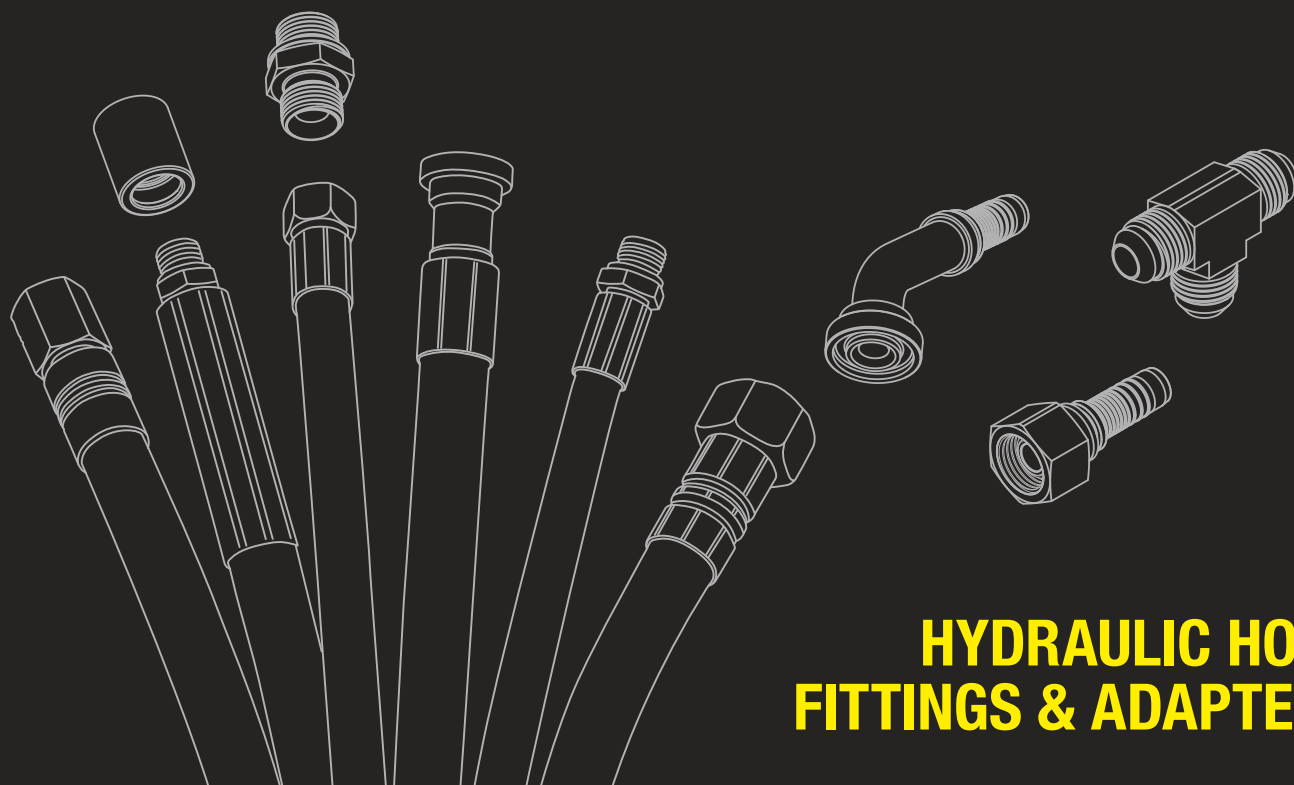




## HYDRAULIC HOSE FITTINGS & ADAPTERS







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Dunlop Hiflex is one of the market's most established suppliers of hydraulic fluid conveyance and industrial fluid conveyance products and systems.

The manufacturing of hoses and couplings, for both high and low pressure, gives Dunlop Hiflex extensive knowledge of the products and enables us to put forward suggestions for new solutions and improvements for the industry.

Halmstad, Sweden



Pirkkala, Finland



## // DUNLOP HIFLEX

## // THE FIRST HOSES

**Scotland, 1887.** John Boyd Dunlop, a Scottish born inventive veterinarian observes his son as he's cycling down a bumpy road. The bike has hard solid rubber tyres and the ride is rough and shaky. The ride is neither fast nor particularly comfortable. He then comes up with an idea of wrapping an air filled rubber hose around the rim. In 1888 he patented the idea and the rest as we say, is history.



## // A PRODUCT THAT CHANGED THE WORLD

John Dunlop's idea about air-filled rubber hoses was the beginning of an industrial manufacturing of air-filled tires and, later, a development of hydraulic and industrial hoses.

We, at Dunlop Hiflex, **are specialists at hoses for high and low pressure** and through our unique position with **manufacturing** in our own factories, in **Halmstad** and **Pirkkala**, we are leading the development of the **next generation of top-quality hoses**. Moreover, our widespread branch network throughout the Nordic Countries and Germany provides customers with an excellent service.

Today we are a part of the Alfacomma Group, one of the leading manufactures of hoses in the world. But we still carry the name that originated from a Scot and bike with pride.

2

PLANTS

41

STORES

121

DISTRIBUTORS

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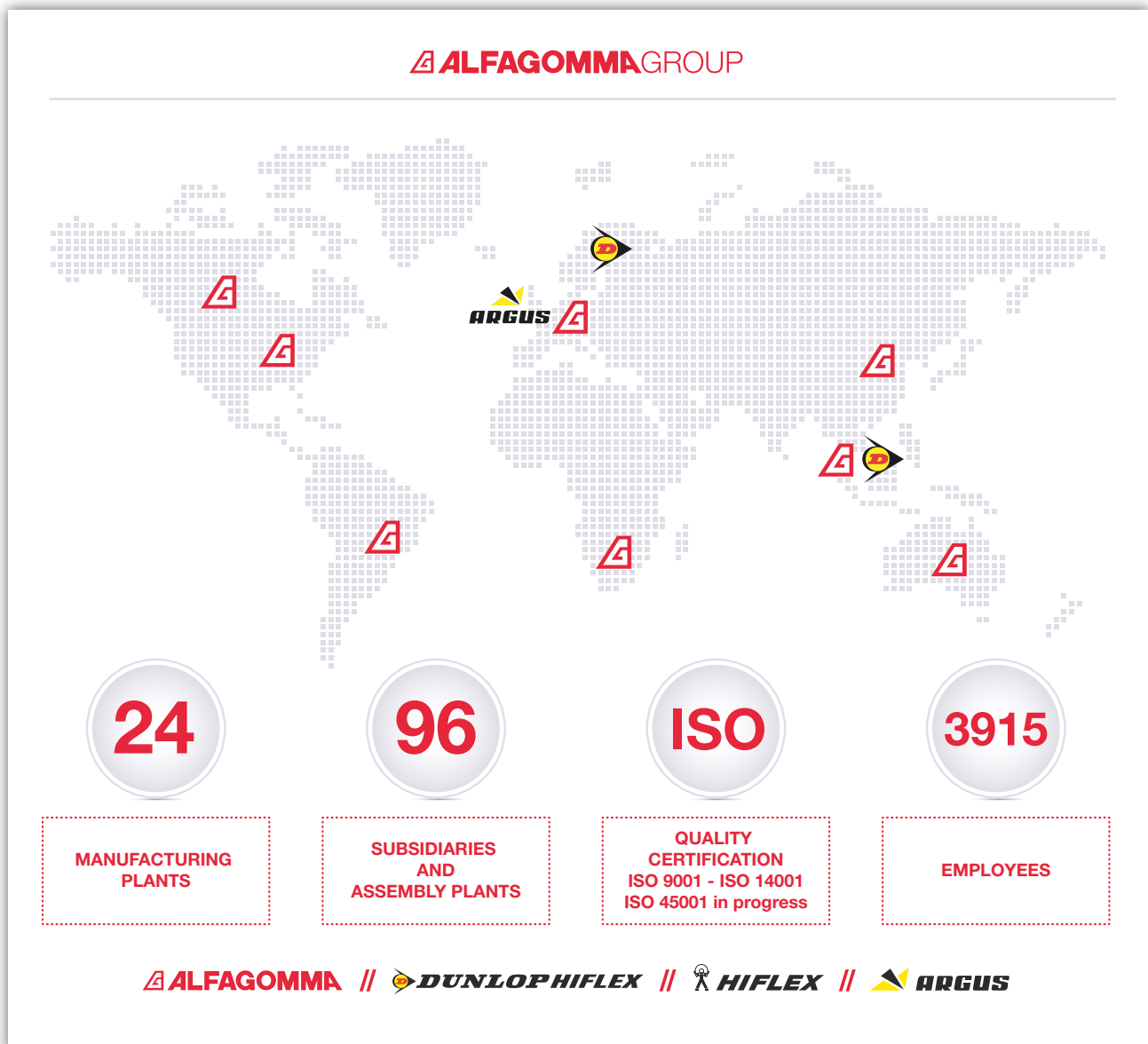
## // ALFAGOMMA GROUP

Dunlop Hiflex was acquired by Alfagomma Group in 2005. The Group, established in 1956, is a global manufacturer specialized in highly engineered, technically demanding hydraulic and industrial products, created with a commitment to excellence in quality and innovation.

## // RESEARCH AND DEVELOPMENT

Alfagomma is focused on continuous improvement, proven by its constant engineering innovation at product, process and production level, which has made it possible to quickly respond to evolving international regulations, improving products performance, safety and efficiency.

The company's distinguishing feature is its ability to innovate, by investing in research and development of products and materials, and designing solutions that meet customer's requirements, in compliance with international regulations.



## // MAIN HYDRAULIC APPLICATION

4

DUNLOP HIFLEX



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## // ICONS



Det Norske Veritas  
Germanischer Lloyd



Lloyd's Register  
approved



Halogen free



U.S. Mine Safety and  
Health Administration  
approved



High Temperature  
resistance



Low Temperature  
resistance

# THE SAFE SOLUTION FOR WATERBLASTING APPLICATION



## **WATERBLAST**

### MAIN APPLICATION

- SURFACE PREPARATION AND CLEANING
- HYDRODEMOLITION
- WATER JET CUTTING

**DUNLOP HIFLEX**



## // HOSE

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## // TEXTILE BRAID

## // ARGUS 2TE

**EN 854 2TE****Tube:** oil resistant synthetic rubber.**Reinforcement:** one high tensile textile braid.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random**DH SCAN crimp short code:** 2TE

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001398   | 4         | 6,0     | 1/4"    | 13,1    | 0,52    | 7,5      | 1100     | 30,0     | 4300     | 40      | 1,57    | 0,112         | 0,08           |
| 1001399   | 5         | 8,0     | 5/16"   | 14,9    | 0,59    | 6,8      | 986      | 27,0     | 3945     | 50      | 1,97    | 0,148         | 0,10           |
| 1001400   | 6         | 10,0    | 3/8"    | 16,5    | 0,65    | 6,3      | 920      | 25,2     | 3680     | 60      | 2,36    | 0,163         | 0,11           |
| 1001401   | 8         | 13,0    | 1/2"    | 19,7    | 0,78    | 5,8      | 840      | 23,2     | 3360     | 70      | 2,76    | 0,216         | 0,15           |
| 1001402   | 10        | 16,0    | 5/8"    | 23,9    | 0,94    | 5,0      | 730      | 20,0     | 2900     | 90      | 3,54    | 0,281         | 0,19           |
| 1001761   | 12        | 19,0    | 3/4"    | 27,0    | 1,06    | 4,5      | 650      | 18,0     | 2610     | 110     | 4,33    | 0,350         | 0,24           |
| 1001404   | 16        | 25,0    | 1"      | 34,4    | 1,35    | 4,0      | 600      | 16,0     | 2320     | 150     | 5,91    | 0,497         | 0,34           |

## // 2TE RAILWAY

**EN 854 2TE - EN 45545-2****Tube:** oil resistant synthetic rubber.**Reinforcement:** one high tensile textile braid.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Specially designed for railway applications.

**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1002681   | 5         | 8,0     | 5/16"   | 14,9    | 0,59    | 6,8      | 986      | 27,0     | 3945     | 50      | 1,97    | 0,148         | 0,10           |
| 1002682   | 6         | 10,0    | 3/8"    | 16,5    | 0,65    | 6,3      | 920      | 25,2     | 3680     | 60      | 2,36    | 0,163         | 0,11           |
| 1002683   | 8         | 13,0    | 1/2"    | 19,7    | 0,78    | 5,8      | 840      | 23,2     | 3360     | 70      | 2,76    | 0,206         | 0,14           |
| 1002684   | 10        | 16,0    | 5/8"    | 23,9    | 0,94    | 5,0      | 730      | 20,0     | 2900     | 90      | 3,54    | 0,281         | 0,19           |
| 1002685   | 12        | 19,0    | 3/4"    | 27,0    | 1,06    | 4,5      | 650      | 18,0     | 2610     | 110     | 4,33    | 0,350         | 0,24           |
| 1002686   | 16        | 25,0    | 1"      | 34,4    | 1,35    | 4,0      | 600      | 16,0     | 2320     | 150     | 5,91    | 0,497         | 0,34           |

REV.2.1

## // WIRE BRAID

## // 121T SLIMLINE PLUS - 1SC

**EN 857 1SC - ISO 11237****Tube:** oil resistant synthetic rubber.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random**DH SCAN crimp short code:** 121B

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1000944   | 4         | 6,0     | 1/4"    | 12,1    | 0,48    | 22,5     | 3250     | 90,0     | 13000    | 50      | 1,97    | 0,170         | 0,12           |
| 1000948   | 6         | 10,0    | 3/8"    | 15,6    | 0,61    | 21,0     | 3000     | 84,0     | 12000    | 65      | 2,56    | 0,260         | 0,18           |
| 1000950   | 8         | 13,0    | 1/2"    | 19,5    | 0,77    | 16,0     | 2320     | 64,0     | 9280     | 90      | 3,54    | 0,410         | 0,28           |
| 1000952   | 10        | 16,0    | 5/8"    | 23,0    | 0,91    | 13,0     | 1900     | 52,0     | 7560     | 100     | 3,94    | 0,440         | 0,30           |
| 1000954   | 12        | 19,0    | 3/4"    | 26,7    | 1,05    | 10,5     | 1530     | 42,0     | 6000     | 125     | 4,92    | 0,570         | 0,39           |
| 1000956   | 16        | 25,0    | 1"      | 34,9    | 1,37    | 8,8      | 1280     | 35,2     | 5100     | 150     | 5,91    | 0,740         | 0,50           |

## // 141T SUPERSLIMLINE

**Tube:** oil resistant synthetic rubber.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random**DH SCAN crimp short code:** 141T

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001212   | 4         | 6,0     | 1/4"    | 12,0    | 0,47    | 28,0     | 4000     | 112,0    | 16000    | 80      | 3,15    | 0,170         | 0,12           |
| 1001112   | 6         | 10,0    | 3/8"    | 15,4    | 0,61    | 22,5     | 3250     | 90,0     | 13000    | 105     | 4,13    | 0,260         | 0,18           |
| 1001778   | 8         | 13,0    | 1/2"    | 19,2    | 0,76    | 21,0     | 3000     | 84,0     | 12000    | 120     | 4,72    | 0,360         | 0,25           |

## // 122T GREENLINE PLUS - 1SN/R1AT



## SAE 100 R1AT - ISO 1436-1 - UNI EN 853 1SN

**Tube:** oil resistant synthetic rubber.**Reinforcement:** one high tensile steel braid.**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random up to 1" - 61 m max over 1 1/4"**DH SCAN crimp short code:** 122T

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1002584   | 3         | 5,0     | 3/16"   | 11,1    | 0,44    | 25,0     | 3630     | 100,0    | 14500    | 90      | 3,54    | 0,160         | 0,11           |
| 1002755   | 4         | 6,0     | 1/4"    | 13,0    | 0,51    | 22,5     | 3250     | 90,0     | 13000    | 100     | 3,94    | 0,198         | 0,14           |
| 1003033   | 5         | 8,0     | 5/16"   | 14,5    | 0,57    | 21,5     | 3120     | 86,0     | 12500    | 115     | 4,53    | 0,236         | 0,16           |
| 1002756   | 6         | 10,0    | 3/8"    | 17,2    | 0,68    | 18,0     | 2610     | 72,0     | 10500    | 130     | 5,12    | 0,313         | 0,22           |
| 1002758   | 8         | 13,0    | 1/2"    | 20,1    | 0,79    | 16,0     | 2320     | 64,0     | 9280     | 180     | 7,09    | 0,367         | 0,25           |
| 1002760   | 10        | 16,0    | 5/8"    | 23,1    | 0,91    | 13,0     | 1900     | 52,0     | 7560     | 200     | 7,87    | 0,466         | 0,32           |
| 1002761   | 12        | 19,0    | 3/4"    | 27,3    | 1,07    | 10,5     | 1530     | 42,0     | 6000     | 240     | 9,45    | 0,555         | 0,38           |
| 1002763   | 16        | 25,0    | 1"      | 35,2    | 1,39    | 8,8      | 1280     | 35,2     | 5100     | 300     | 11,81   | 0,950         | 0,64           |
| 1002765   | 20        | 32,0    | 1 1/4"  | 42,1    | 1,66    | 6,3      | 920      | 25,2     | 3680     | 420     | 16,54   | 1,095         | 0,74           |
| 1001371   | 24        | 38,0    | 1 1/2"  | 49,2    | 1,94    | 5,0      | 730      | 20,0     | 2900     | 500     | 19,69   | 1,411         | 0,95           |
| 1001372   | 32        | 51,0    | 2"      | 62,4    | 2,46    | 4,0      | 600      | 16,0     | 2320     | 630     | 24,80   | 1,864         | 1,26           |

## // 221T SLIMLINE PLUS - 2SC



## EN 857 2SC - ISO 11237

**Tube:** oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random on Reel Pack.**DH SCAN crimp short code:** 221T

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001006   | 4         | 6,0     | 1/4"    | 13,2    | 0,52    | 40,0     | 5850     | 160,0    | 23200    | 50      | 1,97    | 0,255         | 0,18           |
| 1001011   | 6         | 10,0    | 3/8"    | 17,0    | 0,67    | 33,0     | 4800     | 132,0    | 19200    | 65      | 2,56    | 0,370         | 0,25           |
| 1001015   | 8         | 13,0    | 1/2"    | 20,3    | 0,80    | 27,5     | 4000     | 110,0    | 16000    | 90      | 3,54    | 0,470         | 0,32           |
| 1001017   | 10        | 16,0    | 5/8"    | 23,9    | 0,94    | 25,0     | 3630     | 100,0    | 14500    | 100     | 3,94    | 0,591         | 0,40           |
| 1001020   | 12        | 19,0    | 3/4"    | 27,9    | 1,10    | 21,5     | 3120     | 86,0     | 12500    | 120     | 4,72    | 0,760         | 0,52           |
| 1001022   | 16        | 25,0    | 1"      | 34,6    | 1,36    | 16,5     | 2400     | 66,0     | 9600     | 150     | 5,91    | 1,130         | 0,76           |

REV.2.1

## // 241T SUPERSLIMLINE - HI-TUFF



MSHA

## EN 857 2SC (up to 1") - ISO 11237 - SAE 100 R16

**Tube:** oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random up to 1" - 61 m max over 1"1/4**DH SCAN crimp short code:** 241T

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001049   | 4         | 6,0     | 1/4"    | 13,2    | 0,52    | 42,0     | 6000     | 168,0    | 24000    | 50      | 1,97    | 0,259         | 0,18           |
| 1001053   | 5         | 8,0     | 5/16"   | 14,8    | 0,58    | 37,5     | 5500     | 150,0    | 22000    | 55      | 2,17    | 0,313         | 0,22           |
| 1001056   | 6         | 10,0    | 3/8"    | 17,4    | 0,69    | 35,0     | 5000     | 140,0    | 20000    | 65      | 2,56    | 0,382         | 0,26           |
| 1001060   | 8         | 13,0    | 1/2"    | 20,7    | 0,81    | 31,0     | 4500     | 124,0    | 18000    | 90      | 3,54    | 0,502         | 0,34           |
| 1001065   | 10        | 16,0    | 5/8"    | 23,7    | 0,93    | 28,0     | 4000     | 112,0    | 16000    | 100     | 3,94    | 0,598         | 0,41           |
| 1001068   | 12        | 19,0    | 3/4"    | 27,9    | 1,10    | 24,0     | 3500     | 96,0     | 14000    | 120     | 4,72    | 0,821         | 0,56           |
| 1001073   | 16        | 25,0    | 1"      | 35,6    | 1,40    | 21,0     | 3000     | 84,0     | 12000    | 150     | 5,91    | 1,266         | 0,86           |
| 1001791   | 20        | 32,0    | 1 1/4"  | 42,2    | 1,66    | 14,0     | 2000     | 58,0     | 8400     | 210     | 8,27    | 1,367         | 0,92           |
| 1001792   | 24        | 38,0    | 1 1/2"  | 49,9    | 1,96    | 12,5     | 1820     | 50,0     | 7280     | 430     | 16,93   | 1,864         | 1,26           |
| 1001612   | 32        | 51,0    | 2"      | 63,0    | 2,48    | 10,0     | 1500     | 40,0     | 5850     | 550     | 21,65   | 2,462         | 1,66           |
| 1002291   | 40        | 63,0    | 2 1/2"  | 76,4    | 3,01    | 7,5      | 1100     | 30,0     | 4300     | 720     | 28,35   | 3,300         | 2,22           |
| 1002292   | 48        | 76,0    | 3"      | 90,0    | 3,54    | 7,0      | 1000     | 28,0     | 4000     | 880     | 34,65   | 3,850         | 2,59           |

## // 241T-R SUPERSLIMLINE - HI-TUFF



MSHA

## EN 857 2SC (up to 1") - ISO 11237 - SAE 100 R16

**Tube:** oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random up to 1" - 61 m max over 1"1/4**DH SCAN crimp short code:** FXP2-R

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1003111   | 8         | 13,0    | 1/2"    | 21,0    | 0,83    | 35,0     | 5000     | 140,0    | 20000    | 120     | 4,72    | 0,534         | 0,36           |
| 1004915   | 10        | 16,0    | 5/8"    | 24,0    | 0,94    | 35,0     | 5000     | 140,0    | 20000    | 135     | 5,31    | 0,686         | 0,47           |
| 1001721   | 12        | 19,0    | 3/4"    | 50,0    | 1,97    | 28,0     | 4000     | 112,0    | 16000    | 150     | 5,91    | 0,831         | 0,56           |
| 1004362   | 16        | 25,0    | 1"      | 35,6    | 1,40    | 25,0     | 3630     | 100,0    | 14500    | 152     | 5,98    | 1,359         | 0,92           |

## // 222T GREENLINE PLUS - 2SN/R2AT



## SAE 100 R2AT - ISO 1436-1 - UNI EN 853 2SN

**Tube:** oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random up to 1" - 61 m max over 1 1/4"**DH SCAN crimp short code:** 222T

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1002769   | 4         | 6,0     | 1/4"    | 14,5    | 0,57    | 40,0     | 5850     | 160,0    | 23200    | 100     | 3,94    | 0,330         | 0,23           |
| 1002770   | 5         | 8,0     | 5/16"   | 16,1    | 0,63    | 35,0     | 5000     | 140,0    | 20000    | 115     | 4,53    | 0,357         | 0,24           |
| 1002773   | 6         | 10,0    | 3/8"    | 18,5    | 0,73    | 33,0     | 4800     | 132,0    | 19200    | 125     | 4,92    | 0,463         | 0,32           |
| 1002776   | 8         | 13,0    | 1/2"    | 21,4    | 0,84    | 27,5     | 4000     | 110,0    | 16000    | 175     | 6,89    | 0,534         | 0,36           |
| 1002778   | 10        | 16,0    | 5/8"    | 24,6    | 0,97    | 25,0     | 3630     | 100,0    | 14500    | 200     | 7,87    | 0,665         | 0,45           |
| 1002780   | 12        | 19,0    | 3/4"    | 29,0    | 1,14    | 21,5     | 3120     | 86,0     | 12500    | 240     | 9,45    | 0,895         | 0,61           |
| 1002782   | 16        | 25,0    | 1"      | 36,8    | 1,45    | 16,5     | 2400     | 66,0     | 9600     | 300     | 11,81   | 1,253         | 0,85           |
| 1002783   | 20        | 32,0    | 1 1/4"  | 46,4    | 1,83    | 12,5     | 1820     | 50,0     | 7280     | 420     | 16,54   | 1,852         | 1,25           |
| 1001382   | 24        | 38,0    | 1 1/2"  | 52,8    | 2,08    | 9,0      | 1310     | 36,0     | 5240     | 500     | 19,69   | 2,086         | 1,41           |
| 1001383   | 32        | 51,0    | 2"      | 65,6    | 2,58    | 8,0      | 1200     | 32,0     | 4640     | 630     | 24,80   | 2,748         | 1,85           |

## // SP33G SUPERFOREST

**Tube:** oil resistant synthetic rubber.**Reinforcement:** three high tensile steel braids.**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** 33G

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001037   | 6         | 10,0    | 3/8"    | 21,1    | 0,83    | 50,0     | 7280     | 196,0    | 28000    | 120     | 4,72    | 0,730         | 0,50           |
| 1001038   | 8         | 13,0    | 1/2"    | 24,1    | 0,95    | 46,9     | 6800     | 188,0    | 27200    | 160     | 6,30    | 0,863         | 0,58           |
| 1001039   | 10        | 16,0    | 5/8"    | 27,8    | 1,09    | 41,0     | 6000     | 164,0    | 23500    | 210     | 8,27    | 1,084         | 0,73           |
| 1001040   | 12        | 19,0    | 3/4"    | 32,2    | 1,27    | 37,5     | 5500     | 150,0    | 22000    | 260     | 10,24   | 1,380         | 0,93           |
| 1001041   | 16        | 25,0    | 1"      | 39,2    | 1,54    | 32,7     | 4750     | 130,8    | 19000    | 310     | 12,20   | 1,882         | 1,27           |
| 1001042   | 20        | 32,0    | 1 1/4"  | 45,9    | 1,81    | 24,0     | 3500     | 96,0     | 14000    | 410     | 16,14   | 2,310         | 1,56           |

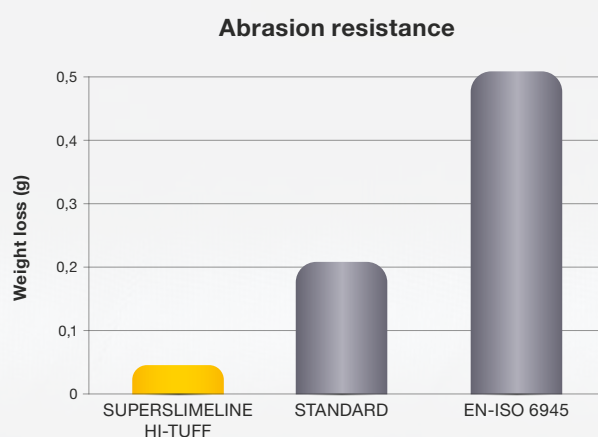
**HI-TUFF**

**HIGH ABRASION**

**RESISTANCE**

## HI-TUFF

- **Excellent abrasion resistance**  
(10 times higher than EN-ISO 6945 requirement)
- **High ozone resistance**  
(10 times more than the standard)
- **MSHA approved cover**
- **Alternative to protective sleeve**  
in applications requiring abrasion resistance

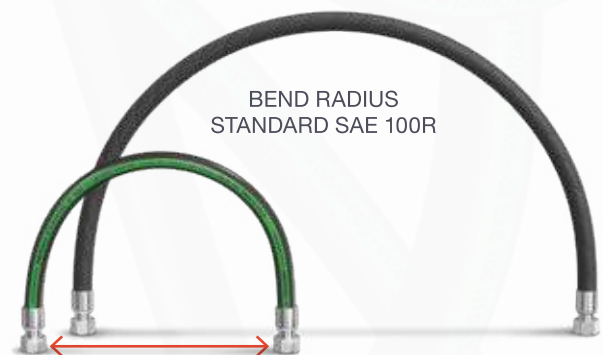


**EXTRA FLEXIBLE**  
**BIO OIL RESISTANT**  
**HOSE RANGE**



**POWERFLEX Bio**

- **Specially designed for bio oil full compability**
- **Extreme flexibility:** up to 50% better bend radius compared to SAE 100R
- **Minetuff cover for top abrasion & ozone resistance**
- **MSHA-approved fire resistant cover**



**BEND RADIUS: REDUCED UP TO 50%**

## // WIRE SPIRAL - POWERFLEXBIO

## // POWERFLEXBIO 4000 - HI-TUFF

MSHA



## ISO 18752

**Tube:** oil resistant synthetic rubber and biodegradable hydraulic fluids.

**Reinforcement:** four high tensile steel spirals.

**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

**Application:** developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

**Temperature:** -40 °C +121 °C (-40 °F +250 °F)

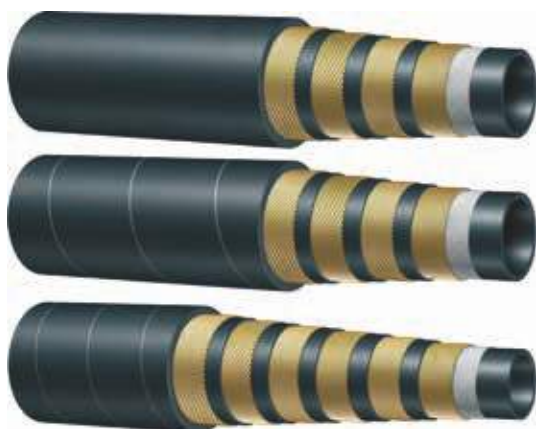
**Length:** random up to 1" - 61 m max over 1"1/4

**DH SCAN crimp short code:** PFB40

| Item Code | Constr. | ID (Dash) | ID (in) | ID (mm) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|---------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001743   | 4WS     | 12        | 3/4"    | 19,0    | 29,5    | 1,16    | 28,0     | 4000     | 112,0    | 16000    | 120     | 4,72    | 1,019         | 0,69           |
| 1001744   | 4WS     | 16        | 1"      | 25,0    | 37,5    | 1,48    | 28,0     | 4000     | 112,0    | 16000    | 150     | 5,91    | 1,556         | 1,05           |
| 1002799   | 4WS     | 24        | 1 1/2"  | 38,0    | 51,8    | 2,04    | 29,0     | 4200     | 116,0    | 16800    | 420     | 16,54   | 2,907         | 1,96           |
| 1002491   | 4WS     | 32        | 2"      | 51,0    | 67,6    | 2,66    | 28,0     | 4000     | 112,0    | 16000    | 630     | 24,80   | 4,383         | 2,95           |

## // POWERFLEXBIO 5000 - HI-TUFF

MSHA



## ISO 18752

**Tube:** oil resistant synthetic rubber and biodegradable hydraulic fluids.

**Reinforcement:** four/six high tensile steel spirals.

**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

**Application:** developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

**Temperature:** -40 °C +121 °C (-40 °F +250 °F)

**Length:** random up to 1" - 61 m max over 1"1/4

**DH SCAN crimp short code:** 4WS: PFB50 / 6WS: PFB50-6S

| Item Code | Constr. | ID (Dash) | ID (in) | ID (mm) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|---------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001745   | 4WS     | 10        | 5/8"    | 16,0    | 25,9    | 1,02    | 35,0     | 5000     | 140,0    | 20000    | 140     | 5,51    | 0,927         | 0,63           |
| 1001746   | 4WS     | 12        | 3/4"    | 19,0    | 31,0    | 1,22    | 35,0     | 5000     | 140,0    | 20000    | 150     | 5,91    | 1,228         | 0,83           |
| 1001747   | 4WS     | 16        | 1"      | 25,0    | 38,0    | 1,50    | 35,0     | 5000     | 140,0    | 20000    | 180     | 7,09    | 1,710         | 1,15           |
| 1001748   | 4WS     | 20        | 1 1/4"  | 32,0    | 45,8    | 1,80    | 35,0     | 5000     | 140,0    | 20000    | 280     | 11,02   | 2,463         | 1,66           |
| 1001946   | 6WS     | 24        | 1 1/2"  | 38,0    | 54,8    | 2,16    | 35,0     | 5000     | 140,0    | 20000    | 500     | 19,69   | 3,924         | 2,64           |
| 1001947   | 6WS     | 32        | 2"      | 51,0    | 70,2    | 2,76    | 35,0     | 5000     | 140,0    | 20000    | 550     | 21,65   | 6,174         | 4,15           |

## // POWERFLEXBIO 5000 PLUS - HI-TUFF

MSHA



## ISO 18752

**Tube:** oil resistant synthetic rubber and biodegradable hydraulic fluids.

**Reinforcement:** four high tensile steel spirals.

**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.

**Application:** developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

**Temperature:** -40 °C +121 °C (-40 °F +250 °F)

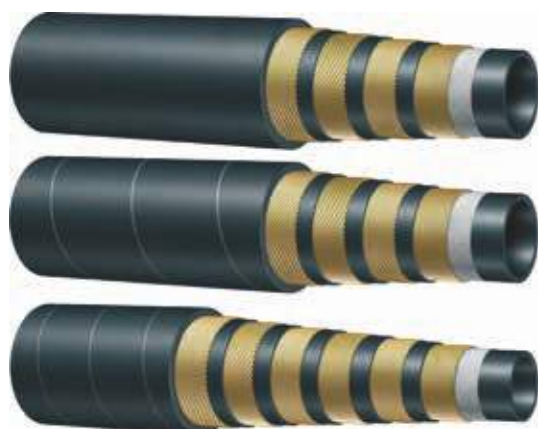
**Length:** random

**DH SCAN crimp short code:** PFB55

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001749   | 12        | 19,0    | 3/4"    | 31,4    | 1,24    | 38,0     | 5500     | 152,0    | 22040    | 180     | 7,09    | 1,266         | 0,86           |
| 1001734   | 16        | 25,0    | 1"      | 38,0    | 1,50    | 38,0     | 5500     | 152,0    | 22040    | 210     | 8,27    | 1,918         | 1,29           |

## // POWERFLEXBIO 6000 - HI-TUFF

MSHA



## ISO 18752 - exceeds SAE 100 R15

**Tube:** oil resistant synthetic rubber and biodegradable hydraulic fluids.

**Reinforcement:** four/six high tensile steel spirals.

**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

**Application:** developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

**Temperature:** -40 °C +121 °C (-40 °F +250 °F)

**Length:** random up to 1" - 61 m max over 1"1/4

**DH SCAN crimp short code:** up to 1": PFB60 / 1 1/4" 4WS: PFB60-4S / 6WS: PFB60-6S

| Item Code | Constr. | ID (Dash) | ID (in) | ID (mm) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|---------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001751   | 4WS     | 4         | 1/4"    | 6,0     | 17,3    | 0,68    | 45,0     | 6550     | 180,0    | 26200    | 60      | 2,36    | 0,518         | 0,35           |
| 1001752   | 4WS     | 6         | 3/8"    | 10,0    | 19,9    | 0,78    | 44,5     | 6450     | 178,0    | 25800    | 75      | 2,95    | 0,630         | 0,43           |
| 1001735   | 4WS     | 8         | 1/2"    | 13,0    | 23,0    | 0,91    | 42,0     | 6000     | 168,0    | 24000    | 90      | 3,54    | 0,745         | 0,51           |
| 1001736   | 4WS     | 10        | 5/8"    | 16,0    | 28,2    | 1,11    | 42,0     | 6000     | 168,0    | 24000    | 180     | 7,09    | 1,260         | 0,85           |
| 1001737   | 4WS     | 12        | 3/4"    | 19,0    | 31,4    | 1,24    | 42,0     | 6000     | 168,0    | 24000    | 210     | 8,27    | 1,417         | 0,96           |
| 1001738   | 4WS     | 16        | 1"      | 25,0    | 38,6    | 1,52    | 42,0     | 6000     | 168,0    | 24000    | 250     | 9,84    | 1,991         | 1,34           |
| 1002492   | 4WS     | 20        | 1 1/4"  | 32,0    | 46,1    | 1,81    | 42,0     | 6000     | 168,0    | 24000    | 445     | 17,52   | 2,859         | 1,93           |
| 1002493   | 6WS     | 20        | 1 1/4"  | 32,0    | 49,4    | 1,94    | 42,0     | 6000     | 168,0    | 24000    | 445     | 17,52   | 3,415         | 2,30           |
| 1002494   | 6WS     | 24        | 1 1/2"  | 38,0    | 56,5    | 2,22    | 42,0     | 6000     | 168,0    | 24000    | 530     | 20,87   | 4,476         | 3,01           |
| 1003506   | 6WS     | 32        | 2"      | 51,0    | 71,0    | 2,80    | 42,0     | 6000     | 168,0    | 24000    | 650     | 25,59   | 6,398         | 4,30           |

Item Code 1002492: to be assembled with Interlock fittings (H14...) only.

## // TUFLEX

## // 241X SUPERSLIMLINE - TUFLEX



MSHA

## EN 857 2SC - ISO 11237 - SAE 100 R16

**Tube:** oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "tuflex" cover for excellent abrasion resistance and long service life in heavy duty applications.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random**DH SCAN crimp short code:** 241X

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001077   | 4         | 6,0     | 1/4"    | 13,2    | 0,52    | 45,0     | 6550     | 180,0    | 26200    | 50      | 1,97    | 0,275         | 0,19           |
| 1001079   | 6         | 10,0    | 3/8"    | 17,4    | 0,69    | 35,0     | 5000     | 140,0    | 20000    | 65      | 2,56    | 0,393         | 0,27           |
| 1001081   | 8         | 13,0    | 1/2"    | 20,6    | 0,81    | 31,0     | 4500     | 124,0    | 18000    | 90      | 3,54    | 0,528         | 0,36           |
| 1001082   | 10        | 16,0    | 5/8"    | 23,7    | 0,93    | 28,0     | 4000     | 112,0    | 16000    | 100     | 3,94    | 0,622         | 0,42           |
| 1001083   | 12        | 19,0    | 3/4"    | 27,7    | 1,09    | 28,0     | 4000     | 112,0    | 16000    | 120     | 4,72    | 0,830         | 0,56           |
| 1001084   | 16        | 25,0    | 1"      | 35,6    | 1,40    | 21,0     | 3000     | 84,0     | 12000    | 150     | 5,91    | 1,300         | 0,88           |

## // POWERFLEXBIO 4000 - TUFLEX



MSHA

## EN 18752

**Tube:** oil resistant synthetic rubber and biodegradable hydraulic fluids.**Reinforcement:** four high tensile steel spirals.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "tuflex" cover for excellent abrasion resistance and long service life in heavy duty applications.**Application:** developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.**Temperature:** -40 °C +121 °C (-40 °F +250 °F)**Length:** 61m**DH SCAN crimp short code:** PFBT40

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1003701   | 24        | 38,0    | 1 1/2"  | 51,8    | 2,04    | 29,0     | 4200     | 116,0    | 16800    | 420     | 16,54   | 2,981         | 2,01           |
| 1003703   | 32        | 51,0    | 2"      | 67,6    | 2,66    | 28,0     | 4000     | 112,0    | 16000    | 630     | 24,80   | 4,540         | 3,06           |

## // HIGH TEMPERATURE

// COMMANDER 150 1SN PLUS **NEW****SAE 100 R1AT - ISO 1436-1 - UNI EN 853 1SN**

**Tube:** oil resistant synthetic rubber.

**Reinforcement:** one high tensile steel braid.

**Cover:** smooth up to 1", wrapped over 1". Blue abrasion, ozone and hydrocarbon resistant synthetic rubber.

**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Specially designed for high temperature applications.

Not recommended for steam service.

**Temperature:** -40 °C +150 °C (-40 °F +300 °F)

air max T up to 5/8" = +85 °C (+185 °F)

air max T over 3/4" = +110 °C (+230 °F)

**Length:** random up to 5/8" - 61 m max over 3/4"

**DH SCAN crimp short code:** 150PLUS-1SN

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1004656   | 4         | 6,0     | 1/4"    | 12,7    | 0,50    | 22,5     | 3250     | 90,0     | 13000    | 100     | 3,94    | 0,206         | 0,14           |
| 1004657   | 6         | 10,0    | 3/8"    | 16,6    | 0,65    | 18,0     | 2610     | 72,0     | 10500    | 130     | 5,12    | 0,307         | 0,21           |
| 1004658   | 8         | 13,0    | 1/2"    | 19,7    | 0,78    | 16,0     | 2320     | 64,0     | 9280     | 180     | 7,09    | 0,379         | 0,26           |
| 1004659   | 10        | 16,0    | 5/8"    | 22,7    | 0,89    | 13,0     | 1900     | 52,0     | 7560     | 200     | 7,87    | 0,436         | 0,30           |
| 1004660   | 12        | 19,0    | 3/4"    | 26,9    | 1,06    | 10,5     | 1530     | 42,0     | 6000     | 240     | 9,45    | 0,581         | 0,40           |
| 1004661   | 16        | 25,0    | 1"      | 34,8    | 1,37    | 8,8      | 1280     | 35,2     | 5100     | 300     | 11,81   | 0,915         | 0,62           |
| 1004662   | 20        | 32,0    | 1 1/4"  | 42,1    | 1,66    | 6,3      | 920      | 25,2     | 3680     | 420     | 16,54   | 1,121         | 0,76           |
| 1004663   | 24        | 38,0    | 1 1/2"  | 49,2    | 1,94    | 5,0      | 730      | 20,0     | 2900     | 500     | 19,69   | 1,443         | 0,97           |
| 1004664   | 32        | 51,0    | 2"      | 62,4    | 2,46    | 4,0      | 600      | 16,0     | 2320     | 630     | 24,80   | 1,911         | 1,29           |

REV.2.1

## // LOW TEMPERATURE

## // 261E HYPERCOLD SUPERSLIMLINE

**Tube:** oil resistant ultra low temperature synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** smooth up to 1", wrapped over 1". Oil, water, ozone and ultra low temperature resistant synthetic rubber.**Application:** hydraulic system with petroleum or water/glycol based fluids, fuel, lubricating oils.

Specially designed for ultra low temperature applications.

**Temperature:** -55 °C +100 °C (-67 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** 261E

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001556   | 4         | 6,0     | 1/4"    | 13,2    | 0,52    | 42,0     | 6000     | 168,0    | 24000    | 50      | 1,97    | 0,280         | 0,19           |
| 1002432   | 5         | 8,0     | 5/16"   | 14,8    | 0,58    | 37,5     | 5500     | 150,0    | 22000    | 55      | 2,17    | 0,310         | 0,21           |
| 1001557   | 6         | 10,0    | 3/8"    | 17,4    | 0,69    | 35,0     | 5000     | 140,0    | 20000    | 65      | 2,56    | 0,390         | 0,27           |
| 1001491   | 8         | 13,0    | 1/2"    | 20,7    | 0,81    | 31,0     | 4500     | 124,0    | 18000    | 90      | 3,54    | 0,520         | 0,35           |
| 1001941   | 10        | 16,0    | 5/8"    | 23,7    | 0,93    | 28,0     | 4000     | 112,0    | 16000    | 100     | 3,94    | 0,600         | 0,41           |
| 1001559   | 12        | 19,0    | 3/4"    | 27,6    | 1,09    | 24,0     | 3500     | 96,0     | 14000    | 120     | 4,72    | 0,810         | 0,55           |
| 1001560   | 16        | 25,0    | 1"      | 35,6    | 1,40    | 21,0     | 3000     | 84,0     | 12000    | 150     | 5,91    | 1,220         | 0,82           |

## // SP33E HYPERCOLD SUPERFOREST

**Tube:** oil resistant ultra low temperature synthetic rubber.**Reinforcement:** three high tensile steel braids.**Cover:** oil, water, ozone and ultra low temperature resistant synthetic rubber.**Application:** hydraulic system with petroleum or water/glycol based fluids, fuel, lubricating oils.

Specially designed for ultra low temperature applications.

**Temperature:** -55 °C +100 °C (-67 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** SP33E

| Item Code | Product Code   | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|----------------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001093   | 8Q8AA01200FVB8 | 8         | 13,0    | 1/2"    | 24,1    | 0,95    | 46,9     | 6800     | 188,0    | 27200    | 160     | 6,30    | 0,892         | 0,60           |
| 1002293   | 8Q8AA01600FVB8 | 10        | 16,0    | 5/8"    | 27,8    | 1,09    | 41,4     | 6000     | 164,0    | 23500    | 210     | 8,27    | 1,121         | 0,76           |
| 1001094   | 8Q8AA02000FVB8 | 12        | 19,0    | 3/4"    | 32,2    | 1,27    | 37,5     | 5500     | 150,0    | 22000    | 260     | 10,24   | 1,430         | 0,97           |
| 1001095   | 8Q8AA02500FVB8 | 16        | 25,0    | 1"      | 39,2    | 1,54    | 33,0     | 4800     | 130,8    | 19000    | 310     | 12,20   | 1,940         | 1,31           |

## // OIL RETURN LINES

## // 605AA



MSHA

**Fuel-oil S&D 10 bar (150 psi)****ISO 13363/2 A+B - exceeds SAE 100 R4 - SAE J2006/R2****Tube:** black conductive NBR.**Reinforcement:** high tensile textile cords with embedded steel helix wire.**Cover:** black CR - abrasion, ozone, hydrocarbon and flame resistant.**Application:** fuel and oil suction and delivery.

Specially designed for tank truck and general industrial applications. Also suitable for marine wet exhaust and bilge pump connection.

**Temperature:** -30 °C +80 °C (-22 °F +176 °F)

| Item Code | Product Code    | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (bar) | WP (psi) | BP (bar) | BP (psi) | BR (mm) | BR (in) | Vacuum % | Weight (kg/m) | Weight (lb/ft) | Length (m) | Brand |
|-----------|-----------------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|----------|---------------|----------------|------------|-------|
| 2001851   | 605AA019306MD02 | 19,0    | 3/4"    | 30,0    | 1,18    | 10       | 150      | 30       | 450      | 76      | 2,99    | 100,00   | 0,590         | 0,40           | 61,000     | AG    |
| 2001853   | 605AA025366MD02 | 25,0    | 1"      | 36,0    | 1,42    | 10       | 150      | 30       | 450      | 100     | 3,94    | 100,00   | 0,740         | 0,50           | 61,000     | AG    |
| 2001856   | 605AA032436MD02 | 32,0    | 1 1/4"  | 43,0    | 1,69    | 10       | 150      | 30       | 450      | 128     | 5,04    | 100,00   | 0,950         | 0,64           | 61,000     | AG    |
| 2001860   | 605AA038496MD02 | 38,0    | 1 1/2"  | 49,0    | 1,93    | 10       | 150      | 30       | 450      | 152     | 5,98    | 100,00   | 1,100         | 0,74           | 61,000     | AG    |
| 2001862   | 605AA042536MD0V | 42,0    | 1 5/8"  | 53,0    | 2,09    | 10       | 150      | 30       | 450      | 168     | 6,61    | 100,00   | 1,210         | 0,82           | 30,500     | AG    |
| 2001863   | 605AA045566MD0V | 45,0    | 1 3/4"  | 56,0    | 2,20    | 10       | 150      | 30       | 450      | 180     | 7,09    | 100,00   | 1,280         | 0,87           | 30,500     | AG    |
| 2001865   | 605AA051626MD0V | 51,0    | 2"      | 62,0    | 2,44    | 10       | 150      | 30       | 450      | 204     | 8,03    | 100,00   | 1,430         | 0,97           | 30,500     | AG    |
| 2001867   | 605AA060736MD0V | 60,0    | 2 3/8"  | 73,0    | 2,87    | 10       | 150      | 30       | 450      | 240     | 9,45    | 100,00   | 2,010         | 1,36           | 30,500     | AG    |
| 2001868   | 605AA063766MD0V | 63,0    | 2 1/2"  | 76,0    | 2,99    | 10       | 150      | 30       | 450      | 252     | 9,92    | 90,00    | 2,100         | 1,42           | 30,500     | AG    |
| 2001870   | 605AA076896MD0V | 76,0    | 3"      | 89,0    | 3,50    | 10       | 150      | 30       | 450      | 304     | 11,97   | 90,00    | 2,520         | 1,70           | 30,500     | AG    |
| 2001872   | 605AA090046MD0V | 90,0    | 3 1/2"  | 104,0   | 4,09    | 10       | 150      | 30       | 450      | 360     | 14,17   | 90,00    | 3,080         | 2,07           | 30,500     | AG    |
| 2001873   | 605AA102166MD0V | 102,0   | 4"      | 116,0   | 4,57    | 10       | 150      | 30       | 450      | 408     | 16,06   | 90,00    | 3,440         | 2,32           | 30,500     | AG    |

## // FLEXOR R4 634

**Extra flexible****SAE 100 R4****Tube:** oil resistant synthetic rubber.**Reinforcement:** high tensile textile cords with embedded steel helix wire.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** fuel, oil and hydraulic fluids with 50% max aromatic content suction and delivery.

Specially designed for hydraulic oil return lines requiring tight bend radius.

**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) | Length (m) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|------------|
| 1001272   | 12        | 19,0    | 3/4"    | 30,0    | 1,18    | 2,1      | 300      | 8,4      | 1200     | 38      | 1,50    | 0,610         | 0,41           | 30,500     |
| 1001273   | 16        | 25,0    | 1"      | 36,0    | 1,42    | 1,7      | 250      | 6,8      | 986      | 50      | 1,97    | 0,760         | 0,52           | 30,500     |
| 1001275   | 20        | 32,0    | 1 1/4"  | 43,0    | 1,69    | 1,4      | 200      | 5,6      | 800      | 64      | 2,52    | 0,930         | 0,63           | 30,500     |
| 1001278   | 24        | 38,0    | 1 1/2"  | 49,0    | 1,93    | 1,0      | 150      | 4,0      | 600      | 76      | 2,99    | 1,080         | 0,73           | 30,500     |
| 1001280   | 32        | 51,0    | 2"      | 62,0    | 2,44    | 0,7      | 100      | 2,8      | 400      | 102     | 4,02    | 1,400         | 0,95           | 30,500     |
| 1001282   | 40        | 63,0    | 2 1/2"  | 76,0    | 2,99    | 0,4      | 60       | 1,6      | 240      | 125     | 4,92    | 2,220         | 1,50           | 30,500     |
| 1001284   | 48        | 76,0    | 3"      | 89,0    | 3,50    | 0,4      | 60       | 1,6      | 240      | 152     | 5,98    | 2,630         | 1,77           | 30,500     |
| 1001288   | 64        | 102,0   | 4"      | 116,0   | 4,57    | 0,2      | 30       | 0,8      | 120      | 204     | 8,03    | 3,910         | 2,63           | 30,500     |

REV.2.1

## // FLEXOR R4 644 HT



MSHA

Extra flexible - High temperature  
SAE 100 R4**Tube:** oil resistant synthetic rubber.**Reinforcement:** high tensile textile cords with embedded steel helix wire.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** fuel, oil and hydraulic fluids with 50% max aromatic content suction and delivery.

Specially designed for high temperature applications and hydraulic oil return lines requiring tight bend radius.

**Temperature:** -40 °C +135 °C (-40 °F +275 °F)

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) | Length (m) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|------------|
| 1001277   | 12        | 19,0    | 3/4"    | 30,0    | 1,18    | 2,1      | 300      | 8,4      | 1200     | 38      | 1,50    | 0,620         | 0,42           | 30,500     |
| 1001274   | 16        | 25,0    | 1"      | 36,0    | 1,42    | 1,7      | 250      | 6,8      | 986      | 50      | 1,97    | 0,770         | 0,52           | 30,500     |
| 1001196   | 20        | 32,0    | 1 1/4"  | 43,0    | 1,69    | 1,4      | 200      | 5,6      | 800      | 64      | 2,52    | 0,950         | 0,64           | 30,500     |
| 1001279   | 24        | 38,0    | 1 1/2"  | 49,0    | 1,93    | 1,0      | 150      | 4,0      | 600      | 76      | 2,99    | 1,100         | 0,74           | 30,500     |
| 1001281   | 32        | 51,0    | 2"      | 62,0    | 2,44    | 0,7      | 100      | 2,8      | 400      | 102     | 4,02    | 1,430         | 0,97           | 30,500     |
| 1001283   | 40        | 63,0    | 2 1/2"  | 76,0    | 2,99    | 0,4      | 60       | 1,6      | 240      | 126     | 4,96    | 2,170         | 1,46           | 30,500     |
| 1001285   | 48        | 76,0    | 3"      | 89,0    | 3,50    | 0,4      | 60       | 1,6      | 240      | 152     | 5,98    | 2,690         | 1,81           | 30,500     |
| 1001290   | 64        | 102,0   | 4"      | 116,0   | 4,57    | 0,2      | 30       | 0,8      | 120      | 204     | 8,03    | 3,530         | 2,38           | 30,500     |

## // PRESSURE WASH

## // ALFAJET 210



**Tube:** oil, detergents and hot water resistant synthetic rubber.

**Reinforcement:** one high tensile steel braid.

**Cover:** abrasion, ozone and hydrocarbon resistant blue synthetic rubber, pin-pricked. Black cover also available.

**Application:** high pressure power cleaners.  
Specially designed for hot water applications.  
Not recommended for steam service.

**Length:** random

**DH SCAN crimp short code:** AJ210

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1000192   | 4         | 6,0     | 1/4"    | 12,1    | 0,48    | 21,0     | 3000     | 84,0     | 12000    | 50      | 1,97    | 0,161         | 0,11           |
| 1000185   | 5         | 8,0     | 5/16"   | 14,1    | 0,56    | 21,0     | 3000     | 84,0     | 12000    | 60      | 2,36    | 0,184         | 0,13           |
| 1000098   | 6         | 10,0    | 3/8"    | 15,6    | 0,61    | 21,0     | 3000     | 73,0     | 10588    | 65      | 2,56    | 0,250         | 0,17           |
| 1000166   | 8         | 13,0    | 1/2"    | 19,5    | 0,77    | 21,0     | 3000     | 73,0     | 10588    | 90      | 3,54    | 0,359         | 0,25           |

Item codes: blue cover hose.

## // ALFAJET 400



**Tube:** oil, detergents and hot water resistant synthetic rubber.

**Reinforcement:** two high tensile steel braids.

**Cover:** abrasion, ozone and hydrocarbon resistant blue synthetic rubber, pin-pricked. Black cover also available.

**Application:** high pressure power cleaners.  
Specially designed for hot water applications.  
Not recommended for steam service.

**Length:** random

**DH SCAN crimp short code:** AJ400

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1000221   | 4         | 6,0     | 1/4"    | 13,2    | 0,52    | 40,0     | 5850     | 140,0    | 20000    | 70      | 2,76    | 0,250         | 0,17           |
| 1000936   | 6         | 10,0    | 3/8"    | 16,7    | 0,66    | 40,0     | 5850     | 130,0    | 18900    | 90      | 3,54    | 0,363         | 0,25           |
| 1000218   | 8         | 13,0    | 1/2"    | 20,1    | 0,79    | 40,0     | 5850     | 120,0    | 17450    | 115     | 4,53    | 0,477         | 0,33           |

Item codes: blue cover hose.

REV.2.1

## // ALFAJET 640



**Tube:** oil, detergents and hot water resistant synthetic rubber.

**Reinforcement:** two high tensile steel braids.

**Cover:** abrasion, ozone and hydrocarbon resistant blue synthetic rubber, non pin-pricked.

**Application:** very high pressure power cleaners.

Specially designed for hot water applications.

Not recommended for steam service.

**Length:** random

**DH SCAN crimp short code:** AJ640

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1004710   | 6         | 10,0    | 3/8"    | 17,0    | 0,67    | 64,0     | 9280     | 160,0    | 23200    | 65      | 2,56    | 0,400         | 0,27           |

## // WATERBLAST - WB10L



**Tube:** oil and water resistant synthetic rubber.

**Reinforcement:** four high tensile steel spirals.

**Cover:** oil, water and ozone resistant synthetic rubber.

**Application:** very high pressure water jetting.

**Temperature:** -10 °C +70 °C (14 °F +158 °F)

**Length:** multiples of lengths shown in below grid.

**DH SCAN crimp short code:** WB10L

| Item Code | ID (Dash) | ID (in) | ID (mm) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) | Length (m) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|------------|
| 1001089   | 6         | 3/8"    | 10,0    | 20,6    | 0,81    | 70,0     | 10000    | 175,0    | 25000    | 150     | 5,91    | 0,664         | 0,45           | 15,250     |
| 1003795   | 8         | 1/2"    | 13,0    | 23,5    | 0,93    | 70,0     | 10000    | 175,0    | 25000    | 200     | 7,87    | 0,805         | 0,55           | 15,250     |
| 1003796   | 8         | 1/2"    | 13,0    | 23,5    | 0,93    | 70,0     | 10000    | 175,0    | 25000    | 200     | 7,87    | 0,805         | 0,55           | 20,000     |
| 1004044   | 12        | 3/4"    | 19,0    | 32,2    | 1,27    | 70,0     | 10000    | 175,0    | 25000    | 210     | 8,27    | 1,450         | 0,98           | 15,250     |
| 1004212   | 12        | 3/4"    | 19,0    | 32,2    | 1,27    | 70,0     | 10000    | 175,0    | 25000    | 210     | 8,27    | 1,450         | 0,98           | 20,000     |
| 1004213   | 16        | 1"      | 25,0    | 38,7    | 1,52    | 70,0     | 10000    | 175,0    | 25000    | 320     | 12,60   | 2,012         | 1,36           | 15,250     |
| 1004214   | 16        | 1"      | 25,0    | 38,7    | 1,52    | 70,0     | 10000    | 175,0    | 25000    | 320     | 12,60   | 2,012         | 1,36           | 20,000     |

## // WATERBLAST - WB15L



**Tube:** oil and water resistant synthetic rubber.

**Reinforcement:** four high tensile steel spirals.

**Cover:** oil, water and ozone resistant synthetic rubber.

**Application:** very high pressure water jetting.

**Temperature:** -10 °C +70 °C (14 °F +158 °F)

**Length:** multiples of lengths shown in below grid.

**DH SCAN crimp short code:** WB15L

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) | Length (m) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|------------|
| 1003471   | 6         | 10,0    | 3/8"    | 21,2    | 0,83    | 124,0    | 18000    | 310,0    | 45000    | 150     | 5,91    | 0,850         | 0,58           | 15,250     |
| 1003470   | 6         | 10,0    | 3/8"    | 21,2    | 0,83    | 124,0    | 18000    | 310,0    | 45000    | 150     | 5,91    | 0,850         | 0,58           | 20,000     |
| 1003473   | 8         | 13,0    | 1/2"    | 25,8    | 1,02    | 110,0    | 16000    | 275,0    | 40000    | 200     | 7,87    | 1,215         | 0,82           | 15,250     |
| 1003472   | 8         | 13,0    | 1/2"    | 25,8    | 1,02    | 110,0    | 16000    | 275,0    | 40000    | 200     | 7,87    | 1,215         | 0,82           | 20,000     |
| 1003475   | 12        | 19,0    | 3/4"    | 32,3    | 1,27    | 100,0    | 14500    | 250,0    | 36000    | 280     | 11,02   | 1,683         | 1,14           | 15,250     |
| 1003474   | 12        | 19,0    | 3/4"    | 32,3    | 1,27    | 100,0    | 14500    | 250,0    | 36000    | 280     | 11,02   | 1,683         | 1,14           | 20,000     |

## // WATERBLAST - WB20L



**Tube:** oil and water resistant synthetic rubber.

**Reinforcement:** four or six high tensile steel spirals or four high tensile steel spiral and one steel braid.

**Cover:** oil, water and ozone resistant synthetic rubber.

**Application:** very high pressure water jetting.

**Temperature:** -10 °C +70 °C (14 °F +158 °F)

**Length:** multiples of lengths shown in below grid.

**DH SCAN crimp short code:** WB20L

| Item Code | Constr. | ID (Dash) | ID (in) | ID (mm) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) | Length (m) |
|-----------|---------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|------------|
| 1004171   | 4WS     | 4         | 1/4"    | 6,0     | 16,4    | 0,65    | 140,0    | 20000    | 350,0    | 50000    | 125     | 4,92    | 0,574         | 0,39           | 15,250     |
| 1004172   | 4WS     | 4         | 1/4"    | 6,0     | 16,4    | 0,65    | 140,0    | 20000    | 350,0    | 50000    | 125     | 4,92    | 0,574         | 0,39           | 20,000     |
| 1004175   | 4WS     | 5         | 5/16"   | 8,0     | 17,3    | 0,68    | 140,0    | 20000    | 350,0    | 50000    | 135     | 5,31    | 0,660         | 0,45           | 15,250     |
| 1004176   | 4WS     | 5         | 5/16"   | 8,0     | 17,3    | 0,68    | 140,0    | 20000    | 350,0    | 50000    | 135     | 5,31    | 0,660         | 0,45           | 20,000     |
| 1004178   | 4WS+1WB | 6         | 3/8"    | 10,0    | 22,5    | 0,89    | 140,0    | 20000    | 350,0    | 50000    | 150     | 5,91    | 1,021         | 0,69           | 15,250     |
| 1004179   | 4WS+1WB | 6         | 3/8"    | 10,0    | 22,5    | 0,89    | 140,0    | 20000    | 350,0    | 50000    | 150     | 5,91    | 1,021         | 0,69           | 20,000     |
| 1003798   | 4WS+1WB | 8         | 1/2"    | 13,0    | 26,6    | 1,05    | 140,0    | 20000    | 350,0    | 50000    | 200     | 7,87    | 1,433         | 0,97           | 15,250     |
| 1003799   | 4WS+1WB | 8         | 1/2"    | 13,0    | 26,6    | 1,05    | 140,0    | 20000    | 350,0    | 50000    | 200     | 7,87    | 1,433         | 0,97           | 20,000     |
| 1004181   | 6WS     | 12        | 3/4"    | 19,0    | 35,0    | 1,38    | 140,0    | 20000    | 350,0    | 50000    | 300     | 11,81   | 2,529         | 1,70           | 15,250     |
| 1004182   | 6WS     | 12        | 3/4"    | 19,0    | 35,0    | 1,38    | 140,0    | 20000    | 350,0    | 50000    | 300     | 11,81   | 2,529         | 1,70           | 20,000     |

REV.2.1

## // THERMOPLASTIC

## // MINIMESS - TPMM

**Pressure test point****Tube:** polyester.**Reinforcement:** one braid of aramid fiber.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Specially designed for pressure gauges and transducers connections.

**Temperature:** -40 °C +100 °C (-40 °F +212 °F) air max T = +70 °C (+160 °F)**Length:** random

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001178   | 1         | 2,0     | 5/64"   | 5,0     | 0,20    | 63,0     | 9100     | 190,0    | 27300    | 20      | 0,79    | 0,020         | 0,02           |

## // FLEXOR 7

**SAE 100 R7 - EN 855 R7****Tube:** polyester.**Reinforcement:** one/two high tensile textile braids.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** TP066

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1000290   | 3         | 5,0     | 3/16"   | 9,6     | 0,38    | 21,0     | 3000     | 84,0     | 12000    | 25      | 0,98    | 0,060         | 0,05           |
| 1000291   | 4         | 6,0     | 1/4"    | 12,2    | 0,48    | 21,0     | 3000     | 84,0     | 12000    | 35      | 1,38    | 0,100         | 0,07           |
| 1000292   | 5         | 8,0     | 5/16"   | 14,3    | 0,56    | 19,0     | 2750     | 76,0     | 11000    | 45      | 1,77    | 0,130         | 0,09           |
| 1000293   | 6         | 10,0    | 3/8"    | 16,0    | 0,63    | 16,0     | 2320     | 64,0     | 9280     | 55      | 2,17    | 0,145         | 0,10           |
| 1000294   | 8         | 13,0    | 1/2"    | 20,3    | 0,80    | 14,0     | 2000     | 56,0     | 8000     | 75      | 2,95    | 0,220         | 0,15           |

## // FLEXOR 7 - TWIN



## SAE 100 R7 - EN 855 R7

**Tube:** polyester.**Reinforcement:** one/two high tensile textile braids.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** TP063

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1000298   | 4         | 6,0     | 1/4"    | 12,2    | 0,48    | 21,0     | 3000     | 84,0     | 12000    | 35      | 1,38    | 0,200         | 0,14           |
| 1000299   | 5         | 8,0     | 5/16"   | 14,3    | 0,56    | 19,0     | 2750     | 76,0     | 11000    | 45      | 1,77    | 0,260         | 0,18           |
| 1000300   | 6         | 10,0    | 3/8"    | 16,0    | 0,63    | 16,0     | 2320     | 64,0     | 9280     | 55      | 2,17    | 0,290         | 0,20           |
| 1000301   | 8         | 13,0    | 1/2"    | 20,3    | 0,80    | 14,0     | 2000     | 56,0     | 8000     | 75      | 2,95    | 0,440         | 0,30           |

## // FLEXOR 8



## SAE 100 R8 - EN 855 R8

**Tube:** polyester.**Reinforcement:** one/two braids of aramid fiber.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** TP075

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1000295   | 4         | 6,0     | 1/4"    | 11,5    | 0,45    | 35,0     | 5000     | 140,0    | 20000    | 50      | 1,97    | 0,085         | 0,06           |
| 1000483   | 5         | 8,0     | 5/16"   | 13,4    | 0,53    | 30,0     | 4300     | 120,0    | 17450    | 55      | 2,17    | 0,105         | 0,08           |
| 1000296   | 6         | 10,0    | 3/8"    | 15,5    | 0,61    | 28,0     | 4000     | 112,0    | 16000    | 60      | 2,36    | 0,135         | 0,10           |
| 1000416   | 8         | 13,0    | 1/2"    | 19,9    | 0,78    | 24,5     | 3500     | 98,0     | 14000    | 80      | 3,15    | 0,200         | 0,14           |

## // FLEXOR 8 - TWIN



## SAE 100 R8 - EN 855 R8

**Tube:** polyester.**Reinforcement:** one/two braids of aramid fiber.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** TP175

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001423   | 4         | 6,0     | 1/4"    | 11,5    | 0,45    | 35,0     | 5000     | 140,0    | 20000    | 50      | 1,97    | 0,085         | 0,06           |
| 1001449   | 5         | 8,0     | 5/16"   | 13,4    | 0,53    | 30,0     | 4300     | 120,0    | 17450    | 55      | 2,17    | 0,105         | 0,08           |
| 1001450   | 6         | 10,0    | 3/8"    | 15,5    | 0,61    | 28,0     | 4000     | 112,0    | 16000    | 60      | 2,36    | 0,135         | 0,10           |
| 1001255   | 8         | 13,0    | 1/2"    | 19,9    | 0,78    | 24,5     | 3500     | 98,0     | 14000    | 80      | 3,15    | 0,200         | 0,14           |

REV.2.1

## // FLEXOR HR8 - TWIN



MSHA

## Hybrid Reinforcement

## SAE 100 R8 - EN 855 R8

**Tube:** polyester.**Reinforcement:** one aramid fiber braid and one steel wire braid.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random**DH SCAN crimp short code:** TP1884

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1003435   | 6         | 10,0    | 3/8"    | 15,8    | 0,62    | 28,0     | 4000     | 112,0    | 16000    | 60      | 2,36    | 0,460         | 0,31           |

## // FLEXOR TWB1



## One wire braid

**Tube:** polyester.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random**DH SCAN crimp short code:** TP087

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1000282   | 3         | 5,0     | 3/16"   | 9,7     | 0,38    | 36,0     | 5240     | 144,0    | 20800    | 30      | 1,18    | 0,120         | 0,09           |
| 1000284   | 5         | 8,0     | 5/16"   | 13,2    | 0,52    | 25,0     | 3630     | 100,0    | 14500    | 55      | 2,17    | 0,190         | 0,13           |
| 1000285   | 6         | 10,0    | 3/8"    | 15,5    | 0,61    | 22,5     | 3250     | 90,0     | 13000    | 65      | 2,56    | 0,230         | 0,16           |

// FLEXOR TWB1-CO<sub>2</sub>**Tube:** polyester.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.Specially designed for CO<sub>2</sub> applications.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random**DH SCAN crimp short code:** TP050

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001469   | 4         | 6,0     | 1/4"    | 11,7    | 0,46    | 27,5     | 4000     | 110,0    | 16000    | 40      | 1,57    | 0,155         | 0,11           |
| 1001470   | 8         | 13,0    | 1/2"    | 18,8    | 0,74    | 17,5     | 2500     | 70,0     | 10000    | 85      | 3,35    | 0,300         | 0,21           |

## // FLEXOR TWB1 - TWIN



## One wire braid - Twin

**Tube:** polyester.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** TP088

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1000289   | 4         | 6,0     | 1/4"    | 11,7    | 0,46    | 31,0     | 4500     | 124,0    | 18000    | 40      | 1,57    | 0,330         | 0,23           |
| 1000288   | 5         | 8,0     | 5/16"   | 13,2    | 0,52    | 25,0     | 3630     | 100,0    | 14500    | 55      | 2,17    | 0,380         | 0,26           |
| 1000287   | 6         | 10,0    | 3/8"    | 15,5    | 0,61    | 22,5     | 3250     | 90,0     | 13000    | 65      | 2,56    | 0,460         | 0,31           |
| 1001167   | 8         | 13,0    | 1/2"    | 18,8    | 0,74    | 19,0     | 2750     | 76,0     | 11000    | 85      | 3,35    | 0,600         | 0,41           |

## // FLEXOR TWB1 - TRIPLE

**Tube:** polyester.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** TP089

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001179   | 4         | 6,0     | 1/4"    | 11,6    | 0,46    | 27,5     | 4000     | 110,0    | 16000    | 100     | 3,94    | 0,330         | 0,23           |
| 1001228   | 6         | 10,0    | 3/8"    | 15,5    | 0,61    | 21,0     | 3000     | 84,0     | 12000    | 125     | 4,92    | 0,460         | 0,31           |

REV.2.1

## // FLEXOR MTKH - TWIN

**Heavy Duty****exceeds SAE 100 R8****Tube:** polyester.**Reinforcement:** one/two aramid fiber braid and one steel wire braid.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** TP150

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001447   | 6         | 10,0    | 3/8"    | 16,9    | 0,67    | 42,0     | 6000     | 168,0    | 24000    | 60      | 2,36    | 0,280         | 0,19           |
| 1001448   | 8         | 12,5    | 1/2"    | 20,3    | 0,80    | 35,0     | 5000     | 140,0    | 20000    | 80      | 3,15    | 0,345         | 0,24           |

## // OFF-SHORE - ROV OPERATION

**Marine high pressure hydraulic - 350 bar (5000 psi)****Tube:** oil and biodegradable hydraulic fluid resistant polyamide 11 methanol washed.**Reinforcement:** high tensile aramid reinforcement.**Cover:** oil, water and ozone resistant polyurethane, non-pin-pricked.**Application:** marine and off-shore equipment, ROVs (remotely operated vehicles), BOP valves.

Suitable for off-shore seismic monitoring operations.

Manufactured according to API 17E / ISO 13628-5.

**Temperature:** -40 °C to +100 °C (-40 °F to +212 °F)

air and water max T = +70 °C (+160 °F)

**Length:** random**DH SCAN crimp short code:** OFSM5K

| Item Code | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (bar) | WP (psi) | BP (bar) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1003750   | 6,0     | 1/4"    | 12,1    | 0,48    | 350      | 5000     | 1400     | 20000    | 50      | 1,97    | 0,090         | 0,07           |
| 1003751   | 10,0    | 3/8"    | 17,1    | 0,67    | 350      | 5000     | 1400     | 20000    | 60      | 2,36    | 0,170         | 0,12           |
| 1003752   | 13,0    | 1/2"    | 21,9    | 0,86    | 350      | 5000     | 1400     | 20000    | 80      | 3,15    | 0,250         | 0,17           |
| 1003753   | 19,0    | 3/4"    | 29,6    | 1,17    | 350      | 5000     | 1400     | 20000    | 150     | 5,91    | 0,400         | 0,27           |
| 1003754   | 25,0    | 1"      | 38,6    | 1,52    | 350      | 5000     | 1400     | 20000    | 250     | 9,84    | 0,685         | 0,47           |

Recommended fitting: AISI 316 SS NPTF male, JIC female and male // Also available in 3000 psi version.

## // FLEXOR VHP700



**Tube:** polyester.

**Reinforcement:** one/two braids of aramid fiber plus one steel wire braid.

**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.

**Application:** high pressure systems and pumps; rescue, safety, jacking and rerailling equipments; bolt tensioning tools.

**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random

**DH SCAN crimp short code:** TP041

| Item Code | Constr. | ID (Dash) | ID (in) | ID (mm) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|---------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001237   | 1TB+1WB | 4         | 1/4"    | 6,0     | 12,7    | 0,50    | 70,0     | 10000    | 280,0    | 40600    | 35      | 1,38    | 0,120         | 0,09           |
| 1001238   | 1TB+1WB | 6         | 3/8"    | 10,0    | 18,7    | 0,74    | 70,0     | 10000    | 280,0    | 40600    | 90      | 3,54    | 0,220         | 0,15           |

## // FLEXOR 7 - PAINT



## SAE 100 R7 - EN 855 R7

**Tube:** polyamide PA6.

**Reinforcement:** one/two high tensile textile braids.

**Cover:** blue abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.

**Application:** specially designed for airless paint spray applications where high chemical resistance to solvents and aggressive fluids is required.

**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random

**DH SCAN crimp short code:** TP098

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001168   | 3         | 5,0     | 3/16"   | 9,6     | 0,38    | 21,0     | 3000     | 84,0     | 12000    | 25      | 0,98    | 0,060         | 0,05           |
| 1001169   | 4         | 6,0     | 1/4"    | 12,2    | 0,48    | 21,0     | 3000     | 84,0     | 12000    | 35      | 1,38    | 0,095         | 0,07           |
| 1001225   | 6         | 10,0    | 3/8"    | 16,0    | 0,63    | 16,0     | 2320     | 64,0     | 9280     | 55      | 2,17    | 0,140         | 0,10           |
| 1001209   | 8         | 13,0    | 1/2"    | 20,3    | 0,80    | 14,0     | 2000     | 56,0     | 8000     | 75      | 2,95    | 0,210         | 0,15           |

## // FLEXOR TWB1 - PAINT



**Tube:** polyamide PA6.

**Reinforcement:** one high tensile steel braid.

**Cover:** blue abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.

**Application:** specially designed for airless paint spray applications where high chemical resistance to solvents and aggressive fluids is required. Conductive.

**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

**Length:** random

**DH SCAN crimp short code:** TP083

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001156   | 3         | 5,0     | 3/16"   | 9,7     | 0,38    | 36,0     | 5240     | 144,0    | 20800    | 30      | 1,18    | 0,120         | 0,09           |
| 1001157   | 4         | 6,0     | 1/4"    | 11,7    | 0,46    | 31,0     | 4500     | 124,0    | 18000    | 40      | 1,57    | 0,150         | 0,11           |
| 1001158   | 6         | 10,0    | 3/8"    | 15,5    | 0,61    | 22,5     | 3250     | 90,0     | 13000    | 65      | 2,56    | 0,225         | 0,16           |
| 1001159   | 8         | 13,0    | 1/2"    | 18,8    | 0,74    | 19,0     | 2750     | 76,0     | 11000    | 85      | 3,35    | 0,295         | 0,20           |

REV.2.1

## // FLEXOR TWB2 - PAINT

**Tube:** polyamide PA6.**Reinforcement:** two high tensile steel braids.**Cover:** blue abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** specially designed for airless paint spray applications where high chemical resistance to solvents and aggressive fluids is required. Conductive.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)  
air max T = +70 °C (+160 °F)**Length:** random**DH SCAN crimp short code:** TP081

| Item Code | ID (Dash) | ID (mm) | ID (in) | OD (mm) | OD (in) | WP (Mpa) | WP (psi) | BP (Mpa) | BP (psi) | BR (mm) | BR (in) | Weight (kg/m) | Weight (lb/ft) |
|-----------|-----------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------------|----------------|
| 1001211   | 4         | 6,0     | 1/4"    | 12,8    | 0,50    | 42,5     | 6100     | 170,0    | 24400    | 40      | 1,57    | 0,240         | 0,17           |
| 1001226   | 6         | 10,0    | 3/8"    | 16,8    | 0,66    | 35,0     | 5000     | 140,0    | 20000    | 65      | 2,56    | 0,370         | 0,25           |
| 1001321   | 8         | 13,0    | 1/2"    | 20,2    | 0,80    | 30,0     | 4300     | 120,0    | 17450    | 85      | 3,35    | 0,445         | 0,30           |

## // PTFE

## // 9TS 0M

**Smooth PTFE Stainless Steel braid - Standard duty****exceeds SAE 100 R14**

**Tube:** smooth PTFE - high mechanical and vibration resistance, low permeability, dielectrical, fire resistant, food grade (FDA, DVGW, BFR compliant). Chemically inert, non sticking, ozone and weather resistant.

**Reinforcement:** high tensile stainless steel braid AISI 304.

**Application:** compressed air, gas, steam, fuel, oil, chemical and pharmaceutical products, particularly suitable for steam piping on injection moulding machines, diathermic oil installations, charging lines for cryogenic gas, compressor discharge lines, automotive, pharmaceutical and food sectors. Solvents, pigments and paint transfer lines. Hydraulic lines in power steering marine applications.

Not suitable for molten alkali metals and halogens at high temperature.

**Temperature:** -60 °C +260 °C (-76 °F +500 °F)

**DH SCAN crimp short code:** 9TS

| Item Code | ID (mm) | ID (in) | OD (mm) | Innertube T (mm) | WP (Mpa) | WP (psi) | BR (mm) | BR (in) | Weight (kg/m) |
|-----------|---------|---------|---------|------------------|----------|----------|---------|---------|---------------|
| 2600557   | 5,0     | 3/16"   | 7,9     | 0,89             | 27,6     | 4000     | 51      | 2,01    | 0,090         |
| 2600558   | 6,0     | 1/4"    | 8,6     | 0,64             | 24,1     | 3500     | 76      | 2,99    | 0,090         |
| 2600559   | 8,0     | 5/16"   | 11,1    | 0,64             | 20,7     | 3000     | 102     | 4,02    | 0,130         |
| 2600560   | 10,0    | 3/8"    | 12,7    | 0,64             | 18,3     | 2600     | 127     | 5,00    | 0,150         |
| 2600561   | 13,0    | 1/2"    | 15,4    | 0,76             | 16,1     | 2300     | 140     | 5,51    | 0,200         |
| 2600562   | 16,0    | 5/8"    | 18,4    | 0,89             | 13,8     | 2000     | 165     | 6,50    | 0,270         |
| 2600563   | 19,0    | 3/4"    | 22,1    | 0,89             | 11,4     | 1600     | 203     | 7,99    | 0,330         |
| 2600564   | 25,0    | 1"      | 29,8    | 1,1              | 6,9      | 1000     | 305     | 12,01   | 0,520         |

## // 9TC OM

**Convoluted PTFE Stainless Steel braid**

**Tube:** convoluted PTFE - high mechanical and vibration resistance, low permeability, dielectrical, fire resistant, food grade (FDA, DVGW, BFR compliant). Chemically inert, non sticking, ozone and weather resistant.

**Reinforcement:** high tensile stainless steel braid AISI 304.

**Application:** compressed air, gas, steam, fuel, oil, chemical and pharmaceutical products, particularly suitable for steam piping on injection moulding machines, diathermic oil installations, charging lines for cryogenic gas, compressor discharge lines, automotive, pharmaceutical and food sectors. Solvents, pigments and paint transfer lines. Hydraulic lines in power steering marine applications.

Not suitable for molten alkali metals and halogens at high temperature.

**Temperature:** -60 °C +260 °C (-76 °F +500 °F)

**DH SCAN crimp short code:** 9TC

| Item Code | ID (mm) | ID (in) | OD (mm) | Innertube T (mm) | WP (Mpa) | WP (psi) | BR (mm) | BR (in) | Weight (kg/m) |
|-----------|---------|---------|---------|------------------|----------|----------|---------|---------|---------------|
| 2600574   | 13,0    | 1/2"    | 18,8    | 0,89             | 10,3     | 1500     | 25      | 0,98    | 0,280         |
| 2600575   | 16,0    | 5/8"    | 22,1    | 0,89             | 8,3      | 1200     | 51      | 2,01    | 0,330         |
| 2600576   | 19,0    | 3/4"    | 24,6    | 0,89             | 6,9      | 1000     | 64      | 2,52    | 0,400         |
| 2600577   | 25,0    | 1"      | 32,8    | 1,02             | 4,6      | 670      | 89      | 3,50    | 0,550         |
| 2600578   | 32,0    | 1 1/4"  | 40,7    | 1,02             | 3,4      | 525      | 127     | 5,00    | 0,690         |
| 2600579   | 38,0    | 1 1/2"  | 48,2    | 1,12             | 3,0      | 450      | 152     | 5,98    | 0,890         |
| 2600580   | 51,0    | 2"      | 61,5    | 1,2              | 2,3      | 345      | 200     | 7,87    | 1,240         |



## // FERRULE SELECTION CHART

|                                                     |    |
|-----------------------------------------------------|----|
| // NO SKIVE FERRULE FOR STANDARD FITTINGS.....      | 35 |
| // SKIVE FERRULE FOR STANDARD FITTINGS.....         | 35 |
| // NO SKIVE FERRULE FOR NEW POWERTRAK FITTINGS..... | 36 |

## // NO SKIVE FERRULE FOR STANDARD FITTINGS

| Hose                           | Table n° | -03<br>DN 5<br>3/16" | -04<br>DN 6<br>1/4" | -05<br>DN 8<br>5/16" | -06<br>DN 10<br>3/8" | -08<br>DN 12<br>1/2" | -10<br>DN 16<br>5/8" | -12<br>DN 19<br>3/4" | -16<br>DN 25<br>1" | -20<br>DN 32<br>1 1/4" | -24<br>DN 38<br>1 1/2" | -32<br>DN 51<br>2" | -40<br>DN 63<br>2 1/2" |
|--------------------------------|----------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------------|------------------------|------------------------|--------------------|------------------------|
| ARGUS 1TE/R6                   | 209      |                      | H1100SK1            | H1100SK1             | H1100SK1             | H1100SK1             | H1100SK1             | H1100SK1             | H1100SK1           |                        |                        |                    |                        |
| ARGUS 2TE                      | 210      |                      | H1100SK1            | H1100SK1             | H1100SK1             | H1100SK1             | H1100404             | H1100404             | H1100SK1           |                        |                        |                    |                        |
| 2TE RAILWAY                    | 210      |                      | H1100SK1            | H1100SK1             | H1100SK1             | H1100SK1             | H1100404             | H1100404             | H1100SK1           |                        |                        |                    |                        |
| ARGUS 3TE/R3 PLUS              | 252      |                      | H1200TX2            | H1200TX2             | H1200TX2             | H1200TX2             | H1200TX2             | H1200TX2             | H1200TX2           | H1200TX2               | H1200TX2               | H1200TX2           |                        |
| FLEXOR TWB1                    | 200      | H1200TP0             | H1200TP0            | H1200TP0             | H1200TP0             | H1200TP0             | H1200TP0             | H1200TP0             | H1200TP0           |                        |                        |                    |                        |
| FLEXOR 7                       | 198      | H1200TP0             | H1200TP0            | H1200TP0             | H1200TP0             | H1200TP0             |                      |                      |                    |                        |                        |                    |                        |
| FLEXOR 8                       | 199      | H1200TP0             | H1200TP0            | H1200TP0             | H1200TP0             | H1200TP0             |                      |                      |                    |                        |                        |                    |                        |
| 121T SLIMLINE PLUS - 1SC       | 178      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1           |                        |                        |                    |                        |
|                                | 206      | H1200TP0             |                     | H1200TP0             | H1200TP0             | H1200TP0             |                      |                      |                    |                        |                        |                    |                        |
| 141T SUPERSLIMLINE             | 185      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             |                      |                      |                    |                        |                        |                    |                        |
| ALFAJET 210                    | 185      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             |                      |                      |                    |                        |                        |                    |                        |
| 221T SLIMLINE PLUS - 2SC       | 176      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1           |                        |                        |                    |                        |
| 2SC RAILWAY                    | 176      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1           |                        |                        |                    |                        |
| ALFAJET 400                    | 176      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             |                      |                      |                    |                        |                        |                    |                        |
| 241T SUPERSLIMLINE - HI-TUFF   | 177      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD2           | H1200AD1               | H1200AD1               | H1200AD1           | H1200TX2               |
| 241X SUPERSLIMLINE - TUFLEX    | 177      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD2           |                        |                        |                    |                        |
| 261E HYPERCOLD SUPERSLIMLINE   | 177      |                      | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD2           | H1200AD1               |                        |                    |                        |
| 122T GREENLINE PLUS - 1SN/R1AT | 173      | H1200AD1             | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD2           | H1200AD1               | H1200AD1               | H1200AD1           |                        |
| COMMANDER 150 1SN PLUS         | 173      | H1200AD1             | H1200AD1            | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD1             | H1200AD2           | H1200AD1               | H1200AD1               | H1200AD1           |                        |
| 222T GREENLINE PLUS - 2SN/R2AT | 174      | H1200AD2             | H1200AD2            | H1200AD2             | H1200AD2             | H1200AD2             | H1200AD2             | H1200AD2             | H1200AD2           | H1200AD2               | H1200AD2               | H1200AD2           |                        |
| POWERFLEXBIO 3000 - HI-TUFF    | 186      |                      |                     |                      |                      |                      |                      |                      |                    | H1200204               | H1200204               |                    |                        |
| POWERFLEXBIO 4000 - HI-TUFF    | 194      |                      |                     |                      |                      |                      |                      | H1200204             | H1200204           | H1200204               |                        |                    |                        |
| FLEXOR R4 604/634/644          | 018      |                      |                     |                      |                      |                      |                      | H1200TX2             | H1200TX2           | H1200TX2               | H1200TX2               | H1200TX2           | H1200TX2               |
| 9TS OM                         | 201      | H2200TF0             | H2200TF0            | H2200TF0             | H2200TF0             | H2200TF0             | H2200TF0             | H2200TF0             | H2200TF0           |                        |                        |                    |                        |
| 9TC OM                         | 203      |                      |                     |                      | H2200TF0             | H2200TF0             | H2200TF0             | H2200TF0             | H2200TF0           | H2200TF0               | H2200TF0               | H2200TF0           |                        |

## // SKIVE FERRULE FOR STANDARD FITTINGS

| Hose                             | Table n° | -03<br>DN 5<br>3/16" | -04<br>DN 6<br>1/4" | -05<br>DN 8<br>5/16" | -06<br>DN 10<br>3/8" | -08<br>DN 12<br>1/2" | -10<br>DN 16<br>5/8" | -12<br>DN 19<br>3/4" | -16<br>DN 25<br>1" | -20<br>DN 32<br>1 1/4" | -24<br>DN 38<br>1 1/2" | -32<br>DN 51<br>2" | -40<br>DN 63<br>2 1/2" | -48<br>DN 76<br>3" |
|----------------------------------|----------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------------|------------------------|------------------------|--------------------|------------------------|--------------------|
| 3SPT SUPERFOREST                 | DH 33    |                      |                     |                      | H1100404             | H1100404             | H1100404             | H1100404             | H1100404           | H1100404               |                        |                    |                        |                    |
| 3SPE SUPERFOREST LT              | DH 33    |                      |                     |                      | H1100404             | H1100404             | H1100404             | H1100404             | H1100404           | H1100404               |                        |                    |                        |                    |
| POWERFLEXBIO 3000 - HI-TUFF      | 229      |                      |                     |                      |                      |                      |                      |                      |                    | H1100404               | H1100404               | H1100404*          |                        |                    |
| POWERFLEXBIO 4000 - HI-TUFF      | 187      |                      |                     |                      |                      | H1100404             |                      | H1100404             | H1100404           |                        |                        |                    |                        |                    |
| POWERFLEXBIO 5000 - HI-TUFF      | 188      |                      |                     |                      |                      |                      | H1100404             | H1100404             | H1100404           |                        |                        |                    |                        |                    |
| POWERFLEXBIO 5000 PLUS - HI-TUFF | 211      |                      |                     |                      |                      |                      |                      | H1100404             |                    |                        |                        |                    |                        |                    |
| POWERFLEXBIO 6000 - HI-TUFF      | 192      |                      | H1100404            |                      | H1100404             | H1100404             |                      |                      |                    |                        |                        |                    |                        |                    |
| BOP - FIRESAFE 5000              | 306      |                      | H1100404            |                      | H1100404             | H1100404             |                      | H1100404             |                    |                        |                        |                    |                        |                    |

\* validated at 175 bar (2500 PSI) according to SAE R12 - table 229

## // INTERLOCK FERRULE FOR INTERLOCK FITTINGS

| Hose                             | Table n° | -06<br>DN 10<br>3/8" | -08<br>DN 12<br>1/2" | -10<br>DN 16<br>5/8" | -12<br>DN 19<br>3/4" | -16<br>DN 25<br>1" | -20<br>DN 32<br>1 1/4" | -24<br>DN 38<br>1 1/2" | -32<br>DN 51<br>2" | -40<br>DN 63<br>2 1/2" | -48<br>DN 76<br>3" |
|----------------------------------|----------|----------------------|----------------------|----------------------|----------------------|--------------------|------------------------|------------------------|--------------------|------------------------|--------------------|
| POWERFLEXBIO 3000 - HI-TUFF      | 217      |                      |                      |                      |                      |                    |                        |                        |                    |                        | H1T00600*          |
| POWERFLEXBIO 4000 - HI-TUFF      | 195      |                      |                      |                      |                      | H1400200           |                        | H1400200               | H1400200           |                        |                    |
| POWERFLEXBIO 5000 - HI-TUFF      | 189      |                      |                      |                      | H1400200             | H1400200           | H1400200               | H1400301               | H1400301           |                        |                    |
|                                  | 251      |                      |                      |                      |                      |                    |                        |                        | H1T00600*          | H1T00600*              | H1T00600*          |
| POWERFLEXBIO 5000 PLUS - HI-TUFF | 190      |                      |                      |                      | H1400200             | H1400200           |                        |                        |                    |                        |                    |
| POWERFLEXBIO 6000 - HI-TUFF - 4S | 191      |                      |                      | H1400301             | H1400200             | H1400200           | H1400301               |                        |                    |                        |                    |
| POWERFLEXBIO 6000 - HI-TUFF - 6S |          |                      |                      |                      |                      |                    | H1400301               | H1400301               |                    |                        |                    |
| POWERFLEXBIO 6000 - HI-TUFF - 6S | 272      |                      |                      |                      |                      |                    |                        |                        | H1T00600*          |                        |                    |
| AT7K - MINETUFF                  | 101      |                      |                      | H1400301             |                      |                    | H1400301               | H1400301               |                    |                        |                    |
| AT8K - MINETUFF - 4S             | 102      |                      |                      |                      | H1400301             | H1T00600*          |                        |                        |                    |                        |                    |
| AT8K - MINETUFF - 6S             |          |                      |                      |                      | H1400301             |                    |                        |                        |                    |                        |                    |
| BOP - FIRESAFE 5000              | 307      |                      |                      |                      |                      | H1400200           | H1400200               | H1400301               | H1400301           |                        |                    |

\* suitable with only Dunlop Hiflex H1T special inserts

| Hose               | Table n° | -03<br>DN 5<br>3/16" | -04<br>DN 6<br>1/4" | -05<br>DN 8<br>5/16" | -06<br>DN 10<br>3/8" | -08<br>DN 12<br>1/2" | -10<br>DN 16<br>5/8" | -12<br>DN 19<br>3/4" | -16<br>DN 25<br>1" | -20<br>DN 32<br>1 1/4" | -24<br>DN 38<br>1 1/2" |
|--------------------|----------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------------|------------------------|------------------------|
| WATERBLAST - WB10L | 281      |                      |                     |                      |                      | H1400200*            |                      |                      | H1400200*          | H1400200*              |                        |
|                    | -        |                      |                     |                      | D990000              | D990000              |                      |                      | D990000            | D990000                |                        |
| WATERBLAST - WB15L | 284      |                      |                     |                      | D990000              | D990000              |                      |                      | D990000            |                        |                        |
| WATERBLAST - WB20L | 285      |                      | D990000             | D990000              | D980000              | D980000              |                      |                      | D980000            |                        |                        |

\* to be used with Interlock H14 series inserts

## // NO SKIVE FERRULE FOR NEW POWERTRAK FITTINGS

| Hose                             | Table n° | -06<br>DN 10<br>3/8" | -08<br>DN 12<br>1/2" | -10<br>DN 16<br>5/8" | -12<br>DN 19<br>3/4" | -16<br>DN 25<br>1" | -20<br>DN 32<br>1 1/4" | -24<br>DN 38<br>1 1/2" | -32<br>DN 51<br>2" | -40<br>DN 63<br>2 1/2" | -48<br>DN 76<br>3" |
|----------------------------------|----------|----------------------|----------------------|----------------------|----------------------|--------------------|------------------------|------------------------|--------------------|------------------------|--------------------|
| POWERFLEXBIO 4000 - HI-TUFF      | 275      |                      |                      |                      |                      |                    |                        | H1300NS4               | H1300NS4           |                        |                    |
| POWERFLEXBIO 5000 - HI-TUFF - 4S | 276      |                      |                      |                      | H1300NS4             | H1300NS4           | H1300NS4               |                        |                    |                        |                    |
| POWERFLEXBIO 5000 - HI-TUFF - 6S | 280      |                      |                      |                      |                      |                    |                        | H1300NS6               | H1300NS6           |                        |                    |
| POWERFLEXBIO 5000 PLUS - HI-TUFF | 277      |                      |                      |                      | H1300NS4             | H1300NS4           |                        |                        |                    |                        |                    |
| POWERFLEXBIO 6000 - HI-TUFF - 4S | 278      |                      |                      |                      | H1300NS4             | H1300NS4           |                        |                        |                    |                        |                    |
| POWERFLEXBIO 6000 - HI-TUFF - 6S | 282      |                      |                      |                      |                      |                    | H1300NS6               |                        |                    |                        |                    |



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- The **total traceability system** ensures **maximum reliability** and **historical data integrity**
- Built to guarantee **total compatibility** and **maximum safety**
- **Carbon steel & stainless steel solutions**



**ALSO AVAILABLE IN STAINLESS STEEL**

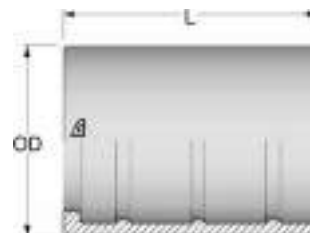
## // STANDARD FITTINGS

|                            |    |                         |    |
|----------------------------|----|-------------------------|----|
| // FERRULES.....           | 39 | // NPTF INSERTS.....    | 75 |
| // HOSE MENDER.....        | 44 | // NPSM INSERTS.....    | 77 |
| // BSP INSERTS.....        | 45 | // ORFS INSERTS.....    | 78 |
| // DIN METRIC INSERTS..... | 52 | // FRENCH INSERTS.....  | 81 |
| // PRESSURE WASHER.....    | 64 | // JIS INSERTS.....     | 82 |
| // SAE INSERTS.....        | 65 | // KOMATSU INSERTS..... | 84 |
| // JIC 37° INSERTS.....    | 67 | // SAE FLANGES.....     | 86 |

## // FERRULES

## // H1200TX2

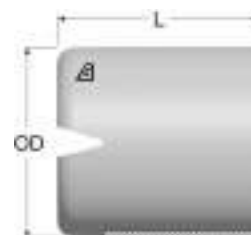
No-Skive Ferrule for 3TE, R5 and Flexopak 2 Minetuff 2 1/2" - 241T  
Hi-tuff hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1236581   | H1200TX2-030000 | 3         | 5,0     | 3/16"   | 21,0            | 20,0   |
| 1236582   | H1200TX2-040000 | 4         | 6,0     | 1/4"    | 23,0            | 24,7   |
| 1236583   | H1200TX2-050000 | 5         | 8,0     | 5/16"   | 25,0            | 24,7   |
| 1236584   | H1200TX2-060000 | 6         | 10,0    | 3/8"    | 27,0            | 29,7   |
| 1236585   | H1200TX2-080000 | 8         | 13,0    | 1/2"    | 30,0            | 30,5   |
| 1236586   | H1200TX2-100000 | 10        | 16,0    | 5/8"    | 34,0            | 35,5   |
| 1236587   | H1200TX2-120000 | 12        | 19,0    | 3/4"    | 38,0            | 36,0   |
| 1236588   | H1200TX2-160000 | 16        | 25,0    | 1"      | 48,0            | 42,5   |
| 1236589   | H1200TX2-200000 | 20        | 31,0    | 1 1/4"  | 53,0            | 56,5   |
| 1236590   | H1200TX2-240000 | 24        | 38,0    | 1 1/2"  | 60,0            | 61,5   |
| 1236591   | H1200TX2-320000 | 32        | 51,0    | 2"      | 76,0            | 73,5   |
| 1236592   | H1200TX2-400000 | 40        | 63,0    | 2 1/2"  | 89,0            | 85,0   |

## // H1200TX4

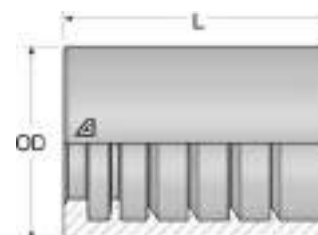
No-Skive Ferrule for R4 Hoses (604, 634, 644)



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1250572   | H1200TX4-120000 | 12        | 19,0    | 3/4"    | 36,0            | 39,0   |
| 1250581   | H1200TX4-160000 | 16        | 25,0    | 1"      | 42,4            | 44,3   |
| 1250582   | H1200TX4-200000 | 20        | 31,0    | 1 1/4"  | 50,0            | 53,2   |
| 1250583   | H1200TX4-240000 | 24        | 38,0    | 1 1/2"  | 55,0            | 60,2   |
| 1250584   | H1200TX4-320000 | 32        | 51,0    | 2"      | 70,0            | 73,2   |
| 1250585   | H1200TX4-400000 | 40        | 63,0    | 2 1/2"  | 83,0            | 86,0   |

## // H1200103

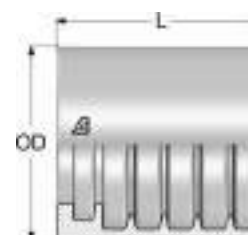
## No-Skive Ferrule for PLT



| ID<br>(Dash) | ID<br>(mm) | ID<br>(in) | Ferrule OD<br>(mm) | L<br>(mm) |
|--------------|------------|------------|--------------------|-----------|
| 3            | 5,0        | 3/16"      | 17,0               | 23,0      |
| 4            | 6,0        | 1/4"       | 19,0               | 26,3      |

## // H1200AD1

## No-Skive Ferrule for 1 Wire Braid and 2 Wire Braid Compact Hoses

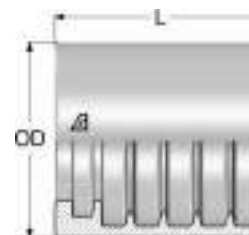


| Item<br>Code | Product Code    | ID<br>(Dash) | ID<br>(mm) | ID<br>(in) | Ferrule OD<br>(mm) | L<br>(mm) |
|--------------|-----------------|--------------|------------|------------|--------------------|-----------|
| 1227977      | H1200AD1-030000 | 3            | 5,0        | 3/16"      | 19,0               | 24,0      |
| 1227978      | H1200AD1-040000 | 4            | 6,0        | 1/4"       | 22,0               | 24,7      |
| 1227979      | H1200AD1-050000 | 5            | 8,0        | 5/16"      | 23,0               | 24,7      |
| 1227980      | H1200AD1-060000 | 6            | 10,0       | 3/8"       | 26,0               | 29,7      |
| 1227981      | H1200AD1-080000 | 8            | 13,0       | 1/2"       | 29,0               | 30,5      |
| 1227983      | H1200AD1-100000 | 10           | 16,0       | 5/8"       | 32,0               | 30,5      |
| 1227985      | H1200AD1-120000 | 12           | 19,0       | 3/4"       | 36,0               | 36,0      |
| 1227986      | H1200AD1-160000 | 16           | 25,0       | 1"         | 44,0               | 36,7      |
| 1227987      | H1200AD1-200000 | 20           | 31,0       | 1 1/4"     | 53,0               | 48,6      |
| 1227988      | H1200AD1-240000 | 24           | 38,0       | 1 1/2"     | 61,0               | 48,6      |
| 1227989      | H1200AD1-320000 | 32           | 51,0       | 2"         | 75,0               | 48,6      |

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## // H1200AD2

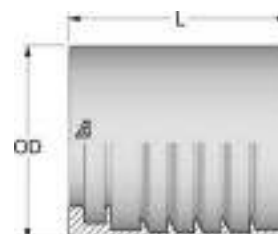
## No-Skive Ferrule for 2SN



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1227990   | H1200AD2-030000 | 3         | 5,0     | 3/16"   | 21,0            | 20,0   |
| 1227991   | H1200AD2-040000 | 4         | 6,0     | 1/4"    | 23,0            | 24,7   |
| 1227992   | H1200AD2-050000 | 5         | 8,0     | 5/16"   | 25,0            | 24,7   |
| 1227993   | H1200AD2-060000 | 6         | 10,0    | 3/8"    | 27,0            | 29,7   |
| 1227994   | H1200AD2-080000 | 8         | 13,0    | 1/2"    | 30,0            | 30,5   |
| 1227995   | H1200AD2-100000 | 10        | 16,0    | 5/8"    | 33,0            | 30,5   |
| 1227996   | H1200AD2-120000 | 12        | 19,0    | 3/4"    | 37,0            | 36,0   |
| 1227997   | H1200AD2-160000 | 16        | 25,0    | 1"      | 45,0            | 36,7   |
| 1227998   | H1200AD2-200000 | 20        | 31,0    | 1 1/4"  | 56,0            | 48,6   |
| 1227999   | H1200AD2-240000 | 24        | 38,0    | 1 1/2"  | 64,0            | 48,5   |
| 1228000   | H1200AD2-320000 | 32        | 51,0    | 2"      | 78,0            | 48,6   |

## // H1200204

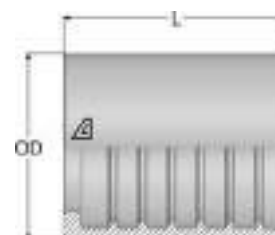
## No-Skive Ferrule for Alfabiotech/Powerflexbio Hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1216588   | H1200204-060000 | 6         | 10,0    | 3/8"    | 30,0            | 28,0   |
| 1216589   | H1200204-080000 | 8         | 13,0    | 1/2"    | 34,0            | 33,9   |
| 1216590   | H1200204-100000 | 10        | 16,0    | 5/8"    | 38,0            | 36,6   |
| 1203322   | H1200204-120000 | 12        | 19,0    | 3/4"    | 42,0            | 39,5   |
| 1203323   | H1200204-160000 | 16        | 25,0    | 1"      | 50,0            | 47,5   |
| 1216591   | H1200204-200000 | 20        | 31,0    | 1 1/4"  | 61,0            | 50,2   |

## // H1200TP0

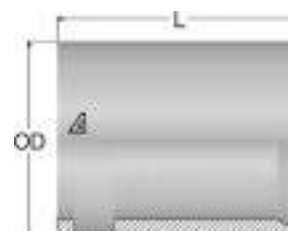
No-Skive Ferrule for Thermoplastic and 1 Wire Braid Compact Hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1232354   | H1200TP0-030000 | 3         | 5,0     | 3/16"   | 15,0            | 22,0   |
| 1232358   | H1200TP0-040000 | 4         | 6,0     | 1/4"    | 17,0            | 26,5   |
| 1232359   | H1200TP0-050000 | 5         | 8,0     | 5/16"   | 19,0            | 26,5   |
| 1232360   | H1200TP0-060000 | 6         | 10,0    | 3/8"    | 22,0            | 26,5   |
| 1232361   | H1200TP0-080000 | 8         | 13,0    | 1/2"    | 26,0            | 30,5   |

## // H2200TF0

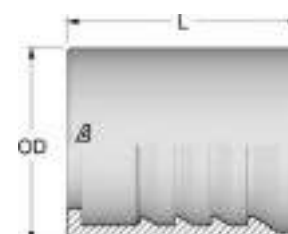
No-Skive Ferrule for PTFE Hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1232132   | H2200TF0-030000 | 3         | 5,0     | 3/16"   | 14,0            | 20,0   |
| 1232133   | H2200TF0-040000 | 4         | 6,0     | 1/4"    | 15,0            | 25,0   |
| 1232134   | H2200TF0-050000 | 5         | 8,0     | 5/16"   | 17,2            | 25,0   |
| 1232135   | H2200TF0-060000 | 6         | 10,0    | 3/8"    | 22,0            | 25,0   |
| 1232136   | H2200TF0-080000 | 8         | 13,0    | 1/2"    | 25,0            | 30,0   |
| 1232137   | H2200TF0-100000 | 10        | 16,0    | 5/8"    | 30,0            | 33,0   |
| 1232138   | H2200TF0-120000 | 12        | 19,0    | 3/4"    | 35,0            | 37,0   |
| 1232139   | H2200TF0-160000 | 16        | 25,0    | 1"      | 42,0            | 45,0   |
| 1232140   | H2200TF0-200000 | 20        | 31,0    | 1 1/4"  | 50,0            | 48,0   |
| 1232141   | H2200TF0-240000 | 24        | 38,0    | 1 1/2"  | 57,0            | 58,0   |
| 1232142   | H2200TF0-320000 | 32        | 51,0    | 2"      | 73,0            | 67,0   |

## // H1100104

Skive Ferrule for 1SN

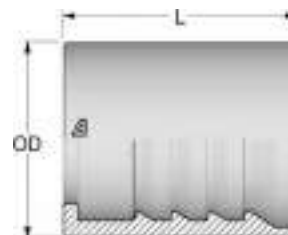


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1201545   | H1100104-200000 | 20        | 31,0    | 1 1/4"  | 50,0            | 43,8   |
| 1201546   | H1100104-240000 | 24        | 38,0    | 1 1/2"  | 57,0            | 49,2   |
| 1201547   | H1100104-320000 | 32        | 51,0    | 2"      | 71,0            | 63,7   |

REV.2.1

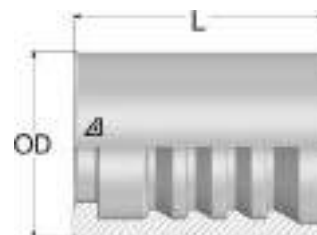
## // H1100404

## Skive Ferrule for 2/3 Wire Braid and Wire Spiral Hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1202719   | H1100404-040000 | 4         | 6,0     | 1/4"    | 22,0            | 26,3   |
| 1203253   | H1100404-060000 | 6         | 10,0    | 3/8"    | 25,0            | 28,5   |
| 1203266   | H1100404-080000 | 8         | 13,0    | 1/2"    | 29,0            | 34,7   |
| 1219132   | H1100404-100000 | 10        | 16,0    | 5/8"    | 33,0            | 37,5   |
| 1203368   | H1100404-120000 | 12        | 19,0    | 3/4"    | 37,0            | 41,5   |
| 1234701   | H1100404-160000 | 16        | 25,0    | 1"      | 45,0            | 47,7   |
| 1234766   | H1100404-200000 | 20        | 31,0    | 1 1/4"  | 55,0            | 54,5   |
| 1234767   | H1100404-240000 | 24        | 38,0    | 1 1/2"  | 67,0            | 61,1   |
| 1234768   | H1100404-320000 | 32        | 51,0    | 2"      | 82,0            | 75,1   |

## // H1100SK1

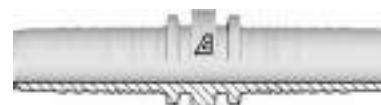
Skive Ferrule for 1 Wire Braid and 2 Wire Braid Compact Hoses  
No-Skive for 1TE, 2TE and R6

| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1233077   | H1100SK1-040000 | 4         | 6,0     | 1/4"    | 19,0            | 25,5   |
| 1233078   | H1100SK1-050000 | 5         | 8,0     | 5/16"   | 21,0            | 25,5   |
| 1233079   | H1100SK1-060000 | 6         | 10,0    | 3/8"    | 23,0            | 27,5   |
| 1233080   | H1100SK1-080000 | 8         | 13,0    | 1/2"    | 27,0            | 33,5   |
| 1233081   | H1100SK1-100000 | 10        | 16,0    | 5/8"    | 30,0            | 36,5   |
| 1233082   | H1100SK1-120000 | 12        | 19,0    | 3/4"    | 33,0            | 40,0   |
| 1233083   | H1100SK1-160000 | 16        | 25,0    | 1"      | 41,0            | 46,5   |

## // HOSE MENDER

## // H12C5610

## Hose Mender

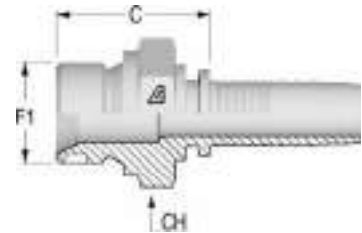


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) |
|-----------|-----------------|-----------|---------|---------|
| 1202949   | H12C5610-040400 | 4         | 6,0     | 1/4"    |
| 1202870   | H12C5610-050500 | 5         | 8,0     | 5/16"   |
| 1202868   | H12C5610-060600 | 6         | 10,0    | 3/8"    |
| 1202867   | H12C5610-080800 | 8         | 13,0    | 1/2"    |
| 1203160   | H12C5610-101000 | 10        | 16,0    | 5/8"    |
| 1203161   | H12C5610-121200 | 12        | 19,0    | 3/4"    |
| 1220608   | H12C5610-161600 | 16        | 25,0    | 1"      |
| 1220607   | H12C5610-202000 | 20        | 32,0    | 1 1/4"  |
| 1220605   | H12C5610-242400 | 24        | 38,0    | 1 1/2"  |
| 1220606   | H12C5610-323200 | 32        | 51,0    | 2"      |

## // BSP INSERTS

## // H1210510

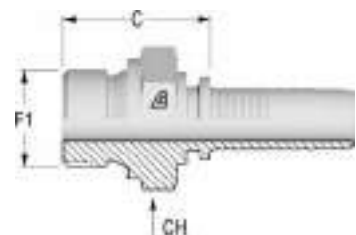
**BSPP Male 60° Flare**  
**AGR**



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|----------|--------|---------|
| 1201291   | H1210510-030200 | 3         | 5,0     | 3/16"   | 2       | 1/8-28   | 20,3   | 14,0    |
| 1201722   | H1210510-040200 | 4         | 6,0     | 1/4"    | 2       | 1/8-28   | 20,8   | 14,0    |
| 1200507   | H1210510-040400 | 4         | 6,0     | 1/4"    | 4       | 1/4-19   | 26,3   | 19,0    |
| 1200508   | H1210510-040600 | 4         | 6,0     | 1/4"    | 6       | 3/8-19   | 27,8   | 22,0    |
| 1201098   | H1210510-040800 | 4         | 6,0     | 1/4"    | 8       | 1/2-14   | 31,3   | 27,0    |
| 1200540   | H1210510-050400 | 5         | 8,0     | 5/16"   | 4       | 1/4-19   | 26,3   | 19,0    |
| 1200541   | H1210510-050600 | 5         | 8,0     | 5/16"   | 6       | 3/8-19   | 27,8   | 22,0    |
| 1201101   | H1210510-050800 | 5         | 8,0     | 5/16"   | 8       | 1/2-14   | 31,3   | 27,0    |
| 1200340   | H1210510-060400 | 6         | 10,0    | 3/8"    | 4       | 1/4-19   | 26,3   | 19,0    |
| 1200341   | H1210510-060600 | 6         | 10,0    | 3/8"    | 6       | 3/8-19   | 27,8   | 22,0    |
| 1200339   | H1210510-060800 | 6         | 10,0    | 3/8"    | 8       | 1/2-14   | 31,3   | 27,0    |
| 1200386   | H1210510-080600 | 8         | 13,0    | 1/2"    | 6       | 3/8-19   | 28,6   | 22,0    |
| 1200384   | H1210510-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 32,1   | 27,0    |
| 1201096   | H1210510-081000 | 8         | 13,0    | 1/2"    | 10      | 5/8-14   | 34,1   | 30,0    |
| 1200385   | H1210510-081200 | 8         | 13,0    | 1/2"    | 12      | 3/4-14   | 36,1   | 32,0    |
| 1201085   | H1210510-100800 | 10        | 16,0    | 5/8"    | 8       | 1/2-14   | 32,1   | 27,0    |
| 1200419   | H1210510-101000 | 10        | 16,0    | 5/8"    | 10      | 5/8-14   | 34,1   | 30,0    |
| 1200418   | H1210510-101200 | 10        | 16,0    | 5/8"    | 12      | 3/4-14   | 36,1   | 32,0    |
| 1200446   | H1210510-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 36,6   | 32,0    |
| 1201095   | H1210510-121600 | 12        | 19,0    | 3/4"    | 16      | 1-11     | 41,6   | 41,0    |
| 1201355   | H1210510-161600 | 16        | 25,0    | 1"      | 16      | 1-11     | 42,4   | 41,0    |
| 1201356   | H1210510-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4-11 | 46,4   | 50,0    |
| 1201357   | H1210510-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 48,0   | 50,0    |
| 1201358   | H1210510-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 51,0   | 55,0    |
| 1201359   | H1210510-323200 | 32        | 51,0    | 2"      | 32      | 2-11     | 56,5   | 70,0    |

## // H1210610

**BSPP Male Flat Seat**  
**AGR FD**

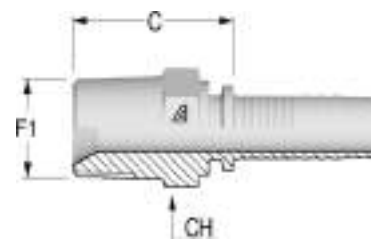


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|--------|--------|---------|
| 1214181   | H1210610-040400 | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 26,3   | 19,0    |
| 1223423   | H1210610-060600 | 6         | 10,0    | 3/8"    | 6       | 3/8-19 | 27,8   | 22,0    |
| 1216596   | H1210610-060800 | 6         | 10,0    | 3/8"    | 8       | 1/2-14 | 31,3   | 27,0    |
| 1225012   | H1210610-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 32,1   | 27,0    |

## // H1210710

BSPT Male

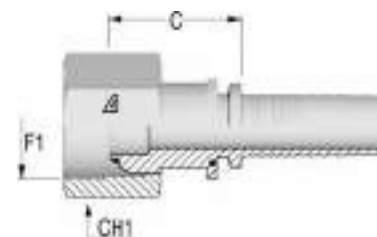
AGR K



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|----------|--------|---------|
| 1200456   | H1210710-030200 | 3         | 5,0     | 3/16"   | 2       | 1/8-28   | 20,8   | 12,0    |
| 1200491   | H1210710-040200 | 4         | 6,0     | 1/4"    | 2       | 1/8-28   | 21,3   | 12,0    |
| 1200490   | H1210710-040400 | 4         | 6,0     | 1/4"    | 4       | 1/4-19   | 26,8   | 17,0    |
| 1200492   | H1210710-040600 | 4         | 6,0     | 1/4"    | 6       | 3/8-19   | 27,8   | 19,0    |
| 1200532   | H1210710-050400 | 5         | 8,0     | 5/16"   | 4       | 1/4-19   | 26,8   | 17,0    |
| 1200533   | H1210710-050600 | 5         | 8,0     | 5/16"   | 6       | 3/8-19   | 27,8   | 19,0    |
| 1200328   | H1210710-060400 | 6         | 10,0    | 3/8"    | 4       | 1/4-19   | 26,8   | 17,0    |
| 1200329   | H1210710-060600 | 6         | 10,0    | 3/8"    | 6       | 3/8-19   | 27,8   | 19,0    |
| 1200327   | H1210710-060800 | 6         | 10,0    | 3/8"    | 8       | 1/2-14   | 32,3   | 22,0    |
| 1200373   | H1210710-080600 | 8         | 13,0    | 1/2"    | 6       | 3/8-19   | 28,6   | 19,0    |
| 1200371   | H1210710-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 33,1   | 22,0    |
| 1200410   | H1210710-101200 | 10        | 16,0    | 5/8"    | 12      | 3/4-14   | 34,1   | 27,0    |
| 1200440   | H1210710-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 34,6   | 27,0    |
| 1200439   | H1210710-121600 | 12        | 19,0    | 3/4"    | 16      | 1-11     | 43,6   | 36,0    |
| 1201365   | H1210710-161200 | 16        | 25,0    | 1"      | 12      | 3/4-14   | 37,4   | 32,0    |
| 1201361   | H1210710-161600 | 16        | 25,0    | 1"      | 16      | 1-11     | 44,4   | 36,0    |
| 1201363   | H1210710-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 49,0   | 46,0    |
| 1201364   | H1210710-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 50,5   | 50,0    |
| 1201360   | H1210710-323200 | 32        | 51,0    | 2"      | 32      | 2-11     | 54,2   | 65,0    |

REV.2.1

## // H1220813

BSPP Female 60° Cone with O-Ring  
DKOR

| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|----------|
| 1200606   | H1220511-030200 | Crimped         | 3         | 5,0     | 3/16"   | 2       | 1/8-28   | 14,3   | 14,0     |
| 1202325   | H1220813-030400 | Slip on nut     | 3         | 5,0     | 3/16"   | 4       | 1/4-19   | 20,3   | 19,0     |
| 1201066   | H1220511-040200 | Crimped         | 4         | 6,0     | 1/4"    | 2       | 1/8-28   | 14,7   | 14,0     |
| 1202326   | H1220813-040400 | Slip on nut     | 4         | 6,0     | 1/4"    | 4       | 1/4-19   | 20,8   | 19,0     |
| 1202327   | H1220813-040600 | Slip on nut     | 4         | 6,0     | 1/4"    | 6       | 3/8-19   | 23,3   | 22,0     |
| 1202328   | H1220811-050400 | Crimped         | 5         | 8,0     | 5/16"   | 4       | 1/4-19   | 16,6   | 19,0     |
| 1202329   | H1220813-050600 | Slip on nut     | 5         | 8,0     | 5/16"   | 6       | 3/8-19   | 23,3   | 22,0     |
| 1202330   | H1220811-060400 | Crimped         | 6         | 10,0    | 3/8"    | 4       | 1/4-19   | 17,3   | 19,0     |
| 1202331   | H1220813-060600 | Slip on nut     | 6         | 10,0    | 3/8"    | 6       | 3/8-19   | 23,3   | 22,0     |
| 1202332   | H1220813-060800 | Slip on nut     | 6         | 10,0    | 3/8"    | 8       | 1/2-14   | 24,3   | 27,0     |
| 1202571   | H1220811-080600 | Crimped         | 8         | 13,0    | 1/2"    | 6       | 3/8-19   | 18,6   | 22,0     |
| 1202333   | H1220813-080800 | Slip on nut     | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 25,1   | 27,0     |
| 1202334   | H1220813-081000 | Slip on nut     | 8         | 13,0    | 1/2"    | 10      | 5/8-14   | 28,4   | 27,0     |
| 1202335   | H1220813-081200 | Slip on nut     | 8         | 13,0    | 1/2"    | 12      | 3/4-14   | 29,0   | 32,0     |
| 1202457   | H1220811-101000 | Crimped         | 10        | 16,0    | 5/8"    | 10      | 5/8-14   | 17,1   | 27,0     |
| 1202336   | H1220813-101200 | Slip on nut     | 10        | 16,0    | 5/8"    | 12      | 3/4-14   | 29,0   | 32,0     |
| 1202462   | H1220811-121200 | Crimped         | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 23,9   | 32,0     |
| 1202337   | H1220813-121600 | Slip on nut     | 12        | 19,0    | 3/4"    | 16      | 1-11     | 34,0   | 38,0     |
| 1202455   | H1220811-161600 | Crimped         | 16        | 25,0    | 1"      | 16      | 1-11     | 23,9   | 38,0     |
| 1202338   | H1220813-162000 | Slip on nut     | 16        | 25,0    | 1"      | 20      | 1 1/4-11 | 39,4   | 50,0     |
| 1202458   | H1220812-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 32,0   | 50,0     |
| 1202339   | H1220813-202400 | Slip on nut     | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2-11 | 41,9   | 55,0     |
| 1202463   | H1220812-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 33,8   | 55,0     |
| 1202340   | H1220813-243200 | Slip on nut     | 24        | 38,0    | 1 1/2"  | 32      | 2-11     | 47,0   | 70,0     |
| 1202014   | H1220812-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 34,0   | 70,0     |

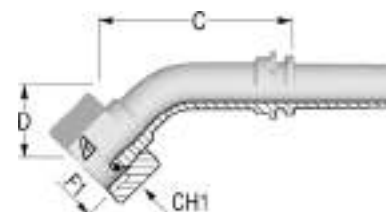
Image: insert with Slip on Nut.

## // H1220843

45° BSPP Female 60° Cone with O-Ring

DKOR 45

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|-------------|----------|
| 1202341   | H1220843-040400 | Slip on nut     | 4         | 6,0     | 1/4"    | 4       | 1/4-19   | 45,5   | 15,0        | 19,0     |
| 1202342   | H1220843-040600 | Slip on nut     | 4         | 6,0     | 1/4"    | 6       | 3/8-19   | 41,5   | 17,5        | 22,0     |
| 1214200   | H1220841-050400 | Crimped         | 5         | 8,0     | 5/16"   | 4       | 1/4-19   | 19,0   | 17,5        | 19,0     |
| 1202343   | H1220843-050600 | Slip on nut     | 5         | 8,0     | 5/16"   | 6       | 3/8-19   | 45,1   | 18,5        | 22,0     |
| 1202344   | H1220843-060600 | Slip on nut     | 6         | 10,0    | 3/8"    | 6       | 3/8-19   | 49,9   | 20,5        | 22,0     |
| 1202345   | H1220843-060800 | Slip on nut     | 6         | 10,0    | 3/8"    | 8       | 1/2-14   | 45,7   | 21,0        | 27,0     |
| 1202346   | H1220843-080800 | Slip on nut     | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 55,0   | 21,0        | 27,0     |
| 1202347   | H1220843-081000 | Slip on nut     | 8         | 13,0    | 1/2"    | 10      | 5/8-14   | 57,2   | 23,0        | 27,0     |
| 1202348   | H1220843-081200 | Slip on nut     | 8         | 13,0    | 1/2"    | 12      | 3/4-14   | 56,7   | 23,0        | 32,0     |
| 1202464   | H1220841-101000 | Crimped         | 10        | 16,0    | 5/8"    | 10      | 5/8-14   | 64,0   | 21,5        | 27,0     |
| 1202349   | H1220843-101200 | Slip on nut     | 10        | 16,0    | 5/8"    | 12      | 3/4-14   | 66,5   | 22,5        | 32,0     |
| 1202465   | H1220841-121200 | Crimped         | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 70,0   | 28,0        | 32,0     |
| 1202350   | H1220843-121600 | Slip on nut     | 12        | 19,0    | 3/4"    | 16      | 1-11     | 74,6   | 31,5        | 38,0     |
| 1202466   | H1220841-161600 | Crimped         | 16        | 25,0    | 1"      | 16      | 1-11     | 84,0   | 34,0        | 38,0     |
| 1216663   | H1220843-162000 | Slip on nut     | 16        | 25,0    | 1"      | 20      | 1 1/4-11 | 97,0   | 47,5        | 50,0     |
| 1202467   | H1220842-202000 | Slip on nut     | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 101,0  | 40,0        | 50,0     |
| 1202468   | H1220842-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 116,0  | 46,0        | 55,0     |
| 1202469   | H1220842-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 152,0  | 60,0        | 70,0     |

Image: insert with Slip on Nut.

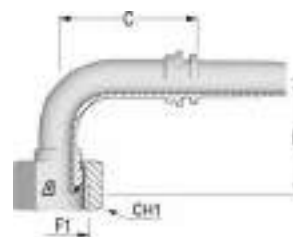
REV.2.1

## // H1220893

90° BSPP Female 60° Cone with O-Ring

DKOR 90

Solid one piece



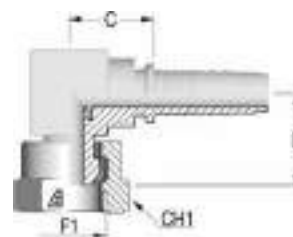
| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|-------------|----------|
| 1200607   | H1220591-030200 | Crimped         | 3         | 5,0     | 3/16"   | 2       | 1/8-28   | 24,0   | 30,0        | 14,0     |
| 1201707   | H1220591-040200 | Crimped         | 4         | 6,0     | 1/4"    | 2       | 1/8-28   | 30,5   | 32,0        | 14,0     |
| 1202367   | H1220893-040400 | Slip on nut     | 4         | 6,0     | 1/4"    | 4       | 1/4-19   | 29,3   | 29,0        | 19,0     |
| 1202353   | H1220893-040600 | Slip on nut     | 4         | 6,0     | 1/4"    | 6       | 3/8-19   | 29,8   | 31,0        | 22,0     |
| 1202354   | H1220893-050600 | Slip on nut     | 5         | 8,0     | 5/16"   | 6       | 3/8-19   | 33,2   | 36,0        | 22,0     |
| 1202355   | H1220893-060600 | Slip on nut     | 6         | 10,0    | 3/8"    | 6       | 3/8-19   | 34,8   | 42,0        | 22,0     |
| 1202356   | H1220893-060800 | Slip on nut     | 6         | 10,0    | 3/8"    | 8       | 1/2-14   | 34,3   | 35,5        | 27,0     |
| 1202881   | H1220891-080600 | Crimped         | 8         | 13,0    | 1/2"    | 6       | 3/8-19   | 35,3   | 43,0        | 22,0     |
| 1202357   | H1220893-080800 | Slip on nut     | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 35,8   | 41,0        | 27,0     |
| 1202358   | H1220893-081000 | Slip on nut     | 8         | 13,0    | 1/2"    | 10      | 5/8-14   | 41,6   | 43,5        | 27,0     |
| 1202359   | H1220893-081200 | Slip on nut     | 8         | 13,0    | 1/2"    | 12      | 3/4-14   | 41,8   | 43,0        | 32,0     |
| 1202470   | H1220891-101000 | Crimped         | 10        | 16,0    | 5/8"    | 10      | 5/8-14   | 47,9   | 47,0        | 27,0     |
| 1202360   | H1220893-101200 | Slip on nut     | 10        | 16,0    | 5/8"    | 12      | 3/4-14   | 51,9   | 49,0        | 32,0     |
| 1202471   | H1220891-121200 | Crimped         | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 49,1   | 53,0        | 32,0     |
| 1202361   | H1220893-121600 | Slip on nut     | 12        | 19,0    | 3/4"    | 16      | 1-11     | 54,1   | 60,5        | 38,0     |
| 1202475   | H1220891-161600 | Crimped         | 16        | 25,0    | 1"      | 16      | 1-11     | 75,1   | 69,0        | 38,0     |
| 1202362   | H1220893-162000 | Slip on nut     | 16        | 25,0    | 1"      | 20      | 1 1/4-11 | 75,1   | 88,5        | 50,0     |
| 1202472   | H1220892-202000 | Slip on nut     | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 82,0   | 83,0        | 50,0     |
| 1202363   | H1220893-202400 | Slip on nut     | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2-11 | 101,0  | 83,0        | 55,0     |
| 1202456   | H1220892-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 96,0   | 96,0        | 55,0     |
| 1202364   | H1220893-243200 | Slip on nut     | 24        | 38,0    | 1 1/2"  | 32      | 2-11     | 107,8  | 104,0       | 70,0     |
| 1202473   | H1220892-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 128,0  | 136,0       | 70,0     |

Image: insert with Slip on Nut.

## // H1220581

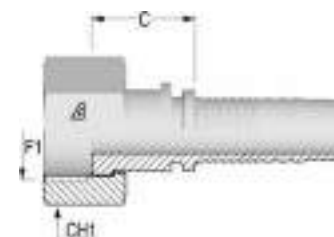
90° Compact BSPP Female 60° Cone

DKR 90



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|--------|--------|-------------|----------|
| 1202422   | H1220581-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 16,8   | 19,5        | 19,0     |
| 1202025   | H1220581-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 3/8-19 | 18,8   | 22,0        | 22,0     |
| 1202026   | H1220581-060800 | Crimped  | 6         | 10,0    | 3/8"    | 8       | 1/2-14 | 21,5   | 22,5        | 27,0     |
| 1202027   | H1220581-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 22,6   | 24,5        | 27,0     |
| 1203213   | H1220581-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 3/4-14 | 26,7   | 31,0        | 32,0     |
| 1203330   | H1220581-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1-11   | 34,5   | 27,5        | 38,0     |

## // H1220613

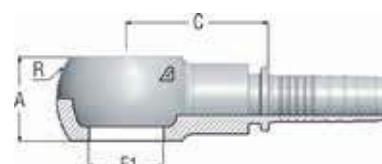
BSPP Female Flat Seat  
DKR FD

| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|--------|--------|----------|
| 1202226   | H1220613-040400 | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 20,3   | 19,0     |
| 1202227   | H1220613-060600 | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 3/8-19 | 20,3   | 22,0     |
| 1202140   | H1220613-060800 | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 1/2-14 | 20,8   | 27,0     |
| 1202228   | H1220613-080800 | Slip on nut | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 21,6   | 27,0     |
| 1202229   | H1220613-081200 | Slip on nut | 8         | 13,0    | 1/2"    | 12      | 3/4-14 | 24,6   | 32,0     |
| 1201684   | H1220611-101200 | Crimped     | 10        | 16,0    | 5/8"    | 12      | 3/4-14 | 17,6   | 32,0     |
| 1201570   | H1220611-121200 | Crimped     | 12        | 19,0    | 3/4"    | 12      | 3/4-14 | 18,1   | 32,0     |
| 1216659   | H1220611-121600 | Crimped     | 12        | 19,0    | 3/4"    | 16      | 1-11   | 20,6   | 38,0     |
| 1201384   | H1220611-161600 | Crimped     | 16        | 25,0    | 1"      | 16      | 1-11   | 19,9   | 38,0     |

Image: insert with Slip on Nut.

## // H1230310

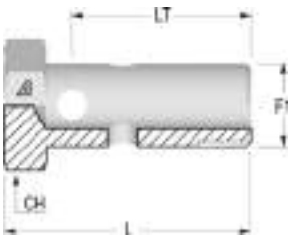
## BSPP Banjo - RNR



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1     | C (mm) | R (mm) | A (mm) |
|-----------|-----------------|-----------|---------|---------|--------|--------|--------|--------|
| 1203086   | H1230310-040400 | 4         | 6,0     | 1/4"    | 1/4-19 | 26,5   | 22     | 14     |
| 1203087   | H1230310-040200 | 4         | 6,0     | 1/4"    | 1/8-28 | 20,0   | 17     | 10     |
| 1216840   | H1230310-040600 | 4         | 6,0     | 1/4"    | 3/8-19 | 30,5   | 28     | 18     |
| 1201763   | H1230310-050600 | 5         | 8,0     | 5/16"   | 3/8-19 | 30,5   | 28     | 18     |
| 1201754   | H1230310-060800 | 6         | 10,0    | 3/8"    | 1/2-14 | 34,5   | 38     | 22     |
| 1201760   | H1230310-060600 | 6         | 10,0    | 3/8"    | 3/8-19 | 30,5   | 28     | 18     |
| 1203048   | H1230310-080800 | 8         | 13,0    | 1/2"    | 1/2-14 | 35,0   | 38     | 22     |
| 1216843   | H1230310-080600 | 8         | 13,0    | 1/2"    | 3/8-19 | 30,5   | 28     | 18     |
| 1203085   | H1230310-101000 | 10        | 16,0    | 5/8"    | 5/8-14 | 38,0   | 40     | 24     |
| 1200423   | H1230310-121200 | 12        | 19,0    | 3/4"    | 3/4-14 | 41,5   | 46     | 29     |
| 1203084   | H1230310-161600 | 16        | 25,0    | 1"      | 1-11   | 50,5   | 58     | 36     |

REV.2.1

H10V0210  
BSPP Bolt



| Item Code | Product Code    | F1 Dash | F1     | LT (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|---------|--------|---------|---------|---------|
| 1210366   | H10V0210-040000 | 4       | 1/4-19 | 25      | 30,0    | 19,0    |
| 1210367   | H10V0210-060000 | 6       | 3/8-19 | 31      | 38,0    | 22,0    |
| 1210365   | H10V0210-080000 | 8       | 1/2-14 | 38      | 46,0    | 27,0    |
| 1210404   | H10V0210-100000 | 10      | 5/8-14 | 42      | 51,0    | 28,0    |
| 1210403   | H10V0210-120000 | 12      | 3/4-14 | 47      | 56,0    | 32,0    |
| 1210402   | H10V0210-160000 | 16      | 1-11   | 58      | 69,0    | 38,0    |

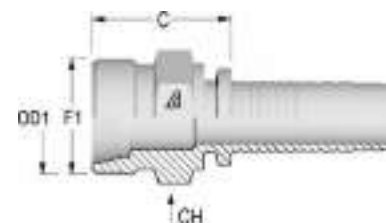
## // DIN METRIC INSERTS

## // H1211110

Metric Male 24° Seat

DIN 3853 - Light Series

CEL



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----|--------|---------|
| 1200451   | H1211110-031200 | 3         | 5,0     | 3/16"   | M12X1.5 | 6   | 20,8   | 14,0    |
| 1200481   | H1211110-041200 | 4         | 6,0     | 1/4"    | M12X1.5 | 6   | 21,3   | 14,0    |
| 1200482   | H1211110-041400 | 4         | 6,0     | 1/4"    | M14X1.5 | 8   | 21,3   | 14,0    |
| 1201558   | H1211110-041600 | 4         | 6,0     | 1/4"    | M16X1.5 | 10  | 23,3   | 17,0    |
| 1200518   | H1211110-051600 | 5         | 8,0     | 5/16"   | M16X1.5 | 10  | 23,3   | 17,0    |
| 1201086   | H1211110-051800 | 5         | 8,0     | 5/16"   | M18X1.5 | 12  | 24,3   | 19,0    |
| 1200314   | H1211110-061600 | 6         | 10,0    | 3/8"    | M16X1.5 | 10  | 23,3   | 17,0    |
| 1200315   | H1211110-061800 | 6         | 10,0    | 3/8"    | M18X1.5 | 12  | 24,3   | 19,0    |
| 1200320   | H1211110-062200 | 6         | 10,0    | 3/8"    | M22X1.5 | 15  | 25,3   | 22,0    |
| 1202565   | H1211110-081800 | 8         | 13,0    | 1/2"    | M18X1.5 | 12  | 25,1   | 19,0    |
| 1200358   | H1211110-082200 | 8         | 13,0    | 1/2"    | M22X1.5 | 15  | 26,1   | 22,0    |
| 1200362   | H1211110-082600 | 8         | 13,0    | 1/2"    | M26X1.5 | 18  | 27,1   | 27,0    |
| 1200401   | H1211110-102600 | 10        | 16,0    | 5/8"    | M26X1.5 | 18  | 27,1   | 27,0    |
| 1200432   | H1211110-123000 | 12        | 19,0    | 3/4"    | M30X2   | 22  | 31,6   | 32,0    |
| 1201372   | H1211110-163600 | 16        | 25,0    | 1"      | M36X2   | 28  | 34,4   | 36,0    |
| 1201373   | H1211110-204500 | 20        | 32,0    | 1 1/4"  | M45X2   | 35  | 40,0   | 46,0    |
| 1201374   | H1211110-245200 | 24        | 38,0    | 1 1/2"  | M52X2   | 42  | 42,0   | 55,0    |

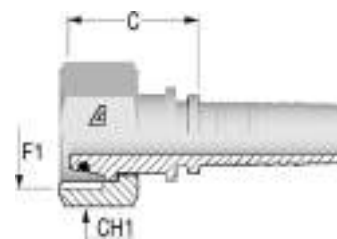
REV.2.1

## // H1221513

Metric Female 24° Cone with O-Ring

DIN 3865 - Light Series

DKOL



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1  | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|------|--------|----------|
| 1200595   | H1221513-031200 | Slip on nut     | 3         | 5,0     | 3/16"   | M12X1.5 | 6    | 23,9   | 14,0     |
| 1202944   | H1221511-041200 | Crimped         | 4         | 6,0     | 1/4"    | M12X1.5 | 6    | 24,8   | 14,0     |
| 1200614   | H1221513-041400 | Slip on nut     | 4         | 6,0     | 1/4"    | M14X1.5 | 8    | 24,4   | 17,0     |
| 1200609   | H1221513-041600 | Slip on nut     | 4         | 6,0     | 1/4"    | M16X1.5 | 10   | 25,4   | 19,0     |
| 1201060   | H1221513-041800 | Slip on nut     | 4         | 6,0     | 1/4"    | M18X1.5 | 12   | 25,4   | 22,0     |
| 1238160   | H1221512-051400 | Thrust wire nut | 5         | 8,0     | 5/16"   | M14X1.5 | 8    | 47,7   | 17,0     |
| 1200642   | H1221513-051600 | Slip on nut     | 5         | 8,0     | 5/16"   | M16X1.5 | 10   | 25,4   | 19,0     |
| 1200643   | H1221513-051800 | Slip on nut     | 5         | 8,0     | 5/16"   | M18X1.5 | 12   | 25,4   | 22,0     |
| 1246243   | H1221511-061600 | Crimped         | 6         | 10,0    | 3/8"    | M16X1.5 | 3/8" | 23,4   | 19,0     |
| 1200667   | H1221513-061800 | Slip on nut     | 6         | 10,0    | 3/8"    | M18X1.5 | 12   | 25,4   | 22,0     |
| 1200670   | H1221513-062200 | Slip on nut     | 6         | 10,0    | 3/8"    | M22X1.5 | 15   | 27,4   | 27,0     |
| 1238162   | H1221512-081800 | Thrust wire nut | 8         | 13,0    | 1/2"    | M18X1.5 | 12   | 24,0   | 22,0     |
| 1200707   | H1221513-082200 | Slip on nut     | 8         | 13,0    | 1/2"    | M22X1.5 | 15   | 28,2   | 27,0     |
| 1201843   | H1221513-082600 | Slip on nut     | 8         | 13,0    | 1/2"    | M26X1.5 | 18   | 29,2   | 32,0     |
| 1238163   | H1221512-102200 | Thrust wire nut | 10        | 16,0    | 5/8"    | M22X1.5 | 15   | 25,3   | 27,0     |
| 1200736   | H1221513-102600 | Slip on nut     | 10        | 16,0    | 5/8"    | M26X1.5 | 18   | 29,2   | 32,0     |
| 1239646   | H1221512-122600 | Thrust wire nut | 12        | 19,0    | 3/4"    | M26X1.5 | 18   | 25,5   | 32,0     |
| 1200762   | H1221513-123000 | Slip on nut     | 12        | 19,0    | 3/4"    | M30X2   | 22   | 31,7   | 36,0     |
| 1220609   | H1221513-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2   | 28   | 32,8   | 41,0     |
| 1201593   | H1221512-163000 | Thrust wire nut | 16        | 25,0    | 1"      | M30X2   | 22   | 44,6   | 36,0     |
| 1201385   | H1221513-163600 | Slip on nut     | 16        | 25,0    | 1"      | M36X2   | 28   | 33,6   | 41,0     |
| 1225980   | H1221513-164500 | Slip on nut     | 16        | 25,0    | 1"      | M45X2   | 35   | 38,5   | 50,0     |
| 1201386   | H1221513-204500 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M45X2   | 35   | 40,1   | 50,0     |
| 1201387   | H1221513-245200 | Slip on nut     | 24        | 38,0    | 1 1/2"  | M52X2   | 42   | 40,5   | 60,0     |

Image: insert with Slip on Nut.

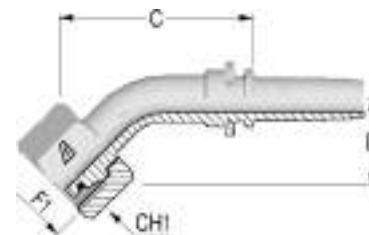
## // H1221543

45° Metric Female 24° Cone with O-Ring

DIN 3865 - Light Series

DKOL 45

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----|--------|-------------|----------|
| 1200594   | H1221543-031200 | Slip on nut     | 3         | 5,0     | 3/16"   | M12X1.5 | 6   | 44,9   | 19,0        | 14,0     |
| 1216676   | H1221541-041200 | Crimped         | 4         | 6,0     | 1/4"    | M12X1.5 | 6   | 45,2   | 15,5        | 14,0     |
| 1200612   | H1221543-041400 | Slip on nut     | 4         | 6,0     | 1/4"    | M14X1.5 | 8   | 43,0   | 17,5        | 17,0     |
| 1201576   | H1221543-041600 | Slip on nut     | 4         | 6,0     | 1/4"    | M16X1.5 | 10  | 42,0   | 20,0        | 19,0     |
| 1200645   | H1221543-051600 | Slip on nut     | 5         | 8,0     | 5/16"   | M16X1.5 | 10  | 47,5   | 20,0        | 19,0     |
| 1200646   | H1221543-051800 | Slip on nut     | 5         | 8,0     | 5/16"   | M18X1.5 | 12  | 47,0   | 22,0        | 22,0     |
| 1200671   | H1221543-061800 | Slip on nut     | 6         | 10,0    | 3/8"    | M18X1.5 | 12  | 46,8   | 19,5        | 22,0     |
| 1239971   | H1221542-081800 | Thrust wire nut | 8         | 13,0    | 1/2"    | M18X1.5 | 12  | 52,0   | 23,0        | 22,0     |
| 1200711   | H1221543-082200 | Slip on nut     | 8         | 13,0    | 1/2"    | M22X1.5 | 15  | 55,0   | 21,0        | 27,0     |
| 1200738   | H1221543-102600 | Slip on nut     | 10        | 16,0    | 5/8"    | M26X1.5 | 18  | 65,3   | 24,0        | 32,0     |
| 1240723   | H1221542-122600 | Thrust wire nut | 12        | 19,0    | 3/4"    | M26X1.5 | 20  | 77,0   | 34,0        | 32,0     |
| 1200764   | H1221543-123000 | Slip on nut     | 12        | 19,0    | 3/4"    | M30X2   | 22  | 69,4   | 32,0        | 36,0     |
| 1225983   | H1221542-163000 | Thrust wire nut | 16        | 25,0    | 1"      | M30X2   | 22  | 71,1   | 29,0        | 36,0     |
| 1201390   | H1221543-163600 | Slip on nut     | 16        | 25,0    | 1"      | M36X2   | 28  | 91,4   | 32,0        | 41,0     |
| 1201392   | H1221543-204500 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M45X2   | 35  | 100,0  | 45,0        | 50,0     |
| 1202128   | H1221543-245200 | Slip on nut     | 24        | 38,0    | 1 1/2"  | M52X2   | 42  | 114,1  | 47,0        | 60,0     |

Image: insert with Slip on Nut.

REV.2.1

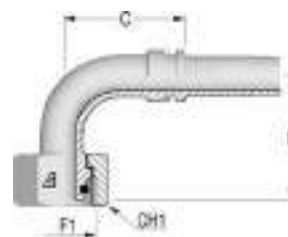
## // H1221593

90° Metric Female 24° Cone with O-Ring

DIN 3865 - Light Series

DKOL 90

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----|--------|-------------|----------|
| 1200597   | H1221593-031200 | Slip on nut     | 3         | 5,0     | 3/16"   | M12X1.5 | 6   | 23,6   | 33,0        | 14,0     |
| 1203240   | H1221591-041200 | Crimped         | 4         | 6,0     | 1/4"    | M12X1.5 | 6   | 29,5   | 26,0        | 14,0     |
| 1200618   | H1221593-041400 | Slip on nut     | 4         | 6,0     | 1/4"    | M14X1.5 | 8   | 28,3   | 32,5        | 17,0     |
| 1200616   | H1221593-041600 | Slip on nut     | 4         | 6,0     | 1/4"    | M16X1.5 | 10  | 28,3   | 32,5        | 19,0     |
| 1203218   | H1221593-041800 | Slip on nut     | 4         | 6,0     | 1/4"    | M18X1.5 | 12  | 28,8   | 35,0        | 22,0     |
| 1200648   | H1221593-051600 | Slip on nut     | 5         | 8,0     | 5/16"   | M16X1.5 | 10  | 33,7   | 38,0        | 19,0     |
| 1200649   | H1221593-051800 | Slip on nut     | 5         | 8,0     | 5/16"   | M18X1.5 | 12  | 32,2   | 40,0        | 22,0     |
| 1246244   | H1221591-061600 | Crimped         | 6         | 10,0    | 3/8"    | M16X1.5 | 10  | 36,0   | 36,0        | 19,0     |
| 1200676   | H1221593-061800 | Slip on nut     | 6         | 10,0    | 3/8"    | M18X1.5 | 12  | 32,8   | 39,0        | 22,0     |
| 1200679   | H1221593-062200 | Slip on nut     | 6         | 10,0    | 3/8"    | M22X1.5 | 15  | 35,8   | 38,5        | 27,0     |
| 1238173   | H1221592-081800 | Thrust wire nut | 8         | 13,0    | 1/2"    | M18X1.5 | 12  | 42,0   | 44,0        | 22,0     |
| 1200713   | H1221593-082200 | Slip on nut     | 8         | 13,0    | 1/2"    | M22X1.5 | 15  | 39,8   | 40,5        | 27,0     |
| 1203154   | H1221593-082600 | Slip on nut     | 8         | 13,0    | 1/2"    | M26X1.5 | 18  | 39,8   | 41,0        | 32,0     |
| 1201292   | H1221593-1022B0 | Slip on nut     | 10        | 16,0    | 5/8"    | M22X1.5 | 15  | 51,4   | 47,0        | 27,0     |
| 1200740   | H1221593-102600 | Slip on nut     | 10        | 16,0    | 5/8"    | M26X1.5 | 18  | 51,4   | 48,0        | 32,0     |
| 1200742   | H1221593-103000 | Slip on nut     | 10        | 16,0    | 5/8"    | M30X2   | 22  | 52,4   | 49,0        | 36,0     |
| 1239736   | H1221592-122600 | Thrust wire nut | 12        | 19,0    | 3/4"    | M26X1.5 | 18  | 60,0   | 64,0        | 32,0     |
| 1200767   | H1221593-123000 | Slip on nut     | 12        | 19,0    | 3/4"    | M30X2   | 22  | 52,1   | 59,0        | 36,0     |
| 1216685   | H1221593-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2   | 28  | 60,0   | 63,0        | 41,0     |
| 1225987   | H1221592-163000 | Thrust wire nut | 16        | 25,0    | 1"      | M30X2   | 22  | 66,0   | 64,0        | 36,0     |
| 1201391   | H1221593-163600 | Slip on nut     | 16        | 25,0    | 1"      | M36X2   | 28  | 75,0   | 68,0        | 41,0     |
| 1216679   | H1221592-203600 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | M36X2   | 28  | 92,2   | 86,0        | 41,0     |
| 1201393   | H1221593-204500 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M45X2   | 35  | 90,5   | 89,0        | 50,0     |
| 1201394   | H1221593-245200 | Slip on nut     | 24        | 38,0    | 1 1/2"  | M52X2   | 42  | 106,5  | 97,5        | 60,0     |

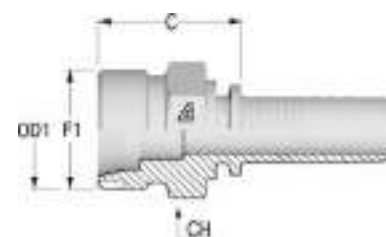
Image: insert with Slip on Nut.

## // H1211210

Metric Male 24° Seat

DIN 3853 - Heavy Series

CES



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----|--------|---------|
| 1201828   | H1211210-041400 | 4         | 6,0     | 1/4"    | M14X1.5 | 6   | 24,3   | 17,0    |
| 1200485   | H1211210-041600 | 4         | 6,0     | 1/4"    | M16X1.5 | 8   | 24,3   | 17,0    |
| 1200477   | H1211210-041800 | 4         | 6,0     | 1/4"    | M18X1.5 | 10  | 25,3   | 19,0    |
| 1200521   | H1211210-052000 | 5         | 8,0     | 5/16"   | M20X1.5 | 12  | 25,3   | 22,0    |
| 1202267   | H1211210-061800 | 6         | 10,0    | 3/8"    | M18X1.5 | 10  | 25,3   | 19,0    |
| 1200316   | H1211210-062000 | 6         | 10,0    | 3/8"    | M20X1.5 | 12  | 25,3   | 22,0    |
| 1200319   | H1211210-062200 | 6         | 10,0    | 3/8"    | M22X1.5 | 14  | 27,3   | 22,0    |
| 1221728   | H1211210-062400 | 6         | 10,0    | 3/8"    | M24X1.5 | 16  | 28,1   | 24,0    |
| 1202564   | H1211210-082200 | 8         | 13,0    | 1/2"    | M22X1.5 | 14  | 28,1   | 22,0    |
| 1200360   | H1211210-082400 | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 29,1   | 24,0    |
| 1200364   | H1211210-083000 | 8         | 13,0    | 1/2"    | M30X2   | 20  | 33,1   | 32,0    |
| 1200403   | H1211210-103000 | 10        | 16,0    | 5/8"    | M30X2   | 20  | 33,1   | 32,0    |
| 1202526   | H1211210-123000 | 12        | 19,0    | 3/4"    | M30X2   | 20  | 33,6   | 32,0    |
| 1200434   | H1211210-123600 | 12        | 19,0    | 3/4"    | M36X2   | 25  | 37,6   | 36,0    |
| 1203151   | H1211210-163600 | 16        | 25,0    | 1"      | M36X2   | 25  | 38,4   | 36,0    |
| 1201375   | H1211210-164200 | 16        | 25,0    | 1"      | M42X2   | 30  | 42,4   | 46,0    |
| 1201376   | H1211210-205200 | 20        | 32,0    | 1 1/4"  | M52X2   | 38  | 48,0   | 55,0    |

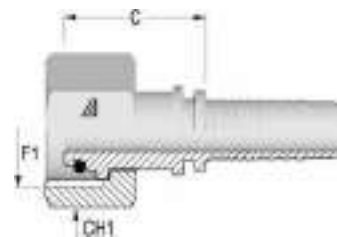
REV.2.1

## // H1221613

Metric Female 24° Cone with O-Ring

DIN 3865 - Heavy Series

DKOS



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----|--------|----------|
| 1200596   | H1221613-031600 | Slip on nut     | 3         | 5,0     | 3/16"   | M16X1.5 | 8   | 27,2   | 19,0     |
| 1201827   | H1221613-041400 | Slip on nut     | 4         | 6,0     | 1/4"    | M14X1.5 | 6   | 26,4   | 17,0     |
| 1200615   | H1221613-041600 | Slip on nut     | 4         | 6,0     | 1/4"    | M16X1.5 | 8   | 27,7   | 19,0     |
| 1200610   | H1221613-041800 | Slip on nut     | 4         | 6,0     | 1/4"    | M18X1.5 | 10  | 27,6   | 22,0     |
| 1201061   | H1221613-042000 | Slip on nut     | 4         | 6,0     | 1/4"    | M20X1.5 | 12  | 27,6   | 24,0     |
| 1201832   | H1221613-051800 | Slip on nut     | 5         | 8,0     | 5/16"   | M18X1.5 | 10  | 27,6   | 22,0     |
| 1200644   | H1221613-052000 | Slip on nut     | 5         | 8,0     | 5/16"   | M20X1.5 | 12  | 27,6   | 24,0     |
| 1239671   | H1221612-061600 | Thrust wire nut | 6         | 10,0    | 3/8"    | M16X1.5 | 8   | 23,2   | 19,0     |
| 1238179   | H1221612-061800 | Thrust wire nut | 6         | 10,0    | 3/8"    | M18X1.5 | 10  | 22,3   | 22,0     |
| 1200668   | H1221613-062000 | Slip on nut     | 6         | 10,0    | 3/8"    | M20X1.5 | 12  | 27,6   | 24,0     |
| 1200669   | H1221613-062200 | Slip on nut     | 6         | 10,0    | 3/8"    | M22X1.5 | 14  | 31,1   | 27,0     |
| 1202570   | H1221613-062400 | Slip on nut     | 6         | 10,0    | 3/8"    | M24X1.5 | 16  | 30,9   | 30,0     |
| 1239650   | H1221612-082000 | Thrust wire nut | 8         | 13,0    | 1/2"    | M20X1.5 | 12  | 23,2   | 24,0     |
| 1218557   | H1221613-082200 | Slip on nut     | 8         | 13,0    | 1/2"    | M22X1.5 | 14  | 31,9   | 27,0     |
| 1200708   | H1221613-082400 | Slip on nut     | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 31,7   | 30,0     |
| 1200710   | H1221613-083000 | Slip on nut     | 8         | 13,0    | 1/2"    | M30X2   | 20  | 36,5   | 36,0     |
| 1200737   | H1221613-103000 | Slip on nut     | 10        | 16,0    | 5/8"    | M30X2   | 20  | 36,5   | 36,0     |
| 1201732   | H1221613-123000 | Slip on nut     | 12        | 19,0    | 3/4"    | M30X2   | 20  | 37,0   | 36,0     |
| 1200763   | H1221613-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2   | 25  | 40,2   | 46,0     |
| 1239744   | H1221612-163000 | Thrust wire nut | 16        | 25,0    | 1"      | M30X2   | 20  | 29,8   | 36,0     |
| 1203099   | H1221613-163600 | Slip on nut     | 16        | 25,0    | 1"      | M36X2   | 25  | 41,0   | 46,0     |
| 1201388   | H1221613-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2   | 30  | 43,1   | 50,0     |
| 1216693   | H1221613-204200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M42X2   | 30  | 44,7   | 50,0     |
| 1201389   | H1221613-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2   | 38  | 48,1   | 60,0     |
| 1216695   | H1221613-245200 | Slip on nut     | 24        | 38,0    | 1 1/2"  | M52X2   | 38  | 48,1   | 60,0     |

Image: insert with Slip on Nut.

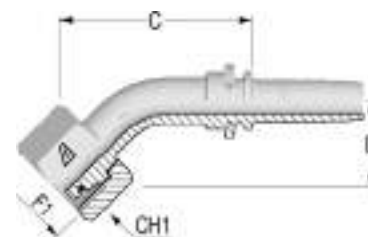
## // H1221643

45° Metric Female 24° Cone with O-Ring

DIN 3865 - Heavy Series

DKOS 45

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----|--------|-------------|----------|
| 1216697   | H1221643-041400 | Slip on nut     | 4         | 6,0     | 1/4"    | M14X1.5 | 6   | 47,0   | 20,0        | 17,0     |
| 1200613   | H1221643-041600 | Slip on nut     | 4         | 6,0     | 1/4"    | M16X1.5 | 8   | 48,6   | 16,0        | 19,0     |
| 1200611   | H1221643-041800 | Slip on nut     | 4         | 6,0     | 1/4"    | M18X1.5 | 10  | 43,5   | 19,0        | 22,0     |
| 1240698   | H1221643-051800 | Slip on nut     | 5         | 8,0     | 5/16"   | M18X1.5 | 10  | 46,0   | 18,0        | 22,0     |
| 1200647   | H1221643-052000 | Slip on nut     | 5         | 8,0     | 5/16"   | M20X1.5 | 12  | 48,1   | 21,0        | 24,0     |
| 1239968   | H1221642-061800 | Thrust wire nut | 6         | 10,0    | 3/8"    | M18X1.5 | 10  | 47,0   | 21,0        | 22,0     |
| 1200672   | H1221643-062000 | Slip on nut     | 6         | 10,0    | 3/8"    | M20X1.5 | 12  | 50,6   | 20,0        | 24,0     |
| 1200673   | H1221643-062200 | Slip on nut     | 6         | 10,0    | 3/8"    | M22X1.5 | 14  | 52,9   | 21,0        | 27,0     |
| 1242602   | H1221642-082000 | Thrust wire nut | 8         | 13,0    | 1/2"    | M20X1.5 | 12  | 54,0   | 24,0        | 24,0     |
| 1200712   | H1221643-082400 | Slip on nut     | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 55,8   | 21,5        | 30,0     |
| 1201300   | H1221643-103000 | Slip on nut     | 10        | 16,0    | 5/8"    | M30X2   | 20  | 66,3   | 30,0        | 36,0     |
| 1202891   | H1221643-123000 | Slip on nut     | 12        | 19,0    | 3/4"    | M30X2   | 20  | 66,1   | 29,0        | 36,0     |
| 1200765   | H1221643-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2   | 25  | 69,5   | 33,0        | 46,0     |
| 1203098   | H1221643-163600 | Slip on nut     | 16        | 25,0    | 1"      | M36X2   | 25  | 89,7   | 36,0        | 46,0     |
| 1201395   | H1221643-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2   | 30  | 110,3  | 40,5        | 50,0     |
| 1201398   | H1221643-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2   | 38  | 109,0  | 45,0        | 60,0     |

Image: insert with Slip on Nut.

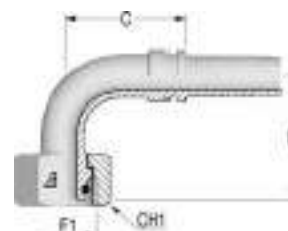
## // H1221693

90° Metric Female 24° Cone with O-Ring

DIN 3865 - Heavy Series

DKOS 90

Solid one piece



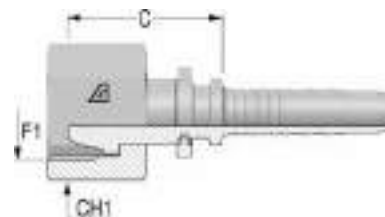
| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----|--------|-------------|----------|
| 1201065   | H1221693-041400 | Slip on nut     | 4         | 6,0     | 1/4"    | M14X1.5 | 6   | 27,3   | 33,0        | 17,0     |
| 1200619   | H1221693-041600 | Slip on nut     | 4         | 6,0     | 1/4"    | M16X1.5 | 8   | 27,3   | 33,0        | 19,0     |
| 1200617   | H1221693-041800 | Slip on nut     | 4         | 6,0     | 1/4"    | M18X1.5 | 10  | 26,8   | 34,0        | 22,0     |
| 1216700   | H1221693-051800 | Slip on nut     | 5         | 8,0     | 5/16"   | M18X1.5 | 10  | 33,2   | 39,0        | 22,0     |
| 1200650   | H1221693-052000 | Slip on nut     | 5         | 8,0     | 5/16"   | M20X1.5 | 12  | 33,2   | 39,0        | 24,0     |
| 1239989   | H1221692-061600 | Thrust wire nut | 6         | 10,0    | 3/8"    | M16X1.5 | 8   | 33,0   | 38,0        | 19,0     |
| 1239926   | H1221692-061800 | Thrust wire nut | 6         | 10,0    | 3/8"    | M18X1.5 | 10  | 35,0   | 38,0        | 22,0     |
| 1200677   | H1221693-062000 | Slip on nut     | 6         | 10,0    | 3/8"    | M20X1.5 | 12  | 34,3   | 38,5        | 24,0     |
| 1200678   | H1221693-062200 | Slip on nut     | 6         | 10,0    | 3/8"    | M22X1.5 | 14  | 34,3   | 40,5        | 27,0     |
| 1240110   | H1221692-082000 | Thrust wire nut | 8         | 13,0    | 1/2"    | M20X1.5 | 12  | 40,0   | 45,0        | 24,0     |
| 1200714   | H1221693-082400 | Slip on nut     | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 39,8   | 41,5        | 30,0     |
| 1201253   | H1221693-083000 | Slip on nut     | 8         | 13,0    | 1/2"    | M30X2   | 20  | 45,8   | 50,0        | 36,0     |
| 1240088   | H1221692-102400 | Thrust wire nut | 10        | 16,0    | 5/8"    | M24X1.5 | 16  | 52,0   | 56,0        | 30,0     |
| 1200741   | H1221693-103000 | Slip on nut     | 10        | 16,0    | 5/8"    | M30X2   | 20  | 47,9   | 55,0        | 36,0     |
| 1200766   | H1221693-123000 | Slip on nut     | 12        | 19,0    | 3/4"    | M30X2   | 20  | 50,6   | 58,0        | 36,0     |
| 1200768   | H1221693-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2   | 25  | 50,6   | 59,5        | 46,0     |
| 1203097   | H1221693-163600 | Slip on nut     | 16        | 25,0    | 1"      | M36X2   | 25  | 77,6   | 73,5        | 46,0     |
| 1201396   | H1221693-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2   | 30  | 75,6   | 79,0        | 50,0     |
| 1203096   | H1221693-204200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M42X2   | 30  | 95,0   | 88,0        | 50,0     |
| 1201397   | H1221693-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2   | 38  | 94,0   | 92,0        | 60,0     |

Image: insert with Slip on Nut.

REV.2.1

## // H1221313

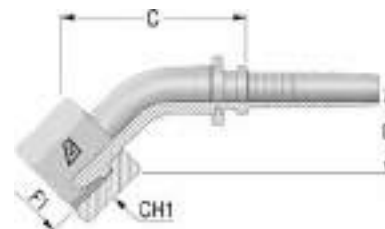
## Universal Metric Female



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1      | C (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|---------|--------|----------|
| 1200631   | H1221313-041400 | Slip on nut | 4         | 6,0     | 1/4"    | 14      | M14X1.5 | 22,3   | 17,0     |
| 1200632   | H1221313-041600 | Slip on nut | 4         | 6,0     | 1/4"    | 16      | M16X1.5 | 22,3   | 19,0     |
| 1200633   | H1221313-041800 | Slip on nut | 4         | 6,0     | 1/4"    | 18      | M18X1.5 | 22,3   | 22,0     |
| 1200658   | H1221313-051600 | Slip on nut | 5         | 8,0     | 5/16"   | 16      | M16X1.5 | 22,3   | 19,0     |
| 1200659   | H1221313-051800 | Slip on nut | 5         | 8,0     | 5/16"   | 18      | M18X1.5 | 22,3   | 22,0     |
| 1200698   | H1221313-061800 | Slip on nut | 6         | 10,0    | 3/8"    | 18      | M18X1.5 | 22,3   | 22,0     |
| 1200729   | H1221313-082200 | Slip on nut | 8         | 13,0    | 1/2"    | 22      | M22X1.5 | 24,7   | 27,0     |
| 1200753   | H1221313-102600 | Slip on nut | 10        | 16,0    | 5/8"    | 26      | M26X1.5 | 25,1   | 32,0     |

## // H1221343

## 45° Universal Metric Female



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1      | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|---------|--------|-------------|----------|
| 1216669   | H1221343-041400 | Slip on nut | 4         | 6,0     | 1/4"    | 14      | M14X1.5 | 36,5   | 16,0        | 17,0     |
| 1200660   | H1221343-051600 | Slip on nut | 5         | 8,0     | 5/16"   | 16      | M16X1.5 | 42,1   | 19,0        | 19,0     |
| 1201450   | H1221343-061800 | Slip on nut | 6         | 10,0    | 3/8"    | 18      | M18X1.5 | 42,8   | 20,0        | 22,0     |
| 1225972   | H1221343-082200 | Slip on nut | 8         | 13,0    | 1/2"    | 22      | M22X1.5 | 54,9   | 20,0        | 27,0     |
| 1225973   | H1221343-102600 | Slip on nut | 10        | 16,0    | 5/8"    | 26      | M26X1.5 | 54,0   | 22,0        | 32,0     |

## // H1221393

## 90° Universal Metric Female

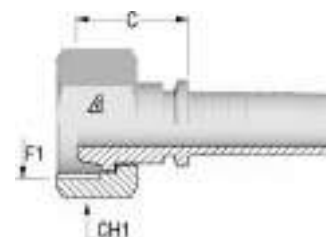


| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1      | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|---------|--------|-------------|----------|
| 1225975   | H1221393-041400 | Slip on nut | 4         | 6,0     | 1/4"    | 14      | M14X1.5 | 29,9   | 28,5        | 17,0     |
| 1201452   | H1221393-041600 | Slip on nut | 4         | 6,0     | 1/4"    | 16      | M16X1.5 | 28,3   | 33,0        | 19,0     |
| 1200661   | H1221393-051600 | Slip on nut | 5         | 8,0     | 5/16"   | 16      | M16X1.5 | 34,2   | 36,0        | 19,0     |
| 1201323   | H1221393-051800 | Slip on nut | 5         | 8,0     | 5/16"   | 18      | M18X1.5 | 34,0   | 32,0        | 22,0     |
| 1200701   | H1221393-061800 | Slip on nut | 6         | 10,0    | 3/8"    | 18      | M18X1.5 | 32,8   | 37,0        | 22,0     |
| 1201580   | H1221393-062200 | Slip on nut | 6         | 10,0    | 3/8"    | 22      | M22X1.5 | 32,3   | 36,0        | 27,0     |
| 1200730   | H1221393-082200 | Slip on nut | 8         | 13,0    | 1/2"    | 22      | M22X1.5 | 39,8   | 40,0        | 27,0     |
| 1216672   | H1221393-102600 | Slip on nut | 10        | 16,0    | 5/8"    | 26      | M26X1.5 | 51,0   | 46,0        | 32,0     |

## // H1221013

Metric Female 60° Cone

DIN 3863



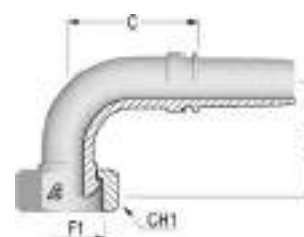
| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1      | C (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|---------|--------|----------|
| 1200759   | H1221013-123000 | Slip on nut | 12        | 19,0    | 3/4"    | 30      | M30X1.5 | 21,6   | 36,0     |
| 1201572   | H1221013-163800 | Slip on nut | 16        | 25,0    | 1"      | 38      | M38X1.5 | 28,0   | 46,0     |

## // H1221093

90° Metric Female 60° Cone

DIN 3863

Solid one piece



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1      | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|---------|--------|-------------|----------|
| 1202056   | H1221093-123000 | Slip on nut | 12        | 19,0    | 3/4"    | 30      | M30X1.5 | 54,6   | 47,0        | 36,0     |
| 1201620   | H1221093-163800 | Slip on nut | 16        | 25,0    | 1"      | 38      | M38X1.5 | 72,6   | 60,0        | 46,0     |

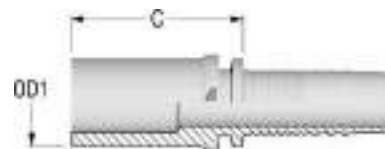
REV.2.1

## // H1252010

## Metric Straight Standpipe

## DIN 2353

## RSL/RSS



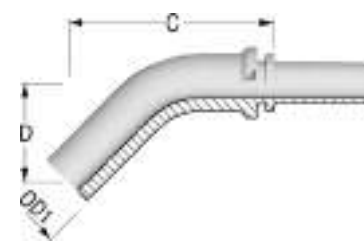
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | OD1 | C (mm) |
|-----------|-----------------|-----------|---------|---------|-----|--------|
| 1200855   | H1252010-030600 | 3         | 5,0     | 3/16"   | 6   | 27,8   |
| 1200856   | H1252010-030800 | 3         | 5,0     | 3/16"   | 8   | 29,8   |
| 1200859   | H1252010-041000 | 4         | 6,0     | 1/4"    | 10  | 32,2   |
| 1200860   | H1252010-041200 | 4         | 6,0     | 1/4"    | 12  | 31,2   |
| 1200865   | H1252010-040600 | 4         | 6,0     | 1/4"    | 6   | 28,3   |
| 1200867   | H1252010-040800 | 4         | 6,0     | 1/4"    | 8   | 30,2   |
| 1200871   | H1252010-051000 | 5         | 8,0     | 5/16"   | 10  | 30,2   |
| 1200872   | H1252010-051200 | 5         | 8,0     | 5/16"   | 12  | 32,7   |
| 1200878   | H1252010-050800 | 5         | 8,0     | 5/16"   | 8   | 30,3   |
| 1200793   | H1252010-061000 | 6         | 10,0    | 3/8"    | 10  | 30,3   |
| 1200794   | H1252010-061200 | 6         | 10,0    | 3/8"    | 12  | 29,3   |
| 1200796   | H1252010-061400 | 6         | 10,0    | 3/8"    | 14  | 35,8   |
| 1200797   | H1252010-061500 | 6         | 10,0    | 3/8"    | 15  | 34,8   |
| 1216922   | H1252010-081000 | 8         | 13,0    | 1/2"    | 10  | 32,5   |
| 1200809   | H1252010-081200 | 8         | 13,0    | 1/2"    | 12  | 32,1   |
| 1200811   | H1252010-081400 | 8         | 13,0    | 1/2"    | 14  | 36,1   |
| 1200812   | H1252010-081500 | 8         | 13,0    | 1/2"    | 15  | 32,1   |
| 1200813   | H1252010-081600 | 8         | 13,0    | 1/2"    | 16  | 37,1   |
| 1200815   | H1252010-081800 | 8         | 13,0    | 1/2"    | 18  | 36,0   |
| 1200828   | H1252010-101800 | 10        | 16,0    | 5/8"    | 18  | 34,2   |
| 1200829   | H1252010-102000 | 10        | 16,0    | 5/8"    | 20  | 44,2   |
| 1200832   | H1252010-102200 | 10        | 16,0    | 5/8"    | 22  | 37,2   |
| 1200838   | H1252010-122000 | 12        | 19,0    | 3/4"    | 20  | 45,5   |
| 1200840   | H1252010-122200 | 12        | 19,0    | 3/4"    | 22  | 36,5   |
| 1200841   | H1252010-122500 | 12        | 19,0    | 3/4"    | 25  | 48,5   |
| 1201442   | H1252010-162500 | 16        | 25,0    | 1"      | 25  | 51,4   |
| 1201440   | H1252010-162800 | 16        | 25,0    | 1"      | 28  | 40,4   |
| 1201441   | H1252010-163000 | 16        | 25,0    | 1"      | 30  | 54,4   |
| 1214227   | H1252010-163800 | 16        | 25,0    | 1"      | 38  | 60,4   |
| 1214228   | H1252010-203000 | 20        | 32,0    | 1 1/4"  | 30  | 56,0   |
| 1201443   | H1252010-203500 | 20        | 32,0    | 1 1/4"  | 35  | 48,0   |
| 1201444   | H1252010-203800 | 20        | 32,0    | 1 1/4"  | 38  | 62,0   |
| 1203082   | H1252010-243800 | 24        | 38,0    | 1 1/2"  | 38  | 62,0   |
| 1201445   | H1252010-244200 | 24        | 38,0    | 1 1/2"  | 42  | 52,0   |

## // H1252040

45° Metric Standpipe

DIN 2353 - RSL45/RSS 45

Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | OD1 | C (mm) | D Drop (mm) |
|-----------|-----------------|-----------|---------|---------|-----|--------|-------------|
| 1200862   | H1252040-041000 | 4         | 6,0     | 1/4"    | 10  | 48,0   | 24,0        |
| 1200863   | H1252040-040600 | 4         | 6,0     | 1/4"    | 6   | 50,1   | 28,0        |
| 1200864   | H1252040-040800 | 4         | 6,0     | 1/4"    | 8   | 43,2   | 23,0        |
| 1200876   | H1252040-051000 | 5         | 8,0     | 5/16"   | 10  | 48,4   | 24,0        |
| 1200877   | H1252040-051200 | 5         | 8,0     | 5/16"   | 12  | 55,4   | 28,0        |
| 1200800   | H1252040-061000 | 6         | 10,0    | 3/8"    | 10  | 48,5   | 24,0        |
| 1200801   | H1252040-061200 | 6         | 10,0    | 3/8"    | 12  | 55,5   | 28,0        |
| 1200802   | H1252040-061400 | 6         | 10,0    | 3/8"    | 14  | 53,1   | 28,0        |
| 1200817   | H1252040-081500 | 8         | 13,0    | 1/2"    | 15  | 62,6   | 28,5        |
| 1200818   | H1252040-081600 | 8         | 13,0    | 1/2"    | 16  | 63,3   | 32,0        |
| 1200843   | H1252040-122200 | 12        | 19,0    | 3/4"    | 22  | 74,3   | 37,0        |
| 1200844   | H1252040-122500 | 12        | 19,0    | 3/4"    | 25  | 83,0   | 44,0        |
| 1214232   | H1252040-163000 | 16        | 25,0    | 1"      | 30  | 137,0  | 46,1        |

## // H1252090

90° Metric Standpipe

DIN 2353 - RSL 90/RSS90

Solid one piece



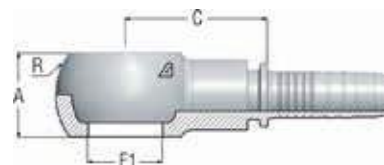
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | OD1 | C (mm) | D Drop (mm) |
|-----------|-----------------|-----------|---------|---------|-----|--------|-------------|
| 1200857   | H1252090-030600 | 3         | 5,0     | 3/16"   | 6   | 24,5   | 36,0        |
| 1200868   | H1252090-041000 | 4         | 6,0     | 1/4"    | 10  | 37,0   | 42,0        |
| 1202296   | H1252090-041200 | 4         | 6,0     | 1/4"    | 12  | 38,0   | 50,0        |
| 1200869   | H1252090-040600 | 4         | 6,0     | 1/4"    | 6   | 25,4   | 36,0        |
| 1200870   | H1252090-040800 | 4         | 6,0     | 1/4"    | 8   | 25,9   | 44,0        |
| 1200879   | H1252090-051000 | 5         | 8,0     | 5/16"   | 10  | 28,6   | 48,5        |
| 1200880   | H1252090-051200 | 5         | 8,0     | 5/16"   | 12  | 39,4   | 55,0        |
| 1200803   | H1252090-061000 | 6         | 10,0    | 3/8"    | 10  | 30,7   | 42,0        |
| 1200804   | H1252090-061200 | 6         | 10,0    | 3/8"    | 12  | 35,0   | 50,0        |
| 1200805   | H1252090-061400 | 6         | 10,0    | 3/8"    | 14  | 37,0   | 50,0        |
| 1218454   | H1252090-081200 | 8         | 13,0    | 1/2"    | 12  | 41,1   | 52,0        |
| 1200822   | H1252090-081500 | 8         | 13,0    | 1/2"    | 15  | 44,7   | 57,0        |
| 1200823   | H1252090-081600 | 8         | 13,0    | 1/2"    | 16  | 43,7   | 64,0        |
| 1203079   | H1252090-081800 | 8         | 13,0    | 1/2"    | 18  | 58,1   | 59,0        |
| 1200835   | H1252090-101800 | 10        | 16,0    | 5/8"    | 18  | 52,2   | 58,0        |
| 1200836   | H1252090-102000 | 10        | 16,0    | 5/8"    | 20  | 62,6   | 70,0        |
| 1210832   | H1252090-102200 | 10        | 16,0    | 5/8"    | 22  | 49,4   | 64,0        |
| 1203081   | H1252090-122000 | 12        | 19,0    | 3/4"    | 20  | 63,4   | 70,0        |
| 1200846   | H1252090-122200 | 12        | 19,0    | 3/4"    | 22  | 53,1   | 67,5        |
| 1200847   | H1252090-122500 | 12        | 19,0    | 3/4"    | 25  | 63,2   | 85,0        |
| 1214233   | H1252090-162500 | 16        | 25,0    | 1"      | 25  | 73,1   | 98,5        |
| 1202886   | H1252090-162800 | 16        | 25,0    | 1"      | 28  | 73,1   | 89,5        |
| 1214234   | H1252090-163000 | 16        | 25,0    | 1"      | 30  | 73,1   | 102,5       |
| 1214235   | H1252090-203500 | 20        | 32,0    | 1 1/4"  | 35  | 89,0   | 106,5       |

REV.2.1

## // H1230910

Metric Banjo

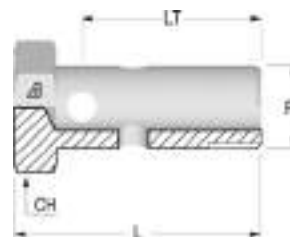
RNM



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1      | C (mm) | R (mm) | A (mm) |
|-----------|-----------------|-----------|---------|---------|---------|--------|--------|--------|
| 1202577   | H1230910-031000 | 3         | 5,0     | 3/16"   | M10X1.0 | 24,0   | 17     | 10     |
| 1200468   | H1230910-041000 | 4         | 6,0     | 1/4"    | M10X1.0 | 25,0   | 17     | 10     |
| 1200469   | H1230910-041200 | 4         | 6,0     | 1/4"    | M12X1.5 | 28,5   | 20     | 12     |
| 1200470   | H1230910-041400 | 4         | 6,0     | 1/4"    | M14X1.5 | 27,5   | 24     | 14     |
| 1200513   | H1230910-051200 | 5         | 8,0     | 5/16"   | M12X1.5 | 28,5   | 24     | 12     |
| 1200514   | H1230910-051400 | 5         | 8,0     | 5/16"   | M14X1.5 | 27,5   | 24     | 14     |
| 1200515   | H1230910-051600 | 5         | 8,0     | 5/16"   | M16X1.5 | 30,5   | 28     | 18     |
| 1200516   | H1230910-051800 | 5         | 8,0     | 5/16"   | M18X1.5 | 28,5   | 32     | 20     |
| 1200309   | H1230910-061400 | 6         | 10,0    | 3/8"    | M14X1.5 | 27,5   | 24     | 14     |
| 1200310   | H1230910-061600 | 6         | 10,0    | 3/8"    | M16X1.5 | 30,5   | 28     | 18     |
| 1200311   | H1230910-061800 | 6         | 10,0    | 3/8"    | M18X1.5 | 31,5   | 32     | 20     |
| 1200346   | H1230910-081800 | 8         | 13,0    | 1/2"    | M18X1.5 | 32,0   | 32     | 20     |
| 1200347   | H1230910-082200 | 8         | 13,0    | 1/2"    | M22X1.5 | 35,0   | 39     | 22     |
| 1200389   | H1230910-102200 | 10        | 16,0    | 5/8"    | M22X1.5 | 35,0   | 39     | 23,5   |
| 1200422   | H1230910-122600 | 12        | 19,0    | 3/4"    | M26X1.5 | 38,5   | 46     | 29     |
| 1203083   | H1230910-163000 | 16        | 25,0    | 1"      | M30X1.5 | 42,5   | 54     | 36     |

## // H10V0810

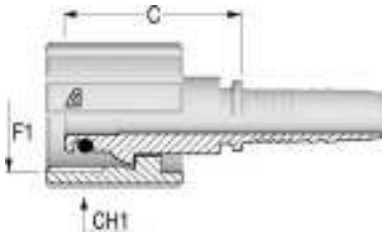
Metric Bolt



| Item Code | Product Code    | F1 Dash | F1      | LT (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|---------|---------|---------|---------|---------|
| 1210374   | H10V0810-100000 | 10      | M10X1.0 | 19      | 24,0    | 14,0    |
| 1210375   | H10V0810-120000 | 12      | M12X1.5 | 24      | 29,0    | 17,0    |
| 1210368   | H10V0810-140000 | 14      | M14X1.5 | 28      | 34,0    | 19,0    |
| 1210384   | H10V0810-160000 | 16      | M16X1.5 | 34      | 41,0    | 22,0    |
| 1210369   | H10V0810-180000 | 18      | M18X1.5 | 37      | 44,0    | 24,0    |
| 1210371   | H10V0810-220000 | 22      | M22X1.5 | 41      | 48,0    | 27,0    |
| 1210406   | H10V0810-260000 | 26      | M26X1.5 | 42      | 52,0    | 32,0    |
| 1210405   | H10V0810-300000 | 30      | M30X1.5 | 51      | 62,0    | 38,0    |

// PRESSURE WASHER

// H1224914  
Universal Female for Pressure Washer

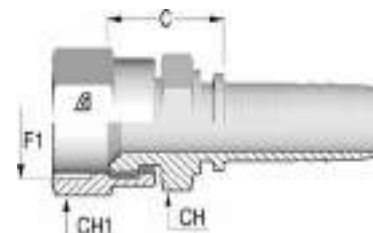


| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1      | C (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|---------|--------|----------|
| 1203350   | H1224914-042200 | Slip on nut | 4         | 6,0     | 1/4"    | 22      | M22X1.5 | 36,8   | 35,0     |
| 1203351   | H1224914-052200 | Slip on nut | 5         | 8,0     | 5/16"   | 22      | M22X1.5 | 36,8   | 35,0     |
| 1203352   | H1224914-062200 | Slip on nut | 6         | 10,0    | 3/8"    | 22      | M22X1.5 | 36,8   | 35,0     |

## // SAE INSERTS

## // H1226611

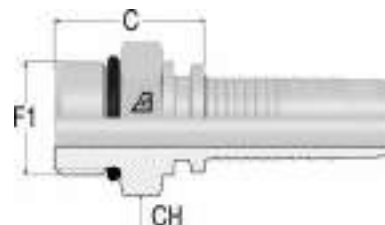
## SAE Female Swivel 45° Seat



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|-----------|--------|---------|----------|
| 1202661   | H1226611-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 5/8-18    | 23,3   | 19,0    | 22,0     |
| 1226098   | H1226611-081000 | Crimped  | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 26,6   | 22,0    | 27,0     |
| 1202371   | H1226611-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 1/16-14 | 28,6   | 27,0    | 32,0     |

## // H1213010

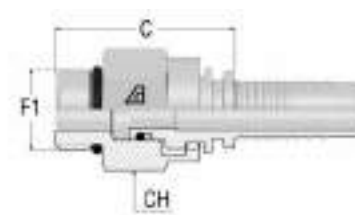
## SAE Male Solid - O-Ring Boss



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----------|--------|---------|
| 1203147   | H1213010-040400 | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 20,3   | 14,0    |
| 1201833   | H1213010-040500 | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 21,3   | 16,0    |
| 1202519   | H1213010-040600 | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 22,3   | 17,0    |
| 1201834   | H1213010-060600 | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 23,3   | 19,0    |
| 1200337   | H1213010-060800 | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 24,3   | 22,0    |
| 1200338   | H1213010-061000 | 6         | 10,0    | 3/8"    | 10      | 7/8-14    | 26,8   | 27,0    |
| 1200382   | H1213010-080800 | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 25,1   | 22,0    |
| 1200383   | H1213010-081000 | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 27,6   | 27,0    |
| 1200381   | H1213010-081200 | 8         | 13,0    | 1/2"    | 12      | 1 1/16-12 | 32,1   | 32,0    |
| 1221652   | H1213010-101000 | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 27,6   | 24,0    |
| 1203146   | H1213010-121000 | 12        | 19,0    | 3/4"    | 10      | 7/8-14    | 28,1   | 27,0    |
| 1200445   | H1213010-121200 | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 32,6   | 32,0    |
| 1201836   | H1213010-161600 | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 35,4   | 38,0    |
| 1225859   | H1213010-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 39,0   | 46,0    |

## // H1213011

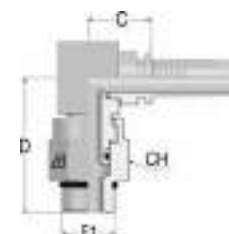
## SAE Male Swivel - O-Ring Boss



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|-----------|--------|---------|
| 1225927   | H1213011-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 40,5   | 22,0    |
| 1225928   | H1213011-060800 | Crimped  | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 22,0   | 22,0    |
| 1225929   | H1213011-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 23,0   | 25,0    |
| 1225930   | H1213011-081000 | Crimped  | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 23,0   | 25,0    |
| 1230553   | H1213011-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 49,6   | 32,0    |

## // H1213081

## 90° Compact SAE Male Swivel - O-Ring Boss



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|-----------|--------|-------------|---------|
| 1226490   | H1213081-040500 | Crimped  | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 17,0   | 34,0        | 17,0    |
| 1225933   | H1213081-060800 | Crimped  | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 22,0   | 44,0        | 25,0    |
| 1225934   | H1213081-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 21,6   | 49,7        | 25,0    |
| 1225935   | H1213081-081000 | Crimped  | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 23,0   | 49,0        | 25,0    |
| 1226492   | H1213081-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 27,0   | 61,0        | 32,0    |
| 1240593   | H1213081-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 34,4   | 67,5        | 41,0    |

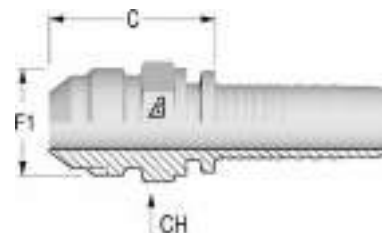
REV.2.1

## // JIC 37° INSERTS

## // H1212510

JIC Male 37° Cone

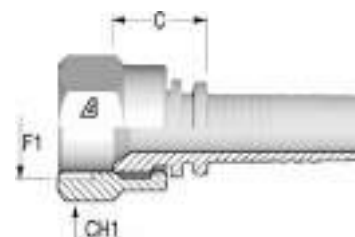
AGJ



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----------|--------|---------|
| 1200457   | H1212510-030400 | 3         | 5,0     | 3/16"   | 4       | 7/16-20   | 23,8   | 12,0    |
| 1200500   | H1212510-040400 | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 25,3   | 12,0    |
| 1200499   | H1212510-040500 | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 25,3   | 14,0    |
| 1200501   | H1212510-040600 | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 26,3   | 17,0    |
| 1200534   | H1212510-050500 | 5         | 8,0     | 5/16"   | 5       | 1/2-20    | 25,3   | 14,0    |
| 1200535   | H1212510-050600 | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 26,3   | 17,0    |
| 1201087   | H1212510-050800 | 5         | 8,0     | 5/16"   | 8       | 3/4-16    | 29,8   | 19,0    |
| 1200332   | H1212510-060600 | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 26,3   | 17,0    |
| 1200330   | H1212510-060800 | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 29,8   | 19,0    |
| 1200331   | H1212510-061000 | 6         | 10,0    | 3/8"    | 10      | 7/8-14    | 33,8   | 24,0    |
| 1200375   | H1212510-080800 | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 30,6   | 19,0    |
| 1200376   | H1212510-081000 | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 34,6   | 24,0    |
| 1200374   | H1212510-081200 | 8         | 13,0    | 1/2"    | 12      | 1 1/16-12 | 37,1   | 27,0    |
| 1200413   | H1212510-101000 | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 34,6   | 24,0    |
| 1200411   | H1212510-101200 | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 37,1   | 27,0    |
| 1200441   | H1212510-121200 | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 37,6   | 27,0    |
| 1200442   | H1212510-121400 | 12        | 19,0    | 3/4"    | 14      | 1 3/16-12 | 40,1   | 32,0    |
| 1200443   | H1212510-121600 | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 42,6   | 36,0    |
| 1222989   | H1212510-161200 | 16        | 25,0    | 1"      | 12      | 1 1/16-12 | 40,4   | 32,0    |
| 1201379   | H1212510-161600 | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 43,4   | 36,0    |
| 1201380   | H1212510-162000 | 16        | 25,0    | 1"      | 20      | 1 5/8-12  | 46,9   | 46,0    |
| 1201381   | H1212510-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 48,5   | 46,0    |
| 1201785   | H1212510-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 7/8-12  | 52,5   | 50,0    |
| 1201382   | H1212510-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 52,5   | 50,0    |
| 1201383   | H1212510-323200 | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 62,0   | 65,0    |

# // H1222511

## JIC Female 37° Seat DKJ

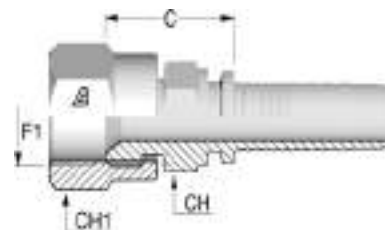


| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|----------|
| 1200600   | H1222511-030400 | Crimped         | 3         | 5,0     | 3/16"   | 4       | 7/16-20   | 14,3   | 16,0     |
| 1200625   | H1222511-040400 | Crimped         | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 14,6   | 16,0     |
| 1200623   | H1222511-040500 | Crimped         | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 15,3   | 17,0     |
| 1200626   | H1222511-040600 | Crimped         | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 15,3   | 19,0     |
| 1200655   | H1222511-050500 | Crimped         | 5         | 8,0     | 5/16"   | 5       | 1/2-20    | 15,3   | 17,0     |
| 1200656   | H1222511-050600 | Crimped         | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 15,3   | 19,0     |
| 1200691   | H1222511-060600 | Crimped         | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 15,3   | 19,0     |
| 1200687   | H1222511-060800 | Crimped         | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 17,8   | 25,0     |
| 1200690   | H1222511-061000 | Crimped         | 6         | 10,0    | 3/8"    | 10      | 7/8-14    | 20,3   | 27,0     |
| 1200723   | H1222511-080800 | Crimped         | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 18,6   | 25,0     |
| 1200725   | H1222511-081000 | Crimped         | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 19,6   | 27,0     |
| 1200722   | H1222511-081200 | Crimped         | 8         | 13,0    | 1/2"    | 12      | 1 1/16-12 | 22,1   | 32,0     |
| 1200751   | H1222511-101000 | Crimped         | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 19,6   | 27,0     |
| 1200749   | H1222511-101200 | Crimped         | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 20,1   | 32,0     |
| 1201841   | H1222511-121000 | Crimped         | 12        | 19,0    | 3/4"    | 10      | 7/8-14    | 20,1   | 27,0     |
| 1200774   | H1222511-121200 | Crimped         | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 20,6   | 32,0     |
| 1200775   | H1222511-121400 | Crimped         | 12        | 19,0    | 3/4"    | 14      | 1 3/16-12 | 19,9   | 36,0     |
| 1200776   | H1222511-121600 | Crimped         | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 22,1   | 38,0     |
| 1201399   | H1222511-161200 | Crimped         | 16        | 25,0    | 1"      | 12      | 1 1/16-12 | 22,4   | 32,0     |
| 1201400   | H1222511-161600 | Crimped         | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 23,9   | 38,0     |
| 1201401   | H1222512-162000 | Thrust wire nut | 16        | 25,0    | 1"      | 20      | 1 5/8-12  | 26,5   | 50,0     |
| 1202820   | H1222511-201600 | Crimped         | 20        | 32,0    | 1 1/4"  | 16      | 1 5/16-12 | 26,5   | 38,0     |
| 1201402   | H1222512-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 28,1   | 50,0     |
| 1201403   | H1222512-202400 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 24      | 1 7/8-12  | 30,4   | 55,0     |
| 1201097   | H1222512-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 29,4   | 55,0     |
| 1201404   | H1222512-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 32,0   | 70,0     |

Image: insert with Crimped Nut.

REV.2.1

## // H1226511

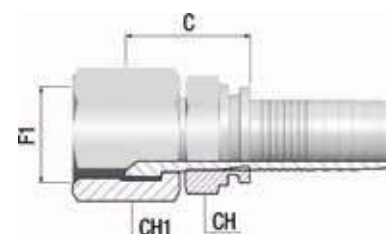
JIC Female 37° Seat with Stem Hexagon  
DKJ

| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|---------|----------|
| 1200599   | H1226511-030400 | Crimped         | 3         | 5,0     | 3/16"   | 4       | 7/16-20   | 18,1   | 12,0    | 16,0     |
| 1200621   | H1226511-040400 | Crimped         | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 18,3   | 14,0    | 16,0     |
| 1202406   | H1226511-040500 | Crimped         | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 20,3   | 14,0    | 17,0     |
| 1200622   | H1226511-040600 | Crimped         | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 20,3   | 14,0    | 19,0     |
| 1201497   | H1226511-050500 | Crimped         | 5         | 8,0     | 5/16"   | 5       | 1/2-20    | 20,3   | 14,0    | 17,0     |
| 1201264   | H1226511-050600 | Crimped         | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 20,3   | 14,0    | 19,0     |
| 1203246   | H1226511-060400 | Crimped         | 6         | 10,0    | 3/8"    | 4       | 7/16-20   | 20,6   | 17,0    | 16,0     |
| 1223146   | H1226511-060500 | Crimped         | 6         | 10,0    | 3/8"    | 5       | 1/2-20    | 21,3   | 16,0    | 17,0     |
| 1200686   | H1226511-060600 | Crimped         | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 21,3   | 17,0    | 19,0     |
| 1200685   | H1226511-060800 | Crimped         | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 24,8   | 19,0    | 25,0     |
| 1201340   | H1226511-061000 | Crimped         | 6         | 10,0    | 3/8"    | 10      | 7/8-14    | 25,8   | 22,0    | 27,0     |
| 1203090   | H1226511-080600 | Crimped         | 8         | 13,0    | 1/2"    | 6       | 9/16-18   | 23,1   | 19,0    | 19,0     |
| 1200720   | H1226511-080800 | Crimped         | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 25,6   | 19,0    | 25,0     |
| 1200721   | H1226511-081000 | Crimped         | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 26,6   | 22,0    | 27,0     |
| 1210833   | H1226511-081200 | Crimped         | 8         | 13,0    | 1/2"    | 12      | 1 1/16-12 | 28,1   | 25,0    | 32,0     |
| 1203329   | H1226511-100800 | Crimped         | 10        | 16,0    | 5/8"    | 8       | 3/4-16    | 26,6   | 24,0    | 25,0     |
| 1201728   | H1226511-101000 | Crimped         | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 27,6   | 24,0    | 27,0     |
| 1201464   | H1226511-101200 | Crimped         | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 28,1   | 25,0    | 32,0     |
| 1202895   | H1226511-121000 | Crimped         | 12        | 19,0    | 3/4"    | 10      | 7/8-14    | 28,1   | 27,0    | 27,0     |
| 1201333   | H1226511-121200 | Crimped         | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 28,6   | 27,0    | 32,0     |
| 1214219   | H1226511-121400 | Crimped         | 12        | 19,0    | 3/4"    | 14      | 1 3/16-12 | 29,9   | 32,0    | 36,0     |
| 1203089   | H1226511-121600 | Crimped         | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 32,1   | 32,0    | 38,0     |
| 1203243   | H1226511-141600 | Crimped         | 14        | 22,0    | 7/8"    | 16      | 1 5/16-12 | 32,1   | 32,0    | 38,0     |
| 1203088   | H1226511-161200 | Crimped         | 16        | 25,0    | 1"      | 12      | 1 1/16-12 | 31,4   | 32,0    | 32,0     |
| 1202408   | H1226511-161600 | Crimped         | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 32,9   | 32,0    | 38,0     |
| 1214220   | H1226512-162000 | Thrust wire nut | 16        | 25,0    | 1"      | 20      | 1 5/8-12  | 37,5   | 41,0    | 50,0     |
| 1216812   | H1226511-201600 | Crimped         | 20        | 32,0    | 1 1/4"  | 16      | 1 5/16-12 | 37,5   | 41,0    | 38,0     |
| 1202483   | H1226512-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 39,1   | 41,0    | 50,0     |
| 1226093   | H1226512-202400 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 24      | 1 7/8-12  | 43,4   | 50,0    | 55,0     |
| 1216815   | H1226512-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 43,4   | 50,0    | 55,0     |
| 1216816   | H1226512-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 49,0   | 65,0    | 70,0     |

Image: insert with Crimped Nut.

// H1226514 **NEW**

**JIC Female 37° Seat with double Hexagon**  
**DKJ and solid nut**

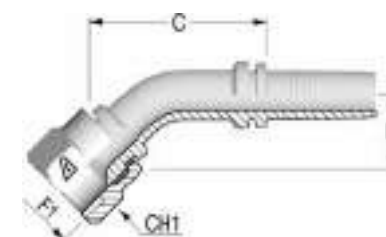


| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|-----------|--------|---------|----------|
| 1244537   | H1226514-040400 | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 19,0   | 14,0    | 14,0     |
| 1245538   | H1226514-040500 | Slip on nut | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 18,9   | 14,0    | 17,0     |
| 1248014   | H122651K-040600 | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 22,0   | 14,0    | 19,0     |
| 1235613   | H1226514-050500 | Slip on nut | 5         | 8,0     | 5/16"   | 5       | 1/2-20    | 20,6   | 14,0    | 17,0     |
| 1245542   | H1226514-050600 | Slip on nut | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 22,1   | 14,0    | 19,0     |
| 1235614   | H1226514-060600 | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 22,1   | 17,0    | 19,0     |
| 1248122   | H122651K-060800 | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 24,0   | 17,0    | 22,0     |
| 1238237   | H1226514-080800 | Slip on nut | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 25,7   | 19,0    | 22,0     |
| 1248016   | H122651K-081000 | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 29,0   | 19,0    | 27,0     |
| 1235615   | H1226514-101000 | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 29,2   | 24,0    | 27,0     |
| 1248017   | H122651K-101200 | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 28,6   | 24,0    | 32,0     |
| 1235616   | H1226514-121200 | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 29,7   | 27,0    | 32,0     |
| 1248018   | H122651K-121600 | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 36,1   | 32,0    | 41,0     |
| 1235617   | H1226514-161600 | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 33,9   | 32,0    | 41,0     |

Product Codes roots ending with K: insert with double hexagon knurled (ex. H122651K).

## // H1222541-M

**45° JIC Female 37° Seat**  
**Medium Drop**  
**DKJ 45M**  
**Solid one piece**



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|-------------|----------|
| 1202821   | H1222541-03040M | Crimped         | 3         | 5,0     | 3/16"   | 4       | 7/16-20   | 37,1   | 10,0        | 16,0     |
| 1202822   | H1222541-04040M | Crimped         | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 36,6   | 10,0        | 16,0     |
| 1202823   | H1222541-04050M | Crimped         | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 37,2   | 12,0        | 17,0     |
| 1202824   | H1222541-04060M | Crimped         | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 39,4   | 11,0        | 19,0     |
| 1202825   | H1222541-05050M | Crimped         | 5         | 8,0     | 5/16"   | 5       | 1/2-20    | 39,8   | 12,0        | 17,0     |
| 1202826   | H1222541-05060M | Crimped         | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 42,8   | 12,0        | 19,0     |
| 1202827   | H1222541-06060M | Crimped         | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 46,3   | 11,0        | 19,0     |
| 1202791   | H1222541-06080M | Crimped         | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 47,2   | 15,0        | 25,0     |
| 1202828   | H1222541-08080M | Crimped         | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 51,6   | 15,0        | 25,0     |
| 1202829   | H1222541-08100M | Crimped         | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 50,7   | 16,0        | 27,0     |
| 1202830   | H1222541-08120M | Crimped         | 8         | 13,0    | 1/2"    | 12      | 1 1/16-12 | 57,0   | 21,0        | 32,0     |
| 1202832   | H1222541-10100M | Crimped         | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 62,2   | 19,0        | 27,0     |
| 1202831   | H1222541-10120M | Crimped         | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 68,6   | 21,0        | 32,0     |
| 1202833   | H1222541-12120M | Crimped         | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 67,5   | 21,0        | 32,0     |
| 1200778   | H1222541-121400 | Crimped         | 12        | 19,0    | 3/4"    | 14      | 1 3/16-12 | 67,6   | 23,0        | 36,0     |
| 1202834   | H1222541-12160M | Crimped         | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 71,4   | 26,0        | 38,0     |
| 1202835   | H1222541-16160M | Crimped         | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 79,4   | 24,0        | 38,0     |
| 1202836   | H1222542-16200M | Thrust wire nut | 16        | 25,0    | 1"      | 20      | 1 5/8-12  | 83,8   | 37,0        | 50,0     |
| 1202837   | H1222542-20200M | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 97,1   | 37,0        | 50,0     |
| 1202839   | H1222542-24240M | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 112,7  | 43,0        | 55,0     |
| 1202840   | H1222542-32320M | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 159,9  | 67,0        | 70,0     |

Image: insert with Crimped Nut.

REV.2.1

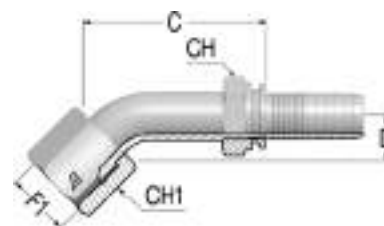
// H1226544-M **NEW**

45° JIC Female 37° Seat

Medium Drop

DKJ 45M

Solid nut and double Hexagon crimped



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|-----------|--------|-------------|---------|----------|
| 1241580   | H1226544-04040M | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 37,0   | 10,0        | 14,0    | 14,0     |
| 1243629   | H1226544-04060M | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 39,4   | 11,0        | 14,0    | 19,0     |
| 1241581   | H1226544-05050M | Slip on nut | 5         | 8,0     | 5/16"   | 5       | 1/2-20    | 40,0   | 11,0        | 14,0    | 17,0     |
| 1241582   | H1226544-06060M | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 46,0   | 11,0        | 17,0    | 19,0     |
| 1244831   | H1226544-06080M | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 47,0   | 22,0        | 17,0    | 22,0     |
| 1241583   | H1226544-08080M | Slip on nut | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 52,0   | 15,0        | 19,0    | 22,0     |
| 1245511   | H1226544-08100M | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 51,0   | 16,0        | 19,0    | 27,0     |
| 1241585   | H1226544-10100M | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 63,4   | 16,0        | 24,0    | 27,0     |
| 1244829   | H1226544-10120M | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 69,0   | 21,0        | 24,0    | 32,0     |
| 1241586   | H1226544-12120M | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 67,0   | 21,0        | 27,0    | 32,0     |
| 1246147   | H1226544-12160M | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 71,0   | 24,0        | 27,0    | 41,0     |
| 1241587   | H1226544-16160M | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 80,0   | 24,0        | 32,0    | 41,0     |

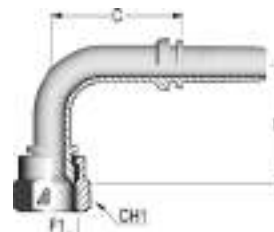
## // H1222591-S

90° JIC Female 37° Seat

Short Drop

DKJ 90S

Solid one piece



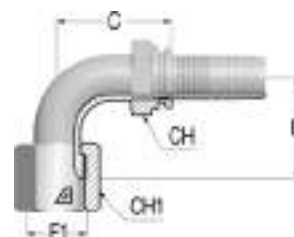
| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|-----------|--------|-------------|----------|
| 1202841   | H1222591-03040S | Crimped  | 3         | 5,0     | 3/16"   | 4       | 7/16-20   | 26,7   | 21,0        | 16,0     |
| 1202772   | H1222591-04040S | Crimped  | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 27,0   | 21,0        | 16,0     |
| 1203118   | H1222591-04050S | Crimped  | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 26,5   | 23,5        | 17,0     |
| 1202788   | H1222591-04060S | Crimped  | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 31,0   | 23,0        | 19,0     |
| 1203116   | H1222591-05060S | Crimped  | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 42,7   | 23,0        | 19,0     |
| 1216771   | H1222591-06050S | Crimped  | 6         | 10,0    | 3/8"    | 5       | 1/2-20    | 33,3   | 25,0        | 17,0     |
| 1203032   | H1222591-06060S | Crimped  | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 42,3   | 25,0        | 19,0     |
| 1203033   | H1222591-06080S | Crimped  | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 48,8   | 29,0        | 25,0     |
| 1203034   | H1222591-08080S | Crimped  | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 46,4   | 29,0        | 25,0     |
| 1202815   | H1222591-08100S | Crimped  | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 45,8   | 32,0        | 27,0     |
| 1202744   | H1222591-08120S | Crimped  | 8         | 13,0    | 1/2"    | 12      | 1 1/16-12 | 37,3   | 46,0        | 32,0     |
| 1203035   | H1222591-1010BS | Crimped  | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 36,5   | 32,0        | 27,0     |
| 1202745   | H1222591-10120S | Crimped  | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 47,9   | 48,0        | 32,0     |
| 1202845   | H1222591-12120S | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 58,2   | 46,0        | 32,0     |
| 1200780   | H1222591-12140S | Crimped  | 12        | 19,0    | 3/4"    | 14      | 1 3/16-12 | 49,6   | 52,5        | 36,0     |
| 1202846   | H1222591-12160S | Crimped  | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 53,6   | 53,0        | 38,0     |
| 1203036   | H1222591-16160S | Crimped  | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 74,0   | 56,0        | 38,0     |

// H1226594-S **NEW**

90° JIC Female 37° Seat

Short Drop

Solid Nut and double Hexagon crimped



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|-----------|--------|-------------|---------|----------|
| 1243637   | H1226594-04040S | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 27,0   | 21,0        | 14,0    | 14,0     |
| 1245516   | H1226594-04050S | Slip on nut | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 26,5   | 21,0        | 14,0    | 17,0     |
| 1243632   | H1226594-04060S | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 30,7   | 23,0        | 14,0    | 19,0     |
| 1245523   | H1226594-05060S | Slip on nut | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 41,0   | 23,0        | 14,0    | 19,0     |
| 1243634   | H1226594-06060S | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 40,3   | 24,5        | 17,0    | 19,0     |
| 1243641   | H1226594-06080S | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 48,8   | 29,0        | 17,0    | 22,0     |
| 1243644   | H1226594-08080S | Slip on nut | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 46,0   | 29,0        | 19,0    | 22,0     |
| 1245562   | H1226594-08100S | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 46,0   | 32,0        | 19,0    | 27,0     |
| 1244849   | H1226594-10120S | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 48,0   | 48,0        | 24,0    | 32,0     |
| 1243635   | H1226594-12120S | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 62,4   | 48,0        | 27,0    | 32,0     |
| 1246115   | H1222593-12160S | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 53,6   | 53,0        |         | 41,0     |
| 1245568   | H1226594-16160S | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 74,0   | 56,0        | 32,0    | 41,0     |

Product Codes roots ending with 3: insert with turned ring (ex. H1222593).

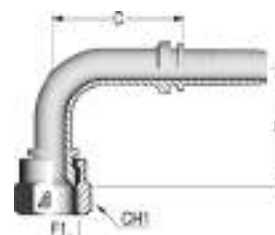
## // H1222591-M

90° JIC Female 37° Seat

Medium Drop

DKJ 90M

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|-------------|----------|
| 1202792   | H1222591-03040M | Crimped         | 3         | 5,0     | 3/16"   | 4       | 7/16-20   | 33,5   | 32,0        | 16,0     |
| 1202739   | H1222591-04040M | Crimped         | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 34,2   | 32,0        | 16,0     |
| 1202740   | H1222591-04050M | Crimped         | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 25,7   | 30,0        | 17,0     |
| 1202793   | H1222591-04060M | Crimped         | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 28,5   | 38,0        | 19,0     |
| 1202794   | H1222591-05050M | Crimped         | 5         | 8,0     | 5/16"   | 5       | 1/2-20    | 34,2   | 32,0        | 17,0     |
| 1202731   | H1222591-05060M | Crimped         | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 33,2   | 35,0        | 19,0     |
| 1202742   | H1222591-06060M | Crimped         | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 31,3   | 35,0        | 19,0     |
| 1202732   | H1222591-06080M | Crimped         | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 39,5   | 41,0        | 25,0     |
| 1200693   | H1222591-06100M | Crimped         | 6         | 10,0    | 3/8"    | 10      | 7/8-14    | 44,6   | 47,0        | 27,0     |
| 1202743   | H1222591-08080M | Crimped         | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 37,2   | 40,0        | 25,0     |
| 1202741   | H1222591-08100M | Crimped         | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 43,3   | 47,0        | 27,0     |
| 1202844   | H1222591-10100M | Crimped         | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 49,4   | 48,0        | 27,0     |
| 1216778   | H1222591-10120M | Crimped         | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 47,9   | 58,0        | 32,0     |
| 1202746   | H1222591-12120M | Crimped         | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 52,4   | 54,0        | 32,0     |
| 1216780   | H1222591-12160M | Crimped         | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 52,6   | 72,0        | 38,0     |
| 1202847   | H1222591-16160M | Crimped         | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 72,6   | 71,5        | 38,0     |
| 1202848   | H1222592-16200M | Thrust wire nut | 16        | 25,0    | 1"      | 20      | 1 5/8-12  | 72,6   | 78,0        | 50,0     |
| 1202849   | H1222592-20200M | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 82,4   | 78,0        | 50,0     |
| 1202850   | H1222592-20240M | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 24      | 1 7/8-12  | 87,3   | 82,0        | 55,0     |
| 1202851   | H1222592-24240M | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 95,3   | 92,0        | 55,0     |
| 1202852   | H1222592-32320M | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 129,5  | 140,0       | 70,0     |

Image: insert with Crimped Nut.

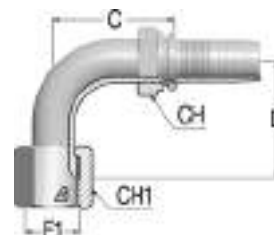
REV.2.1

// H1226594-M **NEW**

90° JIC Female 37° Seat

Medium Drop

Solid Nut and double Hexagon crimped



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|-----------|--------|-------------|---------|----------|
| 1241588   | H1226594-04040M | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 34,0   | 32,0        | 14,0    | 14,0     |
| 1245515   | H1226594-04050M | Slip on nut | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 26,0   | 32,0        | 14,0    | 17,0     |
| 1235584   | H1222593-04060M | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 9/16-18   | 31,0   | 38,0        |         | 19,0     |
| 1241589   | H1226594-05050M | Slip on nut | 5         | 8,0     | 5/16"   | 5       | 1/2-20    | 34,0   | 32,0        | 14,0    | 17,0     |
| 1245522   | H1226594-05060M | Slip on nut | 5         | 8,0     | 5/16"   | 6       | 9/16-18   | 33,0   | 35,0        | 14,0    | 19,0     |
| 1241590   | H1226594-06060M | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 31,3   | 38,0        | 17,0    | 19,0     |
| 1245576   | H1222593-06080M | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 41,0   | 39,5        |         | 22,0     |
| 1241591   | H1226594-08080M | Slip on nut | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 37,2   | 41,0        | 19,0    | 22,0     |
| 1245560   | H1226594-08100M | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 43,3   | 47,0        | 19,0    | 27,0     |
| 1241592   | H1226594-10100M | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 49,4   | 47,0        | 24,0    | 27,0     |
| 1245565   | H1226594-10120M | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 48,0   | 58,0        | 24,0    | 32,0     |
| 1241593   | H1226594-12120M | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 52,0   | 58,0        | 27,0    | 32,0     |
| 1246116   | H1222593-12160M | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 52,6   | 71,0        |         | 41,0     |
| 1241594   | H1226594-16160M | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 73,0   | 71,0        | 32,0    | 41,0     |

Product Codes roots ending with 3: insert with turned ring (ex. H1222593).

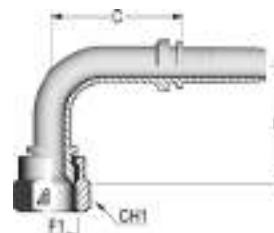
## // H1222591-L

90° JIC Female 37° Seat

Long Drop

DKJ 90L

Solid one piece



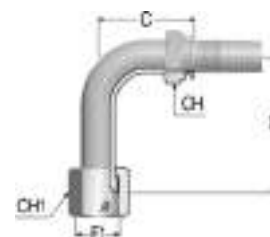
| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|-----------|--------|-------------|----------|
| 1203131   | H1222591-04040L | Crimped  | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 30,8   | 46,0        | 16,0     |
| 1214215   | H1222591-04050L | Crimped  | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 31,3   | 45,0        | 17,0     |
| 1203115   | H1222591-06060L | Crimped  | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 43,3   | 54,0        | 19,0     |
| 1202842   | H1222591-06080L | Crimped  | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 46,8   | 64,0        | 25,0     |
| 1214216   | H1222591-08080L | Crimped  | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 49,9   | 64,0        | 25,0     |
| 1202843   | H1222591-08100L | Crimped  | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 37,3   | 65,0        | 27,0     |
| 1203114   | H1222591-10100L | Crimped  | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 49,9   | 65,0        | 27,0     |
| 1203112   | H1222591-12120L | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 54,1   | 95,0        | 32,0     |
| 1203111   | H1222591-16160L | Crimped  | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 78,6   | 114,0       | 38,0     |

// H1226594-L **NEW**

90° JIC Female 37° Seat

Long Drop

Solid Nut and double Hexagon crimped



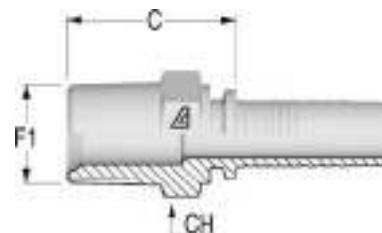
| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|-----------|--------|-------------|---------|----------|
| 1244851   | H1226594-04040L | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 7/16-20   | 31,0   | 46,0        | 14,0    | 14,0     |
| 1245514   | H1226594-04050L | Slip on nut | 4         | 6,0     | 1/4"    | 5       | 1/2-20    | 31,0   | 46,0        | 14,0    | 17,0     |
| 1244845   | H1226594-06060L | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 9/16-18   | 43,3   | 54,0        | 17,0    | 17,0     |
| 1245766   | H1222593-06080L | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 3/4-16    | 47,0   | 64,0        |         | 22,0     |
| 1245557   | H1226594-08080L | Slip on nut | 8         | 13,0    | 1/2"    | 8       | 3/4-16    | 49,9   | 64,0        | 19,0    | 22,0     |
| 1244846   | H1226594-08100L | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 7/8-14    | 37,2   | 65,0        | 19,0    | 27,0     |
| 1244847   | H1226594-10100L | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 7/8-14    | 50,0   | 70,0        | 24,0    | 27,0     |
| 1244850   | H1226594-12120L | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 54,0   | 96,0        | 27,0    | 32,0     |
| 1245567   | H1226594-16160L | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 79,0   | 114,0       | 32,0    | 41,0     |

Product Codes roots ending with 3: insert with turned ring (ex. H1222593).

## // NPTF INSERTS

## // H1212810

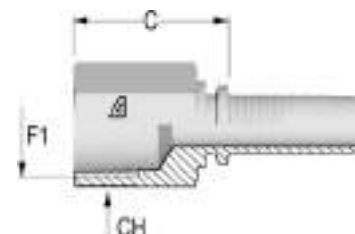
NPTF Male 60° Seat  
AGN



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in)  | F1 Dash | F1           | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|----------|---------|--------------|--------|---------|
| 1200448   | H1212810-030200 | 3         | 5,0     | 3/16"    | 2       | 1/8-27       | 20,8   | 12,0    |
| 1200466   | H1212810-040200 | 4         | 6,0     | 1/4"     | 2       | 1/8-27       | 21,3   | 14,0    |
| 1228235   | H121281P-040400 | 4         | 6,0     | 1/4"     | 4       | 1/4-18       | 26,8   | 14,3    |
| 1200467   | H1212810-040600 | 4         | 6,0     | 1/4"     | 6       | 3/8-18       | 27,8   | 19,0    |
| 1203150   | H1212810-040800 | 4         | 6,0     | 1/4"     | 8       | 1/2-14       | 31,3   | 22,0    |
| 1200511   | H1212810-050400 | 5         | 8,0     | 5/16"    | 4       | 1/4-18       | 26,8   | 17,0    |
| 1200512   | H1212810-050600 | 5         | 8,0     | 5/16"    | 6       | 3/8-18       | 27,8   | 19,0    |
| 1200307   | H1212810-060400 | 6         | 10,0    | 3/8"     | 4       | 1/4-18       | 26,8   | 17,0    |
| 1200308   | H1212810-060600 | 6         | 10,0    | 3/8"     | 6       | 3/8-18       | 27,8   | 19,0    |
| 1200306   | H1212810-060800 | 6         | 10,0    | 3/8"     | 8       | 1/2-14       | 31,3   | 22,0    |
| 1200345   | H1212810-080600 | 8         | 13,0    | 1/2"     | 6       | 3/8-18       | 28,6   | 19,0    |
| 1200343   | H1212810-080800 | 8         | 13,0    | 1/2"     | 8       | 1/2-14       | 32,1   | 22,0    |
| 1200344   | H1212810-081200 | 8         | 13,0    | 1/2"     | 12      | 3/4-14       | 34,1   | 27,0    |
| 1200387   | H1212810-100800 | 10        | 16,0    | 5/8"     | 8       | 1/2-14       | 33,1   | 24,0    |
| 1200388   | H1212810-101200 | 10        | 16,0    | 5/8"     | 12      | 3/4-14       | 34,1   | 27,0    |
| 1203149   | H1212810-120800 | 12        | 19,0    | 3/4"     | 8       | 1/2-14       | 33,6   | 27,0    |
| 1200421   | H1212810-121200 | 12        | 19,0    | 3/4"     | 12      | 3/4-14       | 34,6   | 27,0    |
| 1200420   | H1212810-121600 | 12        | 19,0    | 3/4"     | 16      | 1-11 1/2     | 43,6   | 36,0    |
| 1216610   | H1212810-141600 | 14        | 22,0    | 7/8"     | 16      | 1-11 1/2     | 43,6   | 36,0    |
| 1202282   | H1212810-161200 | 16        | 25,0    | 1"       | 12      | 3/4-14       | 39,4   | 36,0    |
| 1201366   | H1212810-161600 | 16        | 25,0    | 1"       | 16      | 1-11 1/2     | 44,4   | 36,0    |
| 1201367   | H1212810-162000 | 16        | 25,0    | 1"       | 20      | 1 1/4-11 1/2 | 47,4   | 46,0    |
| 1201368   | H1212810-202000 | 20        | 32,0    | 1 1/4"   | 20      | 1 1/4-11 1/2 | 49,0   | 46,0    |
| 1201369   | H1212810-242400 | 24        | 38,0    | 1 1/2"   | 24      | 1 1/2-11 1/2 | 50,5   | 50,0    |
| 1216613   | H1212810-293200 | 29        | 46,0    | 1 13/16" | 32      | 2-11 1/2     | 54,2   | 65,0    |
| 1201370   | H1212810-323200 | 32        | 51,0    | 2"       | 32      | 2-11 1/2     | 54,2   | 65,0    |

## // H1222810

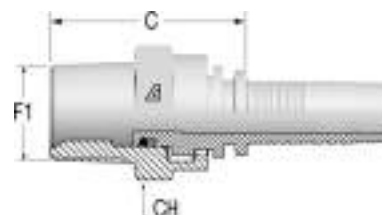
NPTF Female Solid



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|----------|--------|---------|
| 1216794   | H1222810-040200 | 4         | 6,0     | 1/4"    | 2       | 1/8-27   | 22,3   | 14,0    |
| 1200464   | H1222810-040400 | 4         | 6,0     | 1/4"    | 4       | 1/4-18   | 27,8   | 19,0    |
| 1219145   | H1222810-060600 | 6         | 10,0    | 3/8"    | 6       | 3/8-18   | 28,8   | 22,0    |
| 1216795   | H1222810-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 35,6   | 25,0    |
| 1216796   | H1222810-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 38,1   | 32,0    |
| 1216797   | H1222810-161600 | 16        | 25,0    | 1"      | 16      | 1-11 1/2 | 44,9   | 38,0    |

## // H1212811

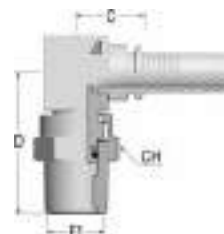
## NPTF Male Swivel 60° Seat



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|----------|--------|---------|
| 1216614   | H1212811-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-18   | 37,6   | 17,0    |
| 1216615   | H1212811-040600 | Crimped  | 4         | 6,0     | 1/4"    | 6       | 3/8-18   | 39,5   | 22,0    |
| 1216616   | H1212811-060400 | Crimped  | 6         | 10,0    | 3/8"    | 4       | 1/4-18   | 39,6   | 17,0    |
| 1214186   | H1212811-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 3/8-18   | 37,5   | 22,0    |
| 1216617   | H1212811-060800 | Crimped  | 6         | 10,0    | 3/8"    | 8       | 1/2-14   | 43,5   | 25,0    |
| 1216619   | H1212811-080600 | Crimped  | 8         | 13,0    | 1/2"    | 6       | 3/8-18   | 38,3   | 22,0    |
| 1214187   | H1212811-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 42,3   | 25,0    |
| 1216620   | H1212811-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 50,1   | 32,0    |
| 1216621   | H1212811-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1-11 1/2 | 57,9   | 41,0    |

## // H1212881

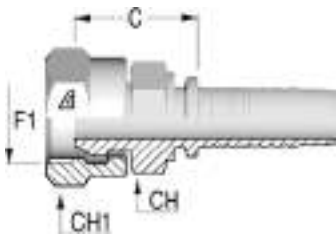
## 90° Compact NPTF Male Swivel 60° Seat



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | D Drop (mm) | CH (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|--------|--------|-------------|---------|
| 1225918   | H1212881-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-18 | 17,0   | 39,0        | 17,0    |
| 1225920   | H1212881-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 3/8-18 | 20,0   | 41,0        | 22,0    |
| 1225921   | H1212881-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 21,6   | 49,7        | 19,0    |
| 1225922   | H1212881-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 3/4-14 | 27,0   | 61,0        | 32,0    |

// NPSM INSERTS

// H1227311  
NPSM Female



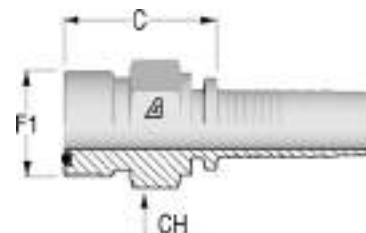
| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|----------|--------|---------|----------|
| 1203280   | H1227311-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-18   | 24,3   | 17,0    | 19,0     |
| 1216834   | H1227311-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 3/8-18   | 24,8   | 19,0    | 22,0     |
| 1202084   | H1227311-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 26,6   | 22,0    | 27,0     |
| 1216835   | H1227311-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 20,6   |         | 32,0     |
| 1216836   | H1227311-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1-11 1/2 | 35,4   | 36,0    | 38,0     |

1216835: without Stem Hexagon, with O-Ring

## // ORFS INSERTS

## // H1212410

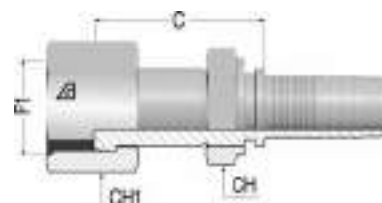
## ORFS Male



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|------------|--------|---------|
| 1202488   | H1212410-040400 | 4         | 6,0     | 1/4"    | 4       | 9/16-18    | 22,3   | 17,0    |
| 1202489   | H1212410-040600 | 4         | 6,0     | 1/4"    | 6       | 11/16-16   | 24,3   | 19,0    |
| 1214185   | H1212410-050600 | 5         | 8,0     | 5/16"   | 6       | 11/16-16   | 24,3   | 19,0    |
| 1202490   | H1212410-060600 | 6         | 10,0    | 3/8"    | 6       | 11/16-16   | 24,3   | 19,0    |
| 1202491   | H1212410-060800 | 6         | 10,0    | 3/8"    | 8       | 13/16-16   | 26,3   | 22,0    |
| 1202055   | H1212410-061000 | 6         | 10,0    | 3/8"    | 10      | 1-14       | 29,8   | 27,0    |
| 1202492   | H1212410-080800 | 8         | 13,0    | 1/2"    | 8       | 13/16-16   | 27,1   | 22,0    |
| 1202054   | H1212410-081000 | 8         | 13,0    | 1/2"    | 10      | 1-14       | 30,6   | 27,0    |
| 1202493   | H1212410-081200 | 8         | 13,0    | 1/2"    | 12      | 1 3/16-12  | 34,1   | 32,0    |
| 1202892   | H1212410-101000 | 10        | 16,0    | 5/8"    | 10      | 1-14       | 30,6   | 27,0    |
| 1202494   | H1212410-101200 | 10        | 16,0    | 5/8"    | 12      | 1 3/16-12  | 34,1   | 32,0    |
| 1202495   | H1212410-121000 | 12        | 19,0    | 3/4"    | 10      | 1-14       | 31,1   | 27,0    |
| 1202496   | H1212410-121200 | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 34,6   | 32,0    |
| 1202497   | H1212410-121600 | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 38,1   | 41,0    |
| 1202498   | H1212410-161600 | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 37,9   | 38,0    |
| 1202499   | H1212410-162000 | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 39,9   | 46,0    |
| 1202500   | H1212410-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 41,5   | 46,0    |

// H1222414 **NEW**

## ORFS Female with support Hexagon knurled



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|-----------|--------|---------|----------|
| 1240013   | H1222414-040400 | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 9/16-18   | 29,5   | 14,0    | 17,0     |
| 1245728   | H1222414-040600 | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 11/16-16  | 31,8   | 17,0    | 22,0     |
| 1245899   | H1222414-040800 | Slip on nut | 4         | 6,0     | 1/4"    | 8       | 13/16-16  | 35,8   | 22,0    | 24,0     |
| 1245428   | H1222414-050600 | Slip on nut | 5         | 8,0     | 5/16"   | 6       | 11/16-16  | 38,0   | 17,0    | 22,0     |
| 1240034   | H1222414-060600 | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 11/16-16  | 32,3   | 17,0    | 22,0     |
| 1245892   | H1222414-060800 | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 13/16-16  | 39,3   | 22,0    | 24,0     |
| 1240035   | H1222414-080800 | Slip on nut | 8         | 13,0    | 1/2"    | 8       | 13/16-16  | 40,5   | 22,0    | 24,0     |
| 1245429   | H1222414-081000 | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 1-14      | 43,0   | 24,0    | 30,0     |
| 1245904   | H1222414-081200 | Slip on nut | 8         | 13,0    | 1/2"    | 12      | 1 3/16-12 | 42,1   | 30,0    | 36,0     |
| 1240036   | H1222414-101000 | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 1-14      | 39,6   | 27,0    | 30,0     |
| 1245905   | H1222414-101200 | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 3/16-12 | 42,1   | 30,0    | 36,0     |
| 1240038   | H1222414-121200 | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12 | 42,6   | 30,0    | 36,0     |
| 1245906   | H1222414-121600 | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12 | 50,6   | 36,0    | 41,0     |
| 1242623   | H1222414-161600 | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 7/16-12 | 51,4   | 36,0    | 41,0     |

REV.2.1

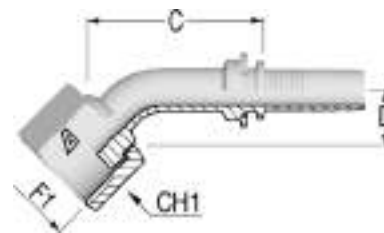
## // H1222443-M

45° ORFS Female

Medium Drop

DK ORFS 45M

Solid one piece



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|------------|--------|-------------|----------|
| 1202774   | H1222443-04040M | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 9/16-18    | 41,1   | 11,0        | 17,0     |
| 1202775   | H1222443-04060M | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 11/16-16   | 46,1   | 11,0        | 22,0     |
| 1202871   | H1222443-05060M | Slip on nut | 5         | 8,0     | 5/16"   | 6       | 11/16-16   | 46,3   | 12,0        | 22,0     |
| 1202776   | H1222443-06060M | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 11/16-16   | 47,4   | 12,0        | 22,0     |
| 1202777   | H1222443-06080M | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 13/16-16   | 51,2   | 15,0        | 24,0     |
| 1202854   | H1222441-08080M | Crimped     | 8         | 13,0    | 1/2"    | 8       | 13/16-16   | 47,1   | 16,0        | 24,0     |
| 1202771   | H1222443-08100M | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 1-14       | 50,4   | 16,5        | 30,0     |
| 1202819   | H1222443-10100M | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 1-14       | 57,7   | 17,0        | 30,0     |
| 1202853   | H1222443-10120M | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 3/16-12  | 63,1   | 21,0        | 36,0     |
| 1203060   | H1222441-12100M | Crimped     | 12        | 19,0    | 3/4"    | 10      | 1-14       | 51,4   | 24,0        | 30,0     |
| 1202872   | H1222443-12120M | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 63,5   | 21,0        | 36,0     |
| 1202915   | H1222443-12160M | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 70,7   | 24,0        | 41,0     |
| 1202797   | H1222443-16160S | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 82,4   | 26,0        | 41,0     |
| 1203141   | H1222443-16200M | Slip on nut | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 85,4   | 26,0        | 50,0     |
| 1202873   | H1222443-20200M | Slip on nut | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 95,0   | 32,0        | 50,0     |
| 1202874   | H1222443-24240M | Slip on nut | 24        | 38,0    | 1 1/2"  | 24      | 2-12       | 104,4  | 28,0        | 60,0     |

Image: insert with Slip on Nut.

## // H1222493-S

90° ORFS Female

Short Drop

DK ORFS 90S

Solid one piece



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|------------|--------|-------------|----------|
| 1202778   | H1222493-04040S | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 9/16-18    | 28,5   | 21,0        | 17,0     |
| 1202856   | H1222493-04060S | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 11/16-16   | 32,0   | 23,0        | 22,0     |
| 1202857   | H1222493-05060S | Slip on nut | 5         | 8,0     | 5/16"   | 6       | 11/16-16   | 50,1   | 23,5        | 22,0     |
| 1202858   | H1222493-06060S | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 11/16-16   | 40,0   | 27,0        | 22,0     |
| 1202859   | H1222493-06080S | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 13/16-16   | 41,8   | 29,0        | 24,0     |
| 1203392   | H1222491-08060S | Crimped     | 8         | 13,0    | 1/2"    | 6       | 11/16-16   | 44,1   | 25,0        | 22,0     |
| 1202855   | H1222491-08080S | Crimped     | 8         | 13,0    | 1/2"    | 8       | 13/16-16   | 39,8   | 29,0        | 24,0     |
| 1203054   | H1222493-08100S | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 1-14       | 46,3   | 32,5        | 30,0     |
| 1203334   | H1222493-08120S | Slip on nut | 8         | 13,0    | 1/2"    | 12      | 1 3/16-12  | 56,3   | 51,0        | 36,0     |
| 1202860   | H1222493-10100S | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 1-14       | 52,3   | 32,5        | 30,0     |
| 1202861   | H1222493-10120S | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 3/16-12  | 55,4   | 49,0        | 36,0     |
| 1202862   | H1222493-12120S | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 60,6   | 51,0        | 36,0     |
| 1203055   | H1222493-12160S | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 61,6   | 56,0        | 41,0     |
| 1203209   | H1222491-16120S | Crimped     | 16        | 25,0    | 1"      | 12      | 1 3/16-12  | 54,6   | 51,0        | 36,0     |
| 1202863   | H1222493-16160S | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 80,0   | 58,0        | 41,0     |
| 1203135   | H1222493-16200S | Slip on nut | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 82,6   | 64,0        | 50,0     |
| 1203133   | H1222493-20200S | Slip on nut | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 95,0   | 68,0        | 50,0     |
| 1214213   | H1222493-24240S | Slip on nut | 24        | 38,0    | 1 1/2"  | 24      | 2-12       | 103,7  | 78,0        | 60,0     |

Image: insert with Slip on Nut.

## // H1222493-M

90° ORFS Female

Medium Drop

DK ORFS 90M

Solid one piece



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|------------|--------|-------------|----------|
| 1202875   | H1222493-04040M | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 9/16-18    | 29,8   | 32,0        | 17,0     |
| 1202715   | H1222493-04060M | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 11/16-16   | 37,3   | 38,0        | 22,0     |
| 1202779   | H1222493-05060M | Slip on nut | 5         | 8,0     | 5/16"   | 6       | 11/16-16   | 40,7   | 34,0        | 22,0     |
| 1202780   | H1222493-06060M | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 11/16-16   | 41,8   | 38,0        | 22,0     |
| 1202716   | H1222493-06080M | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 13/16-16   | 43,8   | 41,0        | 24,0     |
| 1202781   | H1222491-08080M | Crimped     | 8         | 13,0    | 1/2"    | 8       | 13/16-16   | 34,8   | 42,0        | 24,0     |
| 1202770   | H1222493-08100M | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 1-14       | 48,3   | 47,0        | 30,0     |
| 1202782   | H1222493-10100M | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 1-14       | 55,4   | 44,0        | 30,0     |
| 1203137   | H1222493-10120M | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 3/16-12  | 55,4   | 58,0        | 36,0     |
| 1202783   | H1222493-12120M | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 61,6   | 58,0        | 36,0     |
| 1202916   | H1222493-12160M | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 65,6   | 71,0        | 41,0     |
| 1216748   | H1222491-16120M | Crimped     | 16        | 25,0    | 1"      | 12      | 1 3/16-12  | 62,6   | 58,0        | 36,0     |
| 1202717   | H1222493-16160M | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 82,6   | 66,0        | 41,0     |
| 1203069   | H1222493-16200M | Slip on nut | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 82,6   | 78,0        | 50,0     |
| 1202876   | H1222493-20200M | Slip on nut | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 97,0   | 78,0        | 50,0     |
| 1202877   | H1222493-24240M | Slip on nut | 24        | 38,0    | 1 1/2"  | 24      | 2-12       | 107,8  | 87,0        | 60,0     |

Image: insert with Slip on Nut.

## // H1222493-L

90° ORFS Female

Long Drop

DK ORFS 90L

Solid one piece



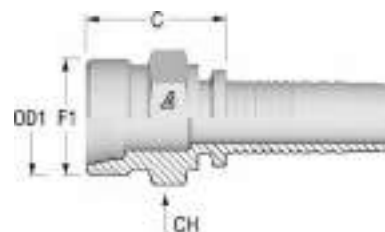
| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|------------|--------|-------------|----------|
| 1210841   | H1222493-04040L | Slip on nut | 4         | 6,0     | 1/4"    | 4       | 9/16-18    | 32,8   | 46,0        | 17,0     |
| 1203139   | H1222493-04060L | Slip on nut | 4         | 6,0     | 1/4"    | 6       | 11/16-16   | 34,8   | 54,0        | 22,0     |
| 1203138   | H1222493-06060L | Slip on nut | 6         | 10,0    | 3/8"    | 6       | 11/16-16   | 41,8   | 54,0        | 22,0     |
| 1203057   | H1222493-06080L | Slip on nut | 6         | 10,0    | 3/8"    | 8       | 13/16-16   | 46,8   | 64,0        | 24,0     |
| 1202922   | H1222491-08080L | Crimped     | 8         | 13,0    | 1/2"    | 8       | 13/16-16   | 38,3   | 64,0        | 24,0     |
| 1214208   | H1222493-08100L | Slip on nut | 8         | 13,0    | 1/2"    | 10      | 1-14       | 46,3   | 70,0        | 30,0     |
| 1202918   | H1222493-10100L | Slip on nut | 10        | 16,0    | 5/8"    | 10      | 1-14       | 55,4   | 70,0        | 30,0     |
| 1202919   | H1222493-10120L | Slip on nut | 10        | 16,0    | 5/8"    | 12      | 1 3/16-12  | 55,4   | 96,0        | 36,0     |
| 1202920   | H1222493-12120L | Slip on nut | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 61,6   | 96,0        | 36,0     |
| 1202921   | H1222493-12160L | Slip on nut | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 61,6   | 118,0       | 41,0     |
| 1203136   | H1222493-16160L | Slip on nut | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 82,6   | 114,0       | 41,0     |
| 1203134   | H1222493-20200L | Slip on nut | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 97,0   | 129,0       | 50,0     |
| 1214212   | H1222493-24240L | Slip on nut | 24        | 38,0    | 1 1/2"  | 24      | 2-12       | 110,8  | 141,0       | 60,0     |

Image: insert with Slip on Nut.

## // FRENCH INSERTS

## // H1211810

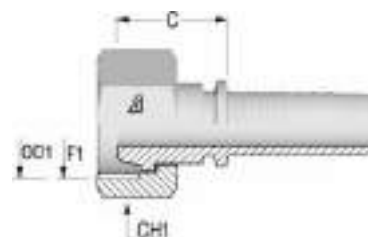
## Metric Male - French Type



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1      | OD1   | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-------|--------|---------|
| 1200317   | H1211810-062000 | 6         | 10,0    | 3/8"    | M20X1.5 | 13,25 | 25,3   | 22,0    |
| 1200361   | H1211810-082400 | 8         | 13,0    | 1/2"    | M24X1.5 | 16,75 | 27,1   | 24,0    |
| 1200404   | H1211810-103000 | 10        | 16,0    | 5/8"    | M30X1.5 | 21,25 | 31,1   | 30,0    |
| 1200435   | H1211810-123600 | 12        | 19,0    | 3/4"    | M36X1.5 | 26,75 | 33,6   | 36,0    |

## // H1221813

## Metric Female - French Type



| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|-----|--------|----------|
| 1200744   | H1221813-103000 | Slip on nut | 10        | 16,0    | 5/8"    | M30X1.5 | 22  | 26,6   | 36,0     |
| 1200770   | H1221813-123600 | Slip on nut | 12        | 19,0    | 3/4"    | M36X1.5 | 28  | 27,0   | 42,0     |

## // H1221893

## 90° Metric Female - French Type

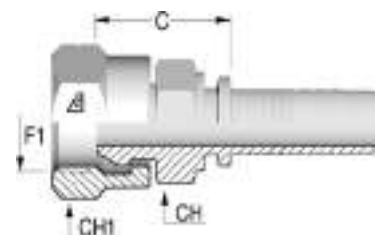


| Item Code | Product Code    | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-------------|-----------|---------|---------|---------|-----|--------|-------------|----------|
| 1200654   | H1221893-052000 | Slip on nut | 5         | 8,0     | 5/16"   | M20X1.5 | 14  | 32,5   | 36,5        | 24,0     |
| 1200719   | H1221893-082400 | Slip on nut | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 39,5   | 46,0        | 30,0     |
| 1203156   | H1221893-103000 | Slip on nut | 10        | 16,0    | 5/8"    | M30X1.5 | 22  | 43,0   | 49,0        | 36,0     |
| 1200773   | H1221893-123600 | Slip on nut | 12        | 19,0    | 3/4"    | M36X1.5 | 28  | 46,6   | 48,5        | 42,0     |

## // JIS INSERTS

## // H1223711

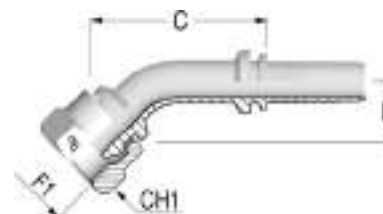
## JIS Female 60° Cone - B 8363 (Type C)



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|--------|--------|---------|----------|
| 1203110   | H1223711-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 24,3   | 17,0    | 19,0     |
| 1203109   | H1223711-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 3/8-19 | 25,5   | 19,0    | 22,0     |
| 1203108   | H1223711-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 26,1   | 22,0    | 27,0     |
| 1226069   | H1223711-100800 | Crimped  | 10        | 16,0    | 5/8"    | 8       | 1/2-14 | 27,1   | 24,0    | 27,0     |
| 1226549   | H1223711-101200 | Crimped  | 10        | 16,0    | 5/8"    | 12      | 3/4-14 | 29,6   | 30,0    | 36,0     |
| 1203107   | H1223711-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 3/4-14 | 30,1   | 30,0    | 36,0     |
| 1214218   | H1223711-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1-11   | 34,9   | 36,0    | 41,0     |

## // H1223741

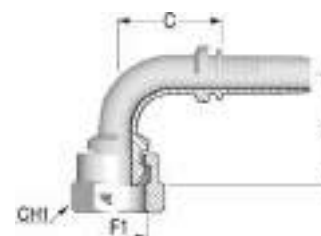
## 45° JIS Female 60° Cone - B 8363 (Type C)



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|--------|--------|-------------|----------|
| 1216798   | H1223741-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 24,3   | 19,0        | 19,0     |
| 1216799   | H1223741-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 3/8-19 | 26,5   | 21,0        | 22,0     |
| 1216800   | H1223741-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 27,0   | 22,0        | 27,0     |
| 1216801   | H1223741-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 3/4-14 | 19,9   | 25,0        | 36,0     |

## // H1223791

## 90° JIS Female 60° Cone - B 8363 (Type C)

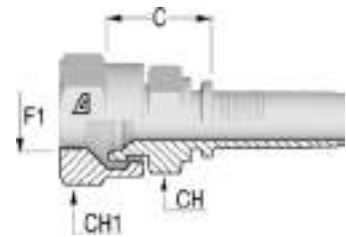


| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|--------|--------|-------------|----------|
| 1216803   | H1223791-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 25,3   | 33,0        | 19,0     |
| 1216805   | H1223791-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 3/8-19 | 32,3   | 36,5        | 22,0     |
| 1216806   | H1223791-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 37,3   | 38,5        | 27,0     |

REV.2.1

## // H122381Z

## JIS Female 60° Seat Flare - B 8363 (Type F)

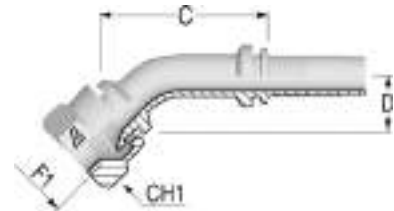


| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|---------|----------|
| 1202947   | H122381Z-040400 | Crimped         | 4         | 6,0     | 1/4"    | 4       | 1/4-19   | 20,8   | 17,0    | 19,0     |
| 1202879   | H122381Z-060600 | Crimped         | 6         | 10,0    | 3/8"    | 6       | 3/8-19   | 21,8   | 19,0    | 22,0     |
| 1202878   | H122381Z-080800 | Crimped         | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 23,6   | 22,0    | 27,0     |
| 1203106   | H122381Z-121200 | Crimped         | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 27,1   | 30,0    | 36,0     |
| 1203105   | H122381Z-161600 | Crimped         | 16        | 25,0    | 1"      | 16      | 1-11     | 32,9   | 36,0    | 41,0     |
| 1201585   | H122381Z-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 39,5   | 46,0    | 50,0     |
| 1201677   | H122381Z-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 41,5   | 50,0    | 55,0     |

Image: insert with Crimped Nut.

## // H122384Z

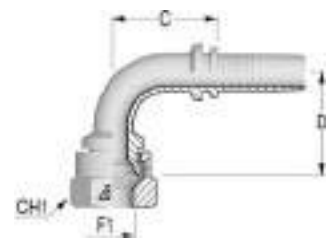
## 45° JIS Female 60° Seat Flare - B 8363 (Type F)



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|--------|--------|-------------|----------|
| 1203104   | H122384Z-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 42,5   | 15,0        | 19,0     |

## // H122389Z

## 90° JIS Female 60° Seat Flare - B 8363 (Type F)

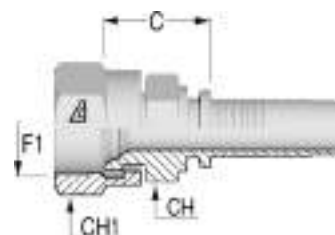


| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|--------|--------|-------------|----------|
| 1203095   | H122389Z-040400 | Crimped  | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 27,3   | 29,5        | 19,0     |
| 1203094   | H122389Z-060600 | Crimped  | 6         | 10,0    | 3/8"    | 6       | 3/8-19 | 31,3   | 33,0        | 22,0     |
| 1203093   | H122389Z-080800 | Crimped  | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 37,3   | 36,5        | 27,0     |
| 1203092   | H122389Z-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 3/4-14 | 46,1   | 52,0        | 36,0     |
| 1203091   | H122389Z-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1-11   | 77,1   | 64,5        | 41,0     |

## // KOMATSU INSERTS

## // H1224011

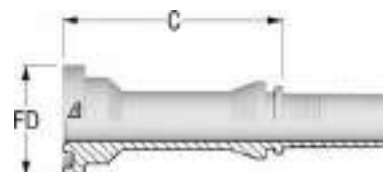
## Komatsu Female



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1      | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|---------|--------|---------|----------|
| 1200502   | H1224011-041400 | Crimped  | 4         | 6,0     | 1/4"    | 14      | M14X1.5 | 20,8   | 17,0    | 19,0     |
| 1216808   | H1224011-061400 | Crimped  | 6         | 10,0    | 3/8"    | 14      | M14X1.5 | 20,8   | 17,0    | 19,0     |
| 1200334   | H1224011-061800 | Crimped  | 6         | 10,0    | 3/8"    | 18      | M18X1.5 | 21,8   | 19,0    | 22,0     |
| 1202688   | H1224011-082200 | Crimped  | 8         | 13,0    | 1/2"    | 22      | M22X1.5 | 23,6   | 22,0    | 27,0     |
| 1200414   | H1224011-102400 | Crimped  | 10        | 16,0    | 5/8"    | 24      | M24X1.5 | 27,1   | 30,0    | 32,0     |
| 1200444   | H1224011-123000 | Crimped  | 12        | 19,0    | 3/4"    | 30      | M30X1.5 | 27,6   | 30,0    | 36,0     |
| 1201720   | H1224011-163300 | Crimped  | 16        | 25,0    | 1"      | 33      | M33X1.5 | 35,7   | 36,0    | 41,0     |

## // H1244110

## Komatsu Flange

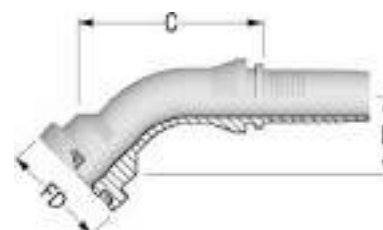


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1  | C (mm) | FD (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----|--------|---------|
| 1201625   | H1244110-101000 | 10        | 16,0    | 5/8"    | 10      | 5/8 | 46,7   | 34,0    |

## // H1244140

## 45° Komatsu Flange

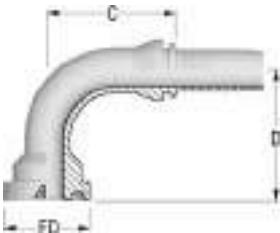
## Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1  | FD (mm) | C (mm) | D Drop (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----|---------|--------|-------------|
| 1202066   | H1244140-101000 | 10        | 16,0    | 5/8"    | 10      | 5/8 | 34,0    | 49,1   | 25,0        |

REV.2.1

**// H1244190**  
**90° Komatsu Flange**  
**Solid one piece**

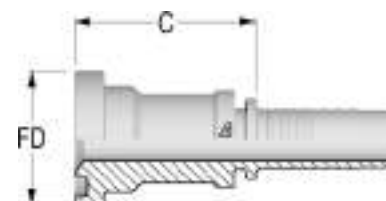


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1  | FD (mm) | C (mm) | D Drop (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----|---------|--------|-------------|
| 1202067   | H1244190-101000 | 10        | 16,0    | 5/8"    | 10      | 5/8 | 34,0    | 51,0   | 51,0        |

## // SAE FLANGES

## // H1243310

Flange SAE 3000 psi J518 Code 61  
SFL



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | C (mm) | FD (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|--------|---------|----------|
| 1202747   | H1243310-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2   | 41,0   | 30,2    | 5000     |
| 1202763   | H1243310-081200 | 8         | 13,0    | 1/2"    | 12      | 3/4   | 42,0   | 38,1    | 5000     |
| 1202801   | H1243310-101200 | 10        | 16,0    | 5/8"    | 12      | 3/4   | 42,2   | 38,1    | 5000     |
| 1201734   | H1243310-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 42,5   | 38,1    | 5000     |
| 1202750   | H1243310-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 50,5   | 44,5    | 5000     |
| 1201408   | H1243310-161600 | 16        | 25,0    | 1"      | 16      | 1     | 51,4   | 44,5    | 5000     |
| 1201409   | H1243310-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 53,9   | 50,8    | 4000     |
| 1221654   | H1243310-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 53,0   | 44,5    | 5000     |
| 1201410   | H1243310-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 55,5   | 50,8    | 4000     |
| 1201411   | H1243310-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 58,5   | 60,3    | 3000     |
| 1201412   | H1243310-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 58,5   | 60,3    | 3000     |
| 1201413   | H1243310-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 70,0   | 71,4    | 3000     |
| 1221662   | H1243310-322400 | 32        | 51,0    | 2"      | 24      | 1 1/2 | 66,0   | 60,3    | 3000     |
| 1201414   | H1243310-323200 | 32        | 51,0    | 2"      | 32      | 2     | 70,0   | 71,4    | 3000     |
| 1202074   | H1243310-324000 | 32        | 51,0    | 2"      | 40      | 2 1/2 | 83,0   | 84,1    | 2500     |
| 1226113   | H1243310-403200 | 40        | 63,0    | 2 1/2"  | 32      | 2     | 86,5   | 71,4    | 3000     |
| 1203063   | H1243310-404000 | 40        | 63,0    | 2 1/2"  | 40      | 2 1/2 | 86,5   | 84,1    | 2500     |

## // H1243320

22° Flange SAE 3000 psi J518 Code 61  
SFL 22  
Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1216854   | H1243320-161600 | 16        | 25,0    | 1"      | 16      | 1     | 44,5    | 92,7   | 12,0        | 5000     |
| 1216856   | H1243320-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 113,6  | 16,0        | 4000     |
| 1216857   | H1243320-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 60,3    | 114,7  | 20,5        | 3000     |
| 1216858   | H1243320-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 131,0  | 22,0        | 3000     |
| 1216859   | H1243320-323200 | 32        | 51,0    | 2"      | 32      | 2     | 71,4    | 153,0  | 22,0        | 3000     |

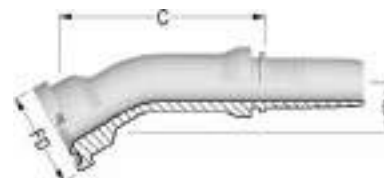
REV.2.1

## // H1243330

30° Flange SAE 3000 psi J518 Code 61

SFL 30

Solid one piece



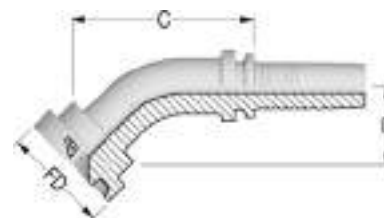
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1216861   | H1243330-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 38,1    | 80,8   | 12,0        | 5000     |
| 1216862   | H1243330-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 44,5    | 83,8   | 12,0        | 5000     |
| 1216863   | H1243330-161600 | 16        | 25,0    | 1"      | 16      | 1     | 44,5    | 89,8   | 12,0        | 5000     |
| 1216864   | H1243330-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 50,8    | 90,0   | 12,0        | 4000     |
| 1216866   | H1243330-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 102,4  | 12,0        | 4000     |
| 1216867   | H1243330-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 60,3    | 111,9  | 13,0        | 3000     |
| 1216868   | H1243330-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 128,6  | 23,0        | 3000     |
| 1216869   | H1243330-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 71,4    | 147,0  | 29,5        | 3000     |

## // H1243340

45° Flange SAE 3000 psi J518 Code 61

SFL 45

Solid one piece



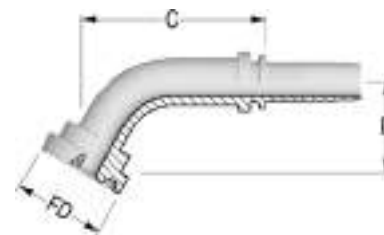
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1202748   | H1243340-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2   | 30,2    | 69,4   | 22,0        | 5000     |
| 1202751   | H1243340-081200 | 8         | 13,0    | 1/2"    | 12      | 3/4   | 38,1    | 60,3   | 26,0        | 5000     |
| 1202678   | H1243340-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 38,1    | 73,7   | 32,0        | 5000     |
| 1202752   | H1243340-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 44,5    | 77,9   | 29,0        | 5000     |
| 1214223   | H1243340-122000 | 12        | 19,0    | 3/4"    | 20      | 1 1/4 | 50,8    | 81,5   | 30,0        | 5000     |
| 1202681   | H1243340-161600 | 16        | 25,0    | 1"      | 16      | 1     | 44,5    | 82,7   | 33,5        | 5000     |
| 1201845   | H1243340-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 50,8    | 82,2   | 36,0        | 4000     |
| 1216872   | H1243340-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 44,5    | 114,6  | 35,1        | 5000     |
| 1201848   | H1243340-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 95,1   | 37,5        | 4000     |
| 1202677   | H1243340-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 60,3    | 104,1  | 40,0        | 3000     |
| 1216873   | H1243340-242000 | 24        | 38,0    | 1 1/2"  | 20      | 1 1/4 | 50,8    | 144,9  | 49,5        | 4000     |
| 1202753   | H1243340-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 116,7  | 48,0        | 3000     |
| 1202754   | H1243340-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 71,4    | 135,6  | 55,5        | 3000     |
| 1201982   | H1243340-323200 | 32        | 51,0    | 2"      | 32      | 2     | 71,4    | 140,8  | 47,5        | 3000     |
| 1216874   | H1243340-4040SL | 40        | 63,0    | 2 1/2"  | 40      | 2 1/2 | 84,1    | 139,0  | 53,0        | 2500     |

## // H1243360

60° Flange SAE 3000 psi J518 Code 61

SFL 60

Solid one piece



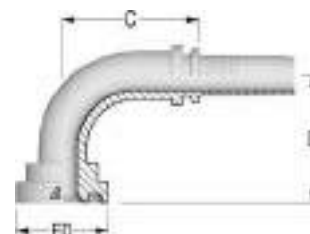
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1216878   | H1243360-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 38,1    | 85,7   | 37,0        | 5000     |
| 1216880   | H1243360-161600 | 16        | 25,0    | 1"      | 16      | 1     | 44,5    | 101,0  | 47,0        | 5000     |
| 1216881   | H1243360-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 50,8    | 106,6  | 43,5        | 4000     |
| 1216882   | H1243360-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 129,5  | 56,5        | 4000     |
| 1202882   | H1243360-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 151,5  | 57,0        | 3000     |
| 1216884   | H1243360-323200 | 32        | 51,0    | 2"      | 32      | 2     | 71,4    | 173,0  | 92,0        | 3000     |

## // H1243390

90° Flange SAE 3000 psi J518 Code 61

SFL 90

Solid one piece

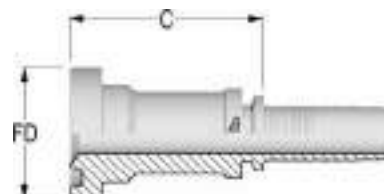


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1202749   | H1243390-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2   | 30,2    | 45,8   | 42,0        | 5000     |
| 1202755   | H1243390-081200 | 8         | 13,0    | 1/2"    | 12      | 3/4   | 38,1    | 45,3   | 51,0        | 5000     |
| 1202805   | H1243390-101200 | 10        | 16,0    | 5/8"    | 12      | 3/4   | 38,1    | 49,4   | 51,0        | 5000     |
| 1202679   | H1243390-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 38,1    | 59,7   | 58,0        | 5000     |
| 1202756   | H1243390-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 44,5    | 66,2   | 64,5        | 5000     |
| 1202883   | H1243390-122000 | 12        | 19,0    | 3/4"    | 20      | 1 1/4 | 50,8    | 69,7   | 60,0        | 4000     |
| 1202680   | H1243390-161600 | 16        | 25,0    | 1"      | 16      | 1     | 44,5    | 70,6   | 67,0        | 5000     |
| 1201846   | H1243390-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 50,8    | 73,6   | 71,0        | 4000     |
| 1216894   | H1243390-162400 | 16        | 25,0    | 1"      | 24      | 1 1/2 | 60,3    | 93,1   | 75,0        | 3000     |
| 1202884   | H1243390-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 44,5    | 94,4   | 65,0        | 5000     |
| 1201847   | H1243390-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 88,0   | 84,0        | 4000     |
| 1202676   | H1243390-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 60,3    | 91,5   | 87,5        | 3000     |
| 1202806   | H1243390-242000 | 24        | 38,0    | 1 1/2"  | 20      | 1 1/4 | 50,8    | 93,6   | 93,0        | 4000     |
| 1202757   | H1243390-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 104,8  | 91,0        | 3000     |
| 1202758   | H1243390-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 71,4    | 104,8  | 115,0       | 3000     |
| 1216898   | H1243390-322400 | 32        | 51,0    | 2"      | 24      | 1 1/2 | 60,3    | 132,8  | 133,0       | 3000     |
| 1201983   | H1243390-323200 | 32        | 51,0    | 2"      | 32      | 2     | 71,4    | 129,3  | 130,0       | 3000     |
| 1203169   | H1243390-3240B0 | 32        | 51,0    | 2"      | 40      | 2 1/2 | 84,1    | 103,0  | 100,0       | 2500     |
| 1203364   | H1243390-4040SL | 40        | 63,0    | 2 1/2"  | 40      | 2 1/2 | 84,1    | 137,2  | 125,0       | 2500     |

REV.2.1

## // H1243610

Flange SAE 6000 psi J518 Code 62  
SFS



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | C (mm) | FD (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|--------|---------|----------|
| 1202511   | H1243610-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2   | 47,0   | 31,8    | 6000     |
| 1202759   | H1243610-081200 | 8         | 13,0    | 1/2"    | 12      | 3/4   | 52,0   | 41,3    | 6000     |
| 1202807   | H1243610-101200 | 10        | 16,0    | 5/8"    | 12      | 3/4   | 52,2   | 41,3    | 6000     |
| 1202733   | H1243610-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 52,5   | 41,3    | 6000     |
| 1202760   | H1243610-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 55,5   | 47,6    | 6000     |
| 1216908   | H1243610-161200 | 16        | 25,0    | 1"      | 12      | 3/4   | 56,4   | 41,3    | 6000     |
| 1201415   | H1243610-161600 | 16        | 25,0    | 1"      | 16      | 1     | 56,4   | 47,6    | 6000     |
| 1201416   | H1243610-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 63,4   | 54,0    | 6000     |
| 1201417   | H1243610-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 83,0   | 54,0    | 6000     |
| 1201418   | H1243610-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 71,0   | 63,5    | 6000     |
| 1201419   | H1243610-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 101,0  | 63,5    | 6000     |
| 1201420   | H1243610-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 76,0   | 79,4    | 6000     |
| 1201421   | H1243610-323200 | 32        | 51,0    | 2"      | 32      | 2     | 76,0   | 79,4    | 6000     |

## // H1243640

45° Flange SAE 6000 psi J518 Code 62  
SFS 45  
Solid one piece



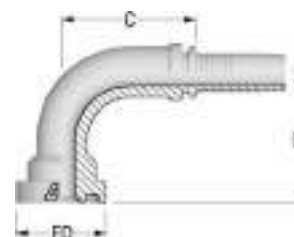
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1201729   | H1243640-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2   | 31,8    | 56,5   | 23,0        | 6000     |
| 1202764   | H1243640-081200 | 8         | 13,0    | 1/2"    | 12      | 3/4   | 41,3    | 79,9   | 30,5        | 6000     |
| 1216910   | H1243640-101200 | 10        | 16,0    | 5/8"    | 12      | 3/4   | 41,3    | 69,0   | 31,0        | 6000     |
| 1202082   | H1243640-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 84,1   | 31,0        | 6000     |
| 1202083   | H1243640-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 80,0   | 33,5        | 6000     |
| 1201794   | H1243640-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 96,7   | 36,0        | 6000     |
| 1202091   | H1243640-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 96,1   | 39,0        | 6000     |
| 1202761   | H1243640-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 108,6  | 40,0        | 6000     |
| 1202452   | H1243640-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 114,8  | 45,5        | 6000     |
| 1202453   | H1243640-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 63,5    | 122,9  | 45,0        | 6000     |
| 1202734   | H1243640-323200 | 32        | 51,0    | 2"      | 32      | 2     | 79,4    | 156,6  | 60,0        | 6000     |

## // H1243690

90° Flange SAE 6000 psi J518 Code 62

SFS 90

Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | FD (mm) | C (mm) | D Drop (mm) | WP (psi) | F1    |
|-----------|-----------------|-----------|---------|---------|---------|---------|--------|-------------|----------|-------|
| 1202257   | H1243690-080800 | 8         | 13,0    | 1/2"    | 8       | 31,8    | 47,8   | 46,0        | 6000     | 1/2   |
| 1202766   | H1243690-081200 | 8         | 13,0    | 1/2"    | 12      | 41,3    | 47,8   | 54,0        | 6000     | 3/4   |
| 1202808   | H1243690-100800 | 10        | 16,0    | 5/8"    | 8       | 31,8    | 50,0   | 52,0        | 6000     | 1/2   |
| 1202814   | H1243690-101200 | 10        | 16,0    | 5/8"    | 12      | 41,3    | 49,9   | 55,0        | 6000     | 3/4   |
| 1202075   | H1243690-121200 | 12        | 19,0    | 3/4"    | 12      | 41,3    | 63,2   | 61,0        | 6000     | 3/4   |
| 1201795   | H1243690-121600 | 12        | 19,0    | 3/4"    | 16      | 47,6    | 63,2   | 66,0        | 6000     | 1     |
| 1216913   | H1243690-161200 | 16        | 25,0    | 1"      | 12      | 41,3    | 72,6   | 61,0        | 6000     | 3/4   |
| 1201739   | H1243690-161600 | 16        | 25,0    | 1"      | 16      | 47,6    | 73,6   | 75,0        | 6000     | 1     |
| 1202767   | H1243690-162000 | 16        | 25,0    | 1"      | 20      | 54,0    | 77,6   | 78,0        | 6000     | 1 1/4 |
| 1202735   | H1243690-202000 | 20        | 32,0    | 1 1/4"  | 20      | 54,0    | 94,5   | 89,0        | 6000     | 1 1/4 |
| 1202768   | H1243690-202400 | 20        | 32,0    | 1 1/4"  | 24      | 63,5    | 98,0   | 94,0        | 6000     | 1 1/2 |
| 1202736   | H1243690-242400 | 24        | 38,0    | 1 1/2"  | 24      | 63,5    | 99,6   | 105,0       | 6000     | 1 1/2 |
| 1202769   | H1243690-243200 | 24        | 38,0    | 1 1/2"  | 32      | 79,4    | 116,9  | 123,0       | 6000     | 2     |
| 1202762   | H1243690-323200 | 32        | 51,0    | 2"      | 32      | 79,4    | 143,3  | 132,0       | 6000     | 2     |

## // H10W3320

Split Flange Clamp 3000 psi J518 Code 61

FHL



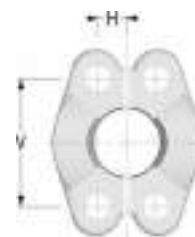
| Item Code | Product Code    | FD (in) | V (mm) | H (mm) |
|-----------|-----------------|---------|--------|--------|
| 1900451   | H10W3320-080000 | 1/2"    | 38,1   | 8,7    |
| 1900457   | H10W3320-120000 | 3/4"    | 47,6   | 11,1   |
| 1900452   | H10W3320-160000 | 1"      | 52,4   | 13,1   |
| 1900454   | H10W3320-200000 | 1 1/4"  | 58,7   | 15,1   |
| 1900453   | H10W3320-240000 | 1 1/2"  | 69,9   | 17,9   |
| 1900455   | H10W3320-320000 | 2"      | 77,8   | 21,4   |
| 1900456   | H10W3320-400000 | 2 1/2"  | 89,0   | 25,5   |
| 1900458   | H10W3320-480000 | 3"      | 106,0  | 31,0   |
| 1901123   | H10W3320-560000 | 3 1/2"  | 120,0  | 35,0   |
| 1900715   | H10W3320-640000 | 4"      | 130,0  | 39,0   |

REV.2.1

## // H10W3620

Split Flange Clamp 6000 psi J518 Code 62

FHS

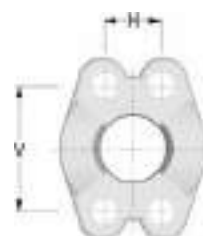


| Item Code | Product Code    | FD (in) | V (mm) | H (mm) |
|-----------|-----------------|---------|--------|--------|
| 1900445   | H10W3620-080000 | 1/2"    | 40,5   | 9,1    |
| 1900450   | H10W3620-120000 | 3/4"    | 50,8   | 11,9   |
| 1900446   | H10W3620-160000 | 1"      | 57,2   | 13,9   |
| 1900448   | H10W3620-200000 | 1 1/4"  | 66,7   | 15,9   |
| 1900447   | H10W3620-240000 | 1 1/2"  | 79,4   | 18,3   |
| 1900449   | H10W3620-320000 | 2"      | 96,8   | 22,2   |

## // H10W3310

4 Hole Flange Clamp 3000 psi J518 Code 61

VHL

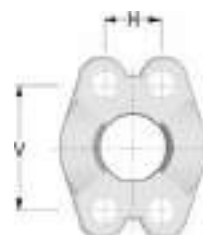


| Item Code | Product Code    | FD (in) | V (mm) | H (mm) |
|-----------|-----------------|---------|--------|--------|
| 1900442   | H10W3310-120000 | 3/4"    | 47,6   | 22,2   |
| 1900437   | H10W3310-160000 | 1"      | 52,4   | 26,2   |
| 1900439   | H10W3310-200000 | 1 1/4"  | 58,7   | 30,2   |
| 1900438   | H10W3310-240000 | 1 1/2"  | 69,9   | 35,8   |
| 1900440   | H10W3310-320000 | 2"      | 77,8   | 42,8   |

## // H10W3610

4 Hole Flange Clamp 6000 psi J518 Code 62

VHS



| Item Code | Product Code    | FD (in) | V (mm) | H (mm) |
|-----------|-----------------|---------|--------|--------|
| 1900428   | H10W3610-080000 | 1/2"    | 40,5   | 18,2   |
| 1900433   | H10W3610-120000 | 3/4"    | 50,8   | 23,8   |
| 1900429   | H10W3610-160000 | 1"      | 57,2   | 27,8   |
| 1900431   | H10W3610-200000 | 1 1/4"  | 66,7   | 31,8   |
| 1900430   | H10W3610-240000 | 1 1/2"  | 79,4   | 36,6   |
| 1900432   | H10W3610-320000 | 2"      | 96,8   | 44,4   |
| 1900910   | H10W3610-400000 | 2 1/2"  | 123,8  | 58,7   |



## // NEW POWERTRAK FITTINGS

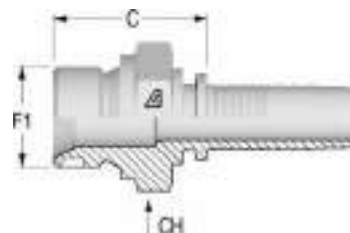
|                            |    |                          |     |
|----------------------------|----|--------------------------|-----|
| // BSP INSERTS.....        | 93 | // ORFS INSERTS.....     | 100 |
| // DIN METRIC INSERTS..... | 95 | // SAE FLANGES.....      | 102 |
| // JIC 37° INSERTS.....    | 97 | // SUPERCAT FLANGES..... | 105 |
| // NPTF INSERTS.....       | 99 | // FERRULES.....         | 106 |

REV.2.1

## // BSP INSERTS

## // H1310510

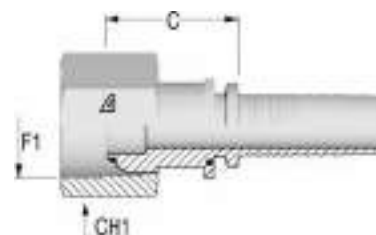
**BSPP Male 60° Flare**  
**AGR**



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|----------|--------|---------|
| 1238090   | H1310510-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 37,5   | 32,0    |
| 1226162   | H1310510-161600 | 16        | 25,0    | 1"      | 16      | 1-11     | 44,5   | 41,0    |
| 1230555   | H1310510-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 95,5   | 50,0    |
| 1241600   | H1310510-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 56,0   | 55,0    |
| 1241601   | H1310510-323200 | 32        | 51,0    | 2"      | 32      | 2-11     | 71,5   | 70,0    |

## // H1320812

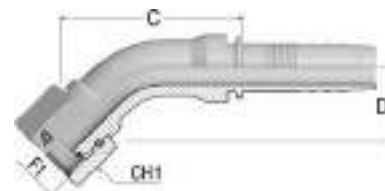
**BSPP Female 60° Cone with O-Ring**  
**DKOR**



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|----------|
| 1226178   | H1320812-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 25,2   | 32,0     |
| 1241616   | H1320812-121600 | Thrust wire nut | 12        | 19,0    | 3/4"    | 16      | 1-11     | 27,7   | 38,0     |
| 1226179   | H1320812-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1-11     | 31,0   | 38,0     |
| 1241617   | H1320812-162000 | Thrust wire nut | 16        | 25,0    | 1"      | 20      | 1 1/4-11 | 32,0   | 50,0     |
| 1238241   | H1320812-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 35,0   | 50,0     |
| 1246639   | H1320812-202400 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2-11 | 36,8   | 55,0     |
| 1239857   | H1320812-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 38,8   | 55,0     |
| 1238240   | H1320812-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 49,0   | 70,0     |

## // H1320842

**45° BSPP Female 60° Cone with O-Ring**  
**DKOR 45**  
**Solid one piece**



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|-------------|----------|
| 1241628   | H1320842-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 75,0   | 30,0        | 32,0     |
| 1237423   | H1320842-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1-11     | 92,0   | 40,0        | 38,0     |
| 1241629   | H1320842-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 90,0   | 40,0        | 50,0     |
| 1242138   | H1320842-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 116,0  | 46,0        | 55,0     |
| 1241630   | H1320842-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 153,5  | 60,0        | 70,0     |

## // H1320892

90° BSPP Female 60° Cone with O-Ring

DKOR 90

Solid one piece

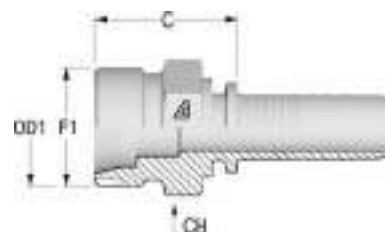


| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|-------------|----------|
| 1226180   | H1320892-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 59,0   | 61,0        | 32,0     |
| 1226181   | H1320892-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1-11     | 74,0   | 71,0        | 38,0     |
| 1241625   | H1320892-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 84,0   | 83,0        | 50,0     |
| 1238242   | H1320892-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 101,0  | 96,0        | 55,0     |
| 1241626   | H1320892-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 140,5  | 130,0       | 70,0     |

## // DIN METRIC INSERTS

## // H1311210

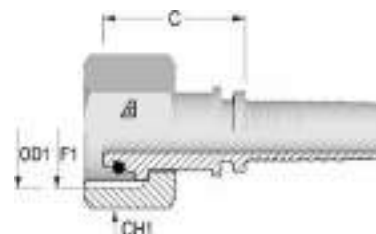
**Metric Male 24° Seat**  
**DIN 3853 - Heavy Series**  
**CES**



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1    | OD1 | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|-------|-----|--------|---------|
| 1241605   | H1311210-123600 | 12        | 19,0    | 3/4"    | M36X2 | 25  | 36,5   | 36,0    |
| 1226164   | H1311210-164200 | 16        | 25,0    | 1"      | M42X2 | 30  | 36,2   | 46,0    |
| 1243063   | H1311210-204200 | 20        | 32,0    | 1 1/4"  | M42X2 | 30  | 47,0   | 46,0    |
| 1226165   | H1311210-205200 | 20        | 32,0    | 1 1/4"  | M52X2 | 38  | 51,0   | 55,0    |

## // H1321613

**Metric Female 24° Cone with O-Ring**  
**DIN 3865 - Heavy Series**  
**DKOS**



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1    | OD1 | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|-------|-----|--------|----------|
| 1226182   | H1321612-123000 | Thrust wire nut | 12        | 19,0    | 3/4"    | M30X2 | 20  | 36,8   | 36,0     |
| 1241632   | H1321613-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2 | 25  | 41,1   | 46,0     |
| 1240224   | H1321612-163600 | Thrust wire nut | 16        | 25,0    | 1"      | M36X2 | 25  | 46,0   | 46,0     |
| 1226184   | H1321613-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2 | 30  | 45,2   | 50,0     |
| 1242139   | H1321612-204200 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | M42X2 | 30  | 51,0   | 50,0     |
| 1226185   | H1321613-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2 | 38  | 51,1   | 60,0     |
| 1238244   | H1321612-245200 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | M52X2 | 38  | 58,0   | 60,0     |

Image: insert with Slip on Nut.

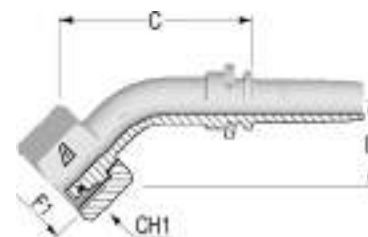
## // H1321643

45° Metric Female 24° Cone with O-Ring

DIN 3865 - Heavy Series

DKOS 45

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1    | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|-------|-----|--------|-------------|----------|
| 1243201   | H1321643-123000 | Slip on nut     | 12        | 19,0    | 3/4"    | M30X2 | 20  | 66,0   | 29,0        | 36,0     |
| 1237408   | H1321643-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2 | 25  | 70,4   | 33,0        | 46,0     |
| 1242140   | H1321642-163600 | Thrust wire nut | 16        | 25,0    | 1"      | M36X2 | 25  | 93,0   | 37,5        | 46,0     |
| 1237422   | H1321643-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2 | 30  | 109,5  | 35,5        | 50,0     |
| 1238246   | H1321643-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2 | 38  | 112,0  | 45,0        | 60,0     |
| 1238245   | H1321642-245200 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | M52X2 | 38  | 127,0  | 45,0        | 60,0     |

Image: insert with Slip on Nut.

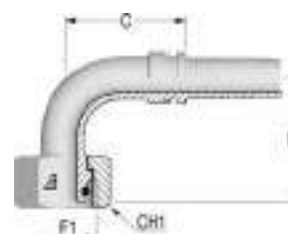
## // H1321693

90° Metric Female 24° Cone with O-Ring

DIN 3865 - Heavy Series

DKOS 90

Solid one piece



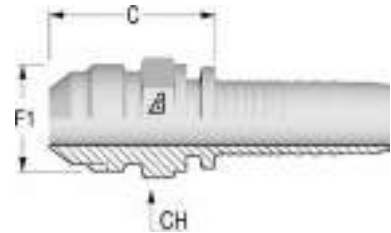
| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1    | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|-------|-----|--------|-------------|----------|
| 1241633   | H1321692-123000 | Thrust wire nut | 12        | 19,0    | 3/4"    | M30X2 | 20  | 65,5   | 67,5        | 36,0     |
| 1237409   | H1321693-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2 | 25  | 51,0   | 59,5        | 46,0     |
| 1240225   | H1321692-163600 | Thrust wire nut | 16        | 25,0    | 1"      | M36X2 | 25  | 75,6   | 82,0        | 46,0     |
| 1237410   | H1321693-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2 | 30  | 85,0   | 70,0        | 50,0     |
| 1243064   | H1321692-204200 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | M42X2 | 30  | 88,0   | 87,5        | 50,0     |
| 1238248   | H1321693-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2 | 38  | 97,0   | 92,0        | 60,0     |
| 1238247   | H1321692-245200 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | M52X2 | 38  | 106,0  | 95,0        | 60,0     |

Image: insert with Slip on Nut.

## // JIC 37° INSERTS

## // H1312510

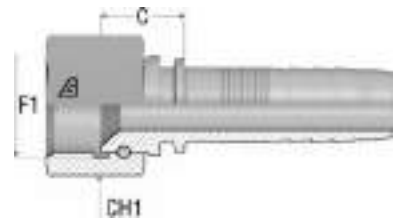
JIC Male 37° Cone  
AGJ



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----------|--------|---------|
| 1226168   | H1312510-121200 | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 38,5   | 27,0    |
| 1226169   | H1312510-161600 | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 45,5   | 36,0    |
| 1226170   | H1312510-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 51,5   | 46,0    |
| 1226171   | H1312510-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 57,5   | 50,0    |
| 1238091   | H1312510-323200 | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 77,0   | 65,0    |

## // H1322512

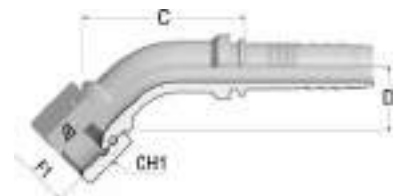
JIC Female 37° Seat  
DKJ



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|----------|
| 1241618   | H1322512-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 22,2   | 32,0     |
| 1241619   | H1322512-121600 | Thrust wire nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 25,0   | 38,0     |
| 1241620   | H1322512-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 27,0   | 38,0     |
| 1241621   | H1322512-162000 | Thrust wire nut | 16        | 25,0    | 1"      | 20      | 1 5/8-12  | 29,0   | 50,0     |
| 1241622   | H1322512-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 31,5   | 50,0     |
| 1241623   | H1322512-202400 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 24      | 1 7/8-12  | 34,0   | 55,0     |
| 1241624   | H1322512-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 36,5   | 55,0     |

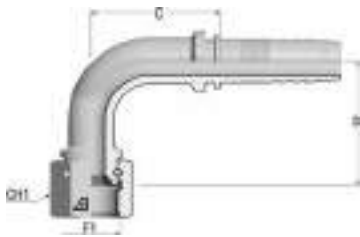
## // H1322542

45° JIC Female 37° Seat  
Medium Drop  
DKJ 45M  
Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|-------------|----------|
| 1226205   | H1322542-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 69,5   | 27,5        | 32,0     |
| 1241631   | H1322542-121600 | Thrust wire nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 69,0   | 33,5        | 38,0     |
| 1226206   | H1322542-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 84,8   | 31,0        | 38,0     |
| 1238251   | H1322542-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 99,0   | 37,0        | 50,0     |
| 1226207   | H1322542-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 118,3  | 43,5        | 55,0     |

**// H1322592**  
**90° JIC Female 37° Seat**  
**Medium Drop**  
**DKJ 90M**  
**Solid one piece**

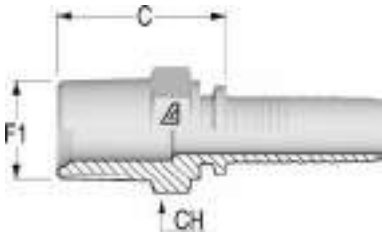


| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|-------------|----------|
| 1226209   | H1322592-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 59,1   | 57,0        | 32,0     |
| 1226211   | H1322592-121600 | Thrust wire nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 58,1   | 63,5        | 38,0     |
| 1226212   | H1322592-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 75,7   | 67,0        | 38,0     |
| 1238254   | H1322592-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 84,0   | 78,0        | 50,0     |
| 1230690   | H1322592-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 105,3  | 92,0        | 55,0     |
| 1238255   | H1322592-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 147,5  | 135,0       | 70,0     |

REV.2.1

NPTF INSERTS

H1312810  
NPTF Male 60° Seat  
AGN

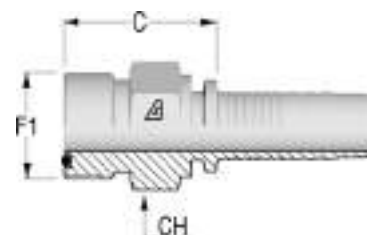


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1           | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|--------------|--------|---------|
| 1226172   | H1312810-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4-14       | 35,5   | 27,0    |
| 1226173   | H1312810-161600 | 16        | 25,0    | 1"      | 16      | 1-11 1/2     | 46,5   | 36,0    |
| 1238093   | H1312810-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 1/2 | 41,0   | 46,0    |
| 1238095   | H1312810-323200 | 32        | 51,0    | 2"      | 32      | 2-11 1/2     | 69,2   | 65,0    |

## // ORFS INSERTS

## // H1312410

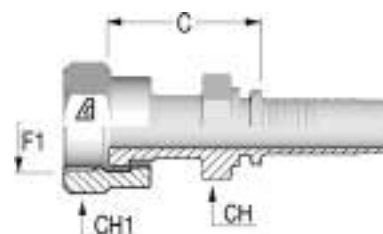
## ORFS Male



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|------------|--------|---------|
| 1230556   | H1312410-121200 | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 32,7   | 32,0    |
| 1226166   | H1312410-161600 | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 35,7   | 38,0    |
| 1230557   | H1312410-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 38,7   | 46,0    |
| 1226167   | H1312410-242400 | 24        | 38,0    | 1 1/2"  | 24      | 2-12       | 41,8   | 55,0    |

## // H1322411

## ORFS Female with Stem Hexagon



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|------------|--------|---------|----------|
| 1226190   | H1322411-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 44,5   | 30,0    | 36,0     |
| 1226191   | H1322411-121600 | Crimped  | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 50,5   | 36,0    | 41,0     |
| 1242141   | H1322411-161200 | Crimped  | 16        | 25,0    | 1"      | 12      | 1 3/16-12  | 42,0   | 32,0    | 36,0     |
| 1226192   | H1322411-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 52,5   | 36,0    | 41,0     |
| 1226193   | H1322411-162000 | Crimped  | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 53,5   | 41,0    | 50,0     |
| 1226194   | H1322411-202000 | Crimped  | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 56,0   | 41,0    | 50,0     |
| 1226195   | H1322411-242400 | Crimped  | 24        | 38,0    | 1 1/2"  | 24      | 2-12       | 62,5   | 50,0    | 60,0     |

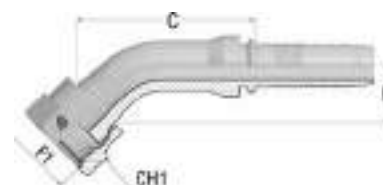
## // H1322441

## 45° ORFS Female

## Medium Drop

## DK ORFS 45M

## Solid one piece



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|------------|--------|-------------|----------|
| 1226196   | H1322441-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 32,5   | 26,0        | 36,0     |
| 1226197   | H1322441-121600 | Crimped  | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 31,2   | 28,0        | 41,0     |
| 1226198   | H1322441-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 94,0   | 28,0        | 41,0     |
| 1241634   | H1322441-162000 | Crimped  | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 88,0   | 28,0        | 50,0     |
| 1238249   | H1322441-202000 | Crimped  | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 110,0  | 36,5        | 50,0     |

REV.2.1

**// H1322491**  
**90° ORFS Female**  
**Medium Drop**  
**DK ORFS 90M**  
**Solid one piece**

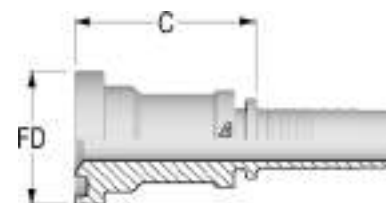


| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|------------|--------|-------------|----------|
| 1226200   | H1322491-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 67,6   | 58,0        | 36,0     |
| 1226201   | H1322491-121600 | Crimped  | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 69,6   | 58,0        | 36,0     |
| 1226202   | H1322491-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 79,6   | 66,0        | 41,0     |
| 1241635   | H1322491-162000 | Crimped  | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 73,0   | 66,0        | 50,0     |
| 1226203   | H1322491-202000 | Crimped  | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 102,4  | 81,0        | 50,0     |

## // SAE FLANGES

## // H1343310

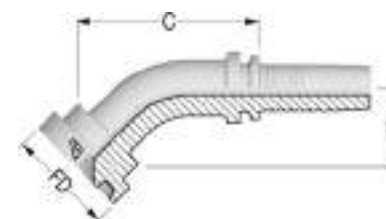
Flange SAE 3000 psi J518 Code 61  
SFL



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | C (mm) | FD (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|--------|---------|----------|
| 1226222   | H1343310-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 43,5   | 38,1    | 5000     |
| 1226224   | H1343310-161600 | 16        | 25,0    | 1"      | 16      | 1     | 53,5   | 44,5    | 5000     |
| 1226225   | H1343310-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 56,0   | 50,8    | 5000     |
| 1241602   | H1343310-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 58,5   | 44,4    | 5000     |
| 1226227   | H1343310-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 58,5   | 50,8    | 5000     |
| 1241604   | H1343310-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 61,5   | 60,3    | 5000     |
| 1241603   | H1343310-242000 | 24        | 38,0    | 1 1/2"  | 20      | 1 1/4 | 55,5   | 50,8    | 5000     |
| 1226228   | H1343310-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 63,5   | 60,3    | 5000     |
| 1226229   | H1343310-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 75,0   | 71,4    | 5000     |
| 1235374   | H1343310-323200 | 32        | 50,0    | 2"      | 32      | 2     | 85,0   | 71,4    | 5000     |

## // H1343340

45° Flange SAE 3000 psi J518 Code 61  
SFL 45  
Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1226233   | H1343340-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 50,8    | 88,9   | 32,5        | 5000     |
| 1226234   | H1343340-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 94,3   | 38,5        | 5000     |
| 1226235   | H1343340-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 99,8   | 43,0        | 5000     |
| 1233534   | H1343340-323200 | 32        | 50,0    | 2"      | 32      | 2     | 71,4    | 154,0  | 54,0        | 5000     |

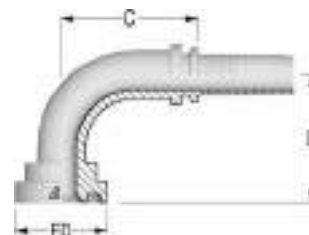
REV.2.1

## // H1343390

90° Flange SAE 3000 psi J518 Code 61

SFL 90

Solid one piece

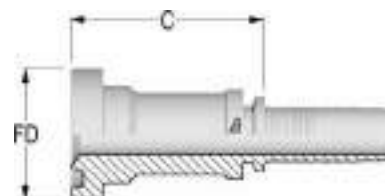


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1226241   | H1343390-161600 | 16        | 25,0    | 1"      | 16      | 1     | 44,5    | 78,1   | 64,0        | 5000     |
| 1226242   | H1343390-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 50,8    | 74,7   | 69,0        | 5000     |
| 1226244   | H1343390-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 92,0   | 81,0        | 5000     |
| 1241608   | H1343390-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 60,3    | 87,0   | 85,0        | 5000     |
| 1226245   | H1343390-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 103,0  | 93,0        | 5000     |
| 1235375   | H1343390-323200 | 32        | 50,0    | 2"      | 32      | 2     | 71,4    | 139,0  | 130,0       | 5000     |

## // H1343610

Flange SAE 6000 psi J518 Code 62

SFS



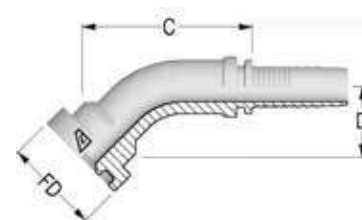
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | C (mm) | FD (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|--------|---------|----------|
| 1226247   | H1343610-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 53,5   | 41,3    | 6000     |
| 1226248   | H1343610-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 56,5   | 47,6    | 6000     |
| 1226623   | H1343610-161200 | 16        | 25,0    | 1"      | 12      | 3/4   | 58,5   | 41,3    | 6000     |
| 1226250   | H1343610-161600 | 16        | 25,0    | 1"      | 16      | 1     | 58,5   | 47,6    | 6000     |
| 1226624   | H1343610-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 65,5   | 54,0    | 6000     |
| 1236992   | H1343610-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 61,0   | 47,6    | 6000     |
| 1226252   | H1343610-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 64,0   | 54,0    | 6000     |
| 1226253   | H1343610-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 74,0   | 63,5    | 6000     |
| 1241614   | H1343610-242000 | 24        | 38,0    | 1 1/2"  | 20      | 1 1/4 | 71,0   | 54,0    | 6000     |
| 1226254   | H1343610-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 76,0   | 63,5    | 6000     |
| 1226255   | H1343610-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 88,0   | 79,4    | 6000     |
| 1241615   | H1343610-322400 | 32        | 51,0    | 2"      | 24      | 1 1/2 | 86,0   | 63,5    | 6000     |
| 1235378   | H1343610-323200 | 32        | 50,0    | 2"      | 32      | 2     | 103,0  | 79,4    | 6000     |

# // H1343640

45° Flange SAE 6000 psi J518 Code 62

SFS 45

Solid one piece



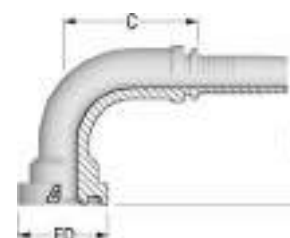
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1226261   | H1343640-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 62,8   | 30,0        | 6000     |
| 1226262   | H1343640-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 65,4   | 33,0        | 6000     |
| 1241609   | H1343640-161200 | 16        | 25,0    | 1"      | 12      | 3/4   | 41,3    | 77,0   | 29,5        | 6000     |
| 1226263   | H1343640-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 82,9   | 38,5        | 6000     |
| 1226264   | H1343640-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 78,0   | 44,0        | 6000     |
| 1242142   | H1343640-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 47,6    | 104,7  | 34,5        | 6000     |
| 1238305   | H1343640-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 103,0  | 41,0        | 6000     |
| 1241610   | H1343640-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 117,0  | 48,0        | 6000     |
| 1226265   | H1343640-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 63,5    | 122,5  | 48,0        | 6000     |
| 1235379   | H1343640-323200 | 32        | 50,0    | 2"      | 32      | 2     | 79,4    | 177,0  | 61,0        | 6000     |

# // H1343690

90° Flange SAE 6000 psi J518 Code 62

SFS 90

Solid one piece

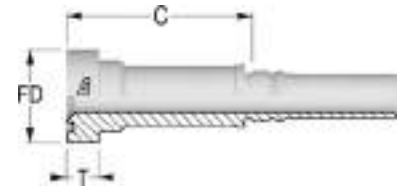


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1226270   | H1343690-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 64,7   | 64,0        | 6000     |
| 1226271   | H1343690-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 64,7   | 66,0        | 6000     |
| 1226633   | H1343690-161200 | 16        | 25,0    | 1"      | 12      | 3/4   | 41,3    | 74,7   | 61,0        | 6000     |
| 1226273   | H1343690-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 74,8   | 74,0        | 6000     |
| 1226274   | H1343690-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 78,8   | 85,0        | 6000     |
| 1241611   | H1343690-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 47,6    | 87,0   | 72,0        | 6000     |
| 1230765   | H1343690-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 96,0   | 91,0        | 6000     |
| 1238310   | H1343690-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 99,0   | 103,5       | 6000     |
| 1226276   | H1343690-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 63,5    | 113,8  | 109,0       | 6000     |
| 1235381   | H1343690-323200 | 32        | 50,0    | 2"      | 32      | 2     | 79,4    | 169,0  | 134,0       | 6000     |

## // SUPERCAT FLANGES

## // H1343910

## Flange SUPERCAT

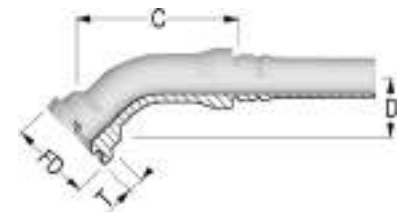


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | T (mm) | C (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|--------|
| 1226278   | H1343910-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 14,3   | 85,5   |
| 1226279   | H1343910-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 14,3   | 85,5   |
| 1226280   | H1343910-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 14,3   | 94,5   |
| 1226281   | H1343910-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 14,3   | 94,5   |
| 1226282   | H1343910-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 14,3   | 92,0   |
| 1226283   | H1343910-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 14,3   | 87,0   |

## // H1343940

## 45° Flange SUPERCAT

## Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | T (mm) | C (mm) | D Drop (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|--------|-------------|
| 1226289   | H1343940-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 14,3   | 107,0  | 34,0        |
| 1241612   | H1343940-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 14,3   | 112,0  | 34,0        |
| 1226290   | H1343940-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 14,3   | 129,0  | 42,5        |
| 1226291   | H1343940-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 14,3   | 128,0  | 40,0        |
| 1226292   | H1343940-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 14,3   | 150,0  | 45,1        |
| 1238317   | H1343940-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 14,3   | 152,0  | 60,0        |

## // H1343990

## 90° Flange SUPERCAT

## Solid one piece

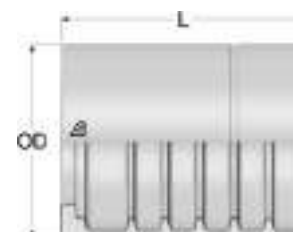


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | T (mm) | C (mm) | D Drop (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|--------|-------------|
| 1226297   | H1343990-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 14,3   | 67,2   | 67,0        |
| 1226298   | H1343990-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 14,3   | 68,7   | 70,0        |
| 1226299   | H1343990-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 14,3   | 84,8   | 79,0        |
| 1226301   | H1343990-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 14,3   | 79,8   | 82,5        |
| 1238312   | H1343990-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 14,3   | 97,0   | 93,0        |
| 1238315   | H1343990-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 14,3   | 97,0   | 101,0       |

## // FERRULES

## // H1300NS4

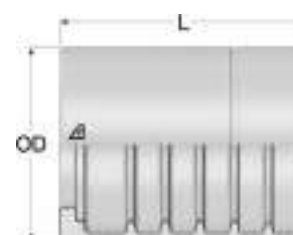
## Multispiral No-Skive Ferrule for 4 Spiral Hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1236599   | H1300NS4-120000 | 12        | 19,0    | 3/4"    | 44,0            | 55,0   |
| 1236600   | H1300NS4-160000 | 16        | 25,0    | 1"      | 51,0            | 64,0   |
| 1236601   | H1300NS4-200000 | 20        | 31,0    | 1 1/4"  | 61,0            | 99,0   |
| 1236602   | H1300NS4-240000 | 24        | 38,0    | 1 1/2"  | 70,0            | 89,5   |
| 1236603   | H1300NS4-320000 | 32        | 51,0    | 2"      | 87,0            | 125,0  |

## // H1300NS6

## Multispiral No-Skive Ferrule for 6 Spiral Hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1236604   | H1300NS6-200000 | 20        | 31,0    | 1 1/4"  | 65,0            | 99,0   |
| 1236605   | H1300NS6-240000 | 24        | 38,0    | 1 1/2"  | 73,0            | 89,5   |
| 1236606   | H1300NS6-320000 | 32        | 51,0    | 2"      | 88,9            | 125,0  |



ALSO AVAILABLE IN STAINLESS STEEL

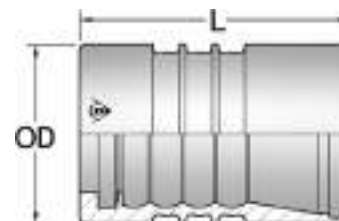
## // WATERBLAST FITTINGS

// FERRULES ..... 108

// INSERTS ..... 109

## // FERRULES

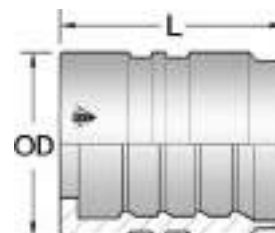
## // D990000 - WATERBLAST



| Item Code | Product Code | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|--------------|-----------|---------|---------|-----------------|--------|
| 1240103   | D99000H-04/0 | 4         | 6,0     | 1/4"    | 22,0            | 25,5   |
| 1240105   | D99000H-05/0 | 5         | 8,0     | 5/16"   | 27,0            | 35,0   |
| 1215264   | D990000-06/0 | 6         | 10,0    | 3/8"    | 28,0            | 47,0   |
| 1223163   | D99000N-08/0 | 8         | 13,0    | 1/2"    | 33,0            | 50,0   |
| 1215266   | D990000-12/0 | 12        | 19,0    | 3/4"    | 41,0            | 63,0   |
| 1215267   | D990000-16/0 | 16        | 25,0    | 1"      | 49,0            | 75,0   |

WB20L: 1/4" and 5/16" only

## // D980000 - WATERBLAST



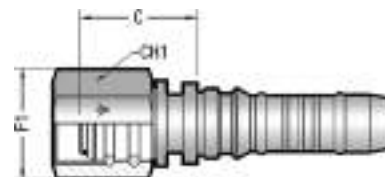
| Item Code | Product Code | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|--------------|-----------|---------|---------|-----------------|--------|
| 1242379   | D980000-06/0 | 6         | 10,0    | 3/8"    | 32,0            | 45,0   |
| 1215257   | D980000-08/0 | 8         | 13,0    | 1/2"    | 37,4            | 46,0   |
| 1241935   | D980000-12/0 | 12        | 19,0    | 3/4"    | 46,0            | 63,0   |

REV.2.1

## // INSERTS

## // D99001-WB

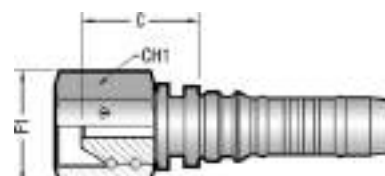
BSP Female 60° with O-Ring



| Item Code | Product Code   | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | CH1 (mm) |
|-----------|----------------|-----------------|-----------|---------|---------|---------|--------|--------|----------|
| 1240158   | DA99001-0404/0 | Slip on nut     | 4         | 6,0     | 1/4"    | 4       | 1/4-19 | 26,0   | 22,0     |
| 1240159   | DA99001-0605/0 | Slip on nut     | 5         | 8,0     | 5/16"   | 6       | 3/8-19 | 31,0   | 25,0     |
| 1214925   | DA99001-0606/0 | Thrust wire nut | 6         | 10,0    | 3/8"    | 6       | 3/8-19 | 32,1   | 22,0     |
| 1225828   | DA9900N-0808/0 | Thrust wire nut | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 36,0   | 30,0     |
| 1214927   | DA99001-1212/0 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 3/4-14 | 37,3   | 36,0     |

## // D99010-WB

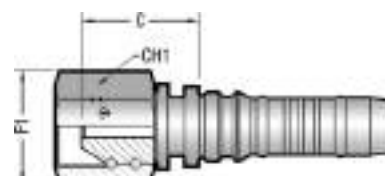
BSP Female 60° without O-Ring



| Item Code | Product Code   | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1     | C (mm) | CH1 (mm) |
|-----------|----------------|-----------------|-----------|---------|---------|---------|--------|--------|----------|
| 1245682   | DA99010-0808/0 | Thrust wire nut | 8         | 13,0    | 1/2"    | 8       | 1/2-14 | 36,0   | 30,0     |

## // D99061-WB

UNF Type "M Swivel"



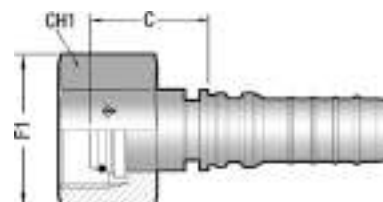
| Item Code | Product Code   | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH1 (mm) |
|-----------|----------------|-----------------|-----------|---------|---------|---------|----------|--------|----------|
| 1230563   | DA99061-1008/0 | Thrust wire nut | 8         | 13,0    | 1/2"    | 10      | 1-12 UNF | 41,0   | 32,0     |

## // D99179-WB

Metric Female 24° Cone with O-Ring - Heavy Series

DIN 3865 - DKOS -

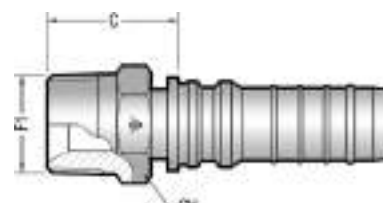
Slip on Nut with Relief Bore



| Item Code | Product Code   | Nut Type    | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | CH1 (mm) |
|-----------|----------------|-------------|-----------|---------|---------|---------|-----|--------|----------|
| 1240100   | DA99179-0204/0 | Slip on nut | 4         | 6,0     | 1/4"    | M14X1.5 | 6   | 28,0   | 22,0     |
| 1240101   | DA99179-0405/0 | Slip on nut | 5         | 8,0     | 5/16"   | M18X1.5 | 10  | 34,3   | 27,0     |
| 1214929   | DA99179-0606/0 | Slip on nut | 6         | 10,0    | 3/8"    | M22X1.5 | 14  | 36,5   | 27,0     |
| 1214930   | DA99179-0806/0 | Slip on nut | 6         | 10,0    | 3/8"    | M24X1.5 | 16  | 39,5   | 30,0     |
| 1214931   | DA9917N-0808/0 | Slip on nut | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 40,0   | 30,0     |
| 1214932   | DA99179-1212/0 | Slip on nut | 12        | 19,0    | 3/4"    | M36X2   | 25  | 47,3   | 46,0     |
| 1214933   | DA99179-1616/0 | Slip on nut | 16        | 25,0    | 1"      | M42X2   | 30  | 49,6   | 50,0     |

## // D99170-WB

NPTF Male 60° Seat - AGN



| Item Code | Product Code   | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) |
|-----------|----------------|-----------|---------|---------|---------|----------|--------|---------|
| 1240134   | D990170-0404/0 | 4         | 6,0     | 1/4"    | 4       | 1/4-18   | 27,5   | 17,0    |
| 1240135   | D990170-0605/0 | 5         | 8,0     | 5/16"   | 6       | 3/8-18   | 30,5   | 19,0    |
| 1215271   | D990170-0606/0 | 6         | 10,0    | 3/8"    | 6       | 3/8-18   | 31,0   | 19,0    |
| 1215272   | D99017N-0808/0 | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 35,0   | 22,0    |
| 1215273   | D990170-1212/0 | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 37,9   | 30,0    |
| 1215274   | D990170-1616/0 | 16        | 25,0    | 1"      | 16      | 1-11 1/2 | 47,3   | 36,0    |



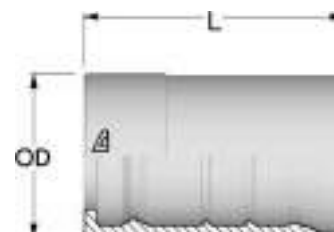
## // INTERLOCK FITTINGS

|                            |     |                          |     |
|----------------------------|-----|--------------------------|-----|
| // FERRULES.....           | 112 | // NPTF INSERTS.....     | 120 |
| // HOSE MENDER.....        | 113 | // ORFS INSERTS.....     | 121 |
| // BSP INSERTS.....        | 114 | // SAE FLANGES.....      | 123 |
| // DIN METRIC INSERTS..... | 116 | // SUPERCAT FLANGES..... | 127 |
| // JIC 37° INSERTS.....    | 118 | // HAMMER UNION.....     | 128 |

## // FERRULES

## // H1400200

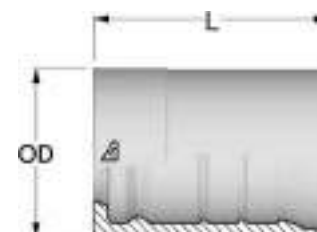
Interlock Dual Skive Ferrule for 4 Spiral Hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1201571   | H1400200-060000 | 6         | 10,0    | 3/8"    | 27,0            | 49,0   |
| 1201856   | H1400200-080000 | 8         | 13,0    | 1/2"    | 30,0            | 52,5   |
| 1201502   | H1400200-100000 | 10        | 16,0    | 5/8"    | 34,0            | 57,5   |
| 1201503   | H1400200-120000 | 12        | 19,0    | 3/4"    | 38,0            | 60,2   |
| 1201504   | H1400200-160000 | 16        | 25,0    | 1"      | 46,0            | 74,7   |
| 1200098   | H1400200-200000 | 20        | 31,0    | 1 1/4"  | 55,0            | 88,2   |
| 1200099   | H1400200-240000 | 24        | 38,0    | 1 1/2"  | 62,0            | 94,2   |
| 1201284   | H1400200-320000 | 32        | 51,0    | 2"      | 78,0            | 99,2   |

## // H1400301

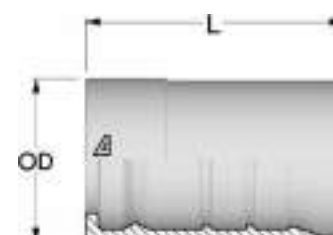
Interlock Dual Skive Ferrule for 4-6 Spiral Hoses



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1202585   | H1400301-100000 | 10        | 16,0    | 5/8"    | 35,5            | 57,5   |
| 1202730   | H1400301-120000 | 12        | 19,0    | 3/4"    | 43,5            | 60,0   |
| 1202222   | H1400301-160000 | 16        | 25,0    | 1"      | 52,0            | 75,0   |
| 1201761   | H1400301-200000 | 20        | 31,0    | 1 1/4"  | 62,0            | 88,0   |
| 1201805   | H1400301-240000 | 24        | 38,0    | 1 1/2"  | 69,5            | 94,0   |
| 1202006   | H1400301-320000 | 32        | 51,0    | 2"      | 88,0            | 99,0   |

## // H1T00600

Interlock Dual Skive Ferrule for Alfabiotech/Powerflexbio 3K and AT8K



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | Ferrule OD (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|-----------------|--------|
| 1225872   | H1T00600-320000 | 32        | 51,0    | 2"      | 88,1            | 108,2  |

REV.2.1

## // HOSE MENDER

## // H14C5610

## Hose Mender

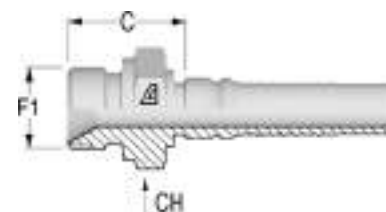


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) |
|-----------|-----------------|-----------|---------|---------|
| 1219636   | H14C5610-101000 | 10        | 16,0    | 5/8"    |
| 1235392   | H14C5610-202000 | 20        | 32,0    | 1 1/4"  |
| 1235393   | H14C5610-242400 | 24        | 38,0    | 1 1/2"  |
| 1235394   | H14C5610-323200 | 32        | 51,0    | 2"      |

## // BSP INSERTS

## // H1410510

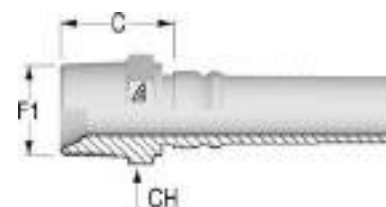
**BSPP Male 60° Flare**  
**AGR**



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|----------|--------|---------|
| 1200218   | H1410510-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 34,0   | 32,0    |
| 1200239   | H1410510-161600 | 16        | 25,0    | 1"      | 16      | 1-11     | 40,0   | 41,0    |
| 1201219   | H1410510-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 45,2   | 50,0    |
| 1200280   | H1410510-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 48,5   | 55,0    |
| 1201080   | H1410510-323200 | 32        | 51,0    | 2"      | 32      | 2-11     | 55,5   | 70,0    |

## // H1410710

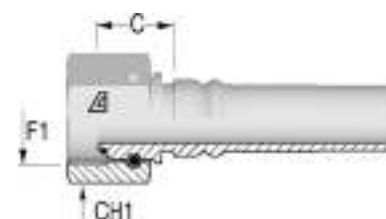
**BSPT Male**  
**AGR K**



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|----------|--------|---------|
| 1200215   | H1410710-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 32,0   | 27,0    |
| 1200237   | H1410710-161600 | 16        | 25,0    | 1"      | 16      | 1-11     | 42,0   | 36,0    |
| 1200261   | H1410710-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 46,2   | 46,0    |
| 1200278   | H1410710-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 48,0   | 50,0    |

## // H1420812

**BSPP Female 60° Cone with O-Ring**  
**DKOR**



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|----------|
| 1214247   | H1420811-080800 | Crimped         | 8         | 13,0    | 1/2"    | 8       | 1/2-14   | 19,5   | 27,0     |
| 1202424   | H1420812-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 22,5   | 32,0     |
| 1202440   | H1420812-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1-11     | 25,5   | 38,0     |
| 1201132   | H1420812-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 30,2   | 50,0     |
| 1201134   | H1420812-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 33,5   | 55,0     |
| 1201136   | H1420812-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 35,0   | 70,0     |

Image: insert with Thrust Wire Nut.

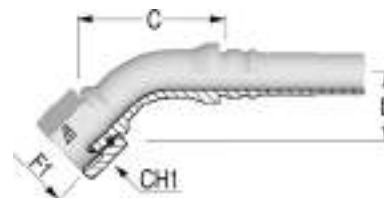
REV.2.1

## // H1420842

45° BSPP Female 60° Cone with O-Ring

DKOR 45

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|-------------|----------|
| 1202447   | H1420842-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 72,0   | 30,0        | 32,0     |
| 1202446   | H1420842-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1-11     | 81,0   | 34,0        | 38,0     |
| 1202444   | H1420842-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 97,0   | 40,0        | 50,0     |
| 1202442   | H1420842-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 113,0  | 46,0        | 55,0     |
| 1201535   | H1420842-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 151,0  | 60,0        | 70,0     |

## // H1420892

90° BSPP Female 60° Cone with O-Ring

DKOR 90

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1       | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|----------|--------|-------------|----------|
| 1200217   | H1420892-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 3/4-14   | 58,0   | 61,0        | 32,0     |
| 1202445   | H1420892-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1-11     | 75,0   | 71,0        | 38,0     |
| 1202443   | H1420892-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 | 79,0   | 83,0        | 50,0     |
| 1202441   | H1420892-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 | 93,0   | 96,0        | 55,0     |
| 1200288   | H1420892-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2-11     | 134,0  | 130,0       | 70,0     |

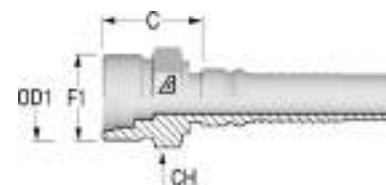
## // DIN METRIC INSERTS

## // H1411210

Metric Male 24° Seat

DIN 3853 - Heavy Series

CES



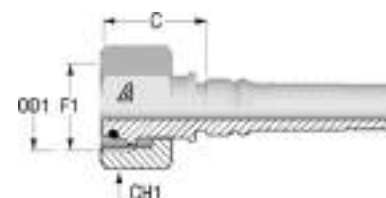
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----|--------|---------|
| 1216929   | H1411210-082400 | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 27,0   | 24,0    |
| 1201077   | H1411210-103000 | 10        | 16,0    | 5/8"    | M30X2   | 20  | 31,0   | 32,0    |
| 1200212   | H1411210-123600 | 12        | 19,0    | 3/4"    | M36X2   | 25  | 35,0   | 36,0    |
| 1200236   | H1411210-164200 | 16        | 25,0    | 1"      | M42X2   | 30  | 40,0   | 46,0    |
| 1200260   | H1411210-205200 | 20        | 32,0    | 1 1/4"  | M52X2   | 38  | 45,2   | 55,0    |

## // H1421613

Metric Female 24° Cone with O-Ring

DIN 3865 - Heavy Series

DKOS



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----|--------|----------|
| 1201857   | H1421613-082400 | Slip on nut     | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 29,6   | 30,0     |
| 1201118   | H1421613-103000 | Slip on nut     | 10        | 16,0    | 5/8"    | M30X2   | 20  | 34,4   | 36,0     |
| 1202584   | H1421612-123000 | Thrust wire nut | 12        | 19,0    | 3/4"    | M30X2   | 20  | 37,5   | 36,0     |
| 1201092   | H1421613-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2   | 25  | 37,6   | 46,0     |
| 1202887   | H1421612-163600 | Thrust wire nut | 16        | 25,0    | 1"      | M36X2   | 25  | 38,8   | 46,0     |
| 1201125   | H1421613-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2   | 30  | 40,7   | 50,0     |
| 1216935   | H1421612-204200 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | M42X2   | 30  | 43,6   | 50,0     |
| 1201129   | H1421613-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2   | 38  | 45,3   | 60,0     |
| 1216936   | H1421612-245200 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | M52X2   | 38  | 50,8   | 60,0     |

Image: insert with Slip on Nut.

REV.2.1

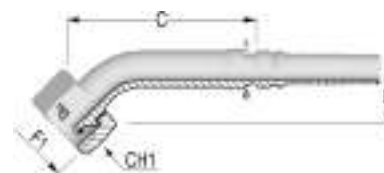
## // H1421643

45° Metric Female 24° Cone with O-Ring

DIN 3865 - Heavy Series

DKOS

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----|--------|-------------|----------|
| 1216942   | H1421643-082400 | Slip on nut     | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 83,0   | 29,0        | 30,0     |
| 1202073   | H1421643-103000 | Slip on nut     | 10        | 16,0    | 5/8"    | M30X2   | 20  | 59,0   | 31,5        | 36,0     |
| 1202583   | H1421642-123000 | Thrust wire nut | 12        | 19,0    | 3/4"    | M30X2   | 20  | 74,0   | 33,0        | 36,0     |
| 1202079   | H1421643-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2   | 25  | 78,1   | 36,0        | 46,0     |
| 1216940   | H1421642-163600 | Thrust wire nut | 16        | 25,0    | 1"      | M36X2   | 25  | 86,5   | 37,5        | 46,0     |
| 1201724   | H1421643-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2   | 30  | 96,8   | 38,0        | 50,0     |
| 1202003   | H1421643-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2   | 38  | 112,7  | 48,0        | 60,0     |
| 1216941   | H1421642-245200 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | M52X2   | 38  | 111,0  | 44,0        | 60,0     |

Image: insert with Slip on Nut.

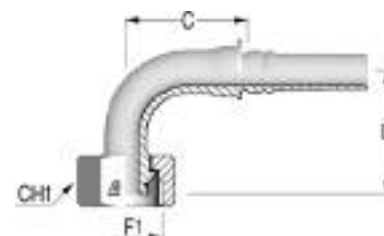
## // H1421693

90° Metric Female 24° Cone with O-Ring

DIN 3865 - Heavy Series

DKOS 90

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1      | OD1 | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----|--------|-------------|----------|
| 1203125   | H1421693-082400 | Slip on nut     | 8         | 13,0    | 1/2"    | M24X1.5 | 16  | 52,0   | 50,0        | 30,0     |
| 1202072   | H1421693-103000 | Slip on nut     | 10        | 16,0    | 5/8"    | M30X2   | 20  | 48,0   | 55,0        | 36,0     |
| 1202582   | H1421692-123000 | Thrust wire nut | 12        | 19,0    | 3/4"    | M30X2   | 20  | 61,0   | 67,5        | 36,0     |
| 1201723   | H1421693-123600 | Slip on nut     | 12        | 19,0    | 3/4"    | M36X2   | 25  | 61,7   | 65,0        | 46,0     |
| 1203126   | H1421692-163600 | Thrust wire nut | 16        | 25,0    | 1"      | M36X2   | 25  | 76,5   | 82,0        | 46,0     |
| 1201740   | H1421693-164200 | Slip on nut     | 16        | 25,0    | 1"      | M42X2   | 30  | 86,4   | 79,0        | 50,0     |
| 1201059   | H1421693-205200 | Slip on nut     | 20        | 32,0    | 1 1/4"  | M52X2   | 38  | 90,9   | 101,0       | 60,0     |
| 1216945   | H1421692-245200 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | M52X2   | 38  | 100,5  | 102,0       | 60,0     |

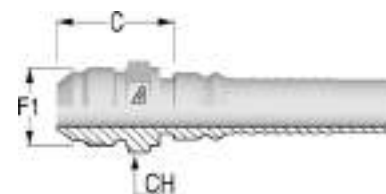
Image: insert with Slip on Nut.

## // JIC 37° INSERTS

## // H1412510

JIC Male 37° Cone

AGJ

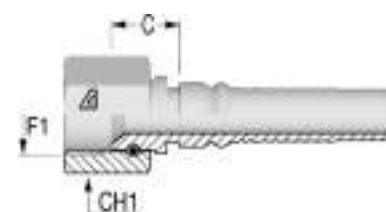


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-----------|--------|---------|
| 1200216   | H1412510-121200 | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 37,0   | 32,0    |
| 1201094   | H1412510-121600 | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 40,0   | 36,0    |
| 1200238   | H1412510-161600 | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 41,0   | 36,0    |
| 1201787   | H1412510-162000 | 16        | 25,0    | 1"      | 20      | 1 5/8-12  | 44,5   | 46,0    |
| 1200262   | H1412510-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 45,7   | 46,0    |
| 1216931   | H1412510-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 7/8-12  | 49,7   | 50,0    |
| 1200279   | H1412510-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 50,0   | 50,0    |
| 1201798   | H1412510-323200 | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 61,0   | 65,0    |

## // H1422512

JIC Female 37° Seat

DKJ



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|----------|
| 1201265   | H1422512-101200 | Thrust wire nut | 10        | 16,0    | 5/8"    | 12      | 1 1/16-12 | 18,7   | 32,0     |
| 1201121   | H1422512-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 18,7   | 32,0     |
| 1201122   | H1422512-121600 | Thrust wire nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 21,5   | 38,0     |
| 1201126   | H1422512-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 22,5   | 38,0     |
| 1201127   | H1422512-162000 | Thrust wire nut | 16        | 25,0    | 1"      | 20      | 1 5/8-12  | 24,5   | 50,0     |
| 1201131   | H1422512-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 25,7   | 50,0     |
| 1216973   | H1422512-202400 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 24      | 1 7/8-12  | 28,2   | 55,0     |
| 1201133   | H1422512-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 29,0   | 55,0     |
| 1201135   | H1422512-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 34,0   | 70,0     |

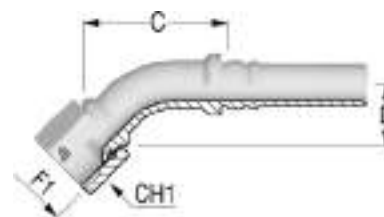
REV.2.1

## // H1422542

45° JIC Female 37° Seat

DKJ 45

Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|-------------|----------|
| 1201485   | H1422542-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 66,0   | 27,5        | 32,0     |
| 1202098   | H1422542-121600 | Thrust wire nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 72,0   | 30,0        | 38,0     |
| 1201486   | H1422542-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 79,5   | 31,0        | 38,0     |
| 1201487   | H1422542-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 93,0   | 37,0        | 50,0     |
| 1201765   | H1422542-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 121,0  | 38,0        | 55,0     |

## // H1422592

90° JIC Female 37° Seat

DKJ 90

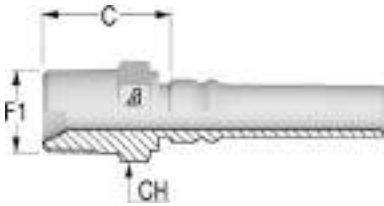
Solid one piece



| Item Code | Product Code    | Nut Type        | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1        | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|-----------------|-----------|---------|---------|---------|-----------|--------|-------------|----------|
| 1201488   | H1422592-121200 | Thrust wire nut | 12        | 19,0    | 3/4"    | 12      | 1 1/16-12 | 45,0   | 57,0        | 32,0     |
| 1202103   | H1422592-121600 | Thrust wire nut | 12        | 19,0    | 3/4"    | 16      | 1 5/16-12 | 58,0   | 60,5        | 38,0     |
| 1201489   | H1422592-161600 | Thrust wire nut | 16        | 25,0    | 1"      | 16      | 1 5/16-12 | 71,0   | 67,0        | 38,0     |
| 1201490   | H1422592-202000 | Thrust wire nut | 20        | 32,0    | 1 1/4"  | 20      | 1 5/8-12  | 79,2   | 78,0        | 50,0     |
| 1201491   | H1422592-242400 | Thrust wire nut | 24        | 38,0    | 1 1/2"  | 24      | 1 7/8-12  | 94,5   | 92,0        | 55,0     |
| 1201796   | H1422592-323200 | Thrust wire nut | 32        | 51,0    | 2"      | 32      | 2 1/2-12  | 132,0  | 120,5       | 70,0     |

// NPTF INSERTS

// H1412810  
NPTF Male 60° Seat  
AGN

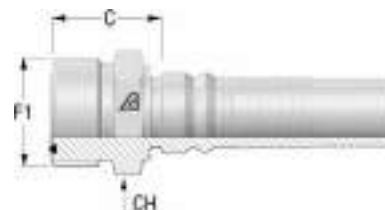


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1           | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|--------------|--------|---------|
| 1201609   | H1412810-060600 | 6         | 10,0    | 3/8"    | 6       | 3/8-18       | 26,5   | 19,0    |
| 1203127   | H1412810-080800 | 8         | 13,0    | 1/2"    | 8       | 1/2-14       | 30,0   | 22,0    |
| 1200193   | H1412810-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4-14       | 32,0   | 27,0    |
| 1200219   | H1412810-161600 | 16        | 25,0    | 1"      | 16      | 1-11 1/2     | 42,0   | 36,0    |
| 1200240   | H1412810-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4-11 1/2 | 46,2   | 46,0    |
| 1200263   | H1412810-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2-11 1/2 | 48,0   | 50,0    |
| 1200281   | H1412810-323200 | 32        | 51,0    | 2"      | 32      | 2-11 1/2     | 53,2   | 65,0    |

## // ORFS INSERTS

## // H1412410

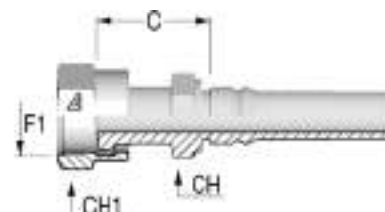
## ORFS Male



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | CH (mm) |
|-----------|-----------------|-----------|---------|---------|---------|------------|--------|---------|
| 1214664   | H1412410-121200 | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 30,2   | 30,0    |
| 1231483   | H1412410-161600 | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 35,8   | 38,0    |
| 1226310   | H1412410-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 39,1   | 46,0    |
| 1226312   | H1412410-242400 | 24        | 38,0    | 1 1/2"  | 24      | 2-12       | 41,0   | 55,0    |

## // H1422411

## ORFS Female with Stem Hexagon



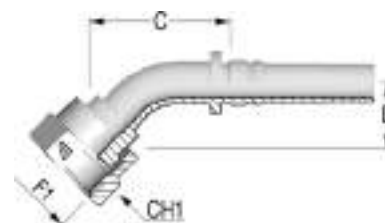
| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|------------|--------|---------|----------|
| 1202864   | H1422411-101200 | Crimped  | 10        | 16,0    | 5/8"    | 12      | 1 3/16-12  | 40,0   | 30,0    | 36,0     |
| 1202099   | H1422411-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 40,0   | 30,0    | 36,0     |
| 1202106   | H1422411-121600 | Crimped  | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 43,0   | 36,0    | 41,0     |
| 1216952   | H1422411-161200 | Crimped  | 16        | 25,0    | 1"      | 12      | 1 3/16-12  | 42,0   | 32,0    | 36,0     |
| 1202071   | H1422411-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 47,0   | 36,0    | 41,0     |
| 1202107   | H1422411-162000 | Crimped  | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 49,0   | 46,0    | 50,0     |
| 1216955   | H1422411-201600 | Crimped  | 20        | 32,0    | 1 1/4"  | 16      | 1 7/16-12  | 47,2   | 41,0    | 41,0     |
| 1201807   | H1422411-202000 | Crimped  | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 47,2   | 46,0    | 50,0     |
| 1216956   | H1422411-242400 | Crimped  | 24        | 38,0    | 1 1/2"  | 24      | 2-12       | 52,0   | 50,0    | 60,0     |

## // H1422441

## 45° ORFS Female

## DK ORFS 45

## Solid one piece



| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|------------|--------|-------------|----------|
| 1202108   | H1422441-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 77,7   | 26,0        | 36,0     |
| 1202109   | H1422441-121600 | Crimped  | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 68,4   | 28,0        | 41,0     |
| 1202110   | H1422441-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 114,0  | 28,0        | 41,0     |
| 1202111   | H1422441-162000 | Crimped  | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 83,4   | 28,0        | 50,0     |
| 1202112   | H1422441-202000 | Crimped  | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 100,7  | 33,0        | 50,0     |

**// H1422491**  
**90° ORFS Female**  
**DK ORFS 90**  
**Solid one piece**

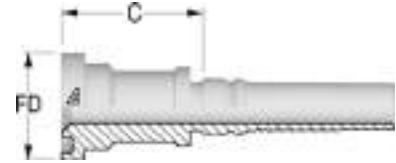


| Item Code | Product Code    | Nut Type | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1         | C (mm) | D Drop (mm) | CH1 (mm) |
|-----------|-----------------|----------|-----------|---------|---------|---------|------------|--------|-------------|----------|
| 1203123   | H1422491-101200 | Crimped  | 10        | 16,0    | 5/8"    | 12      | 1 3/16-12  | 48,1   | 58,0        | 36,0     |
| 1202117   | H1422491-121200 | Crimped  | 12        | 19,0    | 3/4"    | 12      | 1 3/16-12  | 64,2   | 58,0        | 36,0     |
| 1202116   | H1422491-121600 | Crimped  | 12        | 19,0    | 3/4"    | 16      | 1 7/16-12  | 66,2   | 58,0        | 41,0     |
| 1202115   | H1422491-161600 | Crimped  | 16        | 25,0    | 1"      | 16      | 1 7/16-12  | 75,2   | 66,0        | 41,0     |
| 1202114   | H1422491-162000 | Crimped  | 16        | 25,0    | 1"      | 20      | 1 11/16-12 | 73,2   | 66,0        | 50,0     |
| 1202113   | H1422491-202000 | Crimped  | 20        | 32,0    | 1 1/4"  | 20      | 1 11/16-12 | 91,7   | 81,0        | 50,0     |

## // SAE FLANGES

## // H1443310

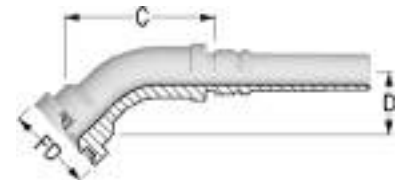
Flange SAE 3000 psi J518 Code 61  
SFL



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | C (mm) | FD (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|--------|---------|----------|
| 1200233   | H1443310-161600 | 16        | 25,0    | 1"      | 16      | 1     | 49,0   | 44,5    | 5000     |
| 1200234   | H1443310-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 51,5   | 50,8    | 4000     |
| 1200257   | H1443310-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 52,7   | 50,8    | 4000     |
| 1200256   | H1443310-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 55,7   | 60,3    | 3000     |
| 1200276   | H1443310-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 56,0   | 60,3    | 3000     |
| 1200277   | H1443310-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 67,5   | 71,4    | 3000     |
| 1200287   | H1443310-323200 | 32        | 51,0    | 2"      | 32      | 2     | 69,0   | 71,4    | 3000     |

## // H1443340

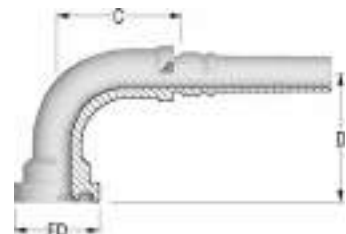
45° Flange SAE 3000 psi J518 Code 61  
SFL 45  
Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1200230   | H1443340-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 50,8    | 95,6   | 30,0        | 4000     |
| 1200253   | H1443340-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 100,9  | 32,5        | 4000     |
| 1200252   | H1443340-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 60,3    | 92,8   | 40,0        | 3000     |
| 1200272   | H1443340-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 103,7  | 43,0        | 3000     |
| 1200273   | H1443340-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 71,4    | 132,7  | 56,5        | 3000     |
| 1200285   | H1443340-323200 | 32        | 51,0    | 2"      | 32      | 2     | 71,4    | 138,1  | 54,0        | 3000     |

## // H1443390

90° Flange SAE 3000 psi J518 Code 61  
SFL 90  
Solid one piece

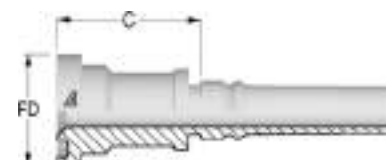


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1200231   | H1443390-161600 | 16        | 25,0    | 1"      | 16      | 1     | 44,5    | 72,2   | 64,0        | 5000     |
| 1200232   | H1443390-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 50,8    | 70,2   | 69,0        | 4000     |
| 1200255   | H1443390-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 50,8    | 86,2   | 81,0        | 4000     |
| 1200254   | H1443390-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 60,3    | 81,2   | 85,0        | 3000     |
| 1200274   | H1443390-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 60,3    | 95,5   | 93,0        | 3000     |
| 1200275   | H1443390-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 71,4    | 130,3  | 97,0        | 3000     |
| 1200286   | H1443390-323200 | 32        | 51,0    | 2"      | 32      | 2     | 71,4    | 134,4  | 130,0       | 3000     |

## // H1443610

Flange SAE 6000 psi J518 Code 62

SFS



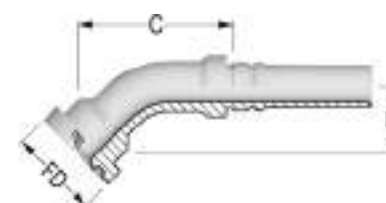
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | C (mm) | FD (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|--------|---------|----------|
| 1200199   | H1443610-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 50,0   | 41,3    | 6000     |
| 1200198   | H1443610-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 53,0   | 47,6    | 6000     |
| 1201218   | H1443610-161200 | 16        | 25,0    | 1"      | 12      | 3/4   | 51,0   | 41,3    | 6000     |
| 1200224   | H1443610-161600 | 16        | 25,0    | 1"      | 16      | 1     | 54,0   | 47,6    | 6000     |
| 1200225   | H1443610-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 61,0   | 54,0    | 6000     |
| 1201556   | H1443610-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 80,2   | 47,6    | 6000     |
| 1200246   | H1443610-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 62,2   | 54,0    | 6000     |
| 1200245   | H1443610-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 68,2   | 63,5    | 6000     |
| 1200270   | H1443610-242000 | 24        | 38,0    | 1 1/2"  | 20      | 1 1/4 | 62,5   | 54,0    | 6000     |
| 1200268   | H1443610-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 68,5   | 63,5    | 6000     |
| 1200271   | H1443610-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 80,5   | 79,4    | 6000     |
| 1200284   | H1443610-323200 | 32        | 51,0    | 2"      | 32      | 2     | 87,0   | 79,4    | 6000     |

## // H1443640

45° Flange SAE 6000 psi J518 Code 62

SFS 45

Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1200195   | H1443640-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 72,1   | 30,0        | 6000     |
| 1200194   | H1443640-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 76,8   | 33,0        | 6000     |
| 1202890   | H1443640-161200 | 16        | 25,0    | 1"      | 12      | 3/4   | 41,3    | 80,3   | 29,5        | 6000     |
| 1200220   | H1443640-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 94,8   | 35,0        | 6000     |
| 1200221   | H1443640-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 105,3  | 44,0        | 6000     |
| 1201557   | H1443640-201600 | 20        | 32,0    | 1 1/4"  | 16      | 1     | 47,6    | 104,7  | 34,5        | 6000     |
| 1200242   | H1443640-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 102,0  | 39,5        | 6000     |
| 1200241   | H1443640-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 111,7  | 48,0        | 6000     |
| 1200264   | H1443640-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 63,5    | 136,3  | 48,0        | 6000     |
| 1200265   | H1443640-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 79,4    | 129,1  | 55,0        | 6000     |
| 1200282   | H1443640-323200 | 32        | 51,0    | 2"      | 32      | 2     | 79,4    | 160,6  | 63,0        | 6000     |

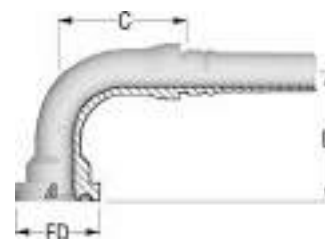
REV.2.1

## // H1443690

90° Flange SAE 6000 psi J518 Code 62

SFS 90

Solid one piece



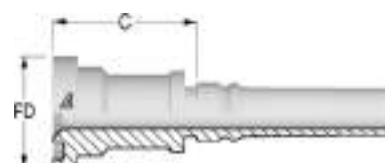
| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1200197   | H1443690-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 61,2   | 64,0        | 6000     |
| 1200196   | H1443690-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 61,2   | 66,0        | 6000     |
| 1202811   | H1443690-161200 | 16        | 25,0    | 1"      | 12      | 3/4   | 41,3    | 70,2   | 61,0        | 6000     |
| 1200222   | H1443690-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 70,4   | 74,0        | 6000     |
| 1200223   | H1443690-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 77,2   | 80,0        | 6000     |
| 1200244   | H1443690-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 88,2   | 91,0        | 6000     |
| 1200243   | H1443690-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 92,9   | 103,5       | 6000     |
| 1200266   | H1443690-242400 | 24        | 38,0    | 1 1/2"  | 24      | 1 1/2 | 63,5    | 106,3  | 109,0       | 6000     |
| 1200267   | H1443690-243200 | 24        | 38,0    | 1 1/2"  | 32      | 2     | 79,4    | 106,5  | 121,5       | 6000     |
| 1200283   | H1443690-323200 | 32        | 51,0    | 2"      | 32      | 2     | 79,4    | 146,0  | 145,0       | 6000     |

## // H1T43610

Flange SAE 6000 psi J518 Code 62

SFS

Special version



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | C (mm) | FD (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|--------|---------|----------|
| 1223166   | H1T43610-322400 | 32        | 51,0    | 2"      | 24      | 1 1/2 | 106,0  | 63,5    | 6000     |
| 1223388   | H1T43610-323200 | 32        | 51,0    | 2"      | 32      | 2     | 104,0  | 79,4    | 6000     |
| 1235395   | H1T43610-404000 | 40        | 63,0    | 2 1/2"  | 40      | 2 1/2 | 124,3  | 108,0   | 6000     |

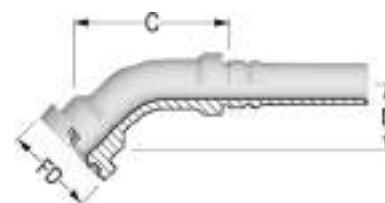
## // H1T43640

45° Flange SAE 6000 psi J518 Code 62

SFS 45

Solid one piece

Special version



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1 | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|----|---------|--------|-------------|----------|
| 1223389   | H1T43640-323200 | 32        | 51,0    | 2"      | 32      | 2  | 79,4    | 141,0  | 63,0        | 6000     |

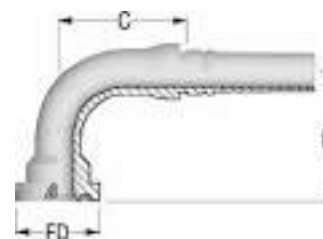
## // H1T43690

90° Flange SAE 6000 psi J518 Code 62

SFS 90

Solid one piece

Special version

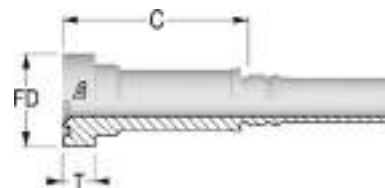


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | C (mm) | D Drop (mm) | WP (psi) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|-------------|----------|
| 1223168   | H1T43690-322400 | 32        | 51,0    | 2"      | 24      | 1 1/2 | 63,5    | 134,0  | 112,0       | 6000     |
| 1228051   | H1T43690-323200 | 32        | 51,0    | 2"      | 32      | 2     | 79,4    | 132,0  | 145,0       | 6000     |

## // SUPERCAT FLANGES

## // H1443910

## Flange SUPERCAT

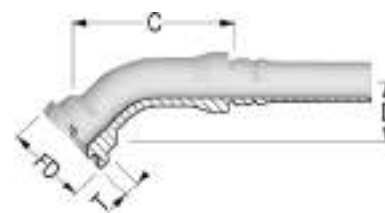


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | T (mm) | C (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|--------|
| 1202219   | H1443910-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 14,3   | 82,0   |
| 1202388   | H1443910-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 14,3   | 82,0   |
| 1202389   | H1443910-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 14,3   | 90,0   |
| 1202390   | H1443910-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 14,3   | 90,0   |
| 1202391   | H1443910-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 14,3   | 86,2   |
| 1202392   | H1443910-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 14,3   | 83,2   |

## // H1443940

## 45° Flange SUPERCAT

## Solid one piece

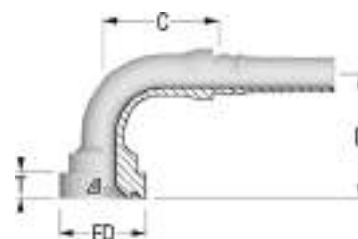


| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | T (mm) | C (mm) | D Drop (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|--------|-------------|
| 1202398   | H1443940-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 14,3   | 82,9   | 34,0        |
| 1202397   | H1443940-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 14,3   | 87,4   | 34,0        |
| 1202396   | H1443940-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 14,3   | 93,9   | 40,0        |
| 1202395   | H1443940-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 14,3   | 95,4   | 40,0        |
| 1202394   | H1443940-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 14,3   | 103,6  | 43,0        |
| 1202393   | H1443940-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 14,3   | 110,1  | 49,5        |

## // H1443990

## 90° Flange SUPERCAT

## Solid one piece



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | F1 Dash | F1    | FD (mm) | T (mm) | C (mm) | D Drop (mm) |
|-----------|-----------------|-----------|---------|---------|---------|-------|---------|--------|--------|-------------|
| 1202399   | H1443990-121200 | 12        | 19,0    | 3/4"    | 12      | 3/4   | 41,3    | 14,3   | 63,7   | 67,0        |
| 1202400   | H1443990-121600 | 12        | 19,0    | 3/4"    | 16      | 1     | 47,6    | 14,3   | 65,2   | 70,0        |
| 1202401   | H1443990-161600 | 16        | 25,0    | 1"      | 16      | 1     | 47,6    | 14,3   | 80,4   | 79,0        |
| 1202402   | H1443990-162000 | 16        | 25,0    | 1"      | 20      | 1 1/4 | 54,0    | 14,3   | 75,4   | 82,5        |
| 1202403   | H1443990-202000 | 20        | 32,0    | 1 1/4"  | 20      | 1 1/4 | 54,0    | 14,3   | 89,2   | 93,0        |
| 1202404   | H1443990-202400 | 20        | 32,0    | 1 1/4"  | 24      | 1 1/2 | 63,5    | 14,3   | 91,4   | 101,0       |

## // HAMMER UNION

## // H1T13F13

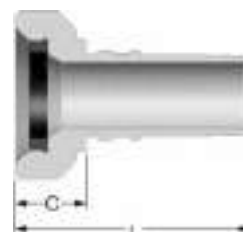
Male Hammer Union Fig. 1502 Integral Fitting with Lug Nut  
Special version



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | C (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|--------|--------|
| 1235624   | H1T13F13-323200 | 32        | 51,0    | 2"      | 60,8   | 162,2  |

## // H1T23F10

Female Hammer Union Fig. 1502 Integral Fitting with Rubber Ring  
Special version



| Item Code | Product Code    | ID (Dash) | ID (mm) | ID (in) | C (mm) | L (mm) |
|-----------|-----------------|-----------|---------|---------|--------|--------|
| 1235623   | H1T23F10-323200 | 32        | 51,0    | 2"      | 57,3   | 158,7  |



ALSO AVAILABLE IN STAINLESS STEEL

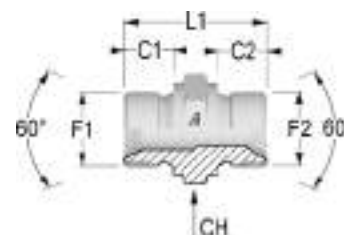
## // BSP ADAPTERS

|                           |     |                 |     |
|---------------------------|-----|-----------------|-----|
| // MALE UNION.....        | 130 | // METRIC.....  | 146 |
| // MALE/FEMALE UNION..... | 133 | // NPTF.....    | 147 |
| // FEMALE UNION.....      | 137 | // FLANGES..... | 148 |
| // BULKHEAD.....          | 140 | // PLUG.....    | 151 |
| // BSPP-BSPT.....         | 142 |                 |     |

## // MALE UNION

## // R1A05M105M

Straight union BSP 60° Male

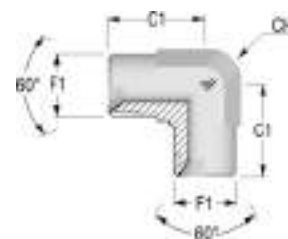


| Item Code | Product Code    | OD1   | F1       | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|----------|----------|---------|---------|---------|---------|
| 1203778   | R1A05M105M-0202 | 1/8"  | 1/8-28   | 1/8-28   | 8,0     | 8,0     | 25,0    | 14,0    |
| 1207670   | R1A05M105M-0204 | 1/8"  | 1/8-28   | 1/4-19   | 8,0     | 11,0    | 27,5    | 19,0    |
| 1212029   | R1A05M105M-0206 | 1/8"  | 1/8-28   | 3/8-19   | 8,0     | 12,0    | 30,0    | 22,0    |
| 1212030   | R1A05M105M-0208 | 1/8"  | 1/8-28   | 1/2-14   | 8,0     | 14,0    | 33,0    | 27,0    |
| 1203775   | R1A05M105M-0404 | 1/4"  | 1/4-19   | 1/4-19   | 11,0    | 11,0    | 31,0    | 19,0    |
| 1207671   | R1A05M105M-0406 | 1/4"  | 1/4-19   | 3/8-19   | 11,0    | 12,0    | 33,5    | 22,0    |
| 1208335   | R1A05M105M-0412 | 1/4"  | 1/4-19   | 3/4-14   | 11,0    | 16,0    | 39,5    | 32,0    |
| 1203798   | R1A05M105M-0606 | 3/8"  | 3/8-19   | 3/8-19   | 12,0    | 12,0    | 35,0    | 22,0    |
| 1212031   | R1A05M105M-0610 | 3/8"  | 3/8-19   | 5/8-14   | 12,0    | 16,0    | 40,5    | 30,0    |
| 1207701   | R1A05M105M-0612 | 3/8"  | 3/8-19   | 3/4-14   | 12,0    | 16,0    | 41,0    | 32,0    |
| 1212032   | R1A05M105M-0616 | 3/8"  | 3/8-19   | 1-11     | 12,0    | 18,0    | 46,0    | 41,0    |
| 1212033   | R1A05M105M-0810 | 1/2"  | 1/2-14   | 5/8-14   | 14,0    | 16,0    | 43,0    | 30,0    |
| 1212034   | R1A05M105M-0816 | 1/2"  | 1/2-14   | 1-11     | 14,0    | 18,0    | 48,0    | 41,0    |
| 1212035   | R1A05M105M-0820 | 1/2"  | 1/2-14   | 1 1/4-11 | 14,0    | 20,0    | 52,0    | 50,0    |
| 1212036   | R1A05M105M-0824 | 1/2"  | 1/2-14   | 1 1/2-11 | 14,0    | 22,0    | 56,0    | 55,0    |
| 1203803   | R1A05M105M-1010 | 5/8"  | 5/8-14   | 5/8-14   | 16,0    | 16,0    | 45,0    | 30,0    |
| 1208252   | R1A05M105M-1012 | 5/8"  | 5/8-14   | 3/4-14   | 16,0    | 16,0    | 45,5    | 32,0    |
| 1205572   | R1A05M105M-1016 | 5/8"  | 5/8-14   | 1-11     | 16,0    | 18,0    | 50,0    | 41,0    |
| 1212037   | R1A05M105M-1020 | 5/8"  | 5/8-14   | 1 1/4-11 | 16,0    | 20,0    | 54,0    | 50,0    |
| 1207675   | R1A05M105M-1216 | 3/4"  | 3/4-14   | 1-11     | 16,0    | 18,0    | 50,0    | 41,0    |
| 1208293   | R1A05M105M-1220 | 3/4"  | 3/4-14   | 1 1/4-11 | 16,0    | 20,0    | 54,0    | 50,0    |
| 1212038   | R1A05M105M-1224 | 3/4"  | 3/4-14   | 1 1/2-11 | 16,0    | 22,0    | 58,0    | 55,0    |
| 1203747   | R1A05M105M-1616 | 1"    | 1-11     | 1-11     | 18,0    | 18,0    | 52,0    | 41,0    |
| 1207676   | R1A05M105M-1620 | 1"    | 1-11     | 1 1/4-11 | 18,0    | 20,0    | 56,0    | 50,0    |
| 1207677   | R1A05M105M-1624 | 1"    | 1-11     | 1 1/2-11 | 18,0    | 22,0    | 60,0    | 55,0    |
| 1203757   | R1A05M105M-2020 | 1"1/4 | 1 1/4-11 | 1 1/4-11 | 20,0    | 20,0    | 58,0    | 50,0    |
| 1208195   | R1A05M105M-2024 | 1"1/4 | 1 1/4-11 | 1 1/2-11 | 20,0    | 22,0    | 62,0    | 55,0    |
| 1212040   | R1A05M105M-2032 | 1"1/4 | 1 1/4-11 | 2-11     | 20,0    | 24,0    | 64,5    | 70,0    |
| 1203751   | R1A05M105M-2424 | 1"1/2 | 1 1/2-11 | 1 1/2-11 | 22,0    | 22,0    | 64,0    | 55,0    |
| 1205940   | R1A05M105M-2432 | 1"1/2 | 1 1/2-11 | 2-11     | 22,0    | 24,0    | 66,5    | 70,0    |
| 1203780   | R1A05M105M-3232 | 2"    | 2-11     | 2-11     | 24,0    | 24,0    | 69,0    | 70,0    |

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## // R1A05M905M

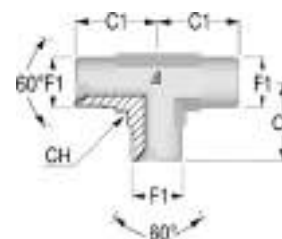
90° union BSP 60° Male



| Item Code | Product Code    | OD1   | F1       | C1 (mm) | CH (mm) |
|-----------|-----------------|-------|----------|---------|---------|
| 1207905   | R1A05M905M-0202 | 1/8"  | 1/8-28   | 20,0    | 12,0    |
| 1207505   | R1A05M905M-0404 | 1/4"  | 1/4-19   | 26,0    | 14,0    |
| 1206438   | R1A05M905M-0606 | 3/8"  | 3/8-19   | 30,0    | 17,0    |
| 1207542   | R1A05M905M-0808 | 1/2"  | 1/2-14   | 35,0    | 22,0    |
| 1212187   | R1A05M905M-1010 | 5/8"  | 5/8-14   | 38,0    | 22,0    |
| 1203905   | R1A05M905M-1212 | 3/4"  | 3/4-14   | 42,0    | 27,0    |
| 1208198   | R1A05M905M-1616 | 1"    | 1-11     | 47,0    | 33,0    |
| 1208199   | R1A05M905M-2020 | 1"1/4 | 1 1/4-11 | 52,0    | 41,0    |
| 1210968   | R1A05M905M-2424 | 1"1/2 | 1 1/2-11 | 60,0    | 48,0    |

## // R1A05MT05M

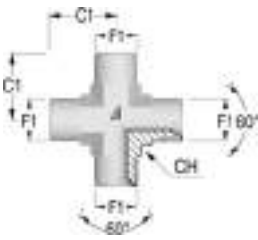
Branch Tee union BSP 60° Male



| Item Code | Product Code    | OD1   | F1       | C1 (mm) | CH (mm) |
|-----------|-----------------|-------|----------|---------|---------|
| 1211959   | R1A05MT05M-0202 | 1/8"  | 1/8-28   | 20,0    | 12,0    |
| 1203955   | R1A05MT05M-0404 | 1/4"  | 1/4-19   | 26,0    | 14,0    |
| 1203956   | R1A05MT05M-0606 | 3/8"  | 3/8-19   | 30,0    | 17,0    |
| 1206940   | R1A05MT05M-0808 | 1/2"  | 1/2-14   | 35,0    | 22,0    |
| 1211960   | R1A05MT05M-1010 | 5/8"  | 5/8-14   | 38,0    | 22,0    |
| 1207236   | R1A05MT05M-1212 | 3/4"  | 3/4-14   | 42,0    | 27,0    |
| 1206450   | R1A05MT05M-1616 | 1"    | 1-11     | 47,0    | 33,0    |
| 1208144   | R1A05MT05M-2020 | 1"1/4 | 1 1/4-11 | 52,0    | 41,0    |
| 1208145   | R1A05MT05M-2424 | 1"1/2 | 1 1/2-11 | 60,0    | 48,0    |

// R1A05MX05M

Cross union BSP 60° Male



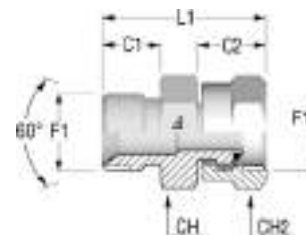
| Item Code | Product Code    | OD1   | F1       | C1 (mm) | CH (mm) |
|-----------|-----------------|-------|----------|---------|---------|
| 1212021   | R1A05MX05M-0202 | 1/8"  | 1/8-28   | 20,0    | 12,0    |
| 1212022   | R1A05MX05M-0404 | 1/4"  | 1/4-19   | 26,0    | 14,0    |
| 1212023   | R1A05MX05M-0606 | 3/8"  | 3/8-19   | 30,0    | 17,0    |
| 1206941   | R1A05MX05M-0808 | 1/2"  | 1/2-14   | 35,0    | 22,0    |
| 1212024   | R1A05MX05M-1010 | 5/8"  | 5/8-14   | 38,0    | 22,0    |
| 1212025   | R1A05MX05M-1212 | 3/4"  | 3/4-14   | 42,0    | 27,0    |
| 1212026   | R1A05MX05M-1616 | 1"    | 1-11     | 47,0    | 33,0    |
| 1212027   | R1A05MX05M-2020 | 1"1/4 | 1 1/4-11 | 52,0    | 41,0    |
| 1212028   | R1A05MX05M-2424 | 1"1/2 | 1 1/2-11 | 60,0    | 48,0    |

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## // MALE/FEMALE UNION

## // R1A05M1051

Straight union BSP 60° Male - Female



| Item Code | Product Code    | OD1   | F1       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|-------|----------|---------|---------|---------|---------|----------|
| 1216217   | R1A05M1051-0202 | 1/8"  | 1/8-28   | 9,5     | 13,0    | 29,0    | 14,0    | 14,0     |
| 1207697   | R1A05M1051-0404 | 1/4"  | 1/4-19   | 13,0    | 15,5    | 33,5    | 19,0    | 19,0     |
| 1207698   | R1A05M1051-0606 | 3/8"  | 3/8-19   | 14,5    | 17,7    | 38,7    | 22,0    | 22,0     |
| 1207699   | R1A05M1051-0808 | 1/2"  | 1/2-14   | 17,0    | 19,0    | 43,0    | 27,0    | 27,0     |
| 1207700   | R1A05M1051-1212 | 3/4"  | 3/4-14   | 19,0    | 22,0    | 50,0    | 32,0    | 32,0     |
| 1207686   | R1A05M1051-1616 | 1"    | 1-11     | 21,0    | 25,5    | 59,5    | 41,0    | 38,0     |
| 1207783   | R1A05M1052-2020 | 1"1/4 | 1 1/4-11 | 20,0    | 31,1    | 69,1    | 50,0    | 50,0     |
| 1207784   | R1A05M1052-2424 | 1"1/2 | 1 1/2-11 | 22,0    | 35,0    | 75,0    | 55,0    | 55,0     |

## // R1A05M4051

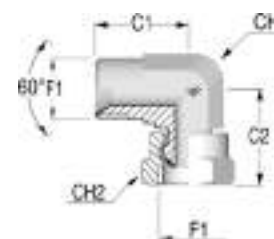
45° union BSP 60° Male - Female



| Item Code | Product Code    | OD1   | F1       | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|-------|----------|---------|---------|---------|----------|
| 1212126   | R1A05M4051-0202 | 1/8"  | 1/8-28   | 16,0    | 20,5    | 12,0    | 14,0     |
| 1212145   | R1A05M4051-0404 | 1/4"  | 1/4-19   | 21,0    | 25,5    | 14,0    | 19,0     |
| 1212146   | R1A05M4051-0606 | 3/8"  | 3/8-19   | 24,0    | 31,2    | 17,0    | 22,0     |
| 1207907   | R1A05M4051-0808 | 1/2"  | 1/2-14   | 27,0    | 35,5    | 22,0    | 27,0     |
| 1207786   | R1A05M4051-1212 | 3/4"  | 3/4-14   | 32,0    | 39,0    | 27,0    | 32,0     |
| 1210963   | R1A05M4051-1616 | 1"    | 1-11     | 35,0    | 42,5    | 33,0    | 38,0     |
| 1212148   | R1A05M4052-2020 | 1"1/4 | 1 1/4-11 | 37,0    | 44,1    | 41,0    | 50,0     |
| 1212149   | R1A05M4082-2424 | 1"1/2 | 1 1/2-11 | 46,0    | 59,2    | 48,0    | 55,0     |

## // R1A05M9051

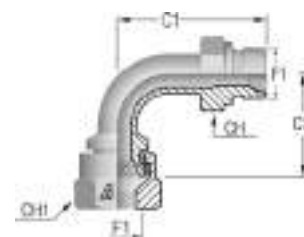
90° union BSP 60° Male - Female



| Item Code | Product Code    | OD1    | F1       | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|----------|---------|---------|---------|----------|
| 1218490   | R1A05M9051-0202 | 1/8"   | 1/8-28   | 22,0    | 26,5    | 12,0    | 14,0     |
| 1207702   | R1A05M9051-0404 | 1/4"   | 1/4-19   | 26,0    | 30,5    | 14,0    | 19,0     |
| 1207703   | R1A05M9051-0606 | 3/8"   | 3/8-19   | 30,0    | 36,2    | 17,0    | 22,0     |
| 1207704   | R1A05M9051-0808 | 1/2"   | 1/2-14   | 35,0    | 41,5    | 22,0    | 27,0     |
| 1212219   | R1A05M9051-1010 | 5/8"   | 5/8-14   | 38,0    | 47,7    | 22,0    | 27,0     |
| 1207946   | R1A05M9051-1212 | 3/4"   | 3/4-14   | 42,0    | 51,0    | 27,0    | 32,0     |
| 1207947   | R1A05M9051-1616 | 1"     | 1-11     | 47,0    | 54,5    | 33,0    | 38,0     |
| 1207948   | R1A05M9052-2020 | 1 1/4" | 1 1/4-11 | 52,0    | 59,1    | 41,0    | 50,0     |
| 1208137   | R1A05M9052-2424 | 1 1/2" | 1 1/2-11 | 60,0    | 73,2    | 48,0    | 55,0     |

## // R1A05M90WB

90° union BSP 60° Male - Female Tube

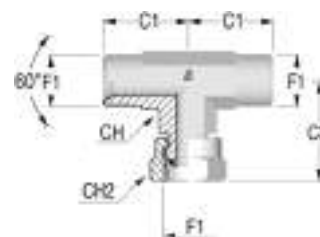


| Item Code | Product Code       | ID (Dash) | F1       | C1 (mm) | C2 (mm) | CH (mm) | CH1 (mm) |
|-----------|--------------------|-----------|----------|---------|---------|---------|----------|
| 1217506   | R1A05M9051-0404_WB | 4         | 1/4-19   | 33,5    | 31,0    | 19,0    | 19,0     |
| 1217507   | R1A05M9051-0606_WB | 6         | 3/8-19   | 40,0    | 36,0    | 22,0    | 22,0     |
| 1217508   | R1A05M9051-0808_WB | 8         | 1/2-14   | 49,0    | 43,0    | 27,0    | 27,0     |
| 1217509   | R1A05M9051-1212_WB | 12        | 3/4-14   | 63,0    | 55,0    | 32,0    | 32,0     |
| 1217510   | R1A05M9051-1616_WB | 16        | 1-11     | 75,0    | 73,0    | 38,0    | 38,0     |
| 1217511   | R1A05M9051-2020_WB | 20        | 1 1/4-11 | 89,0    | 77,0    | 50,0    | 50,0     |
| 1222400   | R1A05M9051-2424_WB | 24        | 1 1/2-11 | 101,0   | 91,0    | 55,0    | 55,0     |

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## // R1A05MT051

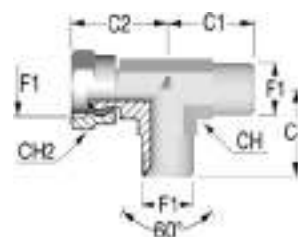
Branch Tee union BSP 60° Male - Female



| Item Code | Product Code    | OD1    | F1       | C1 (mm) | C3 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|----------|---------|---------|---------|----------|
| 1211970   | R1A05MT051-0202 | 1/8"   | 1/8-28   | 22,0    | 27,0    | 12,0    | 14,0     |
| 1207705   | R1A05MT051-0404 | 1/4"   | 1/4-19   | 26,0    | 30,5    | 14,0    | 19,0     |
| 1207706   | R1A05MT051-0606 | 3/8"   | 3/8-19   | 30,0    | 36,2    | 17,0    | 22,0     |
| 1207707   | R1A05MT051-0808 | 1/2"   | 1/2-14   | 35,0    | 41,5    | 22,0    | 27,0     |
| 1207708   | R1A05MT051-1212 | 3/4"   | 3/4-14   | 42,0    | 51,0    | 27,0    | 32,0     |
| 1207709   | R1A05MT051-1616 | 1"     | 1-11     | 47,0    | 54,5    | 33,0    | 38,0     |
| 1211983   | R1A05MT052-2424 | 1 1/2" | 1 1/2-11 | 60,0    | 73,2    | 48,0    | 55,0     |
| 1211982   | R1A05MT082-1010 | 5/8"   | 5/8-14   | 38,0    | 47,7    | 22,0    | 27,0     |
| 1210950   | R1A05MT082-2020 | 1 1/4" | 1 1/4-11 | 52,0    | 59,1    | 41,0    | 50,0     |

## // R1A05ML051

Run Tee union BSP 60° Male - Female

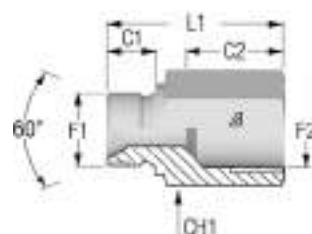


| Item Code | Product Code    | OD1    | F1       | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|----------|---------|---------|---------|----------|
| 1211908   | R1A05ML051-0202 | 1/8"   | 1/8-28   | 22,0    | 26,5    | 12,0    | 14,0     |
| 1207787   | R1A05ML051-0404 | 1/4"   | 1/4-19   | 26,0    | 30,5    | 14,0    | 19,0     |
| 1207788   | R1A05ML051-0606 | 3/8"   | 3/8-19   | 30,0    | 36,2    | 17,0    | 22,0     |
| 1207789   | R1A05ML051-0808 | 1/2"   | 1/2-14   | 35,0    | 41,5    | 22,0    | 27,0     |
| 1207790   | R1A05ML051-1212 | 3/4"   | 3/4-14   | 42,0    | 51,0    | 27,0    | 32,0     |
| 1207791   | R1A05ML051-1616 | 1"     | 1-11     | 47,0    | 54,5    | 33,0    | 38,0     |
| 1210946   | R1A05ML052-2020 | 1 1/4" | 1 1/4-11 | 52,0    | 59,1    | 41,0    | 50,0     |
| 1211921   | R1A05ML052-2424 | 1 1/2" | 1 1/2-11 | 60,0    | 73,2    | 48,0    | 55,0     |

## // R1A05M106A

Straight union

BSP 60° Male - Solid Female



| Item Code | Product Code    | OD1  | F1     | F2     | C1 (mm) | C2 (mm) | L1 (mm) | CH1 (mm) |
|-----------|-----------------|------|--------|--------|---------|---------|---------|----------|
| 1217430   | R1A05M106A-0202 | 1/8" | 1/8-28 | 1/8-28 | 10,2    | 11,4    | 27,0    | 14,0     |
| 1217431   | R1A05M106A-0204 | 1/8" | 1/8-28 | 1/4-19 | 10,2    | 11,4    | 28,0    | 19,0     |
| 1217432   | R1A05M106A-0402 | 1/4" | 1/4-19 | 1/8-28 | 11,0    | 10,5    | 24,0    | 19,0     |
| 1217433   | R1A05M106A-0404 | 1/4" | 1/4-19 | 1/4-19 | 11,0    | 11,4    | 30,0    | 19,0     |

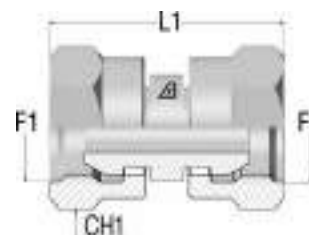
| Item Code | Product Code    | OD1   | F1       | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH1 (mm) |
|-----------|-----------------|-------|----------|----------|---------|---------|---------|----------|
| 1217434   | R1A05M106A-0406 | 1/4"  | 1/4-19   | 3/8-19   | 11,0    | 14,0    | 34,0    | 22,0     |
| 1217435   | R1A05M106A-0408 | 1/4"  | 1/4-19   | 1/2-14   | 11,0    | 16,5    | 36,0    | 27,0     |
| 1217436   | R1A05M106A-0602 | 3/8"  | 3/8-19   | 1/8-28   | 12,7    | 10,5    | 20,0    | 22,0     |
| 1217437   | R1A05M106A-0604 | 3/8"  | 3/8-19   | 1/4-19   | 12,7    | 11,0    | 28,0    | 22,0     |
| 1217438   | R1A05M106A-0606 | 3/8"  | 3/8-19   | 3/8-19   | 12,7    | 14,0    | 34,0    | 22,0     |
| 1217439   | R1A05M106A-0608 | 3/8"  | 3/8-19   | 1/2-14   | 12,7    | 16,5    | 38,6    | 27,0     |
| 1217441   | R1A05M106A-0804 | 1/2"  | 1/2-14   | 1/4-19   | 15,2    | 11,0    | 24,0    | 27,0     |
| 1217442   | R1A05M106A-0806 | 1/2"  | 1/2-14   | 3/8-19   | 15,2    | 12,7    | 32,0    | 27,0     |
| 1217443   | R1A05M106A-0808 | 1/2"  | 1/2-14   | 1/2-14   | 15,2    | 16,5    | 42,0    | 27,0     |
| 1217444   | R1A05M106A-0810 | 1/2"  | 1/2-14   | 5/8-14   | 15,2    | 17,0    | 40,0    | 30,0     |
| 1217445   | R1A05M106A-0812 | 1/2"  | 1/2-14   | 3/4-14   | 15,2    | 17,0    | 42,0    | 32,0     |
| 1217446   | R1A05M106A-0816 | 1/2"  | 1/2-14   | 1-11     | 15,2    | 19,1    | 42,0    | 41,0     |
| 1217447   | R1A05M106A-1008 | 5/8"  | 5/8-14   | 1/2-14   | 16,0    | 16,7    | 36,0    | 30,0     |
| 1221604   | R1A05M106A-1010 | 5/8"  | 5/8-14   | 5/8-14   | 16,0    | 17,0    | 40,0    | 30,0     |
| 1217448   | R1A05M106A-1012 | 5/8"  | 5/8-14   | 3/4-14   | 16,0    | 17,0    | 46,0    | 32,0     |
| 1217449   | R1A05M106A-1206 | 3/4"  | 3/4-14   | 3/8-19   | 17,0    | 12,7    | 28,0    | 32,0     |
| 1217450   | R1A05M106A-1208 | 3/4"  | 3/4-14   | 1/2-14   | 17,0    | 16,0    | 35,0    | 32,0     |
| 1221573   | R1A05M106A-1210 | 3/4"  | 3/4-14   | 5/8-14   | 17,0    | 17,0    | 40,0    | 32,0     |
| 1217451   | R1A05M106A-1212 | 3/4"  | 3/4-14   | 3/4-14   | 17,0    | 17,0    | 41,0    | 32,0     |
| 1217452   | R1A05M106A-1216 | 3/4"  | 3/4-14   | 1-11     | 17,0    | 20,3    | 49,0    | 41,0     |
| 1217453   | R1A05M106A-1608 | 1"    | 1-11     | 1/2-14   | 19,5    | 16,0    | 32,0    | 41,0     |
| 1217454   | R1A05M106A-1612 | 1"    | 1-11     | 3/4-14   | 19,1    | 19,1    | 43,0    | 41,0     |
| 1217456   | R1A05M106A-1620 | 1"    | 1-11     | 1 1/4-11 | 19,1    | 51,6    | 50,0    | 50,0     |
| 1217457   | R1A05M106A-2012 | 1"1/4 | 1 1/4-11 | 3/4-14   | 20,3    | 17,0    | 33,0    | 50,0     |
| 1217458   | R1A05M106A-2016 | 1"1/4 | 1 1/4-11 | 1-11     | 20,3    | 19,0    | 39,0    | 50,0     |
| 1217459   | R1A05M106A-2020 | 1"1/4 | 1 1/4-11 | 1 1/4-11 | 20,3    | 21,6    | 50,0    | 50,0     |
| 1217460   | R1A05M106A-2024 | 1"1/4 | 1 1/4-11 | 1 1/2-11 | 20,3    | 24,1    | 55,0    | 55,0     |
| 1217461   | R1A05M106A-2416 | 1"1/2 | 1 1/2-11 | 1-11     | 22,9    | 19,0    | 35,0    | 55,0     |
| 1217462   | R1A05M106A-2420 | 1"1/2 | 1 1/2-11 | 1 1/4-11 | 22,9    | 21,6    | 55,0    | 55,0     |
| 1217463   | R1A05M106A-2424 | 1"1/2 | 1 1/2-11 | 1 1/2-11 | 22,9    | 24,1    | 55,0    | 55,0     |
| 1217464   | R1A05M106A-2432 | 1"1/2 | 1 1/2-11 | 2-11     | 22,9    | 26,0    | 59,0    | 70,0     |
| 1217465   | R1A05M106A-3220 | 2"    | 2-11     | 1 1/4-11 | 26,0    | 21,0    | 40,0    | 70,0     |
| 1217466   | R1A05M106A-3224 | 2"    | 2-11     | 1 1/2-11 | 26,0    | 23,0    | 40,0    | 70,0     |
| 1217467   | R1A05M106A-3232 | 2"    | 2-11     | 2-11     | 26,0    | 26,0    | 62,0    | 70,0     |

REV.2.1

## // FEMALE UNION

## // R1A0511051

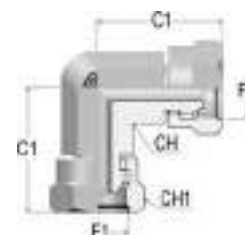
Straight union BSP 60° Female



| Item Code | Product Code    | OD1  | F1     | L1 (mm) | CH1 (mm) |
|-----------|-----------------|------|--------|---------|----------|
| 1205935   | R1A0511051-0404 | 1/4" | 1/4-19 | 36,0    | 19,0     |
| 1205934   | R1A0511051-0606 | 3/8" | 3/8-19 | 38,9    | 22,0     |
| 1205936   | R1A0511051-0808 | 1/2" | 1/2-14 | 44,5    | 27,0     |
| 1207901   | R1A0511051-1212 | 3/4" | 3/4-14 | 49,5    | 32,0     |
| 1203738   | R1A0511051-1616 | 1"   | 1-11   | 56,0    | 38,0     |

## // R1A0519051

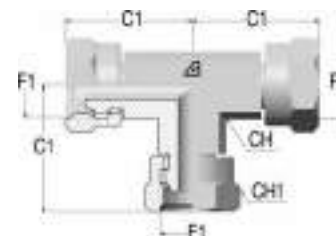
90° union BSP 60° Female



| Item Code | Product Code    | OD1  | F1     | C1 (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|------|--------|---------|---------|----------|
| 1224079   | R1A0519051-0404 | 1/4" | 1/4-19 | 30,5    | 14,0    | 19,0     |
| 1224080   | R1A0519051-0606 | 3/8" | 3/8-19 | 36,2    | 17,0    | 22,0     |
| 1208320   | R1A0519051-0808 | 1/2" | 1/2-14 | 41,5    | 22,0    | 27,0     |
| 1224081   | R1A0519051-1212 | 3/4" | 3/4-14 | 51,0    | 27,0    | 32,0     |
| 1224082   | R1A0519051-1616 | 1"   | 1-11   | 54,5    | 33,0    | 38,0     |

## // R1A051T051

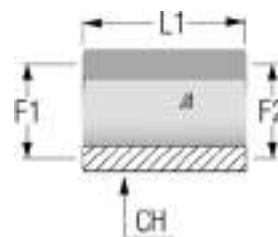
Branch Tee union BSP 60° Female



| Item Code | Product Code    | OD1  | F1     | C1 (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|------|--------|---------|---------|----------|
| 1218501   | R1A051T051-0404 | 1/4" | 1/4-19 | 30,5    | 14,0    | 19,0     |
| 1218502   | R1A051T051-0606 | 3/8" | 3/8-19 | 36,2    | 17,0    | 22,0     |
| 1218503   | R1A051T051-0808 | 1/2" | 1/2-14 | 41,5    | 22,0    | 27,0     |
| 1206665   | R1A051T051-1212 | 3/4" | 3/4-14 | 51,0    | 27,0    | 32,0     |
| 1218505   | R1A051T051-1616 | 1"   | 1-11   | 54,5    | 33,0    | 38,0     |

## // R1A06A106A

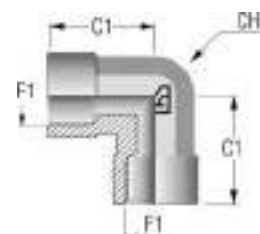
## Straight union BSP Fixed Female



| Item Code | Product Code    | OD1    | F1       | F2       | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|----------|----------|---------|---------|
| 1217408   | R1A06A106A-0202 | 1/8"   | 1/8-28   | 1/8-28   | 23,1    | 14,0    |
| 1217409   | R1A06A106A-0204 | 1/8"   | 1/8-28   | 1/4-19   | 23,1    | 19,0    |
| 1217410   | R1A06A106A-0206 | 1/8"   | 1/8-28   | 3/8-19   | 27,9    | 22,0    |
| 1217411   | R1A06A106A-0404 | 1/4"   | 1/4-19   | 1/4-19   | 27,0    | 19,0    |
| 1217412   | R1A06A106A-0406 | 1/4"   | 1/4-19   | 3/8-19   | 27,9    | 22,0    |
| 1217413   | R1A06A106A-0408 | 1/4"   | 1/4-19   | 1/2-14   | 31,8    | 27,0    |
| 1217414   | R1A06A106A-0606 | 3/8"   | 3/8-19   | 3/8-19   | 29,5    | 22,0    |
| 1217415   | R1A06A106A-0608 | 3/8"   | 3/8-19   | 1/2-14   | 32,0    | 27,0    |
| 1217416   | R1A06A106A-0612 | 3/8"   | 3/8-19   | 3/4-14   | 35,6    | 32,0    |
| 1217417   | R1A06A106A-0808 | 1/2"   | 1/2-14   | 1/2-14   | 32,0    | 27,0    |
| 1217418   | R1A06A106A-0810 | 1/2"   | 1/2-14   | 5/8-14   | 38,1    | 30,0    |
| 1217419   | R1A06A106A-0812 | 1/2"   | 1/2-14   | 3/4-14   | 40,6    | 32,0    |
| 1217420   | R1A06A106A-1010 | 5/8"   | 5/8-14   | 5/8-14   | 38,7    | 30,0    |
| 1217421   | R1A06A106A-1212 | 3/4"   | 3/4-14   | 3/4-14   | 40,6    | 32,0    |
| 1217422   | R1A06A106A-1216 | 3/4"   | 3/4-14   | 1-11     | 41,9    | 41,0    |
| 1217423   | R1A06A106A-1616 | 1"     | 1-11     | 1-11     | 42,2    | 41,0    |
| 1217424   | R1A06A106A-1620 | 1"     | 1-11     | 1 1/4-11 | 45,7    | 50,0    |
| 1217425   | R1A06A106A-2020 | 1 1/4" | 1 1/4-11 | 1 1/4-11 | 48,3    | 50,0    |
| 1217426   | R1A06A106A-2024 | 1 1/4" | 1 1/4-11 | 1 1/2-11 | 50,8    | 55,0    |
| 1217427   | R1A06A106A-2424 | 1 1/2" | 1 1/2-11 | 1 1/2-11 | 50,8    | 55,0    |
| 1217428   | R1A06A106A-2432 | 1 1/2" | 1 1/2-11 | 2-11     | 54,3    | 70,0    |
| 1217429   | R1A06A106A-3232 | 2"     | 2-11     | 2-11     | 55,3    | 70,0    |

## // R1A06A906A

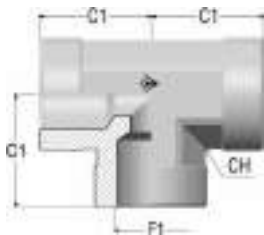
## 90° union BSP 60° Soild Female



| Item Code | Product Code    | OD1  | F1     | C1 (mm) | CH (mm) |
|-----------|-----------------|------|--------|---------|---------|
| 1218766   | R1A06A906A-0404 | 1/4" | 1/4-19 | 17,0    | 14,0    |
| 1218768   | R1A06A906A-0606 | 3/8" | 3/8-19 | 22,0    | 19,0    |
| 1221512   | R1A06A906A-0808 | 1/2" | 1/2-14 | 31,0    | 27,0    |
| 1221562   | R1A06A906A-1212 | 3/4" | 3/4-14 | 35,0    | 33,0    |
| 1218770   | R1A06A906A-1616 | 1"   | 1-11   | 44,0    | 41,0    |

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R1A06AT06A  
Branch Tee union BSP Fixed Female

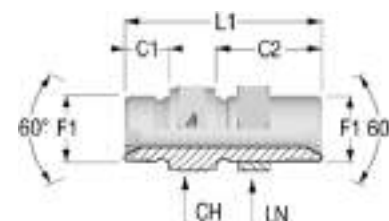


| Item Code | Product Code    | OD1    | F1       | C1 (mm) | CH (mm) |
|-----------|-----------------|--------|----------|---------|---------|
| 1218771   | R1A06AT06A-0202 | 1/8"   | 1/8-28   | 17,0    | 14,0    |
| 1218772   | R1A06AT06A-0404 | 1/4"   | 1/4-19   | 22,0    | 19,0    |
| 1218774   | R1A06AT06A-0606 | 3/8"   | 3/8-19   | 26,0    | 22,0    |
| 1218776   | R1A06AT06A-0808 | 1/2"   | 1/2-14   | 31,0    | 27,0    |
| 1218777   | R1A06AT06A-1212 | 3/4"   | 3/4-14   | 35,0    | 33,0    |
| 1218778   | R1A06AT06A-1616 | 1"     | 1-11     | 44,0    | 41,0    |
| 1242438   | R1A06AT06A-2020 | 1 1/4" | 1 1/4-11 | 50,0    | 48,0    |

## // BULKHEAD

## // R1A05M105T

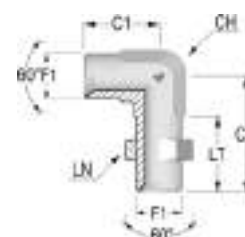
Straight union BSP 60° Bulkhead



| Item Code | Product Code    | OD1   | F1       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|----------|---------|---------|---------|---------|---------|
| 1212042   | R1A05M105T-0202 | 1/8"  | 1/8-28   | 9,5     | 25,0    | 40,5    | 14,0    | 14,0    |
| 1207678   | R1A05M105T-0404 | 1/4"  | 1/4-19   | 13,0    | 29,0    | 47,0    | 19,0    | 19,0    |
| 1207679   | R1A05M105T-0606 | 3/8"  | 3/8-19   | 14,5    | 31,0    | 51,5    | 22,0    | 22,0    |
| 1207680   | R1A05M105T-0808 | 1/2"  | 1/2-14   | 17,0    | 34,0    | 58,0    | 27,0    | 27,0    |
| 1207681   | R1A05M105T-1010 | 5/8"  | 5/8-14   | 19,0    | 37,0    | 63,0    | 30,0    | 32,0    |
| 1207682   | R1A05M105T-1212 | 3/4"  | 3/4-14   | 19,0    | 37,0    | 63,5    | 32,0    | 32,0    |
| 1207683   | R1A05M105T-1616 | 1"    | 1-11     | 21,0    | 41,0    | 72,0    | 41,0    | 41,0    |
| 1207684   | R1A05M105T-2020 | 1"1/4 | 1 1/4-11 | 23,0    | 45,0    | 80,0    | 50,0    | 50,0    |
| 1210955   | R1A05M105T-2424 | 1"1/2 | 1 1/2-11 | 25,0    | 49,0    | 88,0    | 55,0    | 55,0    |

## // R1A05M905T

90° elbow connector BSP 60° Bulkhead

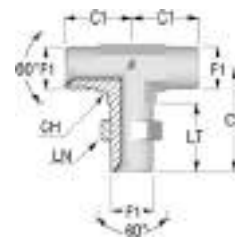


| Item Code | Product Code    | OD1   | F1       | C1 (mm) | C2 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|----------|---------|---------|---------|---------|---------|
| 1212188   | R1A05M905T-0202 | 1/8"  | 1/8-28   | 20,0    | 37,0    | 25,0    | 12,0    | 14,0    |
| 1210969   | R1A05M905T-0404 | 1/4"  | 1/4-19   | 26,0    | 47,0    | 29,0    | 14,0    | 19,0    |
| 1210970   | R1A05M905T-0606 | 3/8"  | 3/8-19   | 30,0    | 49,0    | 31,0    | 17,0    | 22,0    |
| 1210971   | R1A05M905T-0808 | 1/2"  | 1/2-14   | 35,0    | 55,0    | 34,0    | 22,0    | 27,0    |
| 1212189   | R1A05M905T-1010 | 5/8"  | 5/8-14   | 38,0    | 59,0    | 37,0    | 22,0    | 32,0    |
| 1210972   | R1A05M905T-1212 | 3/4"  | 3/4-14   | 42,0    | 63,0    | 35,0    | 33,0    | 41,0    |
| 1210973   | R1A05M905T-1616 | 1"    | 1-11     | 47,0    | 69,0    | 41,0    | 33,0    | 41,0    |
| 1210974   | R1A05M905T-2020 | 1"1/4 | 1 1/4-11 | 52,0    | 77,0    | 45,0    | 41,0    | 50,0    |
| 1210975   | R1A05M905T-2424 | 1"1/2 | 1 1/2-11 | 60,0    | 87,0    | 49,0    | 48,0    | 55,0    |

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## // R1A05MT05T

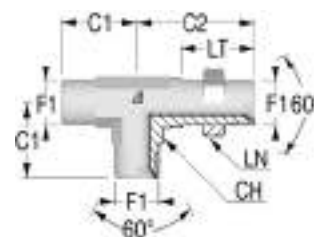
## Branch Tee union BSP 60° Bulkhead



| Item Code | Product Code    | OD1    | F1       | C1 (mm) | C3 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|----------|---------|---------|---------|---------|---------|
| 1211961   | R1A05MT05T-0202 | 1/8"   | 1/8-28   | 20,0    | 37,0    | 25,0    | 12,0    | 14,0    |
| 1211962   | R1A05MT05T-0404 | 1/4"   | 1/4-19   | 26,0    | 44,0    | 29,0    | 14,0    | 19,0    |
| 1211963   | R1A05MT05T-0606 | 3/8"   | 3/8-19   | 27,0    | 49,0    | 31,0    | 17,0    | 22,0    |
| 1211964   | R1A05MT05T-0808 | 1/2"   | 1/2-14   | 35,0    | 55,0    | 34,0    | 22,0    | 27,0    |
| 1211965   | R1A05MT05T-1010 | 5/8"   | 5/8-14   | 38,0    | 59,0    | 37,0    | 22,0    | 32,0    |
| 1211966   | R1A05MT05T-1212 | 3/4"   | 3/4-14   | 42,0    | 63,0    | 37,0    | 27,0    | 36,0    |
| 1211967   | R1A05MT05T-1616 | 1"     | 1-11     | 47,0    | 69,0    | 41,0    | 33,0    | 41,0    |
| 1211968   | R1A05MT05T-2020 | 1 1/4" | 1 1/4-11 | 52,0    | 77,0    | 45,0    | 41,0    | 50,0    |
| 1211969   | R1A05MT05T-2424 | 1 1/2" | 1 1/2-11 | 60,0    | 87,0    | 49,0    | 48,0    | 55,0    |

## // R1A05ML05T

## Run Tee union BSP 60° Bulkhead



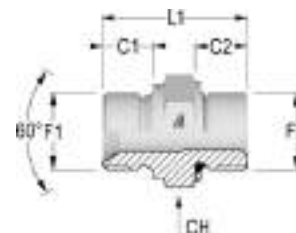
| Item Code | Product Code    | OD1    | F1       | C1 (mm) | C2 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|----------|---------|---------|---------|---------|---------|
| 1211899   | R1A05ML05T-0202 | 1/8"   | 1/8-28   | 20,0    | 37,0    | 25,0    | 12,0    | 14,0    |
| 1211900   | R1A05ML05T-0404 | 1/4"   | 1/4-19   | 26,0    | 44,0    | 29,0    | 14,0    | 19,0    |
| 1211901   | R1A05ML05T-0606 | 3/8"   | 3/8-19   | 27,0    | 49,0    | 31,0    | 17,0    | 22,0    |
| 1211902   | R1A05ML05T-0808 | 1/2"   | 1/2-14   | 35,0    | 55,0    | 34,0    | 22,0    | 27,0    |
| 1211903   | R1A05ML05T-1010 | 5/8"   | 5/8-14   | 38,0    | 59,0    | 37,0    | 22,0    | 32,0    |
| 1211904   | R1A05ML05T-1212 | 3/4"   | 3/4-14   | 42,0    | 63,0    | 37,0    | 27,0    | 36,0    |
| 1211905   | R1A05ML05T-1616 | 1"     | 1-11     | 47,0    | 69,0    | 41,0    | 33,0    | 41,0    |
| 1211906   | R1A05ML05T-2020 | 1 1/4" | 1 1/4-11 | 52,0    | 77,0    | 45,0    | 41,0    | 50,0    |
| 1211907   | R1A05ML05T-2424 | 1 1/2" | 1 1/2-11 | 60,0    | 87,0    | 49,0    | 48,0    | 55,0    |

## // BSPP-BSPT

## // R1A05M106N

Straight connector

BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring



| Item Code | Product Code    | OD1    | F1       | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|----------|----------|---------|---------|---------|---------|
| 1212043   | R1A05M106N-0202 | 1/8"   | 1/8-28   | 1/8-28   | 8,0     | 7,5     | 21,5    | 14,0    |
| 1212044   | R1A05M106N-0204 | 1/8"   | 1/8-28   | 1/4-19   | 8,0     | 11,0    | 28,0    | 19,0    |
| 1212046   | R1A05M106N-0406 | 1/4"   | 1/4-19   | 3/8-19   | 11,0    | 11,0    | 31,0    | 22,0    |
| 1212047   | R1A05M106N-0604 | 3/8"   | 3/8-19   | 1/4-19   | 13,0    | 13,0    | 33,0    | 22,0    |
| 1212048   | R1A05M106N-0606 | 3/8"   | 3/8-19   | 3/8-19   | 13,0    | 11,0    | 34,0    | 22,0    |
| 1212049   | R1A05M106N-0608 | 3/8"   | 3/8-19   | 1/2-14   | 13,0    | 14,5    | 38,0    | 27,0    |
| 1212050   | R1A05M106N-0806 | 1/2"   | 1/2-14   | 3/8-19   | 16,0    | 11,0    | 35,0    | 27,0    |
| 1212051   | R1A05M106N-0808 | 1/2"   | 1/2-14   | 1/2-14   | 16,0    | 16,0    | 40,0    | 27,0    |
| 1212052   | R1A05M106N-0812 | 1/2"   | 1/2-14   | 3/4-14   | 16,0    | 14,5    | 40,0    | 32,0    |
| 1212053   | R1A05M106N-1008 | 5/8"   | 5/8-14   | 1/2-14   | 16,0    | 14,5    | 38,5    | 27,0    |
| 1236668   | R1A05M106N-1208 | 3/4"   | 3/4-14   | 1/2-14   | 17,0    | 14,5    | 44,0    | 32,0    |
| 1212055   | R1A05M106N-1212 | 3/4"   | 3/4-14   | 3/4-14   | 17,0    | 14,5    | 46,0    | 32,0    |
| 1212056   | R1A05M106N-1216 | 3/4"   | 3/4-14   | 1-11     | 17,0    | 18,5    | 52,0    | 41,0    |
| 1212057   | R1A05M106N-1612 | 1"     | 1-11     | 3/4-14   | 19,0    | 14,5    | 49,0    | 41,0    |
| 1212058   | R1A05M106N-1616 | 1"     | 1-11     | 1-11     | 19,0    | 18,5    | 55,0    | 41,0    |
| 1212059   | R1A05M106N-1620 | 1"     | 1-11     | 1 1/4-11 | 19,0    | 18,5    | 60,0    | 50,0    |
| 1212060   | R1A05M106N-2020 | 1 1/4" | 1 1/4-11 | 1 1/4-11 | 20,0    | 18,5    | 62,5    | 50,0    |
| 1212061   | R1A05M106N-2424 | 1 1/2" | 1 1/2-11 | 1 1/2-11 | 22,0    | 18,5    | 63,0    | 55,0    |

REV.2.1

## // R1A05M406N

45° adjustable elbow connector

BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring

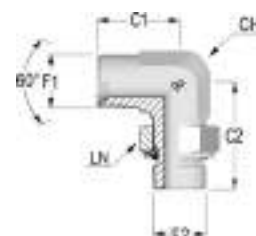


| Item Code | Product Code    | OD1    | F1       | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|----------|----------|---------|---------|---------|---------|
| 1212127   | R1A05M406N-0202 | 1/8"   | 1/8-28   | 1/8-28   | 20,0    | 26,0    | 12,0    | 14,0    |
| 1212128   | R1A05M406N-0204 | 1/8"   | 1/8-28   | 1/4-19   | 21,0    | 28,0    | 14,0    | 19,0    |
| 1210962   | R1A05M406N-0404 | 1/4"   | 1/4-19   | 1/4-19   | 21,0    | 28,0    | 14,0    | 19,0    |
| 1212129   | R1A05M406N-0406 | 1/4"   | 1/4-19   | 3/8-19   | 22,0    | 33,0    | 17,0    | 22,0    |
| 1212130   | R1A05M406N-0604 | 3/8"   | 3/8-19   | 1/4-19   | 25,0    | 30,0    | 17,0    | 19,0    |
| 1212131   | R1A05M406N-0606 | 3/8"   | 3/8-19   | 3/8-19   | 25,0    | 33,0    | 17,0    | 22,0    |
| 1212132   | R1A05M406N-0608 | 3/8"   | 3/8-19   | 1/2-14   | 25,5    | 38,0    | 19,0    | 27,0    |
| 1212133   | R1A05M406N-0806 | 1/2"   | 1/2-14   | 3/8-19   | 26,0    | 35,0    | 19,0    | 22,0    |
| 1212134   | R1A05M406N-0808 | 1/2"   | 1/2-14   | 1/2-14   | 28,0    | 38,0    | 22,0    | 27,0    |
| 1212135   | R1A05M406N-0810 | 1/2"   | 1/2-14   | 5/8-14   | 39,0    | 50,0    | 27,0    | 32,0    |
| 1212136   | R1A05M406N-1008 | 5/8"   | 5/8-14   | 1/2-14   | 28,0    | 38,0    | 22,0    | 27,0    |
| 1212137   | R1A05M406N-1208 | 3/4"   | 3/4-14   | 1/2-14   | 32,0    | 40,0    | 27,0    | 27,0    |
| 1212138   | R1A05M406N-1212 | 3/4"   | 3/4-14   | 3/4-14   | 32,0    | 44,0    | 27,0    | 36,0    |
| 1212139   | R1A05M406N-1216 | 3/4"   | 3/4-14   | 1-11     | 35,0    | 47,0    | 33,0    | 41,0    |
| 1212140   | R1A05M406N-1612 | 1"     | 1-11     | 3/4-14   | 37,0    | 47,0    | 33,0    | 36,0    |
| 1212141   | R1A05M406N-1616 | 1"     | 1-11     | 1-11     | 37,0    | 47,0    | 33,0    | 41,0    |
| 1212142   | R1A05M406N-1620 | 1"     | 1-11     | 1 1/4-11 | 39,0    | 49,0    | 41,0    | 50,0    |
| 1212143   | R1A05M406N-2020 | 1 1/4" | 1 1/4-11 | 1 1/4-11 | 40,0    | 49,0    | 41,0    | 50,0    |
| 1212144   | R1A05M406N-2424 | 1 1/2" | 1 1/2-11 | 1 1/2-11 | 45,0    | 49,0    | 48,0    | 55,0    |

## // R1A05M906N

90° adjustable elbow connector

BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring

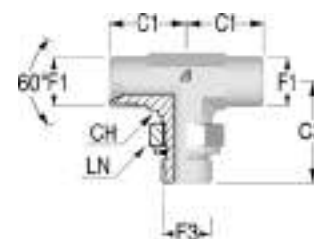


| Item Code | Product Code    | OD1    | F1       | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|----------|----------|---------|---------|---------|---------|
| 1212191   | R1A05M906N-0202 | 1/8"   | 1/8-28   | 1/8-28   | 22,0    | 27,0    | 12,0    | 14,0    |
| 1212192   | R1A05M906N-0204 | 1/8"   | 1/8-28   | 1/4-19   | 24,0    | 31,5    | 14,0    | 19,0    |
| 1208135   | R1A05M906N-0404 | 1/4"   | 1/4-19   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1212193   | R1A05M906N-0406 | 1/4"   | 1/4-19   | 3/8-19   | 28,0    | 37,0    | 17,0    | 22,0    |
| 1212194   | R1A05M906N-0604 | 3/8"   | 3/8-19   | 1/4-19   | 29,0    | 35,0    | 17,0    | 19,0    |
| 1207949   | R1A05M906N-0606 | 3/8"   | 3/8-19   | 3/8-19   | 29,0    | 37,0    | 17,0    | 22,0    |
| 1212195   | R1A05M906N-0608 | 3/8"   | 3/8-19   | 1/2-14   | 32,0    | 43,0    | 19,0    | 27,0    |
| 1212196   | R1A05M906N-0806 | 1/2"   | 1/2-14   | 3/8-19   | 34,0    | 40,0    | 19,0    | 22,0    |
| 1207950   | R1A05M906N-0808 | 1/2"   | 1/2-14   | 1/2-14   | 34,0    | 43,0    | 22,0    | 27,0    |
| 1212199   | R1A05M906N-1208 | 3/4"   | 3/4-14   | 1/2-14   | 41,0    | 46,0    | 27,0    | 27,0    |
| 1208136   | R1A05M906N-1212 | 3/4"   | 3/4-14   | 3/4-14   | 41,0    | 50,0    | 27,0    | 36,0    |
| 1212200   | R1A05M906N-1216 | 3/4"   | 3/4-14   | 1-11     | 43,0    | 53,0    | 33,0    | 41,0    |
| 1212201   | R1A05M906N-1612 | 1"     | 1-11     | 3/4-14   | 46,0    | 52,0    | 33,0    | 36,0    |
| 1210745   | R1A05M906N-1616 | 1"     | 1-11     | 1-11     | 46,0    | 53,0    | 33,0    | 41,0    |
| 1212202   | R1A05M906N-1620 | 1"     | 1-11     | 1 1/4-11 | 50,0    | 58,0    | 41,0    | 50,0    |
| 1210976   | R1A05M906N-2020 | 1 1/4" | 1 1/4-11 | 1 1/4-11 | 51,0    | 58,0    | 41,0    | 50,0    |
| 1210977   | R1A05M906N-2424 | 1 1/2" | 1 1/2-11 | 1 1/2-11 | 59,0    | 67,0    | 48,0    | 55,0    |

## // R1A05MT06N

Branch Tee adjustable elbow connector

BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring

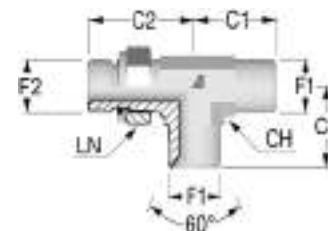


| Item Code | Product Code    | OD1    | F1       | F3       | C1 (mm) | C3 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|----------|----------|---------|---------|---------|---------|
| 1211971   | R1A05MT06N-0202 | 1/8"   | 1/8-28   | 1/8-28   | 22,0    | 27,0    | 12,0    | 14,0    |
| 1211972   | R1A05MT06N-0204 | 1/8"   | 1/8-28   | 1/4-19   | 24,0    | 31,5    | 14,0    | 19,0    |
| 1208147   | R1A05MT06N-0404 | 1/4"   | 1/4-19   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1211973   | R1A05MT06N-0406 | 1/4"   | 1/4-19   | 3/8-19   | 28,0    | 37,0    | 17,0    | 22,0    |
| 1211974   | R1A05MT06N-0604 | 3/8"   | 3/8-19   | 1/4-19   | 29,0    | 35,0    | 17,0    | 19,0    |
| 1210749   | R1A05MT06N-0606 | 3/8"   | 3/8-19   | 3/8-19   | 29,0    | 37,0    | 17,0    | 22,0    |
| 1211976   | R1A05MT06N-0806 | 1/2"   | 1/2-14   | 3/8-19   | 34,0    | 40,0    | 19,0    | 22,0    |
| 1210713   | R1A05MT06N-0808 | 1/2"   | 1/2-14   | 1/2-14   | 34,0    | 43,0    | 22,0    | 27,0    |
| 1211978   | R1A05MT06N-1008 | 5/8"   | 5/8-14   | 1/2-14   | 37,0    | 43,0    | 22,0    | 27,0    |
| 1211979   | R1A05MT06N-1208 | 3/4"   | 3/4-14   | 1/2-14   | 41,0    | 46,0    | 27,0    | 27,0    |
| 1210750   | R1A05MT06N-1212 | 3/4"   | 3/4-14   | 3/4-14   | 41,0    | 50,0    | 27,0    | 36,0    |
| 1211980   | R1A05MT06N-1216 | 3/4"   | 3/4-14   | 1-11     | 43,0    | 53,0    | 33,0    | 41,0    |
| 1211981   | R1A05MT06N-1612 | 1"     | 1-11     | 3/4-14   | 46,0    | 52,0    | 33,0    | 36,0    |
| 1210947   | R1A05MT06N-1616 | 1"     | 1-11     | 1-11     | 46,0    | 53,0    | 33,0    | 41,0    |
| 1207710   | R1A05MT06N-1620 | 1"     | 1-11     | 1 1/4-11 | 50,0    | 58,0    | 41,0    | 50,0    |
| 1210948   | R1A05MT06N-2020 | 1 1/4" | 1 1/4-11 | 1 1/4-11 | 51,0    | 58,0    | 41,0    | 50,0    |
| 1210949   | R1A05MT06N-2424 | 1 1/2" | 1 1/2-11 | 1 1/2-11 | 59,0    | 67,0    | 48,0    | 55,0    |

## // R1A05ML06N

Run Tee adjustable elbow connector

BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring



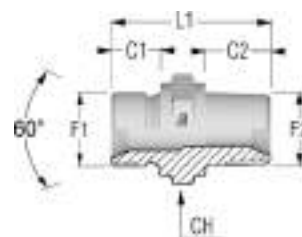
| Item Code | Product Code    | OD1    | F1       | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|----------|----------|---------|---------|---------|---------|
| 1211909   | R1A05ML06N-0202 | 1/8"   | 1/8-28   | 1/8-28   | 22,0    | 27,0    | 12,0    | 14,0    |
| 1211910   | R1A05ML06N-0204 | 1/8"   | 1/8-28   | 1/4-19   | 24,0    | 31,5    | 14,0    | 19,0    |
| 1210746   | R1A05ML06N-0404 | 1/4"   | 1/4-19   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1211911   | R1A05ML06N-0406 | 1/4"   | 1/4-19   | 3/8-19   | 28,0    | 37,0    | 17,0    | 22,0    |
| 1211912   | R1A05ML06N-0604 | 3/8"   | 3/8-19   | 1/4-19   | 29,0    | 35,0    | 17,0    | 19,0    |
| 1208140   | R1A05ML06N-0606 | 3/8"   | 3/8-19   | 3/8-19   | 29,0    | 37,0    | 17,0    | 22,0    |
| 1211913   | R1A05ML06N-0608 | 3/8"   | 3/8-19   | 1/2-14   | 32,0    | 43,0    | 19,0    | 27,0    |
| 1211914   | R1A05ML06N-0806 | 1/2"   | 1/2-14   | 3/8-19   | 34,0    | 40,0    | 19,0    | 22,0    |
| 1208141   | R1A05ML06N-0808 | 1/2"   | 1/2-14   | 1/2-14   | 34,0    | 43,0    | 22,0    | 27,0    |
| 1211915   | R1A05ML06N-0810 | 1/2"   | 1/2-14   | 5/8-14   | 39,0    | 50,0    | 27,0    | 32,0    |
| 1211916   | R1A05ML06N-1008 | 5/8"   | 5/8-14   | 1/2-14   | 37,0    | 43,0    | 22,0    | 27,0    |
| 1211917   | R1A05ML06N-1208 | 3/4"   | 3/4-14   | 1/2-14   | 41,0    | 46,0    | 27,0    | 27,0    |
| 1210715   | R1A05ML06N-1212 | 3/4"   | 3/4-14   | 3/4-14   | 41,0    | 50,0    | 27,0    | 36,0    |
| 1211918   | R1A05ML06N-1216 | 3/4"   | 3/4-14   | 1-11     | 43,0    | 53,0    | 33,0    | 41,0    |
| 1211919   | R1A05ML06N-1612 | 1"     | 1-11     | 3/4-14   | 46,0    | 52,0    | 33,0    | 36,0    |
| 1210942   | R1A05ML06N-1616 | 1"     | 1-11     | 1-11     | 46,0    | 53,0    | 33,0    | 41,0    |
| 1210943   | R1A05ML06N-1620 | 1"     | 1-11     | 1 1/4-11 | 50,0    | 58,0    | 41,0    | 50,0    |
| 1210944   | R1A05ML06N-2020 | 1 1/4" | 1 1/4-11 | 1 1/4-11 | 51,0    | 58,0    | 41,0    | 50,0    |
| 1210945   | R1A05ML06N-2424 | 1 1/2" | 1 1/2-11 | 1 1/2-11 | 59,0    | 67,0    | 48,0    | 55,0    |

REV.2.1

## // R1A05M107M

Straight connector

BSP 60° Male - BSPT Male



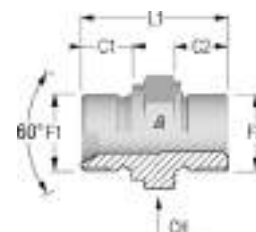
| Item Code | Product Code    | OD1  | F1     | F2     | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|------|--------|--------|---------|---------|---------|---------|
| 1203777   | R1A05M107M-0202 | 1/8" | 1/8-28 | 1/8-28 | 10,2    | 11,2    | 26,9    | 14,0    |
| 1203772   | R1A05M107M-0402 | 1/4" | 1/4-19 | 1/8-28 | 10,2    | 11,2    | 29,2    | 19,0    |
| 1203771   | R1A05M107M-0404 | 1/4" | 1/4-19 | 1/4-19 | 11,0    | 16,2    | 34,5    | 19,0    |
| 1203773   | R1A05M107M-0406 | 1/4" | 1/4-19 | 3/8-19 | 11,0    | 17,3    | 36,2    | 19,0    |
| 1203795   | R1A05M107M-0604 | 3/8" | 3/8-19 | 1/4-19 | 12,7    | 16,5    | 36,6    | 22,0    |
| 1203796   | R1A05M107M-0606 | 3/8" | 3/8-19 | 3/8-19 | 12,7    | 17,3    | 37,3    | 22,0    |
| 1203794   | R1A05M107M-0608 | 3/8" | 3/8-19 | 1/2-14 | 12,7    | 21,6    | 43,8    | 22,0    |
| 1203764   | R1A05M107M-0806 | 1/2" | 1/2-14 | 3/8-19 | 15,2    | 17,3    | 45,2    | 27,0    |
| 1203761   | R1A05M107M-0808 | 1/2" | 1/2-14 | 1/2-14 | 15,2    | 21,6    | 47,3    | 27,0    |
| 1206207   | R1A05M107M-0812 | 1/2" | 1/2-14 | 3/4-14 | 15,2    | 22,1    | 49,8    | 27,0    |
| 1203785   | R1A05M107M-1208 | 3/4" | 3/4-14 | 1/2-14 | 17,0    | 21,6    | 51,3    | 32,0    |
| 1203786   | R1A05M107M-1212 | 3/4" | 3/4-14 | 3/4-14 | 17,0    | 22,1    | 51,8    | 32,0    |
| 1203746   | R1A05M107M-1612 | 1"   | 1-11   | 3/4-14 | 19,1    | 22,1    | 53,8    | 41,0    |
| 1203745   | R1A05M107M-1616 | 1"   | 1-11   | 1-11   | 19,1    | 27,9    | 59,3    | 41,0    |

## // METRIC

## // R1A05M152Q

Straight connector

BSP 60° Male - Metric Male



| Item Code | Product Code    | OD1  | F1     | F2      | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|------|--------|---------|---------|---------|---------|---------|
| 1212110   | R1A05M152Q-0412 | 1/4" | 1/4-19 | M12X1.5 | 11,0    | 11,0    | 31,0    | 19,0    |
| 1212112   | R1A05M152Q-0416 | 1/4" | 1/4-19 | M16X1.5 | 11,0    | 12,7    | 34,0    | 22,0    |
| 1217519   | R1A05M152Q-0418 | 1/4" | 1/4-19 | M18X1.5 | 11,0    | 12,7    | 33,5    | 22,0    |
| 1217517   | R1A05M152Q-0612 | 3/8" | 3/8-19 | M12X1.5 | 12,7    | 11,0    | 34,2    | 22,0    |
| 1212115   | R1A05M152Q-0618 | 3/8" | 3/8-19 | M18X1.5 | 12,7    | 12,7    | 35,7    | 22,0    |
| 1220715   | R1A05M152Q-0620 | 3/8" | 3/8-19 | M20X1.5 | 12,7    | 15,2    | 41,1    | 27,0    |
| 1217521   | R1A05M152Q-0622 | 3/8" | 3/8-19 | M22X1.5 | 12,7    | 15,2    | 41,8    | 27,0    |
| 1217518   | R1A05M152Q-0816 | 1/2" | 1/2-14 | M16X1.5 | 15,2    | 12,7    | 41,2    | 27,0    |
| 1212118   | R1A05M152Q-0822 | 1/2" | 1/2-14 | M22X1.5 | 15,2    | 15,2    | 44,3    | 27,0    |
| 1212120   | R1A05M152Q-1222 | 3/4" | 3/4-14 | M22X1.5 | 17,0    | 15,2    | 49,0    | 32,0    |
| 1212121   | R1A05M152Q-1226 | 3/4" | 3/4-14 | M26X1.5 | 17,0    | 16,0    | 49,6    | 32,0    |
| 1212122   | R1A05M152Q-1227 | 3/4" | 3/4-14 | M27X2   | 17,0    | 16,0    | 48,6    | 32,0    |

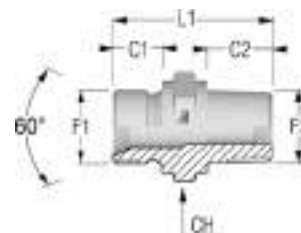
REV.2.1

## // NPTF

## // R1A05M128M

Straight connector

BSP 60° Male - NPT Male



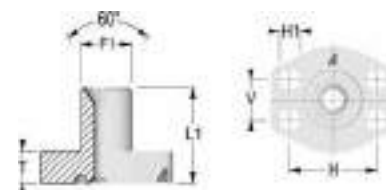
| Item Code | Product Code    | OD1   | F1       | F2           | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|----------|--------------|---------|---------|---------|---------|
| 1205999   | R1A05M128M-0202 | 1/8"  | 1/8-28   | 1/8-27       | 10,2    | 9,7     | 26,2    | 14,0    |
| 1217480   | R1A05M128M-0402 | 1/4"  | 1/4-19   | 1/8-27       | 11,0    | 9,7     | 28,8    | 19,0    |
| 1203769   | R1A05M128M-0404 | 1/4"  | 1/4-19   | 1/4-18       | 11,0    | 14,5    | 32,0    | 19,0    |
| 1203770   | R1A05M128M-0406 | 1/4"  | 1/4-19   | 3/8-18       | 11,0    | 14,2    | 33,0    | 19,0    |
| 1203791   | R1A05M128M-0604 | 3/8"  | 3/8-19   | 1/4-18       | 12,7    | 14,2    | 31,8    | 22,0    |
| 1203793   | R1A05M128M-0606 | 3/8"  | 3/8-19   | 3/8-18       | 12,7    | 14,2    | 35,3    | 22,0    |
| 1203790   | R1A05M128M-0608 | 3/8"  | 3/8-19   | 1/2-14       | 12,7    | 19,1    | 39,8    | 22,0    |
| 1203758   | R1A05M128M-0808 | 1/2"  | 1/2-14   | 1/2-14       | 15,2    | 19,1    | 44,5    | 27,0    |
| 1217483   | R1A05M128M-1208 | 3/4"  | 3/4-14   | 1/2-14       | 17,0    | 19,1    | 48,7    | 32,0    |
| 1203782   | R1A05M128M-1212 | 3/4"  | 3/4-14   | 3/4-14       | 17,0    | 19,1    | 48,0    | 32,0    |
| 1203781   | R1A05M128M-1216 | 3/4"  | 3/4-14   | 1-11 1/2     | 17,0    | 23,9    | 53,0    | 38,0    |
| 1245130   | R1A05M128M-1612 | 1"    | 1-11     | 3/4-14       | 19,1    | 19,1    | 54,1    | 41,0    |
| 1203743   | R1A05M128M-1616 | 1"    | 1-11     | 1-11 1/2     | 19,1    | 23,9    | 55,6    | 41,0    |
| 1210672   | R1A05M128M-1620 | 1"    | 1-11     | 1 1/4-11 1/2 | 19,1    | 24,6    | 59,9    | 50,0    |
| 1203752   | R1A05M128M-2020 | 1"1/4 | 1 1/4-11 | 1 1/4-11 1/2 | 20,3    | 24,6    | 61,2    | 50,0    |
| 1203748   | R1A05M128M-2424 | 1"1/2 | 1 1/2-11 | 1 1/2-11 1/2 | 22,9    | 25,4    | 67,3    | 55,0    |

## // FLANGES

## // R1A05M133W

Straight flange SAE J518 code 61

BSP - Low pressure

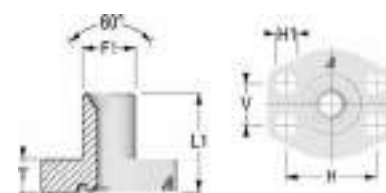


| Item Code | Product Code    | OD1   | F1       | F2    | L1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|-------|----------|-------|---------|--------|--------|--------|---------|
| 1212081   | R1A05M133W-0608 | 3/8"  | 3/8-19   | 1/2   | 37,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212082   | R1A05M133W-0808 | 1/2"  | 1/2-14   | 1/2   | 39,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212083   | R1A05M133W-0812 | 1/2"  | 1/2-14   | 3/4   | 42,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212084   | R1A05M133W-1208 | 3/4"  | 3/4-14   | 1/2   | 42,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212085   | R1A05M133W-1212 | 3/4"  | 3/4-14   | 3/4   | 45,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212086   | R1A05M133W-1216 | 3/4"  | 3/4-14   | 1     | 47,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212087   | R1A05M133W-1612 | 1"    | 1-11     | 3/4   | 47,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212088   | R1A05M133W-1616 | 1"    | 1-11     | 1     | 53,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212089   | R1A05M133W-2016 | 1"1/4 | 1 1/4-11 | 1     | 49,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212090   | R1A05M133W-2020 | 1"1/4 | 1 1/4-11 | 1 1/4 | 53,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212091   | R1A05M133W-2024 | 1"1/4 | 1 1/4-11 | 1 1/2 | 59,0    | 24,0   | 69,9   | 35,7   | 13,5    |
| 1212092   | R1A05M133W-2420 | 1"1/2 | 1 1/2-11 | 1 1/4 | 55,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212093   | R1A05M133W-2424 | 1"1/2 | 1 1/2-11 | 1 1/2 | 61,0    | 24,0   | 69,9   | 35,7   | 13,5    |

## // R1A05M136W

Straight flange SAE J518 code 62

BSP - High pressure



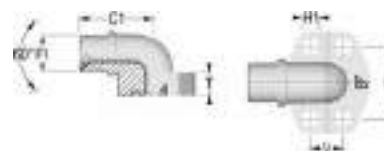
| Item Code | Product Code    | OD1   | F1       | F2    | L1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|-------|----------|-------|---------|--------|--------|--------|---------|
| 1212094   | R1A05M136W-0608 | 3/8"  | 3/8-19   | 1/2   | 37,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212095   | R1A05M136W-0808 | 1/2"  | 1/2-14   | 1/2   | 39,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212096   | R1A05M136W-0812 | 1/2"  | 1/2-14   | 3/4   | 42,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212097   | R1A05M136W-1208 | 3/4"  | 3/4-14   | 1/2   | 42,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212098   | R1A05M136W-1212 | 3/4"  | 3/4-14   | 3/4   | 45,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212099   | R1A05M136W-1216 | 3/4"  | 3/4-14   | 1     | 47,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212100   | R1A05M136W-1612 | 1"    | 1-11     | 3/4   | 47,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212101   | R1A05M136W-1616 | 1"    | 1-11     | 1     | 49,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212102   | R1A05M136W-1620 | 1"    | 1-11     | 1 1/4 | 53,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212103   | R1A05M136W-2016 | 1"1/4 | 1 1/4-11 | 1     | 49,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212104   | R1A05M136W-2020 | 1"1/4 | 1 1/4-11 | 1 1/4 | 53,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212105   | R1A05M136W-2024 | 1"1/4 | 1 1/4-11 | 1 1/2 | 59,0    | 24,0   | 69,9   | 35,7   | 13,5    |
| 1212106   | R1A05M136W-2420 | 1"1/2 | 1 1/2-11 | 1 1/4 | 55,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212107   | R1A05M136W-2424 | 1"1/2 | 1 1/2-11 | 1 1/2 | 61,0    | 24,0   | 69,9   | 35,7   | 13,5    |

REV.2.1

## // R1A05M933W

90° flange SAE J518 code 61

BSP - Low pressure

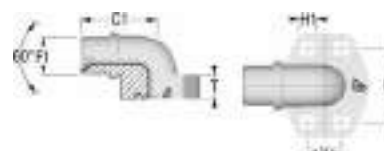


| Item Code | Product Code    | OD1    | F1       | F2    | C1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|--------|----------|-------|---------|--------|--------|--------|---------|
| 1212252   | R1A05M933W-0608 | 3/8"   | 3/8-19   | 1/2   | 37,0    | 17,0   | 38,1   | 17,5   | 9,0     |
| 1212253   | R1A05M933W-0808 | 1/2"   | 1/2-14   | 1/2   | 39,0    | 17,0   | 38,1   | 17,5   | 9,0     |
| 1212254   | R1A05M933W-0812 | 1/2"   | 1/2-14   | 3/4   | 41,0    | 20,0   | 47,6   | 22,2   | 11,0    |
| 1212255   | R1A05M933W-1208 | 3/4"   | 3/4-14   | 1/2   | 40,0    | 20,0   | 38,1   | 17,5   | 9,0     |
| 1212256   | R1A05M933W-1212 | 3/4"   | 3/4-14   | 3/4   | 44,0    | 20,0   | 47,6   | 22,2   | 11,0    |
| 1212257   | R1A05M933W-1216 | 3/4"   | 3/4-14   | 1     | 47,0    | 20,0   | 52,4   | 26,2   | 11,0    |
| 1212258   | R1A05M933W-1612 | 1"     | 1-11     | 3/4   | 45,0    | 25,0   | 47,6   | 22,2   | 11,0    |
| 1212259   | R1A05M933W-1616 | 1"     | 1-11     | 1     | 48,0    | 25,0   | 52,4   | 26,2   | 11,0    |
| 1212260   | R1A05M933W-1620 | 1"     | 1-11     | 1 1/4 | 54,0    | 25,0   | 58,7   | 30,2   | 11,5    |
| 1212261   | R1A05M933W-2016 | 1" 1/4 | 1 1/4-11 | 1     | 49,0    | 31,0   | 52,4   | 26,2   | 11,0    |
| 1212262   | R1A05M933W-2020 | 1" 1/4 | 1 1/4-11 | 1 1/4 | 55,0    | 31,0   | 58,7   | 30,2   | 11,5    |
| 1212263   | R1A05M933W-2024 | 1" 1/4 | 1 1/4-11 | 1 1/2 | 59,0    | 31,0   | 69,9   | 35,7   | 13,5    |
| 1212264   | R1A05M933W-2420 | 1" 1/2 | 1 1/2-11 | 1 1/4 | 56,0    | 37,0   | 58,7   | 30,2   | 11,5    |
| 1212265   | R1A05M933W-2424 | 1" 1/2 | 1 1/2-11 | 1 1/2 | 61,0    | 37,0   | 69,9   | 35,7   | 13,5    |

## // R1A05M936W

90° flange SAE J518 code 62

BSP - High pressure

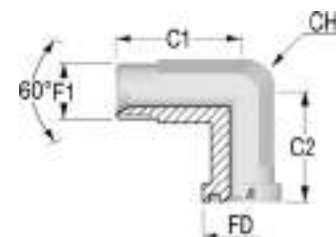


| Item Code | Product Code    | OD1    | F1       | F2    | C1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|--------|----------|-------|---------|--------|--------|--------|---------|
| 1212278   | R1A05M936W-0608 | 3/8"   | 3/8-19   | 1/2   | 37,0    | 17,0   | 38,1   | 17,5   | 9,0     |
| 1212279   | R1A05M936W-0808 | 1/2"   | 1/2-14   | 1/2   | 39,0    | 17,0   | 38,1   | 17,5   | 9,0     |
| 1212280   | R1A05M936W-0812 | 1/2"   | 1/2-14   | 3/4   | 41,0    | 20,0   | 47,6   | 22,2   | 11,0    |
| 1212281   | R1A05M936W-1208 | 3/4"   | 3/4-14   | 1/2   | 40,0    | 20,0   | 38,1   | 17,5   | 9,0     |
| 1212282   | R1A05M936W-1212 | 3/4"   | 3/4-14   | 3/4   | 44,0    | 20,0   | 47,6   | 22,2   | 11,0    |
| 1212283   | R1A05M936W-1216 | 3/4"   | 3/4-14   | 1     | 47,0    | 20,0   | 52,4   | 26,2   | 11,0    |
| 1212284   | R1A05M936W-1612 | 1"     | 1-11     | 3/4   | 45,0    | 25,0   | 47,6   | 22,2   | 11,0    |
| 1212285   | R1A05M936W-1616 | 1"     | 1-11     | 1     | 48,0    | 25,0   | 52,4   | 26,2   | 11,0    |
| 1212286   | R1A05M936W-1620 | 1"     | 1-11     | 1 1/4 | 54,0    | 25,0   | 58,7   | 30,2   | 11,5    |
| 1212287   | R1A05M936W-2016 | 1" 1/4 | 1 1/4-11 | 1     | 49,0    | 31,0   | 52,4   | 26,2   | 11,0    |
| 1212288   | R1A05M936W-2020 | 1" 1/4 | 1 1/4-11 | 1 1/4 | 55,0    | 31,0   | 58,7   | 30,2   | 11,5    |
| 1212289   | R1A05M936W-2024 | 1" 1/4 | 1 1/4-11 | 1 1/2 | 59,0    | 31,0   | 69,9   | 35,7   | 13,5    |
| 1212290   | R1A05M936W-2420 | 1" 1/2 | 1 1/2-11 | 1 1/4 | 56,0    | 37,0   | 58,7   | 30,2   | 11,5    |
| 1212291   | R1A05M936W-2424 | 1" 1/2 | 1 1/2-11 | 1 1/2 | 61,0    | 37,0   | 69,9   | 35,7   | 13,5    |

## // R1A05M9334

90° adjustable flange SAE J518 code 61

BSP - Low pressure

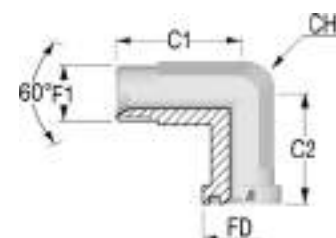


| Item Code | Product Code    | OD1    | F1       | F2    | C1 (mm) | C2 (mm) | FD (mm) | CH (mm) |
|-----------|-----------------|--------|----------|-------|---------|---------|---------|---------|
| 1212266   | R1A05M9334-0608 | 3/8"   | 3/8-19   | 1/2   | 44,0    | 50,0    | 30,2    | 22,0    |
| 1212267   | R1A05M9334-0808 | 1/2"   | 1/2-14   | 1/2   | 48,0    | 42,0    | 30,2    | 22,0    |
| 1212268   | R1A05M9334-0812 | 1/2"   | 1/2-14   | 3/4   | 53,0    | 64,0    | 38,1    | 22,0    |
| 1212269   | R1A05M9334-1212 | 3/4"   | 3/4-14   | 3/4   | 53,0    | 64,0    | 38,1    | 27,0    |
| 1212270   | R1A05M9334-1216 | 3/4"   | 3/4-14   | 1     | 60,0    | 65,0    | 44,5    | 27,0    |
| 1212271   | R1A05M9334-1612 | 1"     | 1-11     | 3/4   | 53,0    | 64,0    | 38,1    | 34,0    |
| 1212272   | R1A05M9334-1616 | 1"     | 1-11     | 1     | 60,0    | 65,0    | 44,5    | 34,0    |
| 1212273   | R1A05M9334-1620 | 1"     | 1-11     | 1 1/4 | 55,0    | 64,0    | 50,8    | 34,0    |
| 1212274   | R1A05M9334-2016 | 1 1/4" | 1 1/4-11 | 1     | 60,0    | 65,0    | 44,5    | 42,0    |
| 1212275   | R1A05M9334-2020 | 1 1/4" | 1 1/4-11 | 1 1/4 | 55,0    | 64,0    | 50,8    | 42,0    |
| 1212276   | R1A05M9334-2024 | 1 1/4" | 1 1/4-11 | 1 1/2 | 66,0    | 78,0    | 60,3    | 42,0    |
| 1212277   | R1A05M9334-2424 | 1 1/2" | 1 1/2-11 | 1 1/2 | 66,0    | 78,0    | 60,3    | 50,0    |

## // R1A05M9364

90° adjustable flange SAE J518 code 62

BSP - High pressure



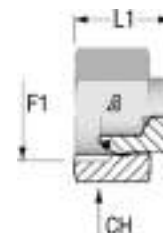
| Item Code | Product Code    | OD1    | F1       | F2    | C1 (mm) | C2 (mm) | FD (mm) | CH (mm) |
|-----------|-----------------|--------|----------|-------|---------|---------|---------|---------|
| 1212292   | R1A05M9364-0608 | 3/8"   | 3/8-19   | 1/2   | 44,0    | 50,0    | 31,8    | 22,0    |
| 1212293   | R1A05M9364-0808 | 1/2"   | 1/2-14   | 1/2   | 49,0    | 43,0    | 31,8    | 22,0    |
| 1212294   | R1A05M9364-0812 | 1/2"   | 1/2-14   | 3/4   | 53,0    | 64,0    | 41,3    | 22,0    |
| 1212295   | R1A05M9364-1212 | 3/4"   | 3/4-14   | 3/4   | 53,0    | 64,0    | 41,3    | 27,0    |
| 1212296   | R1A05M9364-1216 | 3/4"   | 3/4-14   | 1     | 60,0    | 62,0    | 47,6    | 27,0    |
| 1212297   | R1A05M9364-1612 | 1"     | 1-11     | 3/4   | 59,5    | 54,5    | 41,3    | 30,0    |
| 1212298   | R1A05M9364-1616 | 1"     | 1-11     | 1     | 60,0    | 62,0    | 47,6    | 34,0    |
| 1212299   | R1A05M9364-1620 | 1"     | 1-11     | 1 1/4 | 70,0    | 72,0    | 54,0    | 34,0    |
| 1212300   | R1A05M9364-2016 | 1 1/4" | 1 1/4-11 | 1     | 72,0    | 70,0    | 47,6    | 41,0    |
| 1212301   | R1A05M9364-2020 | 1 1/4" | 1 1/4-11 | 1 1/4 | 70,0    | 72,0    | 54,0    | 42,0    |
| 1212302   | R1A05M9364-2024 | 1 1/4" | 1 1/4-11 | 1 1/2 | 80,0    | 84,0    | 63,5    | 42,0    |
| 1212303   | R1A05M9364-2424 | 1 1/2" | 1 1/2-11 | 1 1/2 | 80,0    | 84,0    | 63,5    | 50,0    |

REV.2.1

## // PLUG

## // R1A0531000

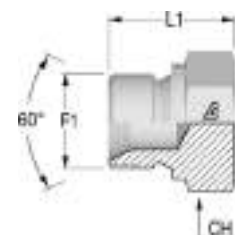
Cap BSP 60° Female



| Item Code | Product Code    | OD1    | F1       | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|----------|---------|---------|
| 1207690   | R1A0531000-0400 | 1/4"   | 1/4-19   | 19,0    | 19,0    |
| 1207691   | R1A0531000-0600 | 3/8"   | 3/8-19   | 21,0    | 22,0    |
| 1207692   | R1A0531000-0800 | 1/2"   | 1/2-14   | 23,3    | 27,0    |
| 1207693   | R1A0531000-1000 | 5/8"   | 5/8-14   | 26,0    | 27,0    |
| 1207694   | R1A0531000-1200 | 3/4"   | 3/4-14   | 21,5    | 32,0    |
| 1207695   | R1A0531000-1600 | 1"     | 1-11     | 32,0    | 38,0    |
| 1207696   | R1A0531000-2000 | 1 1/4" | 1 1/4-11 | 32,0    | 50,0    |
| 1210712   | R1A0531000-2400 | 1 1/2" | 1 1/2-11 | 38,0    | 55,0    |

## // R1A05M1000

Plug BSP 60° Male



| Item Code | Product Code    | OD1    | F1       | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|----------|---------|---------|
| 1207662   | R1A05M1000-0200 | 1/8"   | 1/8-28   | 14,5    | 14,0    |
| 1207663   | R1A05M1000-0400 | 1/4"   | 1/4-19   | 19,0    | 19,0    |
| 1207664   | R1A05M1000-0600 | 3/8"   | 3/8-19   | 20,5    | 22,0    |
| 1207665   | R1A05M1000-0800 | 1/2"   | 1/2-14   | 24,0    | 27,0    |
| 1210952   | R1A05M1000-1000 | 5/8"   | 5/8-14   | 24,0    | 30,0    |
| 1207666   | R1A05M1000-1200 | 3/4"   | 3/4-14   | 26,5    | 32,0    |
| 1207667   | R1A05M1000-1600 | 1"     | 1-11     | 30,0    | 41,0    |
| 1207668   | R1A05M1000-2000 | 1 1/4" | 1 1/4-11 | 39,0    | 50,0    |
| 1207669   | R1A05M1000-2400 | 1 1/2" | 1 1/2-11 | 43,0    | 55,0    |



**ALSO AVAILABLE IN STAINLESS STEEL**

## // JIC 37° ADAPTERS

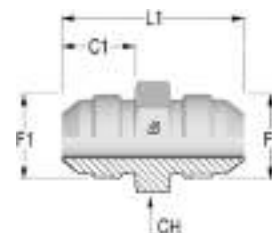
|                           |     |                     |     |
|---------------------------|-----|---------------------|-----|
| // MALE UNION.....        | 153 | // SAE UNF.....     | 175 |
| // MALE/FEMALE UNION..... | 155 | // NPTF.....        | 182 |
| // BULKHEAD.....          | 158 | // FLANGES.....     | 185 |
| // BSPP-BSPT.....         | 161 | // ACCESSORIES..... | 188 |
| // METRIC.....            | 171 | // PLUG.....        | 189 |

REV.2.1

## // MALE UNION

## // R1A25M125M

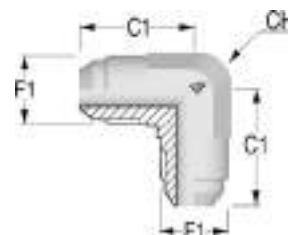
Straight union JIC Male



| Item Code | Product Code    | OD1   | F1        | C1 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|
| 1203685   | R1A25M125M-0404 | 1/4"  | 7/16-20   | 14,0    | 35,0    | 12,0    |
| 1203628   | R1A25M125M-0505 | 5/16" | 1/2-20    | 14,0    | 35,0    | 14,0    |
| 1203713   | R1A25M125M-0606 | 3/8"  | 9/16-18   | 14,0    | 36,0    | 17,0    |
| 1203670   | R1A25M125M-0808 | 1/2"  | 3/4-16    | 16,5    | 41,0    | 22,0    |
| 1203698   | R1A25M125M-1010 | 5/8"  | 7/8-14    | 19,5    | 48,0    | 24,0    |
| 1203616   | R1A25M125M-1212 | 3/4"  | 1 1/16-12 | 22,0    | 55,0    | 30,0    |
| 1216393   | R1A25M125M-1414 | 7/8"  | 1 3/16-12 | 22,5    | 56,5    | 32,0    |
| 1203639   | R1A25M125M-1616 | 1"    | 1 5/16-12 | 23,0    | 57,0    | 36,0    |
| 1203646   | R1A25M125M-2020 | 1"1/4 | 1 5/8-12  | 24,5    | 61,5    | 46,0    |
| 1203653   | R1A25M125M-2424 | 1"1/2 | 1 7/8-12  | 27,5    | 70,0    | 50,0    |

## // R1A25M925M

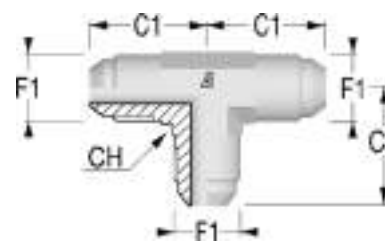
90° union JIC Male



| Item Code | Product Code    | OD1   | F1        | C1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|---------|---------|
| 1203876   | R1A25M925M-0404 | 1/4"  | 7/16-20   | 22,5    | 12,0    |
| 1203842   | R1A25M925M-0505 | 5/16" | 1/2-20    | 24,0    | 14,0    |
| 1203897   | R1A25M925M-0606 | 3/8"  | 9/16-18   | 27,0    | 14,0    |
| 1203866   | R1A25M925M-0808 | 1/2"  | 3/4-16    | 32,0    | 19,0    |
| 1203884   | R1A25M925M-1010 | 5/8"  | 7/8-14    | 37,0    | 22,0    |
| 1203836   | R1A25M925M-1212 | 3/4"  | 1 1/16-12 | 42,0    | 27,0    |
| 1216421   | R1A25M925M-1414 | 7/8"  | 1 3/16-12 | 44,0    | 33,0    |
| 1203849   | R1A25M925M-1616 | 1"    | 1 5/16-12 | 46,0    | 33,0    |
| 1203855   | R1A25M925M-2020 | 1"1/4 | 1 5/8-12  | 52,5    | 41,0    |
| 1206334   | R1A25M925M-2424 | 1"1/2 | 1 7/8-12  | 59,0    | 48,0    |

## // R1A25MT25M

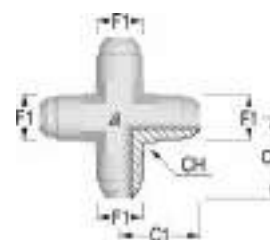
## Branch Tee union JIC Male



| Item Code | Product Code    | OD1   | F1        | C1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|---------|---------|
| 1203950   | R1A25MT25M-0404 | 1/4"  | 7/16-20   | 22,5    | 12,0    |
| 1203945   | R1A25MT25M-0505 | 5/16" | 1/2-20    | 24,0    | 14,0    |
| 1203954   | R1A25MT25M-0606 | 3/8"  | 9/16-18   | 27,0    | 14,0    |
| 1203948   | R1A25MT25M-0808 | 1/2"  | 3/4-16    | 32,0    | 19,0    |
| 1203952   | R1A25MT25M-1010 | 5/8"  | 7/8-14    | 37,0    | 22,0    |
| 1203944   | R1A25MT25M-1212 | 3/4"  | 1 1/16-12 | 42,0    | 27,0    |
| 1216460   | R1A25MT25M-1414 | 7/8"  | 1 3/16-12 | 44,0    | 33,0    |
| 1203947   | R1A25MT25M-1616 | 1"    | 1 5/16-12 | 46,0    | 33,0    |
| 1205959   | R1A25MT25M-2020 | 1"1/4 | 1 5/8-12  | 52,5    | 41,0    |
| 1206335   | R1A25MT25M-2424 | 1"1/2 | 1 7/8-12  | 59,0    | 48,0    |

## // R1A25MX25M

## Cross union JIC Male



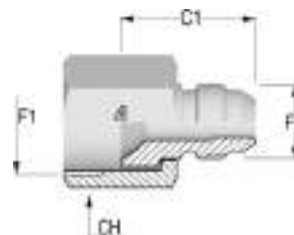
| Item Code | Product Code    | OD1   | F1        | C1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|---------|---------|
| 1206909   | R1A25MX25M-0404 | 1/4"  | 7/16-20   | 22,5    | 12,0    |
| 1205451   | R1A25MX25M-0505 | 5/16" | 1/2-20    | 24,0    | 14,0    |
| 1205455   | R1A25MX25M-0606 | 3/8"  | 9/16-18   | 27,0    | 14,0    |
| 1205453   | R1A25MX25M-0808 | 1/2"  | 3/4-16    | 32,0    | 19,0    |
| 1205454   | R1A25MX25M-1010 | 5/8"  | 7/8-14    | 37,0    | 22,0    |
| 1206835   | R1A25MX25M-1212 | 3/4"  | 1 1/16-12 | 42,0    | 27,0    |
| 1216494   | R1A25MX25M-1414 | 7/8"  | 1 3/16-12 | 44,0    | 33,0    |
| 1205452   | R1A25MX25M-1616 | 1"    | 1 5/16-12 | 46,0    | 33,0    |
| 1212823   | R1A25MX25M-2020 | 1"1/4 | 1 5/8-12  | 52,5    | 41,0    |
| 1212824   | R1A25MX25M-2424 | 1"1/2 | 1 7/8-12  | 59,0    | 48,0    |

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## // MALE/FEMALE UNION

## // R1A253125M

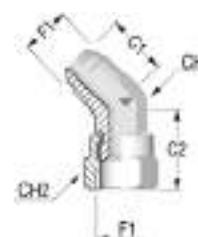
Straight reducing JIC Female - Male



| Item Code | Product Code    | OD1    | F1        | F2        | C1 (mm) | CH (mm) |
|-----------|-----------------|--------|-----------|-----------|---------|---------|
| 1207357   | R1A253125M-0604 | 3/8"   | 9/16-18   | 7/16-20   | 24,5    | 19,0    |
| 1207615   | R1A253125M-0605 | 3/8"   | 9/16-18   | 1/2-20    | 25,0    | 19,0    |
| 1207358   | R1A253125M-0804 | 1/2"   | 3/4-16    | 7/16-20   | 25,5    | 22,0    |
| 1207359   | R1A253125M-0805 | 1/2"   | 3/4-16    | 1/2-20    | 25,5    | 22,0    |
| 1207360   | R1A253125M-0806 | 1/2"   | 3/4-16    | 9/16-18   | 25,5    | 22,0    |
| 1207361   | R1A253125M-1004 | 5/8"   | 7/8-14    | 7/16-20   | 26,5    | 27,0    |
| 1207362   | R1A253125M-1006 | 5/8"   | 7/8-14    | 9/16-18   | 26,5    | 27,0    |
| 1207616   | R1A253125M-1008 | 5/8"   | 7/8-14    | 3/4-16    | 32,5    | 27,0    |
| 1207363   | R1A253125M-1204 | 3/4"   | 1 1/16-12 | 7/16-20   | 27,0    | 32,0    |
| 1207364   | R1A253125M-1206 | 3/4"   | 1 1/16-12 | 9/16-18   | 27,0    | 32,0    |
| 1207365   | R1A253125M-1208 | 3/4"   | 1 1/16-12 | 3/4-16    | 30,5    | 32,0    |
| 1207617   | R1A253125M-1210 | 3/4"   | 1 1/16-12 | 7/8-14    | 34,5    | 32,0    |
| 1216344   | R1A253125M-1412 | 7/8"   | 1 3/16-12 | 1 1/16-12 | 36,4    | 36,0    |
| 1216365   | R1A253125M-1606 | 1"     | 1 5/16-12 | 9/16-18   | 28,5    | 41,0    |
| 1216366   | R1A253125M-1608 | 1"     | 1 5/16-12 | 3/4-16    | 31,0    | 41,0    |
| 1208272   | R1A253125M-1610 | 1"     | 1 5/16-12 | 7/8-14    | 34,0    | 41,0    |
| 1207367   | R1A253125M-1612 | 1"     | 1 5/16-12 | 1 1/16-12 | 37,5    | 41,0    |
| 1213168   | R1A253125M-1614 | 1"     | 1 5/16-12 | 1 3/16-12 | 39,5    | 38,0    |
| 1207366   | R1A253125M-2012 | 1 1/4" | 1 5/8-12  | 1 1/16-12 | 39,1    | 50,0    |
| 1207368   | R1A253125M-2016 | 1 1/4" | 1 5/8-12  | 1 5/16-12 | 40,0    | 50,0    |
| 1216367   | R1A253125M-2416 | 1 1/2" | 1 7/8-12  | 1 5/16-12 | 46,3    | 60,0    |
| 1207369   | R1A253125M-2420 | 1 1/2" | 1 7/8-12  | 1 5/8-12  | 47,8    | 60,0    |

## // R1A25M4251

45° union JIC Male - Female



| Item Code | Product Code    | OD1    | F1        | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|-----------|---------|---------|---------|----------|
| 1207343   | R1A25M4251-0404 | 1/4"   | 7/16-20   | 18,5    | 23,7    | 12,0    | 16,0     |
| 1207342   | R1A25M4251-0505 | 5/16"  | 1/2-20    | 20,0    | 25,5    | 14,0    | 17,0     |
| 1207341   | R1A25M4251-0606 | 3/8"   | 9/16-18   | 21,5    | 28,5    | 14,0    | 19,0     |
| 1207344   | R1A25M4251-0808 | 1/2"   | 3/4-16    | 24,5    | 32,7    | 19,0    | 25,0     |
| 1206944   | R1A25M4251-1010 | 5/8"   | 7/8-14    | 28,0    | 36,7    | 22,0    | 27,0     |
| 1207345   | R1A25M4251-1212 | 3/4"   | 1 1/16-12 | 32,5    | 38,3    | 27,0    | 32,0     |
| 1216410   | R1A25M4251-1414 | 7/8"   | 1 3/16-12 | 35,4    | 43,0    | 33,0    | 36,0     |
| 1207346   | R1A25M4251-1616 | 1"     | 1 5/16-12 | 36,5    | 44,6    | 33,0    | 38,0     |
| 1207347   | R1A25M4252-2020 | 1 1/4" | 1 5/8-12  | 40,5    | 51,4    | 41,0    | 50,0     |
| 1210765   | R1A25M4252-2424 | 1 1/2" | 1 7/8-12  | 45,0    | 57,1    | 48,0    | 55,0     |

## // R1A25M9251

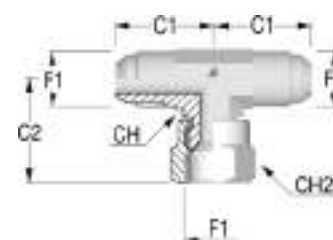
90° union JIC Male - Female



| Item Code | Product Code    | OD1    | F1        | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|-----------|---------|---------|---------|----------|
| 1207266   | R1A25M9251-0404 | 1/4"   | 7/16-20   | 22,5    | 25,2    | 12,0    | 16,0     |
| 1207267   | R1A25M9251-0505 | 5/16"  | 1/2-20    | 24,5    | 27,0    | 14,0    | 17,0     |
| 1207268   | R1A25M9251-0606 | 3/8"   | 9/16-18   | 27,0    | 32,0    | 14,0    | 19,0     |
| 1207269   | R1A25M9251-0808 | 1/2"   | 3/4-16    | 32,5    | 35,2    | 19,0    | 25,0     |
| 1207270   | R1A25M9251-1010 | 5/8"   | 7/8-14    | 36,5    | 41,5    | 22,0    | 27,0     |
| 1207271   | R1A25M9251-1212 | 3/4"   | 1 1/16-12 | 42,0    | 44,3    | 27,0    | 32,0     |
| 1216420   | R1A25M9251-1414 | 7/8"   | 1 3/16-12 | 45,5    | 48,0    | 33,0    | 36,0     |
| 1207272   | R1A25M9251-1616 | 1"     | 1 5/16-12 | 46,0    | 50,6    | 33,0    | 38,0     |
| 1207273   | R1A25M9252-2020 | 1" 1/4 | 1 5/8-12  | 52,5    | 58,9    | 41,0    | 50,0     |
| 1207274   | R1A25M9252-2424 | 1" 1/2 | 1 7/8-12  | 59,0    | 65,6    | 48,0    | 55,0     |

## // R1A25MT251

Branch Tee union JIC Male - Female

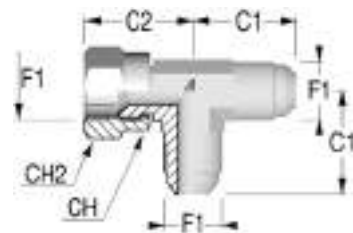


| Item Code | Product Code    | OD1    | F1        | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|-----------|---------|---------|---------|----------|
| 1207304   | R1A25MT251-0404 | 1/4"   | 7/16-20   | 22,5    | 22,5    | 12,0    | 16,0     |
| 1207305   | R1A25MT251-0505 | 5/16"  | 1/2-20    | 24,0    | 24,0    | 14,0    | 17,0     |
| 1207306   | R1A25MT251-0606 | 3/8"   | 9/16-18   | 27,0    | 27,0    | 14,0    | 19,0     |
| 1207307   | R1A25MT251-0808 | 1/2"   | 3/4-16    | 32,0    | 32,0    | 19,0    | 25,0     |
| 1207308   | R1A25MT251-1010 | 5/8"   | 7/8-14    | 36,5    | 36,5    | 22,0    | 27,0     |
| 1207309   | R1A25MT251-1212 | 3/4"   | 1 1/16-12 | 42,0    | 42,0    | 27,0    | 32,0     |
| 1216459   | R1A25MT251-1414 | 7/8"   | 1 3/16-12 | 45,5    | 45,5    | 33,0    | 36,0     |
| 1207310   | R1A25MT251-1616 | 1"     | 1 5/16-12 | 46,0    | 46,0    | 33,0    | 38,0     |
| 1207311   | R1A25MT252-2020 | 1" 1/4 | 1 5/8-12  | 52,5    | 52,5    | 41,0    | 50,0     |
| 1207312   | R1A25MT252-2424 | 1" 1/2 | 1 7/8-12  | 59,0    | 59,0    | 48,0    | 50,0     |

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// R1A25ML251

Run Tee union JIC Male - Female

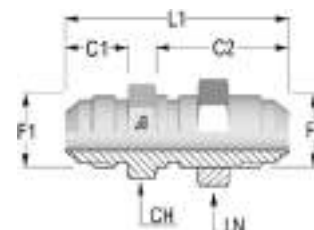


| Item Code | Product Code    | OD1    | F1        | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|-----------|---------|---------|---------|----------|
| 1207283   | R1A25ML251-0404 | 1/4"   | 7/16-20   | 22,5    | 25,2    | 12,0    | 16,0     |
| 1207284   | R1A25ML251-0505 | 5/16"  | 1/2-20    | 24,0    | 27,0    | 14,0    | 17,0     |
| 1207285   | R1A25ML251-0606 | 3/8"   | 9/16-18   | 27,0    | 32,0    | 14,0    | 19,0     |
| 1207286   | R1A25ML251-0808 | 1/2"   | 3/4-16    | 32,0    | 35,2    | 19,0    | 25,0     |
| 1207287   | R1A25ML251-1010 | 5/8"   | 7/8-14    | 36,5    | 41,5    | 22,0    | 27,0     |
| 1207288   | R1A25ML251-1212 | 3/4"   | 1 1/16-12 | 42,0    | 44,3    | 27,0    | 32,0     |
| 1216434   | R1A25ML251-1414 | 7/8"   | 1 3/16-12 | 45,5    | 46,5    | 33,0    | 36,0     |
| 1207289   | R1A25ML251-1616 | 1"     | 1 5/16-12 | 46,0    | 50,5    | 33,0    | 38,0     |
| 1207290   | R1A25ML252-2020 | 1" 1/4 | 1 5/8-12  | 52,5    | 59,0    | 41,0    | 50,0     |
| 1207291   | R1A25ML252-2424 | 1" 1/2 | 1 7/8-12  | 59,0    | 65,6    | 48,0    | 55,0     |

## // BULKHEAD

## // R1A25M125T

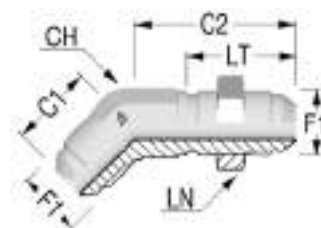
## Straight union JIC Bulkhead



| Item Code | Product Code    | OD1   | F1        | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1203686   | R1A25M125T-0404 | 1/4"  | 7/16-20   | 14,0    | 30,5    | 52,5    | 17,0    | 17,0    |
| 1203629   | R1A25M125T-0505 | 5/16" | 1/2-20    | 14,0    | 30,5    | 52,5    | 19,0    | 19,0    |
| 1203714   | R1A25M125T-0606 | 3/8"  | 9/16-18   | 14,0    | 32,5    | 55,5    | 22,0    | 22,0    |
| 1203671   | R1A25M125T-0808 | 1/2"  | 3/4-16    | 16,5    | 36,5    | 62,0    | 24,0    | 24,0    |
| 1203699   | R1A25M125T-1010 | 5/8"  | 7/8-14    | 19,5    | 40,0    | 69,5    | 30,0    | 30,0    |
| 1203617   | R1A25M125T-1212 | 3/4"  | 1 1/16-12 | 22,0    | 44,5    | 78,5    | 36,0    | 36,0    |
| 1216394   | R1A25M125T-1414 | 7/8"  | 1 3/16-12 | 22,5    | 44,5    | 79,2    | 38,0    | 41,0    |
| 1203640   | R1A25M125T-1616 | 1"    | 1 5/16-12 | 23,0    | 44,5    | 80,0    | 41,0    | 41,0    |
| 1203647   | R1A25M125T-2020 | 1"1/4 | 1 5/8-12  | 24,5    | 45,5    | 84,0    | 50,0    | 50,0    |
| 1211675   | R1A25M125T-2424 | 1"1/2 | 1 7/8-12  | 27,5    | 46,0    | 89,5    | 55,0    | 55,0    |

## // R1A25M425T

## 45° union JIC Bulkhead

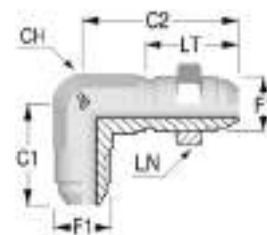


| Item Code | Product Code    | OD1   | F1        | C1 (mm) | C2 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1210766   | R1A25M425T-0404 | 1/4"  | 7/16-20   | 18,5    | 39,0    | 25,9    | 12,0    | 17,0    |
| 1211706   | R1A25M425T-0505 | 5/16" | 1/2-20    | 19,5    | 42,0    | 25,9    | 14,0    | 19,0    |
| 1208045   | R1A25M425T-0606 | 3/8"  | 9/16-18   | 20,0    | 42,7    | 27,7    | 14,0    | 22,0    |
| 1210767   | R1A25M425T-0808 | 1/2"  | 3/4-16    | 25,0    | 49,5    | 31,8    | 19,0    | 24,0    |
| 1210768   | R1A25M425T-1010 | 5/8"  | 7/8-14    | 28,0    | 55,0    | 35,3    | 22,0    | 30,0    |
| 1210769   | R1A25M425T-1212 | 3/4"  | 1 1/16-12 | 32,5    | 62,0    | 39,6    | 27,0    | 36,0    |
| 1216411   | R1A25M425T-1414 | 7/8"  | 1 3/16-12 | 35,0    | 63,5    | 39,6    | 33,0    | 38,0    |
| 1210770   | R1A25M425T-1616 | 1"    | 1 5/16-12 | 37,5    | 65,0    | 39,6    | 33,0    | 41,0    |
| 1211707   | R1A25M425T-2020 | 1"1/4 | 1 5/8-12  | 40,0    | 67,5    | 40,9    | 41,0    | 50,0    |
| 1211708   | R1A25M425T-2424 | 1"1/2 | 1 7/8-12  | 45,0    | 68,0    | 41,1    | 48,0    | 55,0    |

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## // R1A25M925T

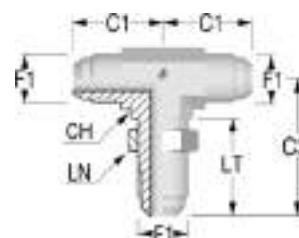
## 90° union JIC Bulkhead



| Item Code | Product Code    | OD1   | F1        | C1 (mm) | C2 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1205564   | R1A25M925T-0404 | 1/4"  | 7/16-20   | 24,5    | 40,5    | 25,9    | 12,0    | 17,0    |
| 1206405   | R1A25M925T-0505 | 5/16" | 1/2-20    | 27,0    | 43,5    | 25,9    | 14,0    | 19,0    |
| 1203898   | R1A25M925T-0606 | 3/8"  | 9/16-18   | 27,5    | 46,0    | 27,7    | 14,0    | 22,0    |
| 1203867   | R1A25M925T-0808 | 1/2"  | 3/4-16    | 34,5    | 53,5    | 31,8    | 19,0    | 24,0    |
| 1203885   | R1A25M925T-1010 | 5/8"  | 7/8-14    | 39,5    | 60,5    | 35,3    | 22,0    | 30,0    |
| 1206783   | R1A25M925T-1212 | 3/4"  | 1 1/16-12 | 45,0    | 68,0    | 39,6    | 27,0    | 36,0    |
| 1216422   | R1A25M925T-1414 | 7/8"  | 1 3/16-12 | 47,0    | 69,0    | 39,6    | 33,0    | 38,0    |
| 1211735   | R1A25M925T-1616 | 1"    | 1 5/16-12 | 49,5    | 71,0    | 39,6    | 33,0    | 41,0    |
| 1211736   | R1A25M925T-2020 | 1"1/4 | 1 5/8-12  | 55,0    | 79,0    | 40,9    | 41,0    | 50,0    |
| 1208117   | R1A25M925T-2424 | 1"1/2 | 1 7/8-12  | 59,5    | 87,0    | 41,1    | 48,0    | 55,0    |

## // R1A25MT25T

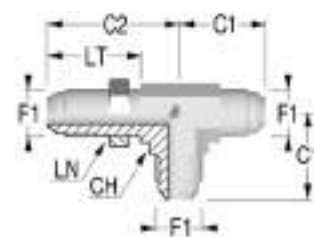
## Branch Tee union JIC Bulkhead



| Item Code | Product Code    | OD1   | F1        | C1 (mm) | C3 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1208139   | R1A25MT25T-0404 | 1/4"  | 7/16-20   | 24,5    | 40,5    | 25,9    | 12,0    | 17,0    |
| 1210747   | R1A25MT25T-0505 | 5/16" | 1/2-20    | 27,0    | 43,5    | 25,9    | 14,0    | 19,0    |
| 1210748   | R1A25MT25T-0606 | 3/8"  | 9/16-18   | 27,5    | 46,0    | 27,7    | 14,0    | 22,0    |
| 1205586   | R1A25MT25T-0808 | 1/2"  | 3/4-16    | 34,5    | 53,5    | 31,8    | 19,0    | 24,0    |
| 1211637   | R1A25MT25T-1010 | 5/8"  | 7/8-14    | 39,5    | 60,5    | 35,3    | 22,0    | 30,0    |
| 1211638   | R1A25MT25T-1212 | 3/4"  | 1 1/16-12 | 45,0    | 68,0    | 39,6    | 27,0    | 36,0    |
| 1216462   | R1A25MT25T-1414 | 7/8"  | 1 3/16-12 | 49,0    | 69,0    | 39,6    | 33,0    | 38,0    |
| 1212775   | R1A25MT25T-1616 | 1"    | 1 5/16-12 | 49,5    | 71,0    | 39,6    | 33,0    | 41,0    |
| 1208225   | R1A25MT25T-2020 | 1"1/4 | 1 5/8-12  | 55,0    | 79,0    | 40,9    | 41,0    | 50,0    |
| 1212776   | R1A25MT25T-2424 | 1"1/2 | 1 7/8-12  | 59,5    | 87,0    | 41,1    | 48,0    | 55,0    |

## // R1A25ML25T

## Run Tee union JIC Bulkhead



| Item Code | Product Code    | OD1   | F1        | C1 (mm) | C2 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1211617   | R1A25ML25T-0404 | 1/4"  | 7/16-20   | 24,5    | 40,5    | 25,9    | 12,0    | 17,0    |
| 1211618   | R1A25ML25T-0505 | 5/16" | 1/2-20    | 27,0    | 43,5    | 25,9    | 14,0    | 19,0    |
| 1206974   | R1A25ML25T-0606 | 3/8"  | 9/16-18   | 27,5    | 46,0    | 27,7    | 14,0    | 22,0    |
| 1211619   | R1A25ML25T-0808 | 1/2"  | 3/4-16    | 34,5    | 53,5    | 32,0    | 19,0    | 24,0    |
| 1210743   | R1A25ML25T-1010 | 5/8"  | 7/8-14    | 39,5    | 60,5    | 35,3    | 22,0    | 30,0    |
| 1211620   | R1A25ML25T-1212 | 3/4"  | 1 1/16-12 | 45,0    | 68,0    | 39,6    | 27,0    | 36,0    |
| 1216435   | R1A25ML25T-1414 | 7/8"  | 1 3/16-12 | 47,0    | 69,0    | 39,6    | 33,0    | 38,0    |
| 1212713   | R1A25ML25T-1616 | 1"    | 1 5/16-12 | 49,5    | 71,0    | 39,6    | 33,0    | 41,0    |
| 1212714   | R1A25ML25T-2020 | 1"1/4 | 1 5/8-12  | 55,0    | 79,0    | 40,9    | 41,0    | 50,0    |
| 1212715   | R1A25ML25T-2424 | 1"1/2 | 1 7/8-12  | 59,5    | 87,0    | 41,1    | 48,0    | 55,0    |

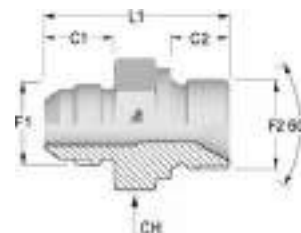
REV.2.1

## // BSPP-BSPT

## // R1A25M105M

Straight connector

JIC Male - BSP 60° Male

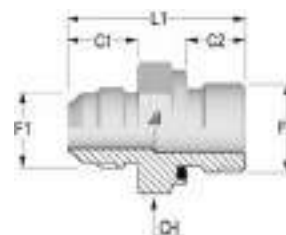


| Item Code | Product Code    | OD1   | F1        | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|----------|---------|---------|---------|---------|
| 1212826   | R1A25M105M-0402 | 1/4"  | 7/16-20   | 1/8-28   | 14,0    | 9,5     | 29,0    | 14,0    |
| 1212827   | R1A25M105M-0404 | 1/4"  | 7/16-20   | 1/4-19   | 14,0    | 13,0    | 34,0    | 19,0    |
| 1212828   | R1A25M105M-0406 | 1/4"  | 7/16-20   | 3/8-19   | 14,0    | 15,5    | 35,5    | 22,0    |
| 1212829   | R1A25M105M-0408 | 1/4"  | 7/16-20   | 1/2-14   | 14,0    | 17,0    | 40,0    | 27,0    |
| 1212830   | R1A25M105M-0502 | 5/16" | 1/2-20    | 1/8-28   | 14,0    | 9,5     | 29,0    | 14,0    |
| 1212831   | R1A25M105M-0504 | 5/16" | 1/2-20    | 1/4-19   | 14,0    | 13,0    | 32,0    | 19,0    |
| 1212832   | R1A25M105M-0604 | 3/8"  | 9/16-18   | 1/4-19   | 14,0    | 13,0    | 34,0    | 19,0    |
| 1212833   | R1A25M105M-0606 | 3/8"  | 9/16-18   | 3/8-19   | 14,0    | 15,5    | 35,5    | 22,0    |
| 1212834   | R1A25M105M-0608 | 3/8"  | 9/16-18   | 1/2-14   | 14,0    | 17,0    | 41,0    | 27,0    |
| 1212835   | R1A25M105M-0804 | 1/2"  | 3/4-16    | 1/4-19   | 16,5    | 13,0    | 36,0    | 19,0    |
| 1207735   | R1A25M105M-0806 | 1/2"  | 3/4-16    | 3/8-19   | 16,5    | 15,5    | 38,0    | 22,0    |
| 1207736   | R1A25M105M-0808 | 1/2"  | 3/4-16    | 1/2-14   | 16,5    | 17,0    | 41,0    | 27,0    |
| 1207737   | R1A25M105M-0812 | 1/2"  | 3/4-16    | 3/4-14   | 16,5    | 20,0    | 45,5    | 32,0    |
| 1207738   | R1A25M105M-1006 | 5/8"  | 7/8-14    | 3/8-19   | 19,5    | 15,5    | 41,5    | 24,0    |
| 1205996   | R1A25M105M-1008 | 5/8"  | 7/8-14    | 1/2-14   | 19,5    | 17,0    | 45,5    | 27,0    |
| 1231525   | R1A25M105M-1012 | 5/8"  | 7/8-14    | 3/4-14   | 19,5    | 20,0    | 48,5    | 32,0    |
| 1212837   | R1A25M105M-1208 | 3/4"  | 1 1/16-12 | 1/2-14   | 22,0    | 17,0    | 50,0    | 32,0    |
| 1212838   | R1A25M105M-1212 | 3/4"  | 1 1/16-12 | 3/4-14   | 22,0    | 20,0    | 50,0    | 32,0    |
| 1212839   | R1A25M105M-1216 | 3/4"  | 1 1/16-12 | 1-11     | 22,0    | 18,0    | 53,0    | 41,0    |
| 1216372   | R1A25M105M-1412 | 7/8"  | 1 3/16-12 | 3/4-14   | 22,5    | 20,0    | 51,5    | 32,0    |
| 1212840   | R1A25M105M-1612 | 1"    | 1 5/16-12 | 3/4-14   | 23,0    | 20,0    | 55,0    | 36,0    |
| 1212841   | R1A25M105M-1616 | 1"    | 1 5/16-12 | 1-11     | 23,0    | 22,0    | 54,0    | 41,0    |
| 1212842   | R1A25M105M-1620 | 1"    | 1 5/16-12 | 1 1/4-11 | 23,0    | 23,0    | 56,0    | 50,0    |
| 1207739   | R1A25M105M-2016 | 1"1/4 | 1 5/8-12  | 1-11     | 24,5    | 22,0    | 58,5    | 46,0    |
| 1212843   | R1A25M105M-2020 | 1"1/4 | 1 5/8-12  | 1 1/4-11 | 24,5    | 23,0    | 59,5    | 50,0    |
| 1212844   | R1A25M105M-2420 | 1"1/2 | 1 7/8-12  | 1 1/4-11 | 27,5    | 23,0    | 62,5    | 50,0    |
| 1212845   | R1A25M105M-2424 | 1"1/2 | 1 7/8-12  | 1 1/2-11 | 27,5    | 25,0    | 64,5    | 55,0    |

## // R1A25M106I

Straight connector

JIC Male - BSPP cylindric Male with elastomer



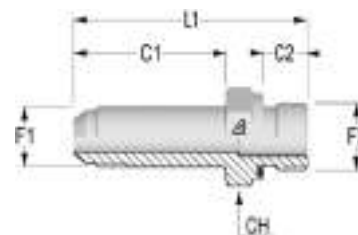
| Item Code | Product Code    | OD1    | F1        | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|-----------|----------|---------|---------|---------|---------|
| 1207410   | R1A25M106I-0402 | 1/4"   | 7/16-20   | 1/8-28   | 14,0    | 8,0     | 30,0    | 14,0    |
| 1207411   | R1A25M106I-0404 | 1/4"   | 7/16-20   | 1/4-19   | 14,0    | 12,0    | 36,0    | 19,0    |
| 1207412   | R1A25M106I-0406 | 1/4"   | 7/16-20   | 3/8-19   | 14,0    | 12,0    | 35,5    | 22,0    |
| 1207413   | R1A25M106I-0408 | 1/4"   | 7/16-20   | 1/2-14   | 14,0    | 14,0    | 39,0    | 27,0    |
| 1207993   | R1A25M106I-0502 | 5/16"  | 1/2-20    | 1/8-28   | 14,0    | 8,0     | 30,5    | 14,0    |
| 1207414   | R1A25M106I-0504 | 5/16"  | 1/2-20    | 1/4-19   | 14,0    | 12,0    | 35,0    | 19,0    |
| 1207415   | R1A25M106I-0506 | 5/16"  | 1/2-20    | 3/8-19   | 14,0    | 12,0    | 35,5    | 22,0    |
| 1207416   | R1A25M106I-0604 | 3/8"   | 9/16-18   | 1/4-19   | 14,0    | 12,0    | 35,0    | 19,0    |
| 1207417   | R1A25M106I-0606 | 3/8"   | 9/16-18   | 3/8-19   | 14,0    | 12,0    | 36,0    | 22,0    |
| 1207418   | R1A25M106I-0608 | 3/8"   | 9/16-18   | 1/2-14   | 14,0    | 14,0    | 39,5    | 27,0    |
| 1207419   | R1A25M106I-0804 | 1/2"   | 3/4-16    | 1/4-19   | 16,5    | 12,0    | 38,5    | 19,0    |
| 1207420   | R1A25M106I-0806 | 1/2"   | 3/4-16    | 3/8-19   | 16,5    | 12,0    | 38,5    | 22,0    |
| 1207421   | R1A25M106I-0808 | 1/2"   | 3/4-16    | 1/2-14   | 16,5    | 14,0    | 42,0    | 27,0    |
| 1207422   | R1A25M106I-0812 | 1/2"   | 3/4-16    | 3/4-14   | 16,5    | 16,0    | 45,5    | 32,0    |
| 1207423   | R1A25M106I-1006 | 5/8"   | 7/8-14    | 3/8-19   | 19,5    | 12,0    | 42,5    | 24,0    |
| 1207424   | R1A25M106I-1008 | 5/8"   | 7/8-14    | 1/2-14   | 19,5    | 14,0    | 44,5    | 27,0    |
| 1207425   | R1A25M106I-1012 | 5/8"   | 7/8-14    | 3/4-14   | 19,5    | 16,0    | 49,5    | 32,0    |
| 1207426   | R1A25M106I-1208 | 3/4"   | 1 1/16-12 | 1/2-14   | 22,0    | 14,0    | 49,0    | 32,0    |
| 1207427   | R1A25M106I-1212 | 3/4"   | 1 1/16-12 | 3/4-14   | 22,0    | 16,0    | 51,0    | 32,0    |
| 1207428   | R1A25M106I-1216 | 3/4"   | 1 1/16-12 | 1-11     | 22,0    | 18,0    | 53,5    | 41,0    |
| 1212875   | R1A25M106I-1412 | 7/8"   | 1 3/16-12 | 3/4-14   | 22,5    | 16,0    | 53,5    | 32,0    |
| 1207429   | R1A25M106I-1612 | 1"     | 1 5/16-12 | 3/4-14   | 23,0    | 16,0    | 51,5    | 36,0    |
| 1207430   | R1A25M106I-1616 | 1"     | 1 5/16-12 | 1-11     | 23,0    | 18,0    | 54,5    | 41,0    |
| 1207431   | R1A25M106I-1620 | 1"     | 1 5/16-12 | 1 1/4-11 | 23,0    | 20,0    | 58,5    | 50,0    |
| 1208006   | R1A25M106I-2016 | 1" 1/4 | 1 5/8-12  | 1-11     | 24,5    | 18,0    | 62,0    | 46,0    |
| 1207432   | R1A25M106I-2020 | 1" 1/4 | 1 5/8-12  | 1 1/4-11 | 24,5    | 20,0    | 60,0    | 50,0    |
| 1207433   | R1A25M106I-2420 | 1" 1/2 | 1 7/8-12  | 1 1/4-11 | 27,5    | 20,0    | 64,0    | 50,0    |
| 1207434   | R1A25M106I-2424 | 1" 1/2 | 1 7/8-12  | 1 1/2-11 | 27,5    | 22,0    | 67,0    | 55,0    |

REV.2.1

## // R1A25M106H

Long connector

JIC Male - BSPP cylindric Male with elastomer



| Item Code | Product Code    | OD1    | F1        | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|-----------|----------|---------|---------|---------|---------|
| 1212846   | R1A25M106H-0402 | 1/4"   | 7/16-20   | 1/8-28   | 35,0    | 8,0     | 50,0    | 14,0    |
| 1212847   | R1A25M106H-0404 | 1/4"   | 7/16-20   | 1/4-19   | 35,0    | 12,0    | 55,5    | 19,0    |
| 1212848   | R1A25M106H-0406 | 1/4"   | 7/16-20   | 3/8-19   | 35,0    | 12,0    | 56,8    | 22,0    |
| 1212849   | R1A25M106H-0408 | 1/4"   | 7/16-20   | 1/2-14   | 35,0    | 14,0    | 60,3    | 27,0    |
| 1212850   | R1A25M106H-0502 | 5/16"  | 1/2-20    | 1/8-28   | 37,0    | 8,0     | 53,3    | 14,0    |
| 1212851   | R1A25M106H-0504 | 5/16"  | 1/2-20    | 1/4-19   | 37,0    | 12,0    | 57,5    | 19,0    |
| 1212852   | R1A25M106H-0506 | 5/16"  | 1/2-20    | 3/8-19   | 37,0    | 12,0    | 57,5    | 22,0    |
| 1212853   | R1A25M106H-0604 | 3/8"   | 9/16-18   | 1/4-19   | 39,0    | 12,0    | 59,5    | 19,0    |
| 1212854   | R1A25M106H-0606 | 3/8"   | 9/16-18   | 3/8-19   | 39,5    | 12,0    | 62,0    | 22,0    |
| 1212855   | R1A25M106H-0608 | 3/8"   | 9/16-18   | 1/2-14   | 39,0    | 14,0    | 63,0    | 27,0    |
| 1212856   | R1A25M106H-0804 | 1/2"   | 3/4-16    | 1/4-19   | 47,8    | 12,0    | 69,8    | 22,0    |
| 1212857   | R1A25M106H-0806 | 1/2"   | 3/4-16    | 3/8-19   | 47,8    | 12,0    | 70,8    | 22,0    |
| 1212858   | R1A25M106H-0808 | 1/2"   | 3/4-16    | 1/2-14   | 48,0    | 14,0    | 73,5    | 27,0    |
| 1212859   | R1A25M106H-0812 | 1/2"   | 3/4-16    | 3/4-14   | 48,0    | 16,0    | 76,8    | 32,0    |
| 1212860   | R1A25M106H-1006 | 5/8"   | 7/8-14    | 3/8-19   | 53,0    | 12,0    | 74,0    | 24,0    |
| 1212861   | R1A25M106H-1008 | 5/8"   | 7/8-14    | 1/2-14   | 53,1    | 14,0    | 78,1    | 27,0    |
| 1212862   | R1A25M106H-1012 | 5/8"   | 7/8-14    | 3/4-14   | 53,1    | 16,0    | 84,1    | 32,0    |
| 1212863   | R1A25M106H-1208 | 3/4"   | 1 1/16-12 | 1/2-14   | 63,5    | 14,0    | 90,5    | 30,0    |
| 1212864   | R1A25M106H-1212 | 3/4"   | 1 1/16-12 | 3/4-14   | 64,0    | 16,0    | 92,5    | 32,0    |
| 1212865   | R1A25M106H-1216 | 3/4"   | 1 1/16-12 | 1-11     | 63,5    | 18,0    | 95,0    | 41,0    |
| 1216388   | R1A25M106H-1412 | 7/8"   | 1 3/16-12 | 3/4-14   | 68,3    | 16,0    | 99,3    | 32,0    |
| 1212866   | R1A25M106H-1612 | 1"     | 1 5/16-12 | 3/4-14   | 72,0    | 16,0    | 100,0   | 36,0    |
| 1212867   | R1A25M106H-1616 | 1"     | 1 5/16-12 | 1-11     | 72,1    | 18,0    | 103,6   | 41,0    |
| 1212868   | R1A25M106H-1620 | 1"     | 1 5/16-12 | 1 1/4-11 | 72,1    | 20,0    | 107,6   | 50,0    |
| 1212869   | R1A25M106H-2016 | 1" 1/4 | 1 5/8-12  | 1-11     | 88,0    | 18,0    | 123,0   | 46,0    |
| 1212870   | R1A25M106H-2020 | 1" 1/4 | 1 5/8-12  | 1 1/4-11 | 88,1    | 20,0    | 123,6   | 50,0    |
| 1212871   | R1A25M106H-2420 | 1" 1/2 | 1 7/8-12  | 1 1/4-11 | 98,6    | 20,0    | 135,1   | 50,0    |
| 1212872   | R1A25M106H-2424 | 1" 1/2 | 1 7/8-12  | 1 1/2-11 | 98,6    | 22,0    | 138,1   | 55,0    |

## // R1A25M406N

45° adjustable elbow connector

JIC Male - BSPP cylindric Male with O-Ring and retaining ring



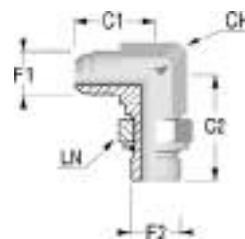
| Item Code | Product Code    | OD1   | F1        | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|----------|---------|---------|---------|---------|
| 1207325   | R1A25M406N-0402 | 1/4"  | 7/16-20   | 1/8-28   | 19,5    | 26,5    | 12,0    | 14,0    |
| 1207326   | R1A25M406N-0404 | 1/4"  | 7/16-20   | 1/4-19   | 21,0    | 29,0    | 14,0    | 19,0    |
| 1212959   | R1A25M406N-0406 | 1/4"  | 7/16-20   | 3/8-19   | 22,0    | 33,0    | 17,0    | 22,0    |
| 1212960   | R1A25M406N-0408 | 1/4"  | 7/16-20   | 1/2-14   | 22,5    | 38,5    | 22,0    | 27,0    |
| 1212961   | R1A25M406N-0502 | 5/16" | 1/2-20    | 1/8-28   | 19,5    | 26,5    | 14,0    | 14,0    |
| 1211702   | R1A25M406N-0504 | 5/16" | 1/2-20    | 1/4-19   | 19,5    | 26,5    | 14,0    | 19,0    |
| 1212962   | R1A25M406N-0506 | 5/16" | 1/2-20    | 3/8-19   | 21,0    | 32,5    | 17,0    | 22,0    |
| 1207327   | R1A25M406N-0604 | 3/8"  | 9/16-18   | 1/4-19   | 21,0    | 29,0    | 14,0    | 19,0    |
| 1207328   | R1A25M406N-0606 | 3/8"  | 9/16-18   | 3/8-19   | 22,0    | 33,0    | 17,0    | 22,0    |
| 1212963   | R1A25M406N-0608 | 3/8"  | 9/16-18   | 1/2-14   | 22,5    | 38,5    | 22,0    | 27,0    |
| 1212964   | R1A25M406N-0804 | 1/2"  | 3/4-16    | 1/4-19   | 25,5    | 30,0    | 19,0    | 19,0    |
| 1207329   | R1A25M406N-0806 | 1/2"  | 3/4-16    | 3/8-19   | 25,5    | 33,0    | 19,0    | 22,0    |
| 1207330   | R1A25M406N-0808 | 1/2"  | 3/4-16    | 1/2-14   | 25,5    | 38,5    | 22,0    | 27,0    |
| 1207331   | R1A25M406N-1008 | 5/8"  | 7/8-14    | 1/2-14   | 28,0    | 38,5    | 22,0    | 27,0    |
| 1208292   | R1A25M406N-1012 | 5/8"  | 7/8-14    | 3/4-14   | 30,0    | 44,0    | 27,0    | 36,0    |
| 1207333   | R1A25M406N-1212 | 3/4"  | 1 1/16-12 | 3/4-14   | 32,5    | 44,0    | 27,0    | 36,0    |
| 1212967   | R1A25M406N-1216 | 3/4"  | 1 1/16-12 | 1-11     | 37,0    | 47,0    | 33,0    | 41,0    |
| 1212968   | R1A25M406N-1412 | 7/8"  | 1 3/16-12 | 3/4-14   | 35,0    | 45,5    | 33,0    | 36,0    |
| 1212969   | R1A25M406N-1612 | 1"    | 1 5/16-12 | 3/4-14   | 37,0    | 47,0    | 33,0    | 36,0    |
| 1207334   | R1A25M406N-1616 | 1"    | 1 5/16-12 | 1-11     | 37,0    | 47,0    | 33,0    | 41,0    |
| 1208380   | R1A25M406N-2020 | 1"1/4 | 1 5/8-12  | 1 1/4-11 | 39,5    | 48,5    | 41,0    | 50,0    |
| 1211703   | R1A25M406N-2424 | 1"1/2 | 1 7/8-12  | 1 1/2-11 | 45,0    | 48,0    | 48,0    | 55,0    |

REV.2.1

## // R1A25M906N

90° adjustable elbow connector

JIC Male - BSPP cylindric Male with O-Ring and retaining ring



| Item Code | Product Code    | OD1   | F1        | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|----------|---------|---------|---------|---------|
| 1207238   | R1A25M906N-0402 | 1/4"  | 7/16-20   | 1/8-28   | 22,5    | 26,0    | 12,0    | 14,0    |
| 1207239   | R1A25M906N-0404 | 1/4"  | 7/16-20   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1213024   | R1A25M906N-0406 | 1/4"  | 7/16-20   | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1213025   | R1A25M906N-0408 | 1/4"  | 7/16-20   | 1/2-14   | 31,0    | 43,0    | 22,0    | 27,0    |
| 1207240   | R1A25M906N-0502 | 5/16" | 1/2-20    | 1/8-28   | 24,0    | 27,5    | 14,0    | 14,0    |
| 1207241   | R1A25M906N-0504 | 5/16" | 1/2-20    | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1207743   | R1A25M906N-0506 | 5/16" | 1/2-20    | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1207242   | R1A25M906N-0604 | 3/8"  | 9/16-18   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1207243   | R1A25M906N-0606 | 3/8"  | 9/16-18   | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1208226   | R1A25M906N-0608 | 3/8"  | 9/16-18   | 1/2-14   | 31,0    | 43,0    | 22,0    | 27,0    |
| 1207244   | R1A25M906N-0804 | 1/2"  | 3/4-16    | 1/4-19   | 31,5    | 33,5    | 19,0    | 19,0    |
| 1207245   | R1A25M906N-0806 | 1/2"  | 3/4-16    | 3/8-19   | 31,5    | 36,5    | 19,0    | 22,0    |
| 1207246   | R1A25M906N-0808 | 1/2"  | 3/4-16    | 1/2-14   | 34,1    | 43,0    | 22,0    | 27,0    |
| 1213026   | R1A25M906N-0812 | 1/2"  | 3/4-16    | 3/4-14   | 37,0    | 49,0    | 27,0    | 36,0    |
| 1207744   | R1A25M906N-1006 | 5/8"  | 7/8-14    | 3/8-19   | 36,5    | 39,5    | 22,0    | 22,0    |
| 1207247   | R1A25M906N-1008 | 5/8"  | 7/8-14    | 1/2-14   | 36,5    | 43,0    | 22,0    | 27,0    |
| 1207745   | R1A25M906N-1012 | 5/8"  | 7/8-14    | 3/4-14   | 39,5    | 49,0    | 27,0    | 27,0    |
| 1207248   | R1A25M906N-1208 | 3/4"  | 1 1/16-12 | 1/2-14   | 42,0    | 45,5    | 27,0    | 27,0    |
| 1207249   | R1A25M906N-1212 | 3/4"  | 1 1/16-12 | 3/4-14   | 42,0    | 49,0    | 27,0    | 36,0    |
| 1207250   | R1A25M906N-1216 | 3/4"  | 1 1/16-12 | 1-11     | 44,5    | 52,0    | 33,0    | 41,0    |
| 1213027   | R1A25M906N-1412 | 7/8"  | 1 3/16-12 | 3/4-14   | 44,0    | 50,5    | 33,0    | 36,0    |
| 1207251   | R1A25M906N-1612 | 1"    | 1 5/16-12 | 3/4-14   | 46,0    | 52,0    | 33,0    | 36,0    |
| 1207252   | R1A25M906N-1616 | 1"    | 1 5/16-12 | 1-11     | 46,0    | 52,0    | 33,0    | 41,0    |
| 1207746   | R1A25M906N-1620 | 1"    | 1 5/16-12 | 1 1/4-11 | 51,0    | 57,0    | 41,0    | 50,0    |
| 1207253   | R1A25M906N-2016 | 1"1/4 | 1 5/8-12  | 1-11     | 52,0    | 57,0    | 41,0    | 41,0    |
| 1207254   | R1A25M906N-2020 | 1"1/4 | 1 5/8-12  | 1 1/4-11 | 52,0    | 57,0    | 41,0    | 50,0    |
| 1213028   | R1A25M906N-2420 | 1"1/2 | 1 7/8-12  | 1 1/4-11 | 59,0    | 61,0    | 48,0    | 50,0    |
| 1207255   | R1A25M906N-2424 | 1"1/2 | 1 7/8-12  | 1 1/2-11 | 59,0    | 61,0    | 48,0    | 55,0    |

## // R1A25M906Y

90° adjustable long elbow connector

JIC Male - BSPP cylindric Male with O-Ring and retaining ring



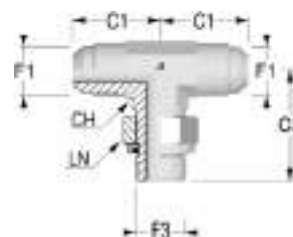
| Item Code | Product Code    | OD1   | F1        | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|----------|---------|---------|---------|---------|
| 1213029   | R1A25M906Y-0402 | 1/4"  | 7/16-20   | 1/8-28   | 24,0    | 46,0    | 14,0    | 14,0    |
| 1213030   | R1A25M906Y-0404 | 1/4"  | 7/16-20   | 1/4-19   | 27,0    | 56,5    | 14,0    | 19,0    |
| 1213031   | R1A25M906Y-0406 | 1/4"  | 7/16-20   | 3/8-19   | 28,5    | 67,0    | 17,0    | 22,0    |
| 1213032   | R1A25M906Y-0408 | 1/4"  | 7/16-20   | 1/2-14   | 31,0    | 78,0    | 22,0    | 27,0    |
| 1213033   | R1A25M906Y-0502 | 5/16" | 1/2-20    | 1/8-28   | 24,0    | 49,5    | 14,0    | 14,0    |
| 1213034   | R1A25M906Y-0504 | 5/16" | 1/2-20    | 1/4-19   | 27,0    | 56,5    | 14,0    | 19,0    |
| 1213035   | R1A25M906Y-0506 | 5/16" | 1/2-20    | 3/8-19   | 28,5    | 61,0    | 17,0    | 22,0    |
| 1213036   | R1A25M906Y-0604 | 3/8"  | 9/16-18   | 1/4-19   | 27,0    | 56,5    | 14,0    | 19,0    |
| 1213037   | R1A25M906Y-0606 | 3/8"  | 9/16-18   | 3/8-19   | 28,5    | 67,0    | 17,0    | 22,0    |
| 1213038   | R1A25M906Y-0608 | 3/8"  | 9/16-18   | 1/2-14   | 28,5    | 78,0    | 22,0    | 27,0    |
| 1213039   | R1A25M906Y-0804 | 1/2"  | 3/4-16    | 1/4-19   | 31,5    | 64,0    | 22,0    | 19,0    |
| 1213040   | R1A25M906Y-0806 | 1/2"  | 3/4-16    | 3/8-19   | 31,5    | 67,0    | 22,0    | 22,0    |
| 1213041   | R1A25M906Y-0808 | 1/2"  | 3/4-16    | 1/2-14   | 34,1    | 78,0    | 22,0    | 27,0    |
| 1213042   | R1A25M906Y-0812 | 1/2"  | 3/4-16    | 3/4-14   | 37,0    | 92,0    | 27,0    | 36,0    |
| 1213043   | R1A25M906Y-1006 | 5/8"  | 7/8-14    | 3/8-19   | 36,5    | 75,0    | 22,0    | 22,0    |
| 1213044   | R1A25M906Y-1008 | 5/8"  | 7/8-14    | 1/2-14   | 36,5    | 78,0    | 22,0    | 27,0    |
| 1213045   | R1A25M906Y-1012 | 5/8"  | 7/8-14    | 3/4-14   | 39,5    | 92,0    | 27,0    | 36,0    |
| 1213046   | R1A25M906Y-1208 | 3/4"  | 1 1/16-12 | 1/2-14   | 42,0    | 88,0    | 27,0    | 27,0    |
| 1213047   | R1A25M906Y-1216 | 3/4"  | 1 1/16-12 | 1-11     | 44,5    | 105,0   | 33,0    | 41,0    |
| 1216418   | R1A25M906Y-1412 | 7/8"  | 1 3/16-12 | 3/4-14   | 44,0    | 99,0    | 33,0    | 36,0    |
| 1213048   | R1A25M906Y-1616 | 1"    | 1 5/16-12 | 1-11     | 46,0    | 105,0   | 33,0    | 41,0    |
| 1213049   | R1A25M906Y-1620 | 1"    | 1 5/16-12 | 1 1/4-11 | 51,0    | 123,0   | 41,0    | 50,0    |
| 1213050   | R1A25M906Y-2016 | 1"1/4 | 1 5/8-12  | 1-11     | 52,0    | 124,0   | 41,0    | 41,0    |
| 1213051   | R1A25M906Y-2020 | 1"1/4 | 1 5/8-12  | 1 1/4-11 | 52,0    | 123,0   | 41,0    | 50,0    |
| 1213052   | R1A25M906Y-2420 | 1"1/2 | 1 7/8-12  | 1 1/4-11 | 59,0    | 134,0   | 48,0    | 50,0    |
| 1213053   | R1A25M906Y-2424 | 1"1/2 | 1 7/8-12  | 1 1/2-11 | 59,0    | 135,0   | 48,0    | 55,0    |

REV.2.1

## // R1A25MT06N

Branch Tee adjustable elbow connector

JIC Male - BSPP cylindric Male with O-Ring and retaining ring

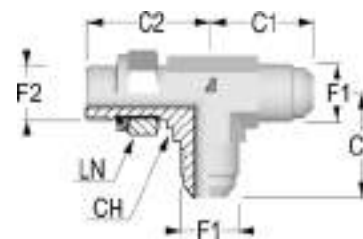


| Item Code | Product Code    | OD1   | F1        | F3       | C1 (mm) | C3 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|----------|---------|---------|---------|---------|
| 1208134   | R1A25MT06N-0402 | 1/4"  | 7/16-20   | 1/8-28   | 24,5    | 26,0    | 12,0    | 14,0    |
| 1210701   | R1A25MT06N-0404 | 1/4"  | 7/16-20   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1212762   | R1A25MT06N-0406 | 1/4"  | 7/16-20   | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1212763   | R1A25MT06N-0408 | 1/4"  | 7/16-20   | 1/2-14   | 31,0    | 43,0    | 22,0    | 27,0    |
| 1212764   | R1A25MT06N-0502 | 5/16" | 1/2-20    | 1/8-28   | 24,0    | 27,5    | 14,0    | 14,0    |
| 1207314   | R1A25MT06N-0504 | 5/16" | 1/2-20    | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1212765   | R1A25MT06N-0506 | 5/16" | 1/2-20    | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1207313   | R1A25MT06N-0604 | 3/8"  | 9/16-18   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1210744   | R1A25MT06N-0606 | 3/8"  | 9/16-18   | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1212766   | R1A25MT06N-0608 | 3/8"  | 9/16-18   | 1/2-14   | 31,0    | 43,0    | 22,0    | 27,0    |
| 1212767   | R1A25MT06N-0804 | 1/2"  | 3/4-16    | 1/4-19   | 31,5    | 33,5    | 19,0    | 19,0    |
| 1240190   | R1A25MT06N-0806 | 1/2"  | 3/4-16    | 3/8-19   | 31,5    | 36,5    | 19,0    | 22,0    |
| 1207316   | R1A25MT06N-0808 | 1/2"  | 3/4-16    | 1/2-14   | 34,0    | 43,0    | 22,0    | 27,0    |
| 1212768   | R1A25MT06N-0812 | 1/2"  | 3/4-16    | 3/4-14   | 37,0    | 49,0    | 27,0    | 36,0    |
| 1212769   | R1A25MT06N-1006 | 5/8"  | 7/8-14    | 3/8-19   | 36,5    | 39,5    | 22,0    | 22,0    |
| 1207317   | R1A25MT06N-1008 | 5/8"  | 7/8-14    | 1/2-14   | 36,5    | 43,0    | 22,0    | 27,0    |
| 1212770   | R1A25MT06N-1012 | 5/8"  | 7/8-14    | 3/4-14   | 36,5    | 43,0    | 27,0    | 36,0    |
| 1207318   | R1A25MT06N-1208 | 3/4"  | 1 1/16-12 | 1/2-14   | 42,0    | 45,5    | 27,0    | 27,0    |
| 1207319   | R1A25MT06N-1212 | 3/4"  | 1 1/16-12 | 3/4-14   | 42,0    | 49,0    | 27,0    | 27,0    |
| 1212771   | R1A25MT06N-1216 | 3/4"  | 1 1/16-12 | 1-11     | 44,5    | 52,0    | 33,0    | 41,0    |
| 1216449   | R1A25MT06N-1412 | 7/8"  | 1 3/16-12 | 3/4-14   | 44,0    | 50,5    | 33,0    | 27,0    |
| 1212772   | R1A25MT06N-1612 | 1"    | 1 5/16-12 | 3/4-14   | 46,0    | 52,0    | 33,0    | 27,0    |
| 1207320   | R1A25MT06N-1616 | 1"    | 1 5/16-12 | 1-11     | 46,0    | 52,0    | 33,0    | 41,0    |
| 1212773   | R1A25MT06N-1620 | 1"    | 1 5/16-12 | 1 1/4-11 | 51,0    | 57,0    | 41,0    | 50,0    |
| 1212774   | R1A25MT06N-2016 | 1"1/4 | 1 5/8-12  | 1-11     | 52,0    | 57,0    | 41,0    | 41,0    |
| 1211631   | R1A25MT06N-2020 | 1"1/4 | 1 5/8-12  | 1 1/4-11 | 52,0    | 57,0    | 41,0    | 50,0    |
| 1211632   | R1A25MT06N-2420 | 1"1/2 | 1 7/8-12  | 1 1/4-11 | 59,0    | 61,0    | 48,0    | 50,0    |
| 1211633   | R1A25MT06N-2424 | 1"1/2 | 1 7/8-12  | 1 1/2-11 | 59,0    | 61,0    | 48,0    | 55,0    |

## // R1A25ML06N

Run Tee adjustable elbow connector

JIC Male - BSPP cylindric Male with O-Ring and retaining ring



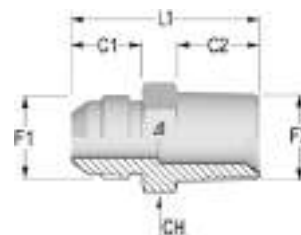
| Item Code | Product Code    | OD1    | F1        | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|-----------|----------|---------|---------|---------|---------|
| 1210740   | R1A25ML06N-0402 | 1/4"   | 7/16-20   | 1/8-28   | 22,5    | 26,5    | 12,0    | 14,0    |
| 1210742   | R1A25ML06N-0404 | 1/4"   | 7/16-20   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1212702   | R1A25ML06N-0406 | 1/4"   | 7/16-20   | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1212703   | R1A25ML06N-0408 | 1/4"   | 7/16-20   | 1/2-14   | 31,0    | 43,0    | 22,0    | 27,0    |
| 1210694   | R1A25ML06N-0504 | 5/16"  | 1/2-20    | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1212704   | R1A25ML06N-0506 | 5/16"  | 1/2-20    | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1207292   | R1A25ML06N-0604 | 3/8"   | 9/16-18   | 1/4-19   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1207293   | R1A25ML06N-0606 | 3/8"   | 9/16-18   | 3/8-19   | 28,5    | 36,5    | 17,0    | 22,0    |
| 1212705   | R1A25ML06N-0608 | 3/8"   | 9/16-18   | 1/2-14   | 31,0    | 43,0    | 22,0    | 27,0    |
| 1212706   | R1A25ML06N-0804 | 1/2"   | 3/4-16    | 1/4-19   | 31,5    | 33,5    | 19,0    | 19,0    |
| 1207294   | R1A25ML06N-0806 | 1/2"   | 3/4-16    | 3/8-19   | 31,5    | 36,5    | 19,0    | 22,0    |
| 1207295   | R1A25ML06N-0808 | 1/2"   | 3/4-16    | 1/2-14   | 34,0    | 43,0    | 22,0    | 27,0    |
| 1212707   | R1A25ML06N-0812 | 1/2"   | 3/4-16    | 3/4-14   | 37,0    | 49,0    | 27,0    | 36,0    |
| 1212708   | R1A25ML06N-1006 | 5/8"   | 7/8-14    | 3/8-19   | 36,5    | 39,5    | 22,0    | 22,0    |
| 1207748   | R1A25ML06N-1008 | 5/8"   | 7/8-14    | 1/2-14   | 36,5    | 43,0    | 22,0    | 27,0    |
| 1208030   | R1A25ML06N-1012 | 5/8"   | 7/8-14    | 3/4-14   | 39,5    | 49,0    | 27,0    | 36,0    |
| 1207299   | R1A25ML06N-1208 | 3/4"   | 1 1/16-12 | 1/2-14   | 42,0    | 45,5    | 27,0    | 27,0    |
| 1207296   | R1A25ML06N-1212 | 3/4"   | 1 1/16-12 | 3/4-14   | 42,0    | 49,0    | 27,0    | 36,0    |
| 1208124   | R1A25ML06N-1216 | 3/4"   | 1 1/16-12 | 1-11     | 44,5    | 52,0    | 33,0    | 41,0    |
| 1208277   | R1A25ML06N-1612 | 1"     | 1 5/16-12 | 3/4-14   | 46,0    | 52,0    | 33,0    | 36,0    |
| 1207297   | R1A25ML06N-1616 | 1"     | 1 5/16-12 | 1-11     | 46,0    | 52,0    | 33,0    | 41,0    |
| 1212710   | R1A25ML06N-1620 | 1"     | 1 5/16-12 | 1 1/4-11 | 52,0    | 56,0    | 41,0    | 50,0    |
| 1212711   | R1A25ML06N-2016 | 1 1/4" | 1 5/8-12  | 1-11     | 52,0    | 57,0    | 41,0    | 41,0    |
| 1212712   | R1A25ML06N-2420 | 1 1/2" | 1 7/8-12  | 1 1/4-11 | 59,0    | 61,0    | 48,0    | 50,0    |
| 1208125   | R1A25ML06N-2424 | 1 1/2" | 1 7/8-12  | 1 1/2-11 | 59,0    | 61,0    | 48,0    | 55,0    |

REV.2.1

## // R1A25M107M

Straight connector

JIC Male - BSPT Male

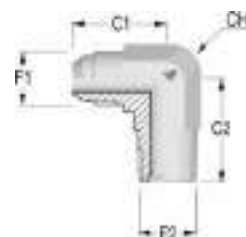


| Item Code | Product Code    | OD1   | F1        | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|----------|---------|---------|---------|---------|
| 1203683   | R1A25M107M-0402 | 1/4"  | 7/16-20   | 1/8-28   | 14,0    | 10,0    | 30,5    | 14,0    |
| 1203682   | R1A25M107M-0404 | 1/4"  | 7/16-20   | 1/4-19   | 14,0    | 14,5    | 35,5    | 14,0    |
| 1203626   | R1A25M107M-0502 | 5/16" | 1/2-20    | 1/8-28   | 14,0    | 10,0    | 30,5    | 14,0    |
| 1203625   | R1A25M107M-0504 | 5/16" | 1/2-20    | 1/4-19   | 14,0    | 14,5    | 35,5    | 14,0    |
| 1203711   | R1A25M107M-0604 | 3/8"  | 9/16-18   | 1/4-19   | 14,0    | 14,5    | 35,5    | 17,0    |
| 1203712   | R1A25M107M-0606 | 3/8"  | 9/16-18   | 3/8-19   | 14,0    | 14,5    | 35,5    | 19,0    |
| 1203710   | R1A25M107M-0608 | 3/8"  | 9/16-18   | 1/2-14   | 14,0    | 19,0    | 41,0    | 22,0    |
| 1203667   | R1A25M107M-0804 | 1/2"  | 3/4-16    | 1/4-19   | 16,5    | 14,5    | 38,5    | 19,0    |
| 1203669   | R1A25M107M-0806 | 1/2"  | 3/4-16    | 3/8-19   | 16,5    | 14,5    | 38,5    | 19,0    |
| 1203666   | R1A25M107M-0808 | 1/2"  | 3/4-16    | 1/2-14   | 16,5    | 19,0    | 43,5    | 22,0    |
| 1203696   | R1A25M107M-1006 | 5/8"  | 7/8-14    | 3/8-19   | 19,5    | 14,5    | 42,0    | 24,0    |
| 1203694   | R1A25M107M-1008 | 5/8"  | 7/8-14    | 1/2-14   | 19,5    | 19,0    | 46,5    | 24,0    |
| 1203695   | R1A25M107M-1012 | 5/8"  | 7/8-14    | 3/4-14   | 19,5    | 19,0    | 48,5    | 27,0    |
| 1203614   | R1A25M107M-1208 | 3/4"  | 1 1/16-12 | 1/2-14   | 22,0    | 19,0    | 51,0    | 27,0    |
| 1203615   | R1A25M107M-1212 | 3/4"  | 1 1/16-12 | 3/4-14   | 22,0    | 19,0    | 51,0    | 27,0    |
| 1203613   | R1A25M107M-1216 | 3/4"  | 1 1/16-12 | 1-11     | 22,0    | 24,0    | 56,5    | 36,0    |
| 1216391   | R1A25M107M-1412 | 7/8"  | 1 3/16-12 | 3/4-14   | 22,5    | 19,0    | 50,5    | 32,0    |
| 1203638   | R1A25M107M-1612 | 1"    | 1 5/16-12 | 3/4-14   | 23,0    | 19,0    | 53,0    | 36,0    |
| 1203636   | R1A25M107M-1616 | 1"    | 1 5/16-12 | 1-11     | 23,0    | 24,0    | 58,0    | 36,0    |
| 1203644   | R1A25M107M-2016 | 1"1/4 | 1 5/8-12  | 1-11     | 24,5    | 24,0    | 60,5    | 46,0    |
| 1203645   | R1A25M107M-2020 | 1"1/4 | 1 5/8-12  | 1 1/4-11 | 24,5    | 25,0    | 61,0    | 46,0    |
| 1203652   | R1A25M107M-2424 | 1"1/2 | 1 7/8-12  | 1 1/2-11 | 27,5    | 25,5    | 68,0    | 50,0    |

## // R1A25M907M

90° elbow connector

JIC Male - BSPT Male



| Item Code | Product Code    | OD1   | F1        | F2       | C1 (mm) | C2 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|----------|---------|---------|---------|
| 1203874   | R1A25M907M-0402 | 1/4"  | 7/16-20   | 1/8-28   | 22,5    | 19,5    | 12,0    |
| 1203873   | R1A25M907M-0404 | 1/4"  | 7/16-20   | 1/4-19   | 27,0    | 27,5    | 14,0    |
| 1203840   | R1A25M907M-0502 | 5/16" | 1/2-20    | 1/8-28   | 24,0    | 20,0    | 14,0    |
| 1203839   | R1A25M907M-0504 | 5/16" | 1/2-20    | 1/4-19   | 27,0    | 27,0    | 14,0    |
| 1203895   | R1A25M907M-0604 | 3/8"  | 9/16-18   | 1/4-19   | 27,0    | 27,0    | 14,0    |
| 1203896   | R1A25M907M-0606 | 3/8"  | 9/16-18   | 3/8-19   | 28,5    | 31,0    | 17,0    |
| 1203894   | R1A25M907M-0608 | 3/8"  | 9/16-18   | 1/2-14   | 31,0    | 37,5    | 22,0    |
| 1203864   | R1A25M907M-0804 | 1/2"  | 3/4-16    | 1/4-19   | 31,5    | 31,0    | 19,0    |
| 1203865   | R1A25M907M-0806 | 1/2"  | 3/4-16    | 3/8-19   | 31,5    | 31,0    | 19,0    |
| 1203863   | R1A25M907M-0808 | 1/2"  | 3/4-16    | 1/2-14   | 34,0    | 37,0    | 22,0    |
| 1203883   | R1A25M907M-1006 | 5/8"  | 7/8-14    | 3/8-19   | 36,5    | 32,5    | 22,0    |
| 1203881   | R1A25M907M-1008 | 5/8"  | 7/8-14    | 1/2-14   | 36,5    | 40,0    | 22,0    |
| 1203882   | R1A25M907M-1012 | 5/8"  | 7/8-14    | 3/4-14   | 39,5    | 40,5    | 27,0    |
| 1203835   | R1A25M907M-1212 | 3/4"  | 1 1/16-12 | 3/4-14   | 42,0    | 40,5    | 27,0    |
| 1203833   | R1A25M907M-1216 | 3/4"  | 1 1/16-12 | 1-11     | 44,5    | 50,0    | 33,0    |
| 1216419   | R1A25M907M-1412 | 7/8"  | 1 3/16-12 | 3/4-14   | 44,0    | 43,0    | 33,0    |
| 1203847   | R1A25M907M-1612 | 1"    | 1 5/16-12 | 3/4-14   | 46,0    | 45,0    | 33,0    |
| 1203846   | R1A25M907M-1616 | 1"    | 1 5/16-12 | 1-11     | 46,0    | 50,0    | 33,0    |
| 1205460   | R1A25M907M-2016 | 1"1/4 | 1 5/8-12  | 1-11     | 52,0    | 59,5    | 41,0    |
| 1203853   | R1A25M907M-2020 | 1"1/4 | 1 5/8-12  | 1 1/4-11 | 52,0    | 60,5    | 41,0    |
| 1213054   | R1A25M907M-2424 | 1"1/2 | 1 7/8-12  | 1 1/2-11 | 59,0    | 67,0    | 48,0    |

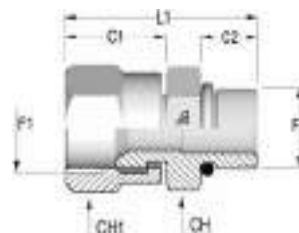
REV.2.1

## // METRIC

## // R1A2511525

Straight connector

JIC Female - Metric Male with O-Ring

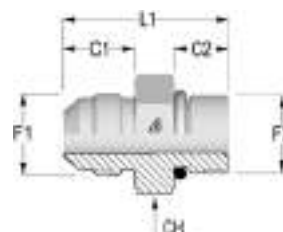


| Item Code | Product Code    | OD1   | F1        | F2      | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|----------|
| 1207442   | R1A2511525-0410 | 1/4"  | 7/16-20   | M10X1.0 | 17,0    | 11,0    | 34,5    | 14,0    | 16,0     |
| 1216347   | R1A2511525-0412 | 1/4"  | 7/16-20   | M12X1.5 | 17,0    | 13,5    | 36,5    | 17,0    | 16,0     |
| 1216348   | R1A2511525-0510 | 5/16" | 1/2-20    | M10X1.0 | 18,5    | 11,0    | 36,5    | 14,0    | 17,0     |
| 1207443   | R1A2511525-0512 | 5/16" | 1/2-20    | M12X1.5 | 18,5    | 13,5    | 39,0    | 17,0    | 17,0     |
| 1216349   | R1A2511525-0514 | 5/16" | 1/2-20    | M14X1.5 | 18,5    | 13,5    | 40,0    | 19,0    | 17,0     |
| 1207444   | R1A2511525-0614 | 3/8"  | 9/16-18   | M14X1.5 | 18,5    | 13,5    | 41,0    | 19,0    | 19,0     |
| 1216350   | R1A2511525-0616 | 3/8"  | 9/16-18   | M16X1.5 | 18,5    | 14,0    | 42,5    | 22,0    | 19,0     |
| 1216351   | R1A2511525-0818 | 1/2"  | 3/4-16    | M18X1.5 | 22,2    | 15,0    | 45,5    | 24,0    | 25,0     |
| 1207629   | R1A2511525-1018 | 5/8"  | 7/8-14    | M18X1.5 | 25,2    | 15,0    | 48,2    | 24,0    | 27,0     |
| 1216352   | R1A2511525-1020 | 5/8"  | 7/8-14    | M20X1.5 | 25,2    | 16,5    | 49,7    | 24,0    | 27,0     |
| 1207446   | R1A2511525-1022 | 5/8"  | 7/8-14    | M22X1.5 | 25,2    | 15,5    | 50,7    | 27,0    | 27,0     |
| 1216353   | R1A2511525-1222 | 3/4"  | 1 1/16-12 | M22X1.5 | 27,3    | 15,5    | 53,5    | 27,0    | 32,0     |
| 1207447   | R1A2511525-1227 | 3/4"  | 1 1/16-12 | M27X2   | 27,3    | 18,5    | 57,5    | 32,0    | 32,0     |
| 1216354   | R1A2511525-1426 | 7/8"  | 1 3/16-12 | M26X1.5 | 27,0    | 21,0    | 60,0    | 32,0    | 36,0     |
| 1216355   | R1A2511525-1627 | 1"    | 1 5/16-12 | M27X2   | 29,6    | 18,5    | 60,0    | 36,0    | 38,0     |
| 1207448   | R1A2511525-1633 | 1"    | 1 5/16-12 | M33X2.0 | 29,6    | 19,0    | 61,0    | 41,0    | 38,0     |

## // R1A25M1525

Straight connector

JIC Male - Metric Male with O-Ring

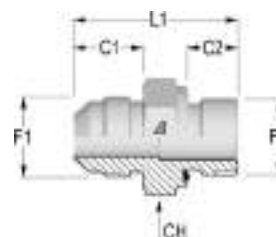


| Item Code | Product Code    | OD1    | F1        | F2      | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|-----------|---------|---------|---------|---------|---------|
| 1207635   | R1A25M1525-0412 | 1/4"   | 7/16-20   | M12X1.5 | 14,0    | 13,5    | 31,5    | 17,0    |
| 1207636   | R1A25M1525-0510 | 5/16"  | 1/2-20    | M10X1.0 | 14,0    | 11,0    | 30,5    | 14,0    |
| 1224083   | R1A25M1525-0512 | 5/16"  | 1/2-20    | M12X1.5 | 14,0    | 13,5    | 33,5    | 17,0    |
| 1207408   | R1A25M1525-0614 | 3/8"   | 9/16-18   | M14X1.5 | 14,0    | 13,5    | 33,5    | 19,0    |
| 1207639   | R1A25M1525-0616 | 3/8"   | 9/16-18   | M16X1.5 | 14,0    | 14,0    | 35,0    | 22,0    |
| 1211696   | R1A25M1525-0816 | 1/2"   | 3/4-16    | M16X1.5 | 16,5    | 14,0    | 38,0    | 22,0    |
| 1207387   | R1A25M1525-0818 | 1/2"   | 3/4-16    | M18X1.5 | 16,5    | 15,0    | 38,5    | 24,0    |
| 1225818   | R1A25M1525-1018 | 5/8"   | 7/8-14    | M18X1.5 | 19,5    | 15,0    | 42,0    | 24,0    |
| 1212958   | R1A25M1525-1020 | 5/8"   | 7/8-14    | M20X1.5 | 19,5    | 16,5    | 41,5    | 24,0    |
| 1207405   | R1A25M1525-1022 | 5/8"   | 7/8-14    | M22X1.5 | 19,5    | 15,5    | 43,0    | 27,0    |
| 1207404   | R1A25M1525-1222 | 3/4"   | 1 1/16-12 | M22X1.5 | 22,0    | 15,5    | 45,5    | 27,0    |
| 1207403   | R1A25M1525-1227 | 3/4"   | 1 1/16-12 | M27X2   | 22,0    | 18,5    | 49,0    | 32,0    |
| 1216402   | R1A25M1525-1627 | 1"     | 1 5/16-12 | M27X2   | 23,0    | 18,5    | 50,5    | 36,0    |
| 1207402   | R1A25M1525-1633 | 1"     | 1 5/16-12 | M33X2.0 | 23,0    | 19,0    | 51,0    | 41,0    |
| 1207401   | R1A25M1525-2042 | 1 1/4" | 1 5/8-12  | M42X2   | 24,5    | 19,0    | 55,0    | 50,0    |
| 1207400   | R1A25M1525-2448 | 1 1/2" | 1 7/8-12  | M48X2.0 | 27,5    | 17,5    | 60,0    | 55,0    |

## // R1A25M152I

Straight connector

JIC Male - Metric Male with elastomer

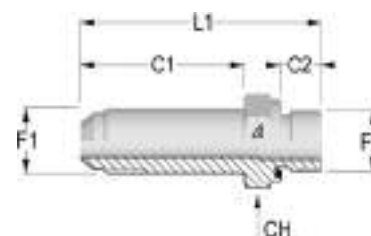


| Item Code | Product Code    | OD1   | F1        | F2      | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1207390   | R1A25M152I-0410 | 1/4"  | 7/16-20   | M10X1.0 | 14,0    | 8,0     | 31,0    | 14,0    |
| 1212950   | R1A25M152I-0412 | 1/4"  | 7/16-20   | M12X1.5 | 14,0    | 12,0    | 33,5    | 17,0    |
| 1212951   | R1A25M152I-0510 | 5/16" | 1/2-20    | M10X1.0 | 14,0    | 8,0     | 30,5    | 14,0    |
| 1207391   | R1A25M152I-0512 | 5/16" | 1/2-20    | M12X1.5 | 14,0    | 12,0    | 33,5    | 17,0    |
| 1208306   | R1A25M152I-0514 | 5/16" | 1/2-20    | M14X1.5 | 14,0    | 12,0    | 35,0    | 19,0    |
| 1207392   | R1A25M152I-0614 | 3/8"  | 9/16-18   | M14X1.5 | 14,0    | 12,0    | 33,5    | 19,0    |
| 1212952   | R1A25M152I-0616 | 3/8"  | 9/16-18   | M16X1.5 | 14,0    | 12,0    | 35,5    | 22,0    |
| 1207393   | R1A25M152I-0816 | 1/2"  | 3/4-16    | M16X1.5 | 16,5    | 12,0    | 37,5    | 22,0    |
| 1207388   | R1A25M152I-0818 | 1/2"  | 3/4-16    | M18X1.5 | 16,5    | 12,0    | 39,0    | 24,0    |
| 1207389   | R1A25M152I-1018 | 5/8"  | 7/8-14    | M18X1.5 | 19,5    | 12,0    | 41,5    | 24,0    |
| 1212953   | R1A25M152I-1020 | 5/8"  | 7/8-14    | M20X1.5 | 19,5    | 14,0    | 43,5    | 24,0    |
| 1207394   | R1A25M152I-1022 | 5/8"  | 7/8-14    | M22X1.5 | 19,5    | 14,0    | 43,0    | 27,0    |
| 1207395   | R1A25M152I-1222 | 3/4"  | 1 1/16-12 | M22X1.5 | 22,0    | 14,0    | 45,5    | 27,0    |
| 1207396   | R1A25M152I-1227 | 3/4"  | 1 1/16-12 | M27X2   | 22,0    | 16,0    | 49,0    | 32,0    |
| 1216405   | R1A25M152I-1426 | 7/8"  | 1 3/16-12 | M26X1.5 | 22,5    | 16,0    | 49,5    | 32,0    |
| 1212957   | R1A25M152I-1627 | 1"    | 1 5/16-12 | M27X2   | 23,0    | 16,0    | 55,0    | 36,0    |
| 1207397   | R1A25M152I-1633 | 1"    | 1 5/16-12 | M33X2.0 | 23,0    | 18,0    | 51,5    | 41,0    |
| 1207398   | R1A25M152I-2042 | 1"1/4 | 1 5/8-12  | M42X2   | 24,5    | 20,0    | 55,0    | 50,0    |
| 1207399   | R1A25M152I-2448 | 1"1/2 | 1 7/8-12  | M48X2.0 | 27,5    | 22,0    | 60,5    | 55,0    |

## // R1A25M152H

Long connector

JIC Male - Metric Male with elastomer



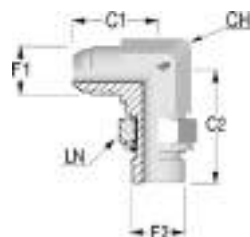
| Item Code | Product Code    | OD1   | F1        | F2      | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1212934   | R1A25M152H-0410 | 1/4"  | 7/16-20   | M10X1.0 | 35,0    | 9,5     | 51,0    | 14,0    |
| 1212935   | R1A25M152H-0510 | 5/16" | 1/2-20    | M10X1.0 | 37,0    | 9,5     | 53,0    | 14,0    |
| 1212936   | R1A25M152H-0512 | 5/16" | 1/2-20    | M12X1.5 | 37,0    | 14,0    | 55,5    | 17,0    |
| 1212937   | R1A25M152H-0514 | 5/16" | 1/2-20    | M14X1.5 | 37,0    | 14,0    | 56,5    | 19,0    |
| 1212938   | R1A25M152H-0614 | 3/8"  | 9/16-18   | M14X1.5 | 39,0    | 14,0    | 58,5    | 19,0    |
| 1212939   | R1A25M152H-0616 | 3/8"  | 9/16-18   | M16X1.5 | 39,0    | 14,0    | 60,0    | 22,0    |
| 1212940   | R1A25M152H-0816 | 1/2"  | 3/4-16    | M16X1.5 | 48,0    | 14,0    | 69,0    | 22,0    |
| 1212941   | R1A25M152H-0818 | 1/2"  | 3/4-16    | M18X1.5 | 48,0    | 14,5    | 70,5    | 24,0    |
| 1212942   | R1A25M152H-1018 | 5/8"  | 7/8-14    | M18X1.5 | 53,0    | 14,5    | 75,5    | 24,0    |
| 1212943   | R1A25M152H-1022 | 5/8"  | 7/8-14    | M22X1.5 | 53,0    | 17,0    | 78,0    | 27,0    |
| 1212944   | R1A25M152H-1222 | 3/4"  | 1 1/16-12 | M22X1.5 | 63,0    | 17,0    | 89,0    | 27,0    |
| 1212945   | R1A25M152H-1227 | 3/4"  | 1 1/16-12 | M27X2   | 63,0    | 19,0    | 92,5    | 32,0    |
| 1212946   | R1A25M152H-1627 | 1"    | 1 5/16-12 | M27X2   | 72,0    | 19,0    | 102,0   | 36,0    |
| 1212947   | R1A25M152H-1633 | 1"    | 1 5/16-12 | M33X2.0 | 72,0    | 21,0    | 102,5   | 41,0    |
| 1212948   | R1A25M152H-2042 | 1"1/4 | 1 5/8-12  | M42X2   | 88,0    | 23,0    | 121,0   | 50,0    |
| 1212949   | R1A25M152H-2448 | 1"1/2 | 1 7/8-12  | M48X2.0 | 88,0    | 25,0    | 136,0   | 55,0    |

REV.2.1

## // R1A25M952Q

90° adjustable elbow connector

JIC Male - Metric Male with O-Ring and retaining ring



| Item Code | Product Code    | OD1   | F1        | F2      | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1207275   | R1A25M952Q-0410 | 1/4"  | 7/16-20   | M10X1.0 | 22,5    | 27,5    | 12,0    | 14,0    |
| 1213138   | R1A25M952Q-0412 | 1/4"  | 7/16-20   | M12X1.5 | 27,0    | 31,5    | 14,0    | 17,0    |
| 1213140   | R1A25M952Q-0510 | 5/16" | 1/2-20    | M10X1.0 | 24,0    | 27,5    | 14,0    | 14,0    |
| 1207276   | R1A25M952Q-0512 | 5/16" | 1/2-20    | M12X1.5 | 27,0    | 31,5    | 14,0    | 17,0    |
| 1213141   | R1A25M952Q-0514 | 5/16" | 1/2-20    | M14X1.5 | 27,0    | 32,5    | 14,0    | 19,0    |
| 1207277   | R1A25M952Q-0614 | 3/8"  | 9/16-18   | M14X1.5 | 27,0    | 32,5    | 14,0    | 19,0    |
| 1213142   | R1A25M952Q-0616 | 3/8"  | 9/16-18   | M16X1.5 | 28,5    | 36,5    | 17,0    | 22,0    |
| 1207278   | R1A25M952Q-0816 | 1/2"  | 3/4-16    | M16X1.5 | 31,5    | 36,5    | 19,0    | 22,0    |
| 1207523   | R1A25M952Q-0818 | 1/2"  | 3/4-16    | M18X1.5 | 31,5    | 39,5    | 19,0    | 24,0    |
| 1207279   | R1A25M952Q-1018 | 5/8"  | 7/8-14    | M18X1.5 | 36,5    | 41,5    | 22,0    | 24,0    |
| 1213144   | R1A25M952Q-1020 | 5/8"  | 7/8-14    | M20X1.5 | 36,5    | 43,0    | 22,0    | 27,0    |
| 1207280   | R1A25M952Q-1022 | 5/8"  | 7/8-14    | M22X1.5 | 36,5    | 43,0    | 22,0    | 27,0    |
| 1207281   | R1A25M952Q-1222 | 3/4"  | 1 1/16-12 | M22X1.5 | 42,0    | 45,5    | 27,0    | 27,0    |
| 1210693   | R1A25M952Q-1227 | 3/4"  | 1 1/16-12 | M27X2   | 42,0    | 51,5    | 27,0    | 32,0    |
| 1213145   | R1A25M952Q-1426 | 7/8"  | 1 3/16-12 | M26X1.5 | 44,0    | 50,5    | 27,0    | 36,0    |
| 1213146   | R1A25M952Q-1627 | 1"    | 1 5/16-12 | M27X2   | 46,0    | 55,0    | 33,0    | 32,0    |
| 1207282   | R1A25M952Q-1633 | 1"    | 1 5/16-12 | M33X1.5 | 46,0    | 55,0    | 33,0    | 41,0    |
| 1211742   | R1A25M952Q-2042 | 1"1/4 | 1 5/8-12  | M42X2   | 52,0    | 60,0    | 41,0    | 50,0    |
| 1213147   | R1A25M952Q-2448 | 1"1/2 | 1 7/8-12  | M48X1.5 | 59,0    | 67,0    | 48,0    | 55,0    |

## // R1A25M952Y

90° adjustable long elbow connector

JIC Male - Metric Male with O-Ring and retaining ring



| Item Code | Product Code    | OD1   | F1        | F2      | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1213148   | R1A25M952Y-0410 | 1/4"  | 7/16-20   | M10X1.0 | 22,5    | 46,0    | 12,0    | 14,0    |
| 1213149   | R1A25M952Y-0412 | 1/4"  | 7/16-20   | M12X1.5 | 27,0    | 53,5    | 14,0    | 17,0    |
| 1213150   | R1A25M952Y-0510 | 5/16" | 1/2-20    | M10X1.0 | 24,0    | 49,5    | 14,0    | 14,0    |
| 1213151   | R1A25M952Y-0512 | 5/16" | 1/2-20    | M12X1.5 | 27,0    | 53,5    | 14,0    | 17,0    |
| 1213152   | R1A25M952Y-0514 | 5/16" | 1/2-20    | M14X1.5 | 27,0    | 56,5    | 14,0    | 19,0    |
| 1213153   | R1A25M952Y-0614 | 3/8"  | 9/16-18   | M14X1.5 | 27,0    | 56,5    | 14,0    | 19,0    |
| 1213154   | R1A25M952Y-0616 | 3/8"  | 9/16-18   | M16X1.5 | 28,5    | 67,0    | 17,0    | 22,0    |
| 1213155   | R1A25M952Y-0816 | 1/2"  | 3/4-16    | M16X1.5 | 31,5    | 67,0    | 19,0    | 22,0    |
| 1213156   | R1A25M952Y-0818 | 1/2"  | 3/4-16    | M18X1.5 | 31,5    | 67,0    | 19,0    | 24,0    |
| 1213157   | R1A25M952Y-1018 | 5/8"  | 7/8-14    | M18X1.5 | 36,5    | 75,0    | 22,0    | 24,0    |
| 1213158   | R1A25M952Y-1020 | 5/8"  | 7/8-14    | M20X1.5 | 36,5    | 78,0    | 22,0    | 27,0    |
| 1213159   | R1A25M952Y-1022 | 5/8"  | 7/8-14    | M22X1.5 | 36,5    | 78,0    | 22,0    | 27,0    |
| 1213160   | R1A25M952Y-1222 | 3/4"  | 1 1/16-12 | M22X1.5 | 42,0    | 88,0    | 27,0    | 27,0    |
| 1213161   | R1A25M952Y-1227 | 3/4"  | 1 1/16-12 | M27X2   | 42,0    | 95,0    | 27,0    | 32,0    |
| 1216432   | R1A25M952Y-1426 | 7/8"  | 1 3/16-12 | M26X1.5 | 44,0    | 97,0    | 27,0    | 36,0    |
| 1213162   | R1A25M952Y-1627 | 1"    | 1 5/16-12 | M27X2   | 46,0    | 105,0   | 33,0    | 32,0    |
| 1213163   | R1A25M952Y-1633 | 1"    | 1 5/16-12 | M33X1.5 | 46,0    | 105,0   | 33,0    | 41,0    |
| 1213164   | R1A25M952Y-2042 | 1"1/4 | 1 5/8-12  | M42X2   | 52,0    | 124,0   | 41,0    | 50,0    |
| 1213165   | R1A25M952Y-2448 | 1"1/2 | 1 7/8-12  | M48X1.5 | 59,0    | 141,0   | 48,0    | 55,0    |

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ADAPTERS

## // R1A25MT52Q

Branch Tee adjustable elbow connector

JIC Male - Metric Male with O-Ring and retaining ring

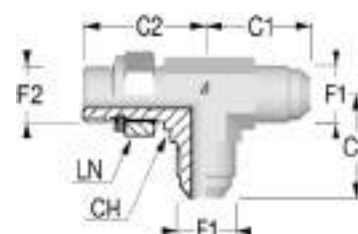


| Item Code | Product Code    | OD1    | F1        | F3      | C1 (mm) | C3 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|-----------|---------|---------|---------|---------|---------|
| 1211640   | R1A25MT52Q-0410 | 1/4"   | 7/16-20   | M10X1.0 | 22,5    | 27,5    | 12,0    | 14,0    |
| 1212815   | R1A25MT52Q-0412 | 1/4"   | 7/16-20   | M12X1.5 | 27,0    | 31,5    | 14,0    | 17,0    |
| 1212816   | R1A25MT52Q-0510 | 5/16"  | 1/2-20    | M10X1.0 | 24,0    | 27,5    | 14,0    | 14,0    |
| 1210706   | R1A25MT52Q-0512 | 5/16"  | 1/2-20    | M12X1.5 | 27,0    | 31,5    | 14,0    | 17,0    |
| 1212817   | R1A25MT52Q-0514 | 5/16"  | 1/2-20    | M14X1.5 | 27,0    | 32,5    | 14,0    | 19,0    |
| 1207324   | R1A25MT52Q-0614 | 3/8"   | 9/16-18   | M14X1.5 | 27,0    | 32,5    | 14,0    | 19,0    |
| 1212818   | R1A25MT52Q-0616 | 3/8"   | 9/16-18   | M16X1.5 | 28,5    | 36,5    | 17,0    | 22,0    |
| 1210707   | R1A25MT52Q-0816 | 1/2"   | 3/4-16    | M16X1.5 | 31,5    | 36,5    | 19,0    | 22,0    |
| 1212819   | R1A25MT52Q-0818 | 1/2"   | 3/4-16    | M18X1.5 | 31,5    | 39,5    | 19,0    | 24,0    |
| 1212820   | R1A25MT52Q-1020 | 5/8"   | 7/8-14    | M20X1.5 | 36,5    | 43,0    | 22,0    | 27,0    |
| 1211641   | R1A25MT52Q-1022 | 5/8"   | 7/8-14    | M22X1.5 | 36,5    | 43,0    | 22,0    | 27,0    |
| 1212821   | R1A25MT52Q-1222 | 3/4"   | 1 1/16-12 | M22X1.5 | 42,0    | 45,5    | 27,0    | 27,0    |
| 1211642   | R1A25MT52Q-1227 | 3/4"   | 1 1/16-12 | M27X1.5 | 42,0    | 51,5    | 27,0    | 32,0    |
| 1216493   | R1A25MT52Q-1426 | 7/8"   | 1 3/16-12 | M26X1.5 | 44,0    | 50,5    | 27,0    | 36,0    |
| 1212822   | R1A25MT52Q-1627 | 1"     | 1 5/16-12 | M27X2   | 46,0    | 55,0    | 33,0    | 32,0    |
| 1211643   | R1A25MT52Q-1633 | 1"     | 1 5/16-12 | M33X1.5 | 46,0    | 55,0    | 33,0    | 41,0    |
| 1211644   | R1A25MT52Q-2042 | 1 1/4" | 1 5/8-12  | M42X2   | 52,0    | 60,0    | 41,0    | 50,0    |
| 1211645   | R1A25MT52Q-2448 | 1 1/2" | 1 7/8-12  | M48X1.5 | 59,0    | 67,0    | 48,0    | 55,0    |

## // R1A25ML52Q

Run Tee adjustable elbow connector

JIC Male - Metric Male with O-Ring and retaining ring



| Item Code | Product Code    | OD1    | F1        | F2      | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|-----------|---------|---------|---------|---------|---------|
| 1210699   | R1A25ML52Q-0410 | 1/4"   | 7/16-20   | M10X1.0 | 22,5    | 27,5    | 12,0    | 14,0    |
| 1212753   | R1A25ML52Q-0412 | 1/4"   | 7/16-20   | M12X1.5 | 27,0    | 31,5    | 14,0    | 17,0    |
| 1212754   | R1A25ML52Q-0510 | 5/16"  | 1/2-20    | M10X1.0 | 24,0    | 27,5    | 14,0    | 14,0    |
| 1211626   | R1A25ML52Q-0512 | 5/16"  | 1/2-20    | M12X1.5 | 27,0    | 31,5    | 14,0    | 17,0    |
| 1212755   | R1A25ML52Q-0514 | 5/16"  | 1/2-20    | M14X1.5 | 27,0    | 32,5    | 14,0    | 19,0    |
| 1207303   | R1A25ML52Q-0614 | 3/8"   | 9/16-18   | M14X1.5 | 27,0    | 32,5    | 14,0    | 19,0    |
| 1212756   | R1A25ML52Q-0616 | 3/8"   | 9/16-18   | M16X1.5 | 28,5    | 36,5    | 17,0    | 22,0    |
| 1207302   | R1A25ML52Q-0816 | 1/2"   | 3/4-16    | M16X1.5 | 31,5    | 36,5    | 19,0    | 22,0    |
| 1212757   | R1A25ML52Q-0818 | 1/2"   | 3/4-16    | M18X1.5 | 31,5    | 39,5    | 19,0    | 24,0    |
| 1212758   | R1A25ML52Q-1018 | 5/8"   | 7/8-14    | M18X1.5 | 36,5    | 41,5    | 22,0    | 24,0    |
| 1212759   | R1A25ML52Q-1020 | 5/8"   | 7/8-14    | M20X1.5 | 36,5    | 43,0    | 22,0    | 27,0    |
| 1210700   | R1A25ML52Q-1022 | 5/8"   | 7/8-14    | M22X1.5 | 36,5    | 43,0    | 22,0    | 27,0    |
| 1212760   | R1A25ML52Q-1222 | 3/4"   | 1 1/16-12 | M22X1.5 | 42,0    | 45,5    | 27,0    | 27,0    |
| 1211627   | R1A25ML52Q-1227 | 3/4"   | 1 1/16-12 | M27X2   | 42,0    | 51,5    | 27,0    | 32,0    |
| 1216448   | R1A25ML52Q-1426 | 7/8"   | 1 3/16-12 | M26X1.5 | 44,0    | 50,5    | 27,0    | 36,0    |
| 1212761   | R1A25ML52Q-1627 | 1"     | 1 5/16-12 | M27X2   | 46,0    | 55,0    | 33,0    | 32,0    |
| 1211628   | R1A25ML52Q-1633 | 1"     | 1 5/16-12 | M33X1.5 | 46,0    | 55,0    | 33,0    | 41,0    |
| 1211629   | R1A25ML52Q-2042 | 1 1/4" | 1 5/8-12  | M42X2   | 52,0    | 60,0    | 41,0    | 50,0    |
| 1211630   | R1A25ML52Q-2448 | 1 1/2" | 1 7/8-12  | M48X1.5 | 59,0    | 67,0    | 48,0    | 55,0    |

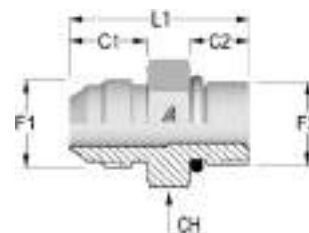
REV.2.1

## // SAE UNF

## // R1A25M1305

Straight connector

JIC Male - SAE UNF/UN Male with O-Ring

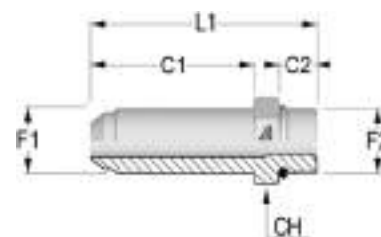


| Item Code | Product Code    | OD1   | F1        | F2        | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|-----------|---------|---------|---------|---------|
| 1207370   | R1A25M1305-0404 | 1/4"  | 7/16-20   | 7/16-20   | 14,0    | 9,0     | 31,0    | 14,0    |
| 1207371   | R1A25M1305-0405 | 1/4"  | 7/16-20   | 1/2-20    | 14,0    | 9,0     | 31,0    | 16,0    |
| 1207630   | R1A25M1305-0406 | 1/4"  | 7/16-20   | 9/16-18   | 14,0    | 10,0    | 32,5    | 17,0    |
| 1207372   | R1A25M1305-0505 | 5/16" | 1/2-20    | 1/2-20    | 14,0    | 9,0     | 31,0    | 17,0    |
| 1208278   | R1A25M1305-0604 | 3/8"  | 9/16-18   | 7/16-20   | 14,0    | 9,0     | 32,0    | 17,0    |
| 1216397   | R1A25M1305-0605 | 3/8"  | 9/16-18   | 1/2-20    | 14,0    | 9,0     | 32,5    | 17,0    |
| 1207373   | R1A25M1305-0606 | 3/8"  | 9/16-18   | 9/16-18   | 14,0    | 10,0    | 33,0    | 17,0    |
| 1207374   | R1A25M1305-0608 | 3/8"  | 9/16-18   | 3/4-16    | 14,0    | 11,0    | 35,0    | 22,0    |
| 1207375   | R1A25M1305-0808 | 1/2"  | 3/4-16    | 3/4-16    | 16,5    | 11,0    | 38,0    | 22,0    |
| 1207376   | R1A25M1305-0810 | 1/2"  | 3/4-16    | 7/8-14    | 16,5    | 12,5    | 40,5    | 27,0    |
| 1207631   | R1A25M1305-0812 | 1/2"  | 3/4-16    | 1 1/16-12 | 16,5    | 15,0    | 44,5    | 32,0    |
| 1207632   | R1A25M1305-1008 | 5/8"  | 7/8-14    | 3/4-16    | 19,5    | 14,3    | 41,5    | 27,0    |
| 1207377   | R1A25M1305-1010 | 5/8"  | 7/8-14    | 7/8-14    | 19,5    | 12,5    | 43,0    | 27,0    |
| 1207633   | R1A25M1305-1012 | 5/8"  | 7/8-14    | 1 1/16-12 | 19,5    | 15,0    | 47,0    | 32,0    |
| 1207378   | R1A25M1305-1208 | 3/4"  | 1 1/16-12 | 3/4-16    | 22,0    | 14,3    | 48,5    | 27,0    |
| 1207379   | R1A25M1305-1210 | 3/4"  | 1 1/16-12 | 7/8-14    | 22,0    | 12,5    | 47,5    | 27,0    |
| 1207380   | R1A25M1305-1212 | 3/4"  | 1 1/16-12 | 1 1/16-12 | 22,0    | 15,0    | 50,0    | 32,0    |
| 1207381   | R1A25M1305-1216 | 3/4"  | 1 1/16-12 | 1 5/16-12 | 22,0    | 15,0    | 50,5    | 38,0    |
| 1216398   | R1A25M1305-1414 | 7/8"  | 1 3/16-12 | 1 3/16-12 | 22,5    | 15,0    | 50,5    | 36,0    |
| 1207382   | R1A25M1305-1612 | 1"    | 1 5/16-12 | 1 1/16-12 | 23,0    | 18,3    | 50,5    | 36,0    |
| 1207383   | R1A25M1305-1616 | 1"    | 1 5/16-12 | 1 5/16-12 | 23,0    | 15,0    | 52,0    | 38,0    |
| 1207634   | R1A25M1305-1620 | 1"    | 1 5/16-12 | 1 5/8-12  | 23,0    | 15,0    | 54,0    | 46,0    |
| 1205938   | R1A25M1305-2016 | 1"1/4 | 1 5/8-12  | 1 5/16-12 | 24,5    | 19,1    | 55,5    | 46,0    |
| 1207384   | R1A25M1305-2020 | 1"1/4 | 1 5/8-12  | 1 5/8-12  | 24,5    | 15,0    | 55,0    | 46,0    |
| 1207385   | R1A25M1305-2424 | 1"1/2 | 1 7/8-12  | 1 7/8-12  | 27,5    | 15,0    | 60,5    | 55,0    |

## // R1A25M130J

Long connector

JIC Male - SAE UNF/UN Male with O-Ring

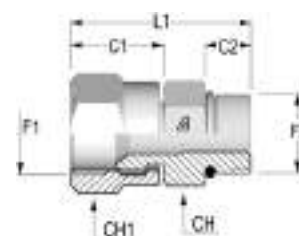


| Item Code | Product Code    | OD1    | F1        | F2        | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|-----------|-----------|---------|---------|---------|---------|
| 1212883   | R1A25M130J-0404 | 1/4"   | 7/16-20   | 7/16-20   | 35,0    | 9,0     | 52,5    | 17,0    |
| 1212884   | R1A25M130J-0405 | 1/4"   | 7/16-20   | 1/2-20    | 35,0    | 9,0     | 52,5    | 17,0    |
| 1212885   | R1A25M130J-0406 | 1/4"   | 7/16-20   | 9/16-18   | 35,0    | 10,0    | 54,5    | 19,0    |
| 1212886   | R1A25M130J-0505 | 5/16"  | 1/2-20    | 1/2-20    | 37,0    | 9,0     | 54,5    | 16,0    |
| 1212888   | R1A25M130J-0606 | 3/8"   | 9/16-18   | 9/16-18   | 39,0    | 10,0    | 58,5    | 19,0    |
| 1212889   | R1A25M130J-0608 | 3/8"   | 9/16-18   | 3/4-16    | 39,0    | 11,0    | 60,0    | 24,0    |
| 1212890   | R1A25M130J-0808 | 1/2"   | 3/4-16    | 3/4-16    | 48,0    | 11,0    | 68,5    | 24,0    |
| 1212891   | R1A25M130J-0810 | 1/2"   | 3/4-16    | 7/8-14    | 48,0    | 12,5    | 71,5    | 27,0    |
| 1212892   | R1A25M130J-0812 | 1/2"   | 3/4-16    | 1 1/16-12 | 48,0    | 15,0    | 71,5    | 32,0    |
| 1212893   | R1A25M130J-1008 | 5/8"   | 7/8-14    | 3/4-16    | 53,0    | 11,0    | 75,5    | 27,0    |
| 1212894   | R1A25M130J-1010 | 5/8"   | 7/8-14    | 7/8-14    | 53,0    | 12,5    | 77,0    | 27,0    |
| 1212895   | R1A25M130J-1012 | 5/8"   | 7/8-14    | 1 1/16-12 | 53,0    | 15,0    | 81,5    | 32,0    |
| 1212898   | R1A25M130J-1212 | 3/4"   | 1 1/16-12 | 1 1/16-12 | 63,0    | 15,0    | 91,5    | 32,0    |
| 1212899   | R1A25M130J-1216 | 3/4"   | 1 1/16-12 | 1 5/16-12 | 63,0    | 15,0    | 92,5    | 41,0    |
| 1216400   | R1A25M130J-1414 | 7/8"   | 1 3/16-12 | 1 3/16-12 | 68,0    | 15,0    | 96,5    | 36,0    |
| 1212900   | R1A25M130J-1612 | 1"     | 1 5/16-12 | 1 1/16-12 | 72,0    | 15,0    | 100,0   | 41,0    |
| 1212901   | R1A25M130J-1616 | 1"     | 1 5/16-12 | 1 5/16-12 | 72,0    | 15,0    | 101,0   | 41,0    |
| 1212903   | R1A25M130J-2020 | 1 1/4" | 1 5/8-12  | 1 5/8-12  | 88,0    | 15,0    | 119,0   | 50,0    |
| 1212904   | R1A25M130J-2424 | 1 1/2" | 1 7/8-12  | 1 7/8-12  | 98,0    | 15,0    | 131,0   | 55,0    |

## // R1A2511305

Straight connector

JIC Female - SAE UNF/UN Male with O-Ring



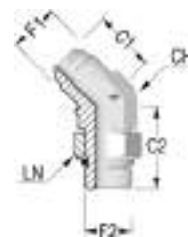
| Item Code | Product Code    | OD1    | F1        | F2        | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|--------|-----------|-----------|---------|---------|---------|---------|----------|
| 1207435   | R1A2511305-0404 | 1/4"   | 7/16-20   | 7/16-20   | 17,0    | 9,0     | 34,0    | 14,0    | 16,0     |
| 1213175   | R1A2511305-0405 | 1/4"   | 7/16-20   | 1/2-20    | 17,0    | 9,0     | 34,0    | 16,0    | 16,0     |
| 1213176   | R1A2511305-0406 | 1/4"   | 7/16-20   | 9/16-18   | 17,0    | 10,0    | 35,0    | 17,0    | 16,0     |
| 1207436   | R1A2511305-0505 | 5/16"  | 1/2-20    | 1/2-20    | 18,5    | 9,0     | 35,5    | 17,0    | 17,0     |
| 1207437   | R1A2511305-0606 | 3/8"   | 9/16-18   | 9/16-18   | 18,5    | 10,0    | 36,5    | 17,0    | 19,0     |
| 1213177   | R1A2511305-0608 | 3/8"   | 9/16-18   | 3/4-16    | 18,5    | 11,0    | 39,5    | 22,0    | 19,0     |
| 1207438   | R1A2511305-0808 | 1/2"   | 3/4-16    | 3/4-16    | 22,2    | 11,0    | 43,2    | 22,0    | 25,0     |
| 1213178   | R1A2511305-0810 | 1/2"   | 3/4-16    | 7/8-14    | 22,2    | 12,5    | 46,2    | 27,0    | 27,0     |
| 1213179   | R1A2511305-0812 | 1/2"   | 3/4-16    | 1 1/16-12 | 22,2    | 15,0    | 49,2    | 32,0    | 25,0     |
| 1213180   | R1A2511305-1008 | 5/8"   | 7/8-14    | 3/4-16    | 25,2    | 11,0    | 46,2    | 22,0    | 27,0     |
| 1207439   | R1A2511305-1010 | 5/8"   | 7/8-14    | 7/8-14    | 25,2    | 12,5    | 49,2    | 27,0    | 27,0     |
| 1213181   | R1A2511305-1012 | 5/8"   | 7/8-14    | 1 1/16-12 | 25,2    | 15,0    | 52,2    | 32,0    | 27,0     |
| 1213183   | R1A2511305-1210 | 3/4"   | 1 1/16-12 | 7/8-14    | 27,3    | 12,5    | 51,3    | 27,0    | 32,0     |
| 1207440   | R1A2511305-1212 | 3/4"   | 1 1/16-12 | 1 1/16-12 | 27,3    | 15,0    | 54,3    | 32,0    | 32,0     |
| 1213184   | R1A2511305-1216 | 3/4"   | 1 1/16-12 | 1 5/16-12 | 27,3    | 15,0    | 54,3    | 38,0    | 32,0     |
| 1216346   | R1A2511305-1414 | 7/8"   | 1 3/16-12 | 1 3/16-12 | 27,0    | 15,0    | 54,0    | 36,0    | 36,0     |
| 1213185   | R1A2511305-1612 | 1"     | 1 5/16-12 | 1 1/16-12 | 29,6    | 15,0    | 56,6    | 32,0    | 38,0     |
| 1207441   | R1A2511305-1616 | 1"     | 1 5/16-12 | 1 5/16-12 | 29,6    | 15,0    | 56,6    | 41,0    | 38,0     |
| 1213208   | R1A2521305-2424 | 1 1/2" | 1 7/8-12  | 1 7/8-12  | 18,4    | 15,0    | 67,0    | 50,0    | 55,0     |

REV.2.1

## // R1A25M4305

45° adjustable elbow connector

JIC Male - SAE UNF/UN Male with O-Ring

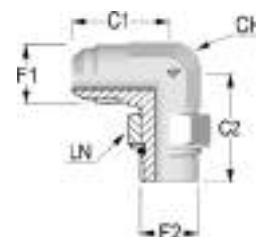


| Item Code | Product Code    | OD1    | F1        | F2        | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|-----------|-----------|---------|---------|---------|---------|
| 1212979   | R1A25M4305-0405 | 1/4"   | 7/16-20   | 1/2-20    | 21,0    | 26,5    | 14,0    | 19,0    |
| 1207335   | R1A25M4305-0505 | 5/16"  | 1/2-20    | 1/2-20    | 21,0    | 26,5    | 14,0    | 19,0    |
| 1207336   | R1A25M4305-0606 | 3/8"   | 9/16-18   | 9/16-18   | 19,5    | 26,5    | 14,0    | 22,0    |
| 1212980   | R1A25M4305-0608 | 3/8"   | 9/16-18   | 3/4-16    | 22,5    | 38,0    | 19,0    | 24,0    |
| 1207337   | R1A25M4305-0808 | 1/2"   | 3/4-16    | 3/4-16    | 25,0    | 33,0    | 19,0    | 24,0    |
| 1212981   | R1A25M4305-0810 | 1/2"   | 3/4-16    | 7/8-14    | 27,5    | 42,5    | 22,0    | 30,0    |
| 1212982   | R1A25M4305-1008 | 5/8"   | 7/8-14    | 3/4-16    | 28,0    | 37,0    | 22,0    | 24,0    |
| 1207338   | R1A25M4305-1010 | 5/8"   | 7/8-14    | 7/8-14    | 28,0    | 38,5    | 22,0    | 30,0    |
| 1216413   | R1A25M4305-1012 | 5/8"   | 7/8-14    | 1 1/16-12 | 28,5    | 44,0    | 27,0    | 36,0    |
| 1212983   | R1A25M4305-1208 | 3/4"   | 1 1/16-12 | 3/4-16    | 32,5    | 37,5    | 27,0    | 24,0    |
| 1211710   | R1A25M4305-1210 | 3/4"   | 1 1/16-12 | 7/8-14    | 32,5    | 40,5    | 27,0    | 27,0    |
| 1207339   | R1A25M4305-1212 | 3/4"   | 1 1/16-12 | 1 1/16-12 | 32,5    | 44,0    | 27,0    | 36,0    |
| 1212984   | R1A25M4305-1216 | 3/4"   | 1 1/16-12 | 1 5/16-12 | 32,5    | 47,0    | 33,0    | 41,0    |
| 1212985   | R1A25M4305-1414 | 7/8"   | 1 3/16-12 | 1 3/16-12 | 37,0    | 47,0    | 33,0    | 38,0    |
| 1212986   | R1A25M4305-1612 | 1"     | 1 5/16-12 | 1 1/16-12 | 37,5    | 44,0    | 33,0    | 36,0    |
| 1207340   | R1A25M4305-1616 | 1"     | 1 5/16-12 | 1 5/16-12 | 37,5    | 47,0    | 33,0    | 41,0    |
| 1212987   | R1A25M4305-1620 | 1"     | 1 5/16-12 | 1 5/8-12  | 40,0    | 48,5    | 41,0    | 50,0    |
| 1211711   | R1A25M4305-2020 | 1" 1/4 | 1 5/8-12  | 1 5/8-12  | 40,5    | 48,5    | 41,0    | 50,0    |
| 1211712   | R1A25M4305-2424 | 1" 1/2 | 1 7/8-12  | 1 7/8-12  | 45,0    | 48,5    | 48,0    | 55,0    |

## // R1A25M9305

90° adjustable elbow connector

JIC Male - SAE UNF/UN Male with O-Ring



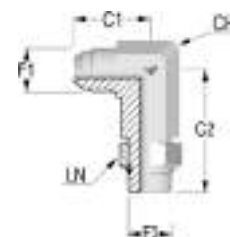
| Item Code | Product Code    | OD1    | F1        | F2        | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|-----------|-----------|---------|---------|---------|---------|
| 1207256   | R1A25M9305-0404 | 1/4"   | 7/16-20   | 7/16-20   | 22,5    | 26,0    | 12,0    | 17,0    |
| 1207640   | R1A25M9305-0405 | 1/4"   | 7/16-20   | 1/2-20    | 24,0    | 27,5    | 14,0    | 17,0    |
| 1213077   | R1A25M9305-0406 | 1/4"   | 7/16-20   | 9/16-18   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1207257   | R1A25M9305-0505 | 5/16"  | 1/2-20    | 1/2-20    | 24,0    | 27,5    | 14,0    | 17,0    |
| 1207258   | R1A25M9305-0606 | 3/8"   | 9/16-18   | 9/16-18   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1207641   | R1A25M9305-0608 | 3/8"   | 9/16-18   | 3/4-16    | 28,5    | 36,5    | 19,0    | 24,0    |
| 1216429   | R1A25M9305-0610 | 3/8"   | 9/16-18   | 7/8-14    | 31,0    | 43,5    | 22,0    | 27,0    |
| 1207259   | R1A25M9305-0808 | 1/2"   | 3/4-16    | 3/4-16    | 31,5    | 36,5    | 19,0    | 24,0    |
| 1207642   | R1A25M9305-0810 | 1/2"   | 3/4-16    | 7/8-14    | 34,0    | 43,0    | 22,0    | 27,0    |
| 1213079   | R1A25M9305-0812 | 1/2"   | 3/4-16    | 1 1/16-12 | 37,0    | 49,0    | 27,0    | 32,0    |
| 1207643   | R1A25M9305-1008 | 5/8"   | 7/8-14    | 3/4-16    | 36,5    | 39,5    | 22,0    | 24,0    |
| 1207260   | R1A25M9305-1010 | 5/8"   | 7/8-14    | 7/8-14    | 36,5    | 43,0    | 22,0    | 27,0    |
| 1213080   | R1A25M9305-1012 | 5/8"   | 7/8-14    | 1 1/16-12 | 39,5    | 49,0    | 27,0    | 32,0    |
| 1213081   | R1A25M9305-1208 | 3/4"   | 1 1/16-12 | 3/4-16    | 42,0    | 42,0    | 27,0    | 22,0    |
| 1207261   | R1A25M9305-1210 | 3/4"   | 1 1/16-12 | 7/8-14    | 42,0    | 45,5    | 27,0    | 27,0    |
| 1207262   | R1A25M9305-1212 | 3/4"   | 1 1/16-12 | 1 1/16-12 | 42,0    | 49,0    | 27,0    | 32,0    |
| 1213082   | R1A25M9305-1216 | 3/4"   | 1 1/16-12 | 1 5/16-12 | 44,5    | 52,0    | 33,0    | 41,0    |
| 1213083   | R1A25M9305-1414 | 7/8"   | 1 3/16-12 | 1 3/16-12 | 44,0    | 50,5    | 33,0    | 41,0    |
| 1207263   | R1A25M9305-1612 | 1"     | 1 5/16-12 | 1 1/16-12 | 46,0    | 52,0    | 33,0    | 32,0    |
| 1207264   | R1A25M9305-1616 | 1"     | 1 5/16-12 | 1 5/16-12 | 46,0    | 54,0    | 33,0    | 41,0    |
| 1213084   | R1A25M9305-1620 | 1"     | 1 5/16-12 | 1 5/8-12  | 51,0    | 57,0    | 41,0    | 50,0    |
| 1207265   | R1A25M9305-2020 | 1" 1/4 | 1 5/8-12  | 1 5/8-12  | 52,0    | 57,0    | 41,0    | 50,0    |
| 1211738   | R1A25M9305-2424 | 1" 1/2 | 1 7/8-12  | 1 7/8-12  | 59,0    | 61,0    | 48,0    | 55,0    |

REV.2.1

## // R1A25M930J

90° adjustable long elbow connector

JIC Male - SAE UNF/UN Male with O-Ring

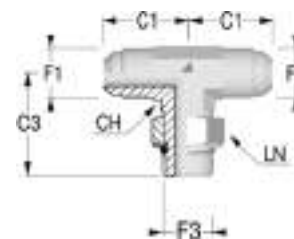


| Item Code | Product Code    | OD1    | F1        | F2        | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|-----------|-----------|---------|---------|---------|---------|
| 1213056   | R1A25M930J-0404 | 1/4"   | 7/16-20   | 7/16-20   | 23,5    | 46,0    | 14,0    | 17,0    |
| 1213057   | R1A25M930J-0405 | 1/4"   | 7/16-20   | 1/2-20    | 24,0    | 49,5    | 14,0    | 17,0    |
| 1213058   | R1A25M930J-0406 | 1/4"   | 7/16-20   | 9/16-18   | 27,0    | 56,5    | 17,0    | 19,0    |
| 1213059   | R1A25M930J-0505 | 5/16"  | 1/2-20    | 1/2-20    | 24,0    | 49,5    | 14,0    | 17,0    |
| 1213060   | R1A25M930J-0606 | 3/8"   | 9/16-18   | 9/16-18   | 27,0    | 56,5    | 17,0    | 19,0    |
| 1213061   | R1A25M930J-0608 | 3/8"   | 9/16-18   | 3/4-16    | 28,5    | 67,0    | 22,0    | 24,0    |
| 1213062   | R1A25M930J-0808 | 1/2"   | 3/4-16    | 3/4-16    | 31,5    | 67,0    | 22,0    | 24,0    |
| 1213063   | R1A25M930J-0810 | 1/2"   | 3/4-16    | 7/8-14    | 34,0    | 78,0    | 22,0    | 27,0    |
| 1213064   | R1A25M930J-0812 | 1/2"   | 3/4-16    | 1 1/16-12 | 37,0    | 92,0    | 27,0    | 32,0    |
| 1213065   | R1A25M930J-1008 | 5/8"   | 7/8-14    | 3/4-16    | 36,5    | 75,0    | 22,0    | 24,0    |
| 1213066   | R1A25M930J-1010 | 5/8"   | 7/8-14    | 7/8-14    | 36,5    | 78,0    | 22,0    | 27,0    |
| 1213067   | R1A25M930J-1012 | 5/8"   | 7/8-14    | 1 1/16-12 | 39,5    | 92,0    | 27,0    | 32,0    |
| 1213068   | R1A25M930J-1208 | 3/4"   | 1 1/16-12 | 3/4-16    | 42,0    | 85,0    | 27,0    | 24,0    |
| 1213069   | R1A25M930J-1210 | 3/4"   | 1 1/16-12 | 7/8-14    | 44,6    | 88,0    | 27,0    | 27,0    |
| 1213070   | R1A25M930J-1212 | 3/4"   | 1 1/16-12 | 1 1/16-12 | 42,0    | 92,0    | 27,0    | 32,0    |
| 1213071   | R1A25M930J-1216 | 3/4"   | 1 1/16-12 | 1 5/16-12 | 44,5    | 105,0   | 33,0    | 41,0    |
| 1216431   | R1A25M930J-1414 | 7/8"   | 1 3/16-12 | 1 3/16-12 | 44,0    | 92,0    | 33,0    | 41,0    |
| 1213072   | R1A25M930J-1612 | 1"     | 1 5/16-12 | 1 1/16-12 | 46,0    | 105,0   | 33,0    | 32,0    |
| 1213073   | R1A25M930J-1616 | 1"     | 1 5/16-12 | 1 5/16-12 | 46,0    | 105,0   | 33,0    | 41,0    |
| 1213074   | R1A25M930J-1620 | 1"     | 1 5/16-12 | 1 5/8-12  | 51,0    | 124,0   | 41,0    | 50,0    |
| 1213075   | R1A25M930J-2020 | 1" 1/4 | 1 5/8-12  | 1 5/8-12  | 52,0    | 124,0   | 41,0    | 50,0    |
| 1213076   | R1A25M930J-2424 | 1" 1/2 | 1 7/8-12  | 1 7/8-12  | 59,0    | 135,0   | 48,0    | 55,0    |

## // R1A25MT305

Branch Tee adjustable elbow connector

JIC Male - SAE UNF/UN Male with O-Ring



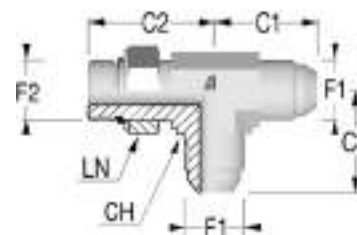
| Item Code | Product Code    | OD1    | F1        | F3        | C1 (mm) | C3 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|-----------|-----------|---------|---------|---------|---------|
| 1210702   | R1A25MT305-0404 | 1/4"   | 7/16-20   | 7/16-20   | 22,5    | 26,0    | 12,0    | 16,0    |
| 1212777   | R1A25MT305-0405 | 1/4"   | 7/16-20   | 1/2-20    | 24,0    | 27,5    | 14,0    | 17,0    |
| 1212778   | R1A25MT305-0406 | 1/4"   | 7/16-20   | 9/16-18   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1210703   | R1A25MT305-0505 | 5/16"  | 1/2-20    | 1/2-20    | 24,0    | 27,5    | 14,0    | 17,0    |
| 1207321   | R1A25MT305-0606 | 3/8"   | 9/16-18   | 9/16-18   | 27,0    | 31,5    | 14,0    | 19,0    |
| 1212779   | R1A25MT305-0608 | 3/8"   | 9/16-18   | 3/4-16    | 28,5    | 36,5    | 19,0    | 24,0    |
| 1207322   | R1A25MT305-0808 | 1/2"   | 3/4-16    | 3/4-16    | 31,5    | 36,5    | 19,0    | 24,0    |
| 1212780   | R1A25MT305-0810 | 1/2"   | 3/4-16    | 7/8-14    | 34,0    | 43,0    | 22,0    | 27,0    |
| 1212781   | R1A25MT305-0812 | 1/2"   | 3/4-16    | 1 1/16-12 | 37,0    | 49,0    | 27,0    | 32,0    |
| 1212782   | R1A25MT305-1008 | 5/8"   | 7/8-14    | 3/4-16    | 36,5    | 39,5    | 22,0    | 24,0    |
| 1207323   | R1A25MT305-1010 | 5/8"   | 7/8-14    | 7/8-14    | 36,5    | 43,0    | 22,0    | 27,0    |
| 1212783   | R1A25MT305-1012 | 5/8"   | 7/8-14    | 1 1/16-12 | 36,5    | 49,0    | 22,0    | 32,0    |
| 1212784   | R1A25MT305-1208 | 3/4"   | 1 1/16-12 | 3/4-16    | 42,0    | 42,0    | 27,0    | 24,0    |
| 1212785   | R1A25MT305-1210 | 3/4"   | 1 1/16-12 | 7/8-14    | 42,0    | 45,5    | 27,0    | 27,0    |
| 1210704   | R1A25MT305-1212 | 3/4"   | 1 1/16-12 | 1 1/16-12 | 42,0    | 49,0    | 27,0    | 32,0    |
| 1212786   | R1A25MT305-1216 | 3/4"   | 1 1/16-12 | 1 5/16-12 | 44,5    | 52,0    | 33,0    | 41,0    |
| 1216491   | R1A25MT305-1414 | 7/8"   | 1 3/16-12 | 1 3/16-12 | 44,0    | 50,5    | 33,0    | 38,0    |
| 1212787   | R1A25MT305-1612 | 1"     | 1 5/16-12 | 1 1/16-12 | 46,0    | 52,0    | 33,0    | 32,0    |
| 1210705   | R1A25MT305-1616 | 1"     | 1 5/16-12 | 1 5/16-12 | 46,0    | 54,6    | 33,0    | 41,0    |
| 1212788   | R1A25MT305-1620 | 1"     | 1 5/16-12 | 1 5/8-12  | 51,0    | 57,0    | 41,0    | 50,0    |
| 1212789   | R1A25MT305-2020 | 1" 1/4 | 1 5/8-12  | 1 5/8-12  | 52,0    | 57,0    | 41,0    | 50,0    |
| 1212790   | R1A25MT305-2424 | 1" 1/2 | 1 7/8-12  | 1 7/8-12  | 59,0    | 61,0    | 48,0    | 55,0    |

REV.2.1

## // R1A25ML305

Run Tee adjustable elbow connector

JIC Male - SAE UNF/UN Male with O-Ring



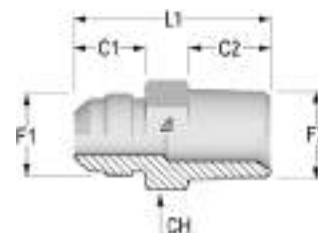
| Item Code | Product Code    | OD1   | F1        | F2        | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|-----------|---------|---------|---------|---------|
| 1210695   | R1A25ML305-0404 | 1/4"  | 7/16-20   | 7/16-20   | 22,5    | 26,0    | 12,0    | 17,0    |
| 1212716   | R1A25ML305-0405 | 1/4"  | 7/16-20   | 1/2-20    | 24,0    | 27,5    | 14,0    | 17,0    |
| 1212717   | R1A25ML305-0406 | 1/4"  | 7/16-20   | 9/16-18   | 27,0    | 31,5    | 14,0    | 22,0    |
| 1210696   | R1A25ML305-0505 | 5/16" | 1/2-20    | 1/2-20    | 24,0    | 27,5    | 14,0    | 19,0    |
| 1207300   | R1A25ML305-0606 | 3/8"  | 9/16-18   | 9/16-18   | 27,0    | 31,5    | 14,0    | 22,0    |
| 1212718   | R1A25ML305-0608 | 3/8"  | 9/16-18   | 3/4-16    | 28,5    | 36,5    | 19,0    | 24,0    |
| 1210697   | R1A25ML305-0808 | 1/2"  | 3/4-16    | 3/4-16    | 31,5    | 36,5    | 19,0    | 24,0    |
| 1212719   | R1A25ML305-0810 | 1/2"  | 3/4-16    | 7/8-14    | 34,0    | 43,0    | 22,0    | 30,0    |
| 1212720   | R1A25ML305-0812 | 1/2"  | 3/4-16    | 1 1/16-12 | 37,0    | 49,0    | 27,0    | 32,0    |
| 1212721   | R1A25ML305-1008 | 5/8"  | 7/8-14    | 3/4-16    | 36,5    | 39,5    | 22,0    | 24,0    |
| 1210698   | R1A25ML305-1010 | 5/8"  | 7/8-14    | 7/8-14    | 36,5    | 39,5    | 22,0    | 24,0    |
| 1212722   | R1A25ML305-1012 | 5/8"  | 7/8-14    | 1 1/16-12 | 39,5    | 49,0    | 27,0    | 32,0    |
| 1212723   | R1A25ML305-1208 | 3/4"  | 1 1/16-12 | 3/4-16    | 42,0    | 42,0    | 27,0    | 24,0    |
| 1212724   | R1A25ML305-1210 | 3/4"  | 1 1/16-12 | 7/8-14    | 42,0    | 45,5    | 27,0    | 27,0    |
| 1207301   | R1A25ML305-1212 | 3/4"  | 1 1/16-12 | 1 1/16-12 | 42,0    | 49,0    | 27,0    | 32,0    |
| 1212725   | R1A25ML305-1216 | 3/4"  | 1 1/16-12 | 1 5/16-12 | 44,5    | 52,0    | 33,0    | 41,0    |
| 1211624   | R1A25ML305-1616 | 1"    | 1 5/16-12 | 1 5/16-12 | 46,0    | 54,6    | 33,0    | 41,0    |
| 1212727   | R1A25ML305-1620 | 1"    | 1 5/16-12 | 1 5/8-12  | 51,0    | 57,0    | 41,0    | 50,0    |
| 1211625   | R1A25ML305-2020 | 1"1/4 | 1 5/8-12  | 1 5/8-12  | 52,0    | 57,0    | 41,0    | 50,0    |
| 1212728   | R1A25ML305-2424 | 1"1/2 | 1 7/8-12  | 1 7/8-12  | 59,0    | 61,0    | 48,0    | 55,0    |

## // NPTF

## // R1A25M128M

Straight connector

JIC - NPTF Male



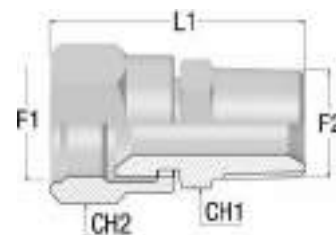
| Item Code | Product Code    | F1        | F2           | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-----------|--------------|---------|---------|---------|---------|
| 1203679   | R1A25M128M-0402 | 7/16-20   | 1/8-27       | 14,0    | 10,0    | 31,0    | 14,0    |
| 1203678   | R1A25M128M-0404 | 7/16-20   | 1/4-18       | 14,0    | 14,5    | 36,0    | 14,0    |
| 1203621   | R1A25M128M-0502 | 1/2-20    | 1/8-27       | 14,0    | 10,0    | 31,0    | 14,0    |
| 1203620   | R1A25M128M-0504 | 1/2-20    | 1/4-18       | 14,0    | 14,5    | 36,0    | 14,0    |
| 1203704   | R1A25M128M-0602 | 9/16-18   | 1/8-27       | 14,0    | 10,0    | 32,0    | 17,0    |
| 1203703   | R1A25M128M-0604 | 9/16-18   | 1/4-18       | 14,0    | 14,5    | 36,5    | 17,0    |
| 1203705   | R1A25M128M-0606 | 9/16-18   | 3/8-18       | 14,0    | 14,5    | 36,5    | 19,0    |
| 1203702   | R1A25M128M-0608 | 9/16-18   | 1/2-14       | 14,0    | 18,0    | 43,0    | 22,0    |
| 1203659   | R1A25M128M-0804 | 3/4-16    | 1/4-18       | 16,5    | 14,5    | 39,0    | 19,0    |
| 1203661   | R1A25M128M-0806 | 3/4-16    | 3/8-18       | 16,5    | 14,5    | 39,0    | 19,0    |
| 1203658   | R1A25M128M-0808 | 3/4-16    | 1/2-14       | 16,5    | 18,0    | 44,5    | 22,0    |
| 1203660   | R1A25M128M-0812 | 3/4-16    | 3/4-14       | 16,5    | 19,0    | 47,0    | 27,0    |
| 1212881   | R1A25M128M-1004 | 7/8-14    | 1/4-18       | 19,5    | 14,5    | 43,0    | 24,0    |
| 1203691   | R1A25M128M-1006 | 7/8-14    | 3/8-18       | 19,5    | 14,5    | 43,5    | 24,0    |
| 1203689   | R1A25M128M-1008 | 7/8-14    | 1/2-14       | 19,5    | 18,0    | 47,0    | 24,0    |
| 1203690   | R1A25M128M-1012 | 7/8-14    | 3/4-14       | 19,5    | 19,0    | 49,5    | 27,0    |
| 1203608   | R1A25M128M-1208 | 1 1/16-12 | 1/2-14       | 22,0    | 18,0    | 51,5    | 27,0    |
| 1203609   | R1A25M128M-1212 | 1 1/16-12 | 3/4-14       | 22,0    | 19,0    | 52,5    | 27,0    |
| 1203607   | R1A25M128M-1216 | 1 1/16-12 | 1-11 1/2     | 22,0    | 24,0    | 57,0    | 36,0    |
| 1216396   | R1A25M128M-1412 | 1 3/16-12 | 3/4-14       | 22,5    | 19,0    | 53,0    | 30,0    |
| 1203633   | R1A25M128M-1612 | 1 5/16-12 | 3/4-14       | 23,0    | 19,0    | 53,5    | 36,0    |
| 1203631   | R1A25M128M-1616 | 1 5/16-12 | 1-11 1/2     | 23,0    | 24,0    | 58,5    | 36,0    |
| 1203642   | R1A25M128M-2016 | 1 5/8-12  | 1-11 1/2     | 24,5    | 24,0    | 61,5    | 46,0    |
| 1203643   | R1A25M128M-2020 | 1 5/8-12  | 1 1/4-11 1/2 | 24,5    | 25,0    | 62,5    | 46,0    |
| 1212882   | R1A25M128M-2420 | 1 7/8-12  | 1 1/4-11 1/2 | 27,5    | 25,0    | 67,5    | 50,0    |
| 1203649   | R1A25M128M-2424 | 1 7/8-12  | 1 1/2-11 1/2 | 27,5    | 25,5    | 68,0    | 50,0    |

REV.2.1

## // R1A251128M

Straight connector

JIC Female - NPTF Male



| Item Code | Product Code    | OD1    | F1        | F2           | L1 (mm) | CH1 (mm) | CH2 (mm) |
|-----------|-----------------|--------|-----------|--------------|---------|----------|----------|
| 1210848   | R1A251128M-0402 | 1/4"   | 7/16-20   | 1/8-27       | 34,2    | 16,0     | 14,0     |
| 1207618   | R1A251128M-0404 | 1/4"   | 7/16-20   | 1/4-18       | 39,2    | 16,0     | 14,0     |
| 1213170   | R1A251128M-0502 | 5/16"  | 1/2-20    | 1/8-27       | 35,0    | 17,0     | 14,0     |
| 1207619   | R1A251128M-0504 | 5/16"  | 1/2-20    | 1/4-18       | 41,0    | 17,0     | 14,0     |
| 1213171   | R1A251128M-0602 | 3/8"   | 9/16-18   | 1/8-27       | 36,5    | 19,0     | 14,0     |
| 1207620   | R1A251128M-0604 | 3/8"   | 9/16-18   | 1/4-18       | 41,0    | 19,0     | 14,0     |
| 1207621   | R1A251128M-0606 | 3/8"   | 9/16-18   | 3/8-18       | 41,5    | 19,0     | 19,0     |
| 1213173   | R1A251128M-0804 | 1/2"   | 3/4-16    | 1/4-18       | 44,0    | 25,0     | 19,0     |
| 1207622   | R1A251128M-0806 | 1/2"   | 3/4-16    | 3/8-18       | 43,2    | 25,0     | 19,0     |
| 1207624   | R1A251128M-1008 | 5/8"   | 7/8-14    | 1/2-14       | 49,7    | 27,0     | 22,0     |
| 1213174   | R1A251128M-1012 | 5/8"   | 7/8-14    | 3/4-14       | 52,5    | 27,0     | 27,0     |
| 1207625   | R1A251128M-1208 | 3/4"   | 1 1/16-12 | 1/2-14       | 54,3    | 32,0     | 27,0     |
| 1207626   | R1A251128M-1212 | 3/4"   | 1 1/16-12 | 3/4-14       | 55,3    | 32,0     | 27,0     |
| 1216345   | R1A251128M-1412 | 7/8"   | 1 3/16-12 | 3/4-14       | 55,2    | 36,0     | 30,0     |
| 1207627   | R1A251128M-1612 | 1"     | 1 5/16-12 | 3/4-14       | 58,6    | 38,0     | 32,0     |
| 1207628   | R1A251128M-1616 | 1"     | 1 5/16-12 | 1-11 1/2     | 64,0    | 38,0     | 36,0     |
| 1213206   | R1A252128M-2020 | 1" 1/4 | 1 5/8-12  | 1 1/4-11 1/2 | 69,4    | 50,0     | 46,0     |

## // R1A25M428M

45° elbow connector

JIC - NPTF Male

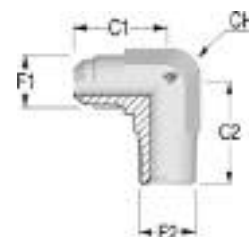


| Item Code | Product Code    | OD1   | F1        | F2       | C1 (mm) | C2 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|----------|---------|---------|---------|
| 1203920   | R1A25M428M-0402 | 1/4"  | 7/16-20   | 1/8-27   | 19,0    | 16,0    | 12,0    |
| 1203919   | R1A25M428M-0404 | 1/4"  | 7/16-20   | 1/4-18   | 21,0    | 21,5    | 14,0    |
| 1210674   | R1A25M428M-0504 | 5/16" | 1/2-20    | 1/4-18   | 21,0    | 21,5    | 14,0    |
| 1203925   | R1A25M428M-0604 | 3/8"  | 9/16-18   | 1/4-18   | 21,0    | 21,5    | 14,0    |
| 1203927   | R1A25M428M-0606 | 3/8"  | 9/16-18   | 3/8-18   | 22,0    | 24,0    | 19,0    |
| 1203916   | R1A25M428M-0806 | 1/2"  | 3/4-16    | 3/8-18   | 25,0    | 24,0    | 19,0    |
| 1203915   | R1A25M428M-0808 | 1/2"  | 3/4-16    | 1/2-14   | 25,5    | 29,5    | 22,0    |
| 1212975   | R1A25M428M-1006 | 5/8"  | 7/8-14    | 3/8-18   | 28,0    | 24,5    | 22,0    |
| 1203923   | R1A25M428M-1008 | 5/8"  | 7/8-14    | 1/2-14   | 28,0    | 29,0    | 22,0    |
| 1212976   | R1A25M428M-1012 | 5/8"  | 7/8-14    | 3/4-14   | 30,0    | 30,5    | 27,0    |
| 1203907   | R1A25M428M-1208 | 3/4"  | 1 1/16-12 | 1/2-14   | 32,5    | 30,5    | 27,0    |
| 1203908   | R1A25M428M-1212 | 3/4"  | 1 1/16-12 | 3/4-14   | 32,5    | 30,5    | 27,0    |
| 1203913   | R1A25M428M-1616 | 1"    | 1 5/16-12 | 1-11 1/2 | 37,0    | 37,5    | 33,0    |

## // R1A25M928M

90° elbow connector

JIC - NPTF Male



| Item Code | Product Code    | OD1    | F1        | F2           | C1 (mm) | C2 (mm) | CH (mm) |
|-----------|-----------------|--------|-----------|--------------|---------|---------|---------|
| 1203872   | R1A25M928M-0402 | 1/4"   | 7/16-20   | 1/8-27       | 22,5    | 19,5    | 12,0    |
| 1203871   | R1A25M928M-0404 | 1/4"   | 7/16-20   | 1/4-18       | 27,0    | 27,5    | 14,0    |
| 1203838   | R1A25M928M-0502 | 5/16"  | 1/2-20    | 1/8-27       | 24,0    | 19,5    | 14,0    |
| 1203837   | R1A25M928M-0504 | 5/16"  | 1/2-20    | 1/4-18       | 26,5    | 27,5    | 14,0    |
| 1203889   | R1A25M928M-0604 | 3/8"   | 9/16-18   | 1/4-18       | 27,0    | 27,5    | 14,0    |
| 1203891   | R1A25M928M-0606 | 3/8"   | 9/16-18   | 3/8-18       | 28,5    | 31,0    | 19,0    |
| 1203888   | R1A25M928M-0608 | 3/8"   | 9/16-18   | 1/2-14       | 31,0    | 37,0    | 22,0    |
| 1203861   | R1A25M928M-0806 | 1/2"   | 3/4-16    | 3/8-18       | 31,5    | 31,0    | 19,0    |
| 1203858   | R1A25M928M-0808 | 1/2"   | 3/4-16    | 1/2-14       | 34,0    | 37,5    | 22,0    |
| 1203860   | R1A25M928M-0812 | 1/2"   | 3/4-16    | 3/4-14       | 37,0    | 40,5    | 27,0    |
| 1203878   | R1A25M928M-1008 | 5/8"   | 7/8-14    | 1/2-14       | 36,5    | 37,0    | 22,0    |
| 1203879   | R1A25M928M-1012 | 5/8"   | 7/8-14    | 3/4-14       | 39,5    | 40,5    | 27,0    |
| 1203831   | R1A25M928M-1208 | 3/4"   | 1 1/16-12 | 1/2-14       | 42,0    | 40,5    | 27,0    |
| 1203832   | R1A25M928M-1212 | 3/4"   | 1 1/16-12 | 3/4-14       | 42,0    | 40,5    | 27,0    |
| 1203843   | R1A25M928M-1616 | 1"     | 1 5/16-12 | 1-11 1/2     | 46,0    | 50,0    | 33,0    |
| 1203851   | R1A25M928M-2016 | 1" 1/4 | 1 5/8-12  | 1-11 1/2     | 52,0    | 59,0    | 41,0    |
| 1203852   | R1A25M928M-2020 | 1" 1/4 | 1 5/8-12  | 1 1/4-11 1/2 | 52,0    | 60,0    | 41,0    |

REV.2.1

## // FLANGES

## // R1A25M133W

Straight flange SAE J518 code 61

JIC - Low pressure

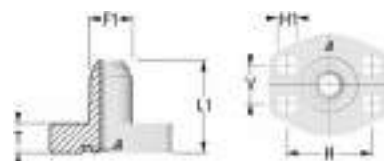


| Item Code | Product Code    | OD1   | F1        | F2    | L1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|-------|-----------|-------|---------|--------|--------|--------|---------|
| 1212906   | R1A25M133W-0808 | 1/2"  | 3/4-16    | 1/2   | 41,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212907   | R1A25M133W-1008 | 5/8"  | 7/8-14    | 1/2   | 44,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212908   | R1A25M133W-1012 | 5/8"  | 7/8-14    | 3/4   | 47,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212909   | R1A25M133W-1208 | 3/4"  | 1 1/16-12 | 1/2   | 46,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212910   | R1A25M133W-1212 | 3/4"  | 1 1/16-12 | 3/4   | 49,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212911   | R1A25M133W-1216 | 3/4"  | 1 1/16-12 | 1     | 51,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212912   | R1A25M133W-1612 | 1"    | 1 5/16-12 | 3/4   | 50,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212913   | R1A25M133W-1616 | 1"    | 1 5/16-12 | 1     | 52,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212914   | R1A25M133W-1620 | 1"    | 1 5/16-12 | 3/4   | 56,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212915   | R1A25M133W-2016 | 1"1/4 | 1 5/8-12  | 1     | 54,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212916   | R1A25M133W-2020 | 1"1/4 | 1 5/8-12  | 1 1/4 | 58,0    | 21,0   | 58,4   | 30,2   | 11,5    |
| 1212917   | R1A25M133W-2024 | 1"1/4 | 1 5/8-12  | 1     | 64,0    | 24,0   | 69,9   | 35,7   | 13,5    |
| 1212918   | R1A25M133W-2420 | 1"1/2 | 1 7/8-12  | 1 1/4 | 61,0    | 21,0   | 58,4   | 30,2   | 11,5    |
| 1212919   | R1A25M133W-2424 | 1"1/2 | 1 7/8-12  | 1 1/2 | 67,0    | 24,0   | 69,9   | 35,7   | 13,5    |

## // R1A25M136W

Straight flange SAE J518 code 62

JIC - High pressure



| Item Code | Product Code    | OD1   | F1        | F2    | L1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|-------|-----------|-------|---------|--------|--------|--------|---------|
| 1212920   | R1A25M136W-0808 | 1/2"  | 3/4-16    | 1/2   | 42,0    | 15,0   | 40,5   | 18,2   | 9,0     |
| 1212921   | R1A25M136W-1008 | 5/8"  | 7/8-14    | 1/2   | 45,0    | 15,0   | 40,5   | 18,2   | 9,0     |
| 1212922   | R1A25M136W-1012 | 5/8"  | 7/8-14    | 3/4   | 49,0    | 17,0   | 50,8   | 23,8   | 11,0    |
| 1212923   | R1A25M136W-1208 | 3/4"  | 1 1/16-12 | 1/2   | 47,0    | 15,0   | 40,5   | 18,2   | 9,0     |
| 1212924   | R1A25M136W-1212 | 3/4"  | 1 1/16-12 | 3/4   | 51,0    | 17,0   | 50,8   | 23,8   | 11,0    |
| 1212925   | R1A25M136W-1216 | 3/4"  | 1 1/16-12 | 1     | 58,0    | 21,0   | 57,2   | 27,8   | 13,0    |
| 1212926   | R1A25M136W-1612 | 1"    | 1 5/16-12 | 3/4   | 52,0    | 17,0   | 50,8   | 23,8   | 11,0    |
| 1212927   | R1A25M136W-1616 | 1"    | 1 5/16-12 | 1     | 59,0    | 21,0   | 57,2   | 27,8   | 13,0    |
| 1212928   | R1A25M136W-1620 | 1"    | 1 5/16-12 | 1 1/4 | 64,0    | 24,0   | 66,7   | 31,8   | 15,0    |
| 1212929   | R1A25M136W-2016 | 1"1/4 | 1 5/8-12  | 1     | 61,0    | 21,0   | 57,2   | 27,8   | 13,0    |
| 1212930   | R1A25M136W-2020 | 1"1/4 | 1 5/8-12  | 1 1/4 | 66,0    | 24,0   | 66,7   | 31,8   | 15,0    |
| 1212931   | R1A25M136W-2024 | 1"1/4 | 1 5/8-12  | 1 1/2 | 70,0    | 27,0   | 79,4   | 36,5   | 17,0    |
| 1212932   | R1A25M136W-2420 | 1"1/2 | 1 7/8-12  | 1 1/4 | 69,0    | 24,0   | 66,7   | 31,8   | 15,0    |
| 1212933   | R1A25M136W-2424 | 1"1/2 | 1 7/8-12  | 1 1/2 | 73,0    | 27,0   | 79,4   | 36,5   | 17,0    |

## // R1A25M933W

90° flange SAE J518 code 61

JIC - Low pressure



| Item Code | Product Code    | OD1   | F1        | F2    | C1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|-------|-----------|-------|---------|--------|--------|--------|---------|
| 1213085   | R1A25M933W-0808 | 1/2"  | 3/4-16    | 1/2   | 40,0    | 17,0   | 38,1   | 17,5   | 9,0     |
| 1213086   | R1A25M933W-1008 | 5/8"  | 7/8-14    | 1/2   | 42,0    | 17,0   | 38,1   | 17,5   | 9,0     |
| 1213087   | R1A25M933W-1012 | 5/8"  | 7/8-14    | 3/4   | 45,0    | 20,0   | 47,6   | 22,2   | 11,0    |
| 1213088   | R1A25M933W-1208 | 3/4"  | 1 1/16-12 | 1/2   | 42,0    | 20,0   | 38,1   | 17,5   | 9,0     |
| 1213089   | R1A25M933W-1212 | 3/4"  | 1 1/16-12 | 3/4   | 47,0    | 20,0   | 47,6   | 22,2   | 11,0    |
| 1213090   | R1A25M933W-1216 | 3/4"  | 1 1/16-12 | 1     | 50,0    | 20,0   | 52,4   | 26,2   | 11,0    |
| 1213091   | R1A25M933W-1612 | 1"    | 1 5/16-12 | 3/4   | 48,0    | 25,0   | 47,6   | 22,2   | 11,0    |
| 1213092   | R1A25M933W-1616 | 1"    | 1 5/16-12 | 1     | 51,0    | 25,0   | 52,4   | 26,2   | 11,0    |
| 1213093   | R1A25M933W-1620 | 1"    | 1 5/16-12 | 1 1/4 | 56,0    | 25,0   | 58,7   | 30,2   | 11,5    |
| 1213094   | R1A25M933W-2016 | 1"1/4 | 1 5/8-12  | 1     | 53,0    | 31,0   | 52,4   | 26,2   | 11,0    |
| 1213095   | R1A25M933W-2020 | 1"1/4 | 1 5/8-12  | 1 1/4 | 58,0    | 31,0   | 58,4   | 30,2   | 11,5    |
| 1213096   | R1A25M933W-2024 | 1"1/4 | 1 5/8-12  | 1 1/2 | 63,0    | 31,0   | 69,9   | 35,7   | 13,5    |
| 1213097   | R1A25M933W-2420 | 1"1/2 | 1 7/8-12  | 1 1/4 | 58,0    | 37,0   | 58,4   | 30,2   | 11,5    |
| 1213098   | R1A25M933W-2424 | 1"1/2 | 1 7/8-12  | 1 1/2 | 66,0    | 37,0   | 69,9   | 35,7   | 13,5    |

## // R1A25M936W

90° flange SAE J518 code 62

JIC - High pressure



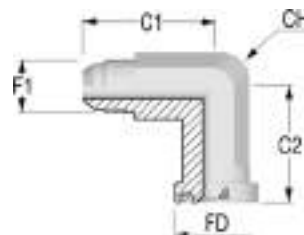
| Item Code | Product Code    | OD1   | F1        | F2    | C1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|-------|-----------|-------|---------|--------|--------|--------|---------|
| 1213111   | R1A25M936W-0808 | 1/2"  | 3/4-16    | 1/2   | 40,0    | 17,0   | 40,5   | 18,2   | 9,0     |
| 1213112   | R1A25M936W-1008 | 5/8"  | 7/8-14    | 1/2   | 42,0    | 17,0   | 40,5   | 18,2   | 9,0     |
| 1213113   | R1A25M936W-1012 | 5/8"  | 7/8-14    | 3/4   | 49,0    | 20,0   | 50,8   | 23,8   | 11,0    |
| 1213114   | R1A25M936W-1208 | 3/4"  | 1 1/16-12 | 1/2   | 42,0    | 20,0   | 40,5   | 18,2   | 9,0     |
| 1213115   | R1A25M936W-1212 | 3/4"  | 1 1/16-12 | 3/4   | 51,0    | 20,0   | 50,8   | 23,8   | 11,0    |
| 1213116   | R1A25M936W-1216 | 3/4"  | 1 1/16-12 | 1     | 55,0    | 25,0   | 57,2   | 27,8   | 13,0    |
| 1213117   | R1A25M936W-1612 | 1"    | 1 5/16-12 | 3/4   | 52,0    | 25,0   | 50,8   | 23,8   | 11,0    |
| 1213118   | R1A25M936W-1616 | 1"    | 1 5/16-12 | 1     | 56,0    | 25,0   | 57,2   | 27,8   | 13,0    |
| 1213119   | R1A25M936W-1620 | 1"    | 1 5/16-12 | 1 1/4 | 56,0    | 31,0   | 66,7   | 31,8   | 15,0    |
| 1213120   | R1A25M936W-2016 | 1"1/4 | 1 5/8-12  | 1     | 58,0    | 31,0   | 57,2   | 27,8   | 13,0    |
| 1213121   | R1A25M936W-2020 | 1"1/4 | 1 5/8-12  | 1 1/4 | 63,0    | 31,0   | 66,7   | 31,8   | 15,0    |
| 1213122   | R1A25M936W-2024 | 1"1/4 | 1 5/8-12  | 1 1/2 | 67,0    | 37,0   | 79,4   | 36,5   | 17,0    |
| 1213123   | R1A25M936W-2420 | 1"1/2 | 1 7/8-12  | 1 1/4 | 63,0    | 37,0   | 66,7   | 31,8   | 15,0    |
| 1213124   | R1A25M936W-2424 | 1"1/2 | 1 7/8-12  | 1 1/2 | 70,0    | 37,0   | 79,4   | 36,5   | 17,0    |

REV.2.1

## // R1A25M9334

90° adjustable split flange SAE J518 code 61

JIC - Low pressure

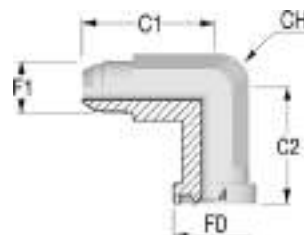


| Item Code | Product Code    | OD1   | F1        | F2    | FD (mm) | C1 (mm) | C2 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|-------|---------|---------|---------|---------|
| 1213099   | R1A25M9334-0808 | 1/2"  | 3/4-16    | 1/2   | 30,2    | 48,0    | 42,0    | 22,0    |
| 1213100   | R1A25M9334-1008 | 5/8"  | 7/8-14    | 1/2   | 30,2    | 50,0    | 44,0    | 22,0    |
| 1213101   | R1A25M9334-1012 | 5/8"  | 7/8-14    | 3/4   | 38,1    | 64,0    | 53,0    | 22,0    |
| 1213102   | R1A25M9334-1212 | 3/4"  | 1 1/16-12 | 3/4   | 38,1    | 64,0    | 53,0    | 27,0    |
| 1213103   | R1A25M9334-1216 | 3/4"  | 1 1/16-12 | 1     | 44,5    | 65,0    | 60,0    | 27,0    |
| 1213104   | R1A25M9334-1612 | 1"    | 1 5/16-12 | 3/4   | 38,1    | 64,0    | 53,0    | 34,0    |
| 1213105   | R1A25M9334-1616 | 1"    | 1 5/16-12 | 1     | 44,5    | 65,0    | 60,0    | 34,0    |
| 1213106   | R1A25M9334-1620 | 1"    | 1 5/16-12 | 1 1/4 | 50,8    | 64,0    | 55,0    | 34,0    |
| 1213107   | R1A25M9334-2016 | 1"1/4 | 1 5/8-12  | 1     | 44,5    | 65,0    | 60,0    | 42,0    |
| 1213108   | R1A25M9334-2020 | 1"1/4 | 1 5/8-12  | 1 1/4 | 50,8    | 64,0    | 55,0    | 42,0    |
| 1213109   | R1A25M9334-2024 | 1"1/4 | 1 5/8-12  | 1 1/2 | 60,3    | 78,0    | 66,0    | 42,0    |
| 1213110   | R1A25M9334-2424 | 1"1/2 | 1 7/8-12  | 1 1/2 | 60,3    | 78,0    | 66,0    | 50,0    |

## // R1A25M9364

90° adjustable split flange SAE J518 code 62

JIC - High pressure

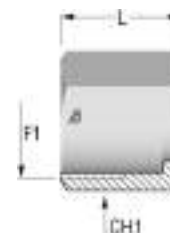


| Item Code | Product Code    | OD1   | F1        | F2    | FD (mm) | C1 (mm) | C2 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|-------|---------|---------|---------|---------|
| 1213125   | R1A25M9364-0808 | 1/2"  | 3/4-16    | 1/2   | 31,8    | 49,0    | 43,0    | 22,0    |
| 1213126   | R1A25M9364-1008 | 5/8"  | 7/8-14    | 1/2   | 31,8    | 50,0    | 44,0    | 22,0    |
| 1213127   | R1A25M9364-1012 | 5/8"  | 7/8-14    | 3/4   | 41,3    | 64,0    | 53,0    | 22,0    |
| 1213128   | R1A25M9364-1212 | 3/4"  | 1 1/16-12 | 3/4   | 41,3    | 64,0    | 53,0    | 27,0    |
| 1213129   | R1A25M9364-1216 | 3/4"  | 1 1/16-12 | 1     | 47,6    | 65,0    | 60,0    | 27,0    |
| 1213130   | R1A25M9364-1612 | 1"    | 1 5/16-12 | 3/4   | 41,3    | 64,0    | 53,0    | 34,0    |
| 1213131   | R1A25M9364-1616 | 1"    | 1 5/16-12 | 1     | 47,6    | 65,0    | 60,0    | 34,0    |
| 1213132   | R1A25M9364-1620 | 1"    | 1 5/16-12 | 1 1/4 | 54,0    | 64,0    | 55,0    | 34,0    |
| 1213133   | R1A25M9364-2016 | 1"1/4 | 1 5/8-12  | 1     | 47,6    | 65,0    | 60,0    | 42,0    |
| 1213134   | R1A25M9364-2020 | 1"1/4 | 1 5/8-12  | 1 1/4 | 54,0    | 64,0    | 55,0    | 42,0    |
| 1213135   | R1A25M9364-2024 | 1"1/4 | 1 5/8-12  | 1 1/2 | 63,5    | 78,0    | 66,0    | 42,0    |
| 1213136   | R1A25M9364-2424 | 1"1/2 | 1 7/8-12  | 1 1/2 | 63,5    | 78,0    | 66,0    | 50,0    |

## // ACCESSORIES

## // RXA25D0000

Nut JIC



| Item Code | Product Code    | OD1 | F1        | L (mm) | CH1 (mm) |
|-----------|-----------------|-----|-----------|--------|----------|
| 1208046   | RXA25D0000-0400 | 6   | 7/16-20   | 15,8   | 14,0     |
| 1208047   | RXA25D0000-0500 | 8   | 1/2-20    | 17,3   | 17,0     |
| 1207580   | RXA25D0000-0600 | 10  | 9/16-18   | 18,8   | 19,0     |
| 1208048   | RXA25D0000-0800 | 12  | 3/4-16    | 21,8   | 22,0     |
| 1208049   | RXA25D0000-1000 | 14  | 7/8-14    | 25,1   | 27,0     |
| 1208050   | RXA25D0000-1200 | 18  | 1 1/16-12 | 26,2   | 32,0     |
| 1203514   | RXA25D0000-1220 | 20  | 1 1/16-12 | 26,2   | 32,0     |
| 1208051   | RXA25D0000-1600 | 25  | 1 5/16-12 | 28,7   | 41,0     |
| 1208052   | RXA25D0000-2000 | 30  | 1 5/8-12  | 31,2   | 50,0     |
| 1208053   | RXA25D0000-2400 | 38  | 1 7/8-12  | 36,1   | 60,0     |

## // R1A25R0000

Sleeve JIC



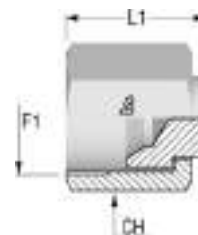
| Item Code | OD1   | L1 (mm) |
|-----------|-------|---------|
| 1203725   | 1/4"  | 10,4    |
| 1203719   | 5/16" | 11,0    |
| 1203729   | 3/8"  | 12,5    |
| 1203724   | 1/2"  | 14,0    |
| 1203728   | 5/8"  | 17,0    |
| 1203727   | 5/8"  | 17,0    |
| 1203726   | 5/8"  | 17,0    |
| 1203717   | 3/4"  | 17,5    |
| 1203718   | 3/4"  | 17,5    |
| 1216495   | 7/8"  | 19,5    |
| 1203720   | 1"    | 20,0    |
| 1203722   | 1"1/4 | 23,0    |
| 1203721   | 1"1/4 | 23,0    |
| 1203723   | 1"1/2 | 28,5    |

REV.2.1

## // PLUG

## // R1A2531000

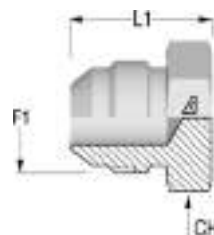
Cap JIC Female



| Item Code | Product Code    | OD1   | F1        | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|---------|---------|
| 1207348   | R1A2531000-0400 | 1/4"  | 7/16-20   | 17,0    | 14,0    |
| 1207349   | R1A2531000-0500 | 5/16" | 1/2-20    | 19,5    | 17,0    |
| 1207350   | R1A2531000-0600 | 3/8"  | 9/16-18   | 20,5    | 19,0    |
| 1207351   | R1A2531000-0800 | 1/2"  | 3/4-16    | 24,0    | 22,0    |
| 1207352   | R1A2531000-1000 | 5/8"  | 7/8-14    | 27,0    | 27,0    |
| 1207353   | R1A2531000-1200 | 3/4"  | 1 1/16-12 | 31,5    | 32,0    |
| 1213213   | R1A2531000-1400 | 7/8"  | 1 3/16-12 | 32,0    | 36,0    |
| 1207354   | R1A2531000-1600 | 1"    | 1 5/16-12 | 32,5    | 41,0    |
| 1207355   | R1A2531000-2000 | 1"1/4 | 1 5/8-12  | 35,5    | 50,0    |
| 1207356   | R1A2531000-2400 | 1"1/2 | 1 7/8-12  | 43,0    | 60,0    |

## // R1A25M1000

Plug JIC Male



| Item Code | Product Code    | OD1   | F1        | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|-----------|---------|---------|
| 1207449   | R1A25M1000-0400 | 1/4"  | 7/16-20   | 20,5    | 12,0    |
| 1207450   | R1A25M1000-0500 | 5/16" | 1/2-20    | 20,5    | 14,0    |
| 1207451   | R1A25M1000-0600 | 3/8"  | 9/16-18   | 21,5    | 14,0    |
| 1207452   | R1A25M1000-0800 | 1/2"  | 3/4-16    | 24,0    | 22,0    |
| 1207453   | R1A25M1000-1000 | 5/8"  | 7/8-14    | 28,0    | 24,0    |
| 1207454   | R1A25M1000-1200 | 3/4"  | 1 1/16-12 | 32,5    | 30,0    |
| 1212825   | R1A25M1000-1400 | 7/8"  | 1 3/16-12 | 33,0    | 33,0    |
| 1207455   | R1A25M1000-1600 | 1"    | 1 5/16-12 | 34,0    | 36,0    |
| 1207456   | R1A25M1000-2000 | 1"1/4 | 1 5/8-12  | 37,0    | 46,0    |
| 1207457   | R1A25M1000-2400 | 1"1/2 | 1 7/8-12  | 42,0    | 50,0    |



ALSO AVAILABLE IN STAINLESS STEEL

# **// ORFS ADAPTERS**

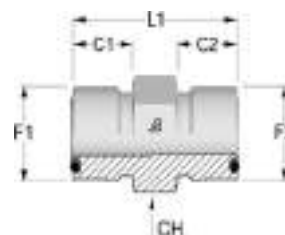
|                           |     |                     |     |
|---------------------------|-----|---------------------|-----|
| // MALE UNION.....        | 191 | // SAE UNF.....     | 207 |
| // MALE/FEMALE UNION..... | 193 | // FLANGES.....     | 211 |
| // BULKHEAD.....          | 196 | // ACCESSORIES..... | 214 |
| // BSPP-BSPT.....         | 199 | // PLUG.....        | 215 |
| // METRIC.....            | 203 |                     |     |

REV.2.1

## // MALE UNION

## // R1A2451245

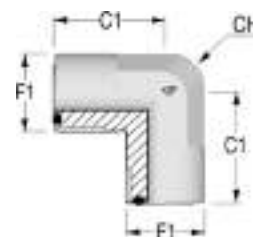
Straight union ORFS Male



| Item Code | Product Code    | OD1 | F1         | F2         | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-----|------------|------------|---------|---------|---------|---------|
| 1207586   | R1A2451245-0404 |     | 9/16-18    | 9/16-18    | 10,0    | 10,0    | 27,0    | 17,0    |
| 1208173   | R1A2451245-0604 |     | 11/16-16   | 9/16-18    | 11,0    | 10,0    | 30,0    | 19,0    |
| 1207587   | R1A2451245-0606 |     | 11/16-16   | 11/16-16   | 11,0    | 11,0    | 31,0    | 19,0    |
| 1208174   | R1A2451245-0806 |     | 13/16-16   | 11/16-16   | 13,0    | 11,0    | 33,5    | 22,0    |
| 1207579   | R1A2451245-0808 |     | 13/16-16   | 13/16-16   | 13,0    | 13,0    | 35,5    | 22,0    |
| 1208175   | R1A2451245-1008 |     | 1-14       | 13/16-16   | 15,5    | 13,0    | 40,0    | 27,0    |
| 1207588   | R1A2451245-1010 |     | 1-14       | 1-14       | 15,5    | 15,5    | 42,5    | 27,0    |
| 1208176   | R1A2451245-1210 |     | 1 3/16-12  | 1-14       | 17,0    | 15,5    | 45,5    | 32,0    |
| 1207589   | R1A2451245-1212 |     | 1 3/16-12  | 1 3/16-12  | 17,0    | 17,0    | 47,0    | 32,0    |
| 1208177   | R1A2451245-1612 |     | 1 7/16-12  | 13/16-16   | 17,5    | 17,0    | 49,5    | 41,0    |
| 1207590   | R1A2451245-1616 |     | 1 7/16-12  | 1 7/16-12  | 17,5    | 17,5    | 49,5    | 41,0    |
| 1208179   | R1A2451245-2016 |     | 1 11/16-12 | 1 7/16-12  | 17,5    | 17,5    | 51,5    | 46,0    |
| 1208180   | R1A2451245-2020 |     | 1 11/16-12 | 1 11/16-12 | 17,5    | 17,5    | 51,5    | 46,0    |
| 1211533   | R1A2451245-2424 |     | 2-12       | 2-12       | 17,5    | 17,5    | 53,0    | 55,0    |

## // R1A2459245

90° union ORFS Male



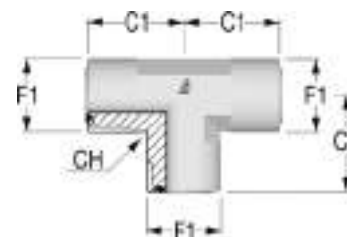
| Item Code | Product Code    | OD1   | F1         | C1 (mm) | CH (mm) |
|-----------|-----------------|-------|------------|---------|---------|
| 1207045   | R1A2459245-0404 | 1/4"  | 9/16-18    | 21,5    | 14,0    |
| 1208128   | R1A2459245-0606 | 3/8"  | 11/16-16   | 25,0    | 17,0    |
| 1207578   | R1A2459245-0808 | 1/2"  | 13/16-16   | 28,0    | 19,0    |
| 1208129   | R1A2459245-1010 | 5/8"  | 1-14       | 33,5    | 27,0    |
| 1208130   | R1A2459245-1212 | 3/4"  | 1 3/16-12  | 37,5    | 27,0    |
| 1208131   | R1A2459245-1616 | 1"    | 1 7/16-12  | 42,0    | 36,0    |
| 1208132   | R1A2459245-2020 | 1"1/4 | 1 11/16-12 | 45,0    | 41,0    |
| 1211560   | R1A2459245-2424 | 1"1/2 | 2-12       | 49,0    | 48,0    |

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ADAPTERS

## // R1A245T245

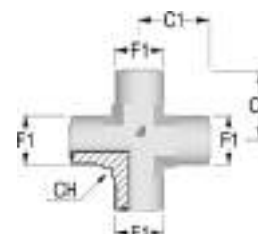
Branch Tee union ORFS Male



| Item Code | Product Code    | OD1    | F1         | C1 (mm) | CH (mm) |
|-----------|-----------------|--------|------------|---------|---------|
| 1207600   | R1A245T245-0404 | 1/4"   | 9/16-18    | 21,5    | 14,0    |
| 1207601   | R1A245T245-0606 | 3/8"   | 11/16-16   | 25,0    | 17,0    |
| 1207572   | R1A245T245-0808 | 1/2"   | 13/16-16   | 28,0    | 19,0    |
| 1207571   | R1A245T245-1010 | 5/8"   | 1-14       | 33,5    | 27,0    |
| 1208205   | R1A245T245-1212 | 3/4"   | 1 3/16-12  | 37,5    | 27,0    |
| 1207602   | R1A245T245-1616 | 1"     | 1 7/16-12  | 42,0    | 36,0    |
| 1208206   | R1A245T245-2020 | 1 1/4" | 1 11/16-12 | 45,0    | 41,0    |
| 1211520   | R1A245T245-2424 | 1 1/2" | 2-12       | 49,0    | 48,0    |

## // R1A245X245

Cross union ORFS Male



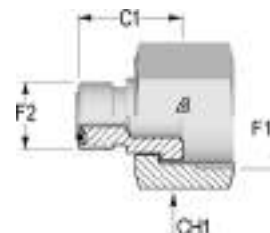
| Item Code | Product Code    | OD1    | F1         | C1 (mm) | CH (mm) |
|-----------|-----------------|--------|------------|---------|---------|
| 1212531   | R1A245X245-0404 | 1/4"   | 9/16-18    | 21,5    | 14,0    |
| 1212532   | R1A245X245-0606 | 3/8"   | 11/16-16   | 25,0    | 17,0    |
| 1212533   | R1A245X245-0808 | 1/2"   | 13/16-16   | 28,0    | 19,0    |
| 1212534   | R1A245X245-1010 | 5/8"   | 1-14       | 33,5    | 27,0    |
| 1212535   | R1A245X245-1212 | 3/4"   | 1 3/16-12  | 37,5    | 27,0    |
| 1212536   | R1A245X245-1616 | 1"     | 1 7/16-12  | 42,0    | 36,0    |
| 1212537   | R1A245X245-2020 | 1 1/4" | 1 11/16-12 | 45,0    | 41,0    |
| 1212538   | R1A245X245-2424 | 1 1/2" | 2-12       | 49,0    | 48,0    |

REV.2.1

## // MALE/FEMALE UNION

## // R1A2431245

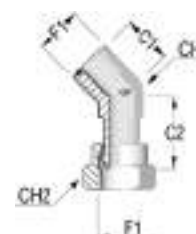
Straight union ORFS Female - Male



| Item Code | Product Code    | OD1   | F1         | F2         | C1 (mm) | CH1 (mm) |
|-----------|-----------------|-------|------------|------------|---------|----------|
| 1212498   | R1A2431245-0604 | 3/8"  | 11/16-16   | 9/16-18    | 19,5    | 22,0     |
| 1208210   | R1A2431245-0804 | 1/2"  | 13/16-16   | 9/16-18    | 22,0    | 24,0     |
| 1208347   | R1A2431245-0806 | 1/2"  | 13/16-16   | 11/16-16   | 23,0    | 24,0     |
| 1207033   | R1A2431245-1004 | 5/8"  | 1-14       | 9/16-18    | 23,0    | 30,0     |
| 1212518   | R1A2431245-1006 | 5/8"  | 1-14       | 11/16-16   | 24,0    | 30,0     |
| 1207660   | R1A2431245-1008 | 5/8"  | 1-14       | 13/16-16   | 26,0    | 30,0     |
| 1212519   | R1A2431245-1204 | 3/4"  | 1 3/16-12  | 9/16-18    | 25,0    | 36,0     |
| 1208211   | R1A2431245-1206 | 3/4"  | 1 3/16-12  | 11/16-16   | 26,0    | 36,0     |
| 1208212   | R1A2431245-1208 | 3/4"  | 1 3/16-12  | 13/16-16   | 28,0    | 36,0     |
| 1214621   | R1A2431245-1210 | 3/4"  | 1 3/16-12  | 1-14       | 30,5    | 36,0     |
| 1208213   | R1A2431245-1608 | 1"    | 1 7/16-12  | 13/16-16   | 29,5    | 41,0     |
| 1207661   | R1A2431245-1610 | 1"    | 1 7/16-12  | 1-14       | 32,0    | 41,0     |
| 1212499   | R1A2431245-1612 | 1"    | 1 7/16-12  | 1 3/16-12  | 33,5    | 41,0     |
| 1208214   | R1A2431245-2012 | 1"1/4 | 1 11/16-12 | 13/16-16   | 33,5    | 50,0     |
| 1208037   | R1A2431245-2016 | 1"1/4 | 1 11/16-12 | 1 7/16-12  | 38,5    | 50,0     |
| 1211497   | R1A2431245-2416 | 1"1/2 | 2-12       | 1 7/16-12  | 34,0    | 60,0     |
| 1211498   | R1A2431245-2420 | 1"1/2 | 2-12       | 1 11/16-12 | 34,0    | 60,0     |

## // R1A2454241

45° union ORFS Male - Female



| Item Code | Product Code    | OD1   | F1         | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|----------|
| 1212613   | R1A2454241-0404 | 1/4"  | 9/16-18    | 16,0    | 26,5    | 14,0    | 17,0     |
| 1212614   | R1A2454241-0606 | 3/8"  | 11/16-16   | 19,0    | 25,0    | 17,0    | 22,0     |
| 1212615   | R1A2454241-0808 | 1/2"  | 13/16-16   | 20,5    | 30,0    | 19,0    | 24,0     |
| 1212616   | R1A2454241-1010 | 5/8"  | 1-14       | 23,5    | 36,0    | 27,0    | 30,0     |
| 1211542   | R1A2454241-1212 | 3/4"  | 1 3/16-12  | 26,0    | 41,0    | 27,0    | 36,0     |
| 1212617   | R1A2454241-1616 | 1"    | 1 7/16-12  | 30,0    | 45,0    | 36,0    | 41,0     |
| 1212618   | R1A2454241-2020 | 1"1/4 | 1 11/16-12 | 32,0    | 45,0    | 41,0    | 50,0     |
| 1212619   | R1A2454241-2424 | 1"1/2 | 2-12       | 32,0    | 47,5    | 48,0    | 60,0     |

## // R1A2459241

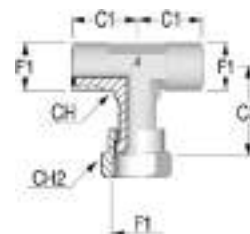
90° union ORFS Male - Female



| Item Code | Product Code    | OD1    | F1         | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|------------|---------|---------|---------|----------|
| 1208021   | R1A2459241-0404 | 1/4"   | 9/16-18    | 21,5    | 26,5    | 14,0    | 17,0     |
| 1207593   | R1A2459241-0606 | 3/8"   | 11/16-16   | 25,0    | 29,0    | 17,0    | 22,0     |
| 1207569   | R1A2459241-0808 | 1/2"   | 13/16-16   | 28,0    | 38,0    | 19,0    | 24,0     |
| 1206968   | R1A2459241-1010 | 5/8"   | 1-14       | 33,5    | 41,5    | 27,0    | 30,0     |
| 1207594   | R1A2459241-1212 | 3/4"   | 1 3/16-12  | 37,5    | 46,5    | 27,0    | 36,0     |
| 1207595   | R1A2459241-1616 | 1"     | 1 7/16-12  | 41,5    | 53,5    | 36,0    | 41,0     |
| 1208126   | R1A2459241-2020 | 1 1/4" | 1 11/16-12 | 44,5    | 58,0    | 41,0    | 50,0     |
| 1211559   | R1A2459241-2424 | 1 1/2" | 2-12       | 49,0    | 61,0    | 48,0    | 60,0     |

## // R1A245T241

Branch Tee union ORFS Male - Female

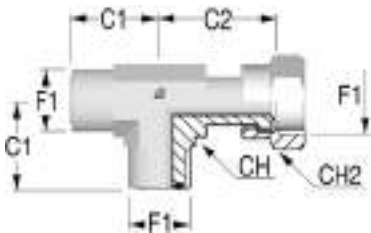


| Item Code | Product Code    | OD1    | F1         | C1 (mm) | C3 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|--------|------------|---------|---------|---------|----------|
| 1208200   | R1A245T241-0404 | 1/4"   | 9/16-18    | 21,5    | 26,5    | 14,0    | 17,0     |
| 1208033   | R1A245T241-0606 | 3/8"   | 11/16-16   | 25,0    | 29,0    | 17,0    | 22,0     |
| 1207570   | R1A245T241-0808 | 1/2"   | 13/16-16   | 28,0    | 38,0    | 19,0    | 24,0     |
| 1208201   | R1A245T241-1010 | 5/8"   | 1-14       | 33,5    | 41,5    | 27,0    | 30,0     |
| 1208202   | R1A245T241-1212 | 3/4"   | 1 3/16-12  | 37,5    | 46,5    | 27,0    | 36,0     |
| 1208203   | R1A245T241-1616 | 1"     | 1 7/16-12  | 41,5    | 53,5    | 36,0    | 41,0     |
| 1208204   | R1A245T241-2020 | 1 1/4" | 1 11/16-12 | 44,5    | 58,0    | 41,0    | 50,0     |
| 1211519   | R1A245T241-2424 | 1 1/2" | 2-12       | 49,0    | 61,0    | 48,0    | 60,0     |

REV.2.1

// R1A245L241

Run Tee union ORFS Male - Female

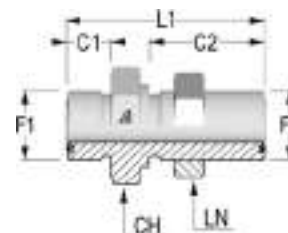


| Item Code | Product Code    | OD1   | F1         | C1 (mm) | C2 (mm) | CH (mm) | CH2 (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|----------|
| 1207597   | R1A245L241-0404 | 1/4"  | 9/16-18    | 21,5    | 26,5    | 14,0    | 19,0     |
| 1207573   | R1A245L241-0606 | 3/8"  | 11/16-16   | 25,0    | 29,0    | 17,0    | 22,0     |
| 1207598   | R1A245L241-0808 | 1/2"  | 13/16-16   | 28,0    | 38,0    | 19,0    | 27,0     |
| 1207032   | R1A245L241-1010 | 5/8"  | 1-14       | 33,5    | 41,5    | 27,0    | 30,0     |
| 1207559   | R1A245L241-1212 | 3/4"  | 1 3/16-12  | 37,5    | 46,5    | 27,0    | 36,0     |
| 1207599   | R1A245L241-1616 | 1"    | 1 7/16-12  | 41,5    | 53,5    | 36,0    | 41,0     |
| 1208209   | R1A245L241-2020 | 1"1/4 | 1 11/16-12 | 44,0    | 58,0    | 41,0    | 50,0     |
| 1211508   | R1A245L241-2424 | 1"1/2 | 2-12       | 48,5    | 61,0    | 48,0    | 60,0     |

## // BULKHEAD

## // R1A245124T

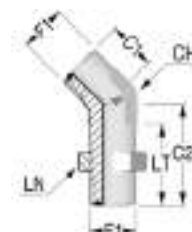
## Straight union ORFS Bulkhead



| Item Code | Product Code    | OD1   | F1         | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1208184   | R1A245124T-0404 | 1/4"  | 9/16-18    | 10,0    | 30,0    | 48,0    | 22,0    | 22,0    |
| 1207035   | R1A245124T-0606 | 3/8"  | 11/16-16   | 11,0    | 32,5    | 53,0    | 27,0    | 27,0    |
| 1208185   | R1A245124T-0808 | 1/2"  | 13/16-16   | 13,0    | 34,0    | 58,0    | 30,0    | 30,0    |
| 1239974   | R1A245124T-0812 | 1/2"  | 13/16-16   | 13,0    | 38,5    | 65,0    | 41,0    | 41,0    |
| 1206967   | R1A245124T-1010 | 5/8"  | 1-14       | 15,5    | 38,0    | 65,5    | 36,0    | 36,0    |
| 1208187   | R1A245124T-1212 | 3/4"  | 1 3/16-12  | 17,0    | 38,5    | 69,0    | 41,0    | 41,0    |
| 1208188   | R1A245124T-1616 | 1"    | 1 7/16-12  | 17,5    | 39,0    | 70,0    | 46,0    | 46,0    |
| 1208189   | R1A245124T-2020 | 1"1/4 | 1 11/16-12 | 17,5    | 39,0    | 70,0    | 50,0    | 50,0    |
| 1211532   | R1A245124T-2424 | 1"1/2 | 2-12       | 17,5    | 39,0    | 70,0    | 60,0    | 60,0    |

## // R1A245424T

## 45° union ORFS Bulkhead

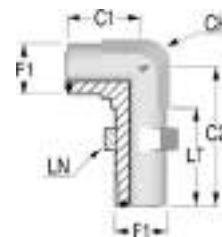


| Item Code | Product Code    | OD1   | F1        | C1 (mm) | C2 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|-----------|---------|---------|---------|---------|---------|
| 1212605   | R1A245424T-0404 | 1/4"  | 9/16-18   | 16,0    | 44,0    | 31,5    | 14,0    | 22,0    |
| 1212606   | R1A245424T-0606 | 3/8"  | 11/16-16  | 19,0    | 48,5    | 34,0    | 17,0    | 27,0    |
| 1212607   | R1A245424T-0808 | 1/2"  | 13/16-16  | 20,5    | 51,0    | 36,5    | 19,0    | 30,0    |
| 1212608   | R1A245424T-1010 | 5/8"  | 1-14      | 23,5    | 56,5    | 40,5    | 27,0    | 36,0    |
| 1212609   | R1A245424T-1212 | 3/4"  | 1 3/16-12 | 26,0    | 60,5    | 41,5    | 27,0    | 41,0    |
| 1212610   | R1A245424T-1616 | 1"    | 1 7/16-12 | 30,0    | 65,0    | 42,0    | 36,0    | 46,0    |
| 1212612   | R1A245424T-2424 | 1"1/2 | 2-12      | 37,0    | 67,0    | 42,0    | 48,0    | 60,0    |

REV.2.1

## // R1A245924T

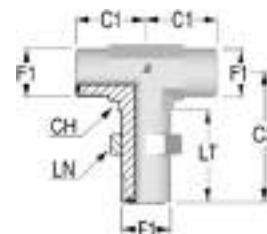
## 90° union ORFS Bulkhead



| Item Code | Product Code    | OD1   | F1         | C1 (mm) | C2 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1210753   | R1A245924T-0404 | 1/4"  | 9/16-18    | 22,5    | 47,0    | 31,5    | 14,0    | 22,0    |
| 1210754   | R1A245924T-0606 | 3/8"  | 11/16-16   | 26,0    | 52,0    | 34,0    | 17,0    | 27,0    |
| 1210755   | R1A245924T-0808 | 1/2"  | 13/16-16   | 29,0    | 55,5    | 36,5    | 19,0    | 30,0    |
| 1207560   | R1A245924T-1010 | 5/8"  | 1-14       | 34,5    | 63,0    | 40,5    | 27,0    | 36,0    |
| 1208157   | R1A245924T-1212 | 3/4"  | 1 3/16-12  | 38,5    | 67,0    | 41,5    | 27,0    | 41,0    |
| 1211557   | R1A245924T-1616 | 1"    | 1 7/16-12  | 42,5    | 71,0    | 42,0    | 36,0    | 46,0    |
| 1208158   | R1A245924T-2020 | 1"1/4 | 1 11/16-12 | 45,5    | 75,5    | 42,0    | 41,0    | 50,0    |
| 1211558   | R1A245924T-2424 | 1"1/2 | 2-12       | 49,5    | 79,5    | 42,0    | 48,0    | 60,0    |

## // R1A245T24T

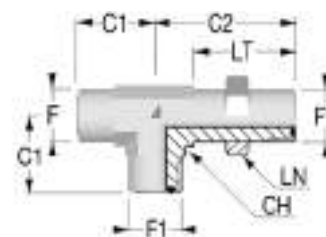
## Branch Tee union ORFS Bulkhead



| Item Code | Product Code    | OD1   | F1         | C1 (mm) | C3 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1212524   | R1A245T24T-0404 | 1/4"  | 9/16-18    | 22,5    | 47,0    | 31,5    | 14,0    | 22,0    |
| 1212525   | R1A245T24T-0606 | 3/8"  | 11/16-16   | 26,0    | 52,0    | 34,0    | 17,0    | 27,0    |
| 1208224   | R1A245T24T-0808 | 1/2"  | 13/16-16   | 29,0    | 55,5    | 36,5    | 19,0    | 30,0    |
| 1212526   | R1A245T24T-1010 | 5/8"  | 1-14       | 34,5    | 63,0    | 40,5    | 27,0    | 36,0    |
| 1212527   | R1A245T24T-1212 | 3/4"  | 1 3/16-12  | 38,5    | 67,0    | 41,5    | 27,0    | 41,0    |
| 1212528   | R1A245T24T-1616 | 1"    | 1 7/16-12  | 42,5    | 71,0    | 42,0    | 36,0    | 46,0    |
| 1212529   | R1A245T24T-2020 | 1"1/4 | 1 11/16-12 | 45,5    | 75,5    | 42,0    | 41,0    | 50,0    |
| 1212530   | R1A245T24T-2424 | 1"1/2 | 2-12       | 49,5    | 79,5    | 42,0    | 48,0    | 60,0    |

## // R1A245L24T

## Run Tee union ORFS Bulkhead



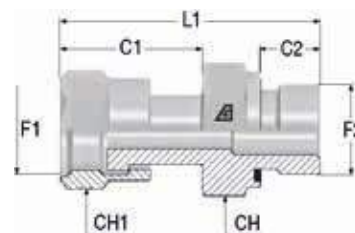
| Item Code | Product Code    | OD1   | F1         | C1 (mm) | C2 (mm) | LT (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1240057   | R1A245L24T-0404 | 1/4"  | 9/16-18    | 22,5    | 47,0    | 35,0    | 14,0    | 22,0    |
| 1211502   | R1A245L24T-0606 | 3/8"  | 11/16-16   | 26,0    | 52,0    | 39,0    | 17,0    | 27,0    |
| 1210797   | R1A245L24T-0808 | 1/2"  | 13/16-16   | 29,0    | 55,5    | 40,0    | 19,0    | 30,0    |
| 1211503   | R1A245L24T-1010 | 5/8"  | 1-14       | 34,5    | 63,0    | 43,5    | 27,0    | 36,0    |
| 1211504   | R1A245L24T-1212 | 3/4"  | 1 3/16-12  | 38,5    | 67,0    | 44,5    | 27,0    | 41,0    |
| 1211505   | R1A245L24T-1616 | 1"    | 1 7/16-12  | 42,5    | 71,0    | 46,0    | 36,0    | 46,0    |
| 1211506   | R1A245L24T-2020 | 1"1/4 | 1 11/16-12 | 45,5    | 75,5    | 46,5    | 41,0    | 50,0    |
| 1211507   | R1A245L24T-2424 | 1"1/2 | 2-12       | 49,5    | 79,5    | 45,0    | 48,0    | 60,0    |

## // BSPP-BSPT

## // R1A241106I

Straight connector

ORFS Female - BSPP Male with elastomer

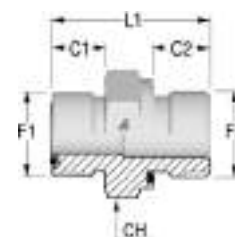


| Item Code | Product Code    | OD1    | F1         | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|--------|------------|----------|---------|---------|---------|---------|----------|
| 1221426   | R1A241106I-0402 | 1/4"   | 9/16-18    | 1/8-28   | 24,4    | 8,0     | 42,4    | 14,0    | 17,0     |
| 1212486   | R1A241106I-0404 | 1/4"   | 9/16-18    | 1/4-19   | 24,4    | 12,0    | 46,4    | 19,0    | 17,0     |
| 1212487   | R1A241106I-0406 | 1/4"   | 9/16-18    | 3/8-19   | 24,4    | 12,0    | 48,4    | 22,0    | 17,0     |
| 1212488   | R1A241106I-0604 | 3/8"   | 11/16-16   | 1/4-19   | 27,5    | 12,0    | 49,5    | 19,0    | 22,0     |
| 1208025   | R1A241106I-0606 | 3/8"   | 11/16-16   | 3/8-19   | 27,5    | 12,0    | 49,5    | 22,0    | 22,0     |
| 1212489   | R1A241106I-0806 | 1/2"   | 13/16-16   | 3/8-19   | 33,0    | 12,0    | 58,5    | 22,0    | 24,0     |
| 1212490   | R1A241106I-0808 | 1/2"   | 13/16-16   | 1/2-14   | 33,0    | 14,0    | 60,5    | 27,0    | 24,0     |
| 1212491   | R1A241106I-1008 | 5/8"   | 1-14       | 1/2-14   | 37,5    | 14,0    | 65,0    | 27,0    | 30,0     |
| 1212493   | R1A241106I-1212 | 3/4"   | 1 3/16-12  | 3/4-14   | 41,5    | 16,0    | 71,5    | 32,0    | 36,0     |
| 1218451   | R1A241106I-1216 | 3/4"   | 1 3/16-12  | 1-11     | 41,5    | 18,0    | 73,0    | 41,0    | 36,0     |
| 1212494   | R1A241106I-1612 | 1"     | 1 7/16-12  | 3/4-14   | 43,8    | 16,0    | 80,3    | 41,0    | 41,0     |
| 1212495   | R1A241106I-1616 | 1"     | 1 7/16-12  | 1-11     | 43,8    | 18,0    | 83,8    | 41,0    | 41,0     |
| 1212496   | R1A241106I-2016 | 1 1/4" | 1 11/16-12 | 1-11     | 43,8    | 18,0    | 83,8    | 41,0    | 50,0     |
| 1212497   | R1A241106I-2020 | 1 1/4" | 1 11/16-12 | 1 1/4-11 | 43,8    | 20,0    | 83,8    | 50,0    | 50,0     |

## // R1A245106I

Straight connector

ORFS Male - BSPP cylindric Male with elastomer

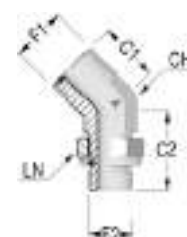


| Item Code | Product Code    | OD1   | F1         | F2       | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|------------|----------|---------|---------|---------|---------|
| 1207990   | R1A245106I-0402 | 1/4"  | 9/16-18    | 1/8-28   | 10,0    | 8,0     | 25,5    | 17,0    |
| 1206956   | R1A245106I-0404 | 1/4"  | 9/16-18    | 1/4-19   | 10,0    | 12,0    | 30,5    | 19,0    |
| 1206957   | R1A245106I-0406 | 1/4"  | 9/16-18    | 3/8-19   | 10,0    | 12,0    | 31,5    | 22,0    |
| 1208017   | R1A245106I-0408 | 1/4"  | 9/16-18    | 1/2-14   | 10,0    | 14,0    | 35,5    | 27,0    |
| 1207575   | R1A245106I-0604 | 3/8"  | 11/16-16   | 1/4-19   | 11,0    | 12,0    | 31,5    | 19,0    |
| 1207574   | R1A245106I-0606 | 3/8"  | 11/16-16   | 3/8-19   | 11,0    | 12,0    | 33,5    | 22,0    |
| 1207996   | R1A245106I-0608 | 3/8"  | 11/16-16   | 1/2-14   | 11,0    | 14,0    | 37,0    | 27,0    |
| 1207998   | R1A245106I-0804 | 1/2"  | 13/16-16   | 1/4-19   | 13,0    | 12,0    | 39,5    | 22,0    |
| 1207576   | R1A245106I-0806 | 1/2"  | 13/16-16   | 3/8-19   | 13,0    | 12,0    | 34,5    | 22,0    |
| 1206958   | R1A245106I-0808 | 1/2"  | 13/16-16   | 1/2-14   | 13,0    | 14,0    | 38,5    | 27,0    |
| 1208022   | R1A245106I-0812 | 1/2"  | 13/16-16   | 3/4-14   | 13,0    | 16,0    | 42,0    | 32,0    |
| 1207999   | R1A245106I-1006 | 5/8"  | 1-14       | 3/8-19   | 15,5    | 12,0    | 43,0    | 27,0    |
| 1208010   | R1A245106I-1008 | 5/8"  | 1-14       | 1/2-14   | 15,5    | 14,0    | 41,0    | 27,0    |
| 1207959   | R1A245106I-1012 | 5/8"  | 1-14       | 3/4-14   | 15,5    | 16,0    | 44,5    | 32,0    |
| 1208000   | R1A245106I-1208 | 3/4"  | 1 3/16-12  | 1/2-14   | 17,0    | 14,0    | 48,5    | 32,0    |
| 1206955   | R1A245106I-1212 | 3/4"  | 1 3/16-12  | 3/4-14   | 17,0    | 16,0    | 46,0    | 32,0    |
| 1211527   | R1A245106I-1216 | 3/4"  | 1 3/16-12  | 1-11     | 17,0    | 18,0    | 49,5    | 41,0    |
| 1208003   | R1A245106I-1612 | 1"    | 1 7/16-12  | 3/4-14   | 17,5    | 16,0    | 51,0    | 41,0    |
| 1207577   | R1A245106I-1616 | 1"    | 1 7/16-12  | 1-11     | 17,5    | 18,0    | 49,0    | 41,0    |
| 1207979   | R1A245106I-1620 | 1"    | 1 7/16-12  | 1 1/4-11 | 17,5    | 20,0    | 54,0    | 50,0    |
| 1208034   | R1A245106I-2016 | 1"1/4 | 1 11/16-12 | 1-11     | 17,5    | 18,0    | 57,5    | 46,0    |
| 1208018   | R1A245106I-2020 | 1"1/4 | 1 11/16-12 | 1 1/4-11 | 17,5    | 20,0    | 54,0    | 50,0    |
| 1211528   | R1A245106I-2024 | 1"1/4 | 1 11/16-12 | 1 1/2-11 | 17,5    | 22,0    | 57,5    | 55,0    |
| 1211529   | R1A245106I-2424 | 1"1/2 | 2-12       | 1 1/2-11 | 17,5    | 22,0    | 57,5    | 55,0    |

## // R1A245406N

45° adjustable elbow connector

ORFS Male - BSPP cylindric Male with O-Ring and retaining ring



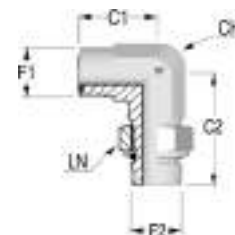
| Item Code | Product Code    | OD1   | F1         | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|----------|---------|---------|---------|---------|
| 1210800   | R1A245406N-0402 | 1/4"  | 9/16-18    | 1/8-28   | 16,0    | 28,0    | 14,0    | 14,0    |
| 1210801   | R1A245406N-0404 | 1/4"  | 9/16-18    | 1/4-19   | 17,5    | 31,0    | 14,0    | 19,0    |
| 1210802   | R1A245406N-0604 | 3/8"  | 11/16-16   | 1/4-19   | 19,0    | 32,0    | 19,0    | 19,0    |
| 1210803   | R1A245406N-0606 | 3/8"  | 11/16-16   | 3/8-19   | 19,0    | 33,0    | 19,0    | 22,0    |
| 1210804   | R1A245406N-0608 | 3/8"  | 11/16-16   | 1/2-14   | 19,5    | 43,0    | 27,0    | 27,0    |
| 1210805   | R1A245406N-0806 | 1/2"  | 13/16-16   | 3/8-19   | 20,5    | 33,5    | 19,0    | 22,0    |
| 1212604   | R1A245406N-0808 | 1/2"  | 13/16-16   | 1/2-14   | 22,0    | 42,0    | 27,0    | 27,0    |
| 1210806   | R1A245406N-1008 | 5/8"  | 1-14       | 1/2-14   | 23,5    | 42,0    | 27,0    | 27,0    |
| 1210807   | R1A245406N-1012 | 5/8"  | 1-14       | 3/4-14   | 24,5    | 46,5    | 30,0    | 36,0    |
| 1210733   | R1A245406N-1212 | 3/4"  | 1 3/16-12  | 3/4-14   | 26,0    | 50,0    | 30,0    | 36,0    |
| 1211539   | R1A245406N-1216 | 3/4"  | 1 3/16-12  | 1-11     | 29,5    | 52,5    | 36,0    | 41,0    |
| 1207720   | R1A245406N-1616 | 1"    | 1 7/16-12  | 1-11     | 30,0    | 52,5    | 36,0    | 41,0    |
| 1211540   | R1A245406N-2020 | 1"1/4 | 1 11/16-12 | 1 1/4-11 | 32,0    | 53,5    | 41,0    | 50,0    |
| 1211541   | R1A245406N-2424 | 1"1/2 | 2-12       | 1 1/2-11 | 37,0    | 53,5    | 48,0    | 55,0    |

REV.2.1

## // R1A245906N

90° adjustable elbow connector

ORFS Male - BSPP cylindric Male with O-Ring and retaining ring

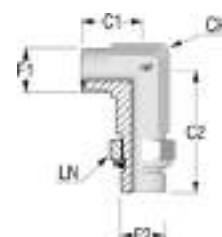


| Item Code | Product Code    | OD1    | F1         | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|------------|----------|---------|---------|---------|---------|
| 1210739   | R1A245906N-0402 | 1/4"   | 9/16-18    | 1/8-28   | 21,5    | 30,0    | 14,0    | 14,0    |
| 1207721   | R1A245906N-0404 | 1/4"   | 9/16-18    | 1/4-19   | 23,5    | 35,0    | 14,0    | 19,0    |
| 1207581   | R1A245906N-0406 | 1/4"   | 9/16-18    | 3/8-19   | 25,0    | 38,0    | 19,0    | 22,0    |
| 1248244   | R1A245906N-0604 | 3/8"   | 11/16-16   | 1/4-19   | 25,0    | 38,0    | 19,0    | 19,0    |
| 1207722   | R1A245906N-0604 | 3/8"   | 11/16-16   | 1/4-19   | 25,0    | 38,0    | 19,0    | 19,0    |
| 1207568   | R1A245906N-0606 | 3/8"   | 11/16-16   | 3/8-19   | 26,5    | 38,0    | 19,0    | 22,0    |
| 1207567   | R1A245906N-0608 | 3/8"   | 11/16-16   | 1/2-14   | 29,5    | 48,0    | 27,0    | 27,0    |
| 1207723   | R1A245906N-0804 | 1/2"   | 13/16-16   | 1/4-19   | 28,0    | 35,0    | 19,0    | 19,0    |
| 1207724   | R1A245906N-0806 | 1/2"   | 13/16-16   | 3/8-19   | 28,0    | 38,0    | 19,0    | 22,0    |
| 1207725   | R1A245906N-0808 | 1/2"   | 13/16-16   | 1/2-14   | 31,0    | 48,0    | 27,0    | 27,0    |
| 1208118   | R1A245906N-1006 | 5/8"   | 1-14       | 3/8-19   | 33,5    | 43,0    | 27,0    | 22,0    |
| 1207034   | R1A245906N-1008 | 5/8"   | 1-14       | 1/2-14   | 33,5    | 48,0    | 27,0    | 27,0    |
| 1210741   | R1A245906N-1012 | 5/8"   | 1-14       | 3/4-14   | 36,0    | 51,5    | 30,0    | 36,0    |
| 1208029   | R1A245906N-1208 | 3/4"   | 1 3/16-12  | 1/2-14   | 37,5    | 49,5    | 30,0    | 27,0    |
| 1207557   | R1A245906N-1212 | 3/4"   | 1 3/16-12  | 3/4-14   | 37,5    | 51,5    | 30,0    | 36,0    |
| 1208119   | R1A245906N-1216 | 3/4"   | 1 3/16-12  | 1-11     | 41,5    | 58,0    | 36,0    | 41,0    |
| 1210714   | R1A245906N-1612 | 1"     | 1 7/16-12  | 3/4-14   | 42,0    | 56,0    | 36,0    | 36,0    |
| 1208121   | R1A245906N-1616 | 1"     | 1 7/16-12  | 1-11     | 42,0    | 63,5    | 36,0    | 41,0    |
| 1211552   | R1A245906N-1620 | 1"     | 1 7/16-12  | 1 1/4-11 | 45,0    | 60,5    | 41,0    | 50,0    |
| 1211553   | R1A245906N-2016 | 1 1/4" | 1 11/16-12 | 1-11     | 45,0    | 60,0    | 41,0    | 41,0    |
| 1211554   | R1A245906N-2020 | 1 1/4" | 1 11/16-12 | 1 1/4-11 | 45,0    | 67,5    | 41,0    | 50,0    |
| 1211555   | R1A245906N-2024 | 1 1/4" | 1 11/16-12 | 1 1/2-11 | 49,0    | 64,5    | 48,0    | 55,0    |
| 1211556   | R1A245906N-2424 | 1 1/2" | 2-12       | 1 1/2-11 | 49,0    | 64,5    | 48,0    | 55,0    |

## // R1A245906Y

90° adjustable long elbow connector

ORFS Male - BSPP cylindric Male with O-Ring and retaining ring

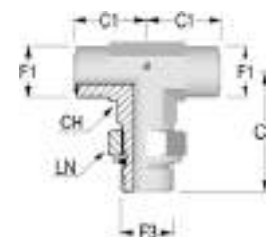


| Item Code | Product Code    | OD1    | F1         | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|------------|----------|---------|---------|---------|---------|
| 1212620   | R1A245906Y-0404 | 1/4"   | 9/16-18    | 1/4-19   | 23,5    | 59,0    | 14,0    | 19,0    |
| 1212621   | R1A245906Y-0406 | 1/4"   | 9/16-18    | 3/8-19   | 25,0    | 62,0    | 22,0    | 22,0    |
| 1212622   | R1A245906Y-0606 | 3/8"   | 11/16-16   | 3/8-19   | 26,5    | 67,0    | 22,0    | 22,0    |
| 1212623   | R1A245906Y-0608 | 3/8"   | 11/16-16   | 1/2-14   | 36,5    | 93,1    | 27,0    | 27,0    |
| 1212624   | R1A245906Y-0806 | 1/2"   | 13/16-16   | 3/8-19   | 28,0    | 73,0    | 22,0    | 22,0    |
| 1212625   | R1A245906Y-0808 | 1/2"   | 13/16-16   | 1/2-14   | 31,0    | 82,0    | 27,0    | 27,0    |
| 1212626   | R1A245906Y-1008 | 5/8"   | 1-14       | 1/2-14   | 33,0    | 82,0    | 27,0    | 27,0    |
| 1212627   | R1A245906Y-1012 | 5/8"   | 1-14       | 3/4-14   | 36,0    | 90,0    | 33,0    | 36,0    |
| 1212628   | R1A245906Y-1212 | 3/4"   | 1 3/16-12  | 3/4-14   | 37,5    | 97,0    | 33,0    | 36,0    |
| 1212629   | R1A245906Y-1216 | 3/4"   | 1 3/16-12  | 1-11     | 41,5    | 104,0   | 36,0    | 41,0    |
| 1212630   | R1A245906Y-1616 | 1"     | 1 7/16-12  | 1-11     | 42,0    | 112,0   | 36,0    | 41,0    |
| 1212631   | R1A245906Y-1620 | 1"     | 1 7/16-12  | 1 1/4-11 | 45,0    | 113,0   | 41,0    | 50,0    |
| 1212632   | R1A245906Y-2020 | 1 1/4" | 1 11/16-12 | 1 1/4-11 | 45,0    | 113,0   | 41,0    | 50,0    |
| 1212633   | R1A245906Y-2024 | 1 1/4" | 1 11/16-12 | 1 1/2-11 | 45,0    | 113,0   | 41,0    | 50,0    |
| 1212634   | R1A245906Y-2424 | 1 1/2" | 2-12       | 1 1/2-11 | 49,0    | 137,0   | 48,0    | 55,0    |

## // R1A245T06N

Branch Tee adjustable elbow connector

ORFS Male - BSPP cylindric Male with O-Ring and retaining ring

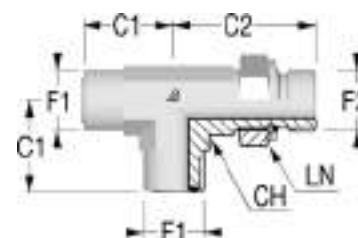


| Item Code | Product Code    | OD1   | F1         | F3       | C1 (mm) | C3 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|----------|---------|---------|---------|---------|
| 1210825   | R1A245T06N-0402 | 1/4"  | 9/16-18    | 1/8-28   | 21,5    | 30,0    | 14,0    | 14,0    |
| 1210826   | R1A245T06N-0404 | 1/4"  | 9/16-18    | 1/4-19   | 23,5    | 35,0    | 14,0    | 19,0    |
| 1210827   | R1A245T06N-0604 | 3/8"  | 11/16-16   | 1/4-19   | 25,0    | 36,0    | 17,0    | 19,0    |
| 1210828   | R1A245T06N-0606 | 3/8"  | 11/16-16   | 3/8-19   | 26,5    | 38,0    | 17,0    | 22,0    |
| 1210829   | R1A245T06N-0806 | 1/2"  | 13/16-16   | 3/8-19   | 28,0    | 38,0    | 19,0    | 22,0    |
| 1212523   | R1A245T06N-0808 | 1/2"  | 13/16-16   | 1/2-14   | 31,0    | 48,0    | 22,0    | 27,0    |
| 1207726   | R1A245T06N-1008 | 5/8"  | 1-14       | 1/2-14   | 33,5    | 48,0    | 27,0    | 27,0    |
| 1210830   | R1A245T06N-1012 | 5/8"  | 1-14       | 3/4-14   | 36,0    | 51,5    | 30,0    | 36,0    |
| 1207558   | R1A245T06N-1212 | 3/4"  | 1 3/16-12  | 3/4-14   | 37,5    | 51,5    | 30,0    | 36,0    |
| 1211516   | R1A245T06N-1616 | 1"    | 1 7/16-12  | 1-11     | 42,0    | 58,0    | 36,0    | 41,0    |
| 1211517   | R1A245T06N-2020 | 1"1/4 | 1 11/16-12 | 1 1/4-11 | 45,0    | 60,5    | 41,0    | 50,0    |
| 1211518   | R1A245T06N-2424 | 1"1/2 | 2-12       | 1 1/2-11 | 49,0    | 64,5    | 48,0    | 55,0    |

## // R1A245L06N

Run Tee adjustable elbow connector

ORFS Male - BSPP cylindric Male with O-Ring and retaining ring



| Item Code | Product Code    | OD1   | F1         | F2       | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|----------|---------|---------|---------|---------|
| 1210789   | R1A245L06N-0402 | 1/4"  | 9/16-18    | 1/8-28   | 21,5    | 30,0    | 14,0    | 14,0    |
| 1210791   | R1A245L06N-0604 | 3/8"  | 11/16-16   | 1/4-19   | 25,0    | 36,0    | 17,0    | 19,0    |
| 1210792   | R1A245L06N-0606 | 3/8"  | 11/16-16   | 3/8-19   | 26,5    | 38,0    | 17,0    | 22,0    |
| 1211499   | R1A245L06N-0806 | 1/2"  | 13/16-16   | 3/8-19   | 28,0    | 38,0    | 19,0    | 22,0    |
| 1210793   | R1A245L06N-0808 | 1/2"  | 13/16-16   | 1/2-14   | 31,0    | 48,0    | 22,0    | 27,0    |
| 1210794   | R1A245L06N-1008 | 5/8"  | 1-14       | 1/2-14   | 33,5    | 48,0    | 27,0    | 27,0    |
| 1210795   | R1A245L06N-1012 | 5/8"  | 1-14       | 3/4-14   | 38,0    | 51,5    | 30,0    | 36,0    |
| 1210796   | R1A245L06N-1212 | 3/4"  | 1 3/16-12  | 3/4-14   | 37,5    | 51,5    | 30,0    | 36,0    |
| 1208208   | R1A245L06N-1616 | 1"    | 1 7/16-12  | 1-11     | 42,0    | 58,0    | 36,0    | 41,0    |
| 1211500   | R1A245L06N-2020 | 1"1/4 | 1 11/16-12 | 1 1/4-11 | 45,0    | 60,5    | 41,0    | 50,0    |
| 1211501   | R1A245L06N-2424 | 1"1/2 | 2-12       | 1 1/2-11 | 49,0    | 64,5    | 48,0    | 55,0    |

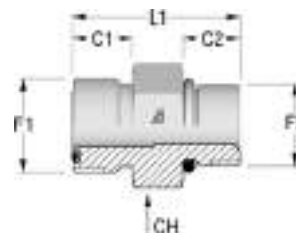
REV.2.1

## // METRIC

## // R1A2451525

Straight connector

ORFS Male - Metric Male with O-Ring

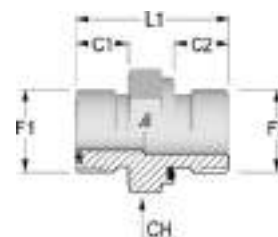


| Item Code | Product Code    | OD1   | F1         | F2      | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1216267   | R1A2451525-0410 | 1/4"  | 9/16-18    | M10X1.0 | 10,0    | 12,0    | 27,0    | 17,0    |
| 1216268   | R1A2451525-0412 | 1/4"  | 9/16-18    | M12X1.5 | 10,0    | 13,5    | 28,5    | 17,0    |
| 1208019   | R1A2451525-0414 | 1/4"  | 9/16-18    | M14X1.5 | 10,0    | 13,5    | 29,5    | 19,0    |
| 1207957   | R1A2451525-0614 | 3/8"  | 11/16-16   | M14X1.5 | 11,0    | 13,5    | 32,0    | 22,0    |
| 1208032   | R1A2451525-0616 | 3/8"  | 11/16-16   | M16X1.5 | 11,0    | 15,0    | 33,5    | 22,0    |
| 1216270   | R1A2451525-0618 | 3/8"  | 11/16-16   | M18X1.5 | 11,0    | 16,5    | 36,0    | 24,0    |
| 1207956   | R1A2451525-0814 | 1/2"  | 13/16-16   | M14X1.5 | 13,0    | 13,5    | 35,0    | 22,0    |
| 1216272   | R1A2451525-0816 | 1/2"  | 13/16-16   | M16X1.5 | 13,0    | 15,0    | 36,5    | 24,0    |
| 1208040   | R1A2451525-0818 | 1/2"  | 13/16-16   | M18X1.5 | 13,0    | 16,5    | 38,0    | 24,0    |
| 1211538   | R1A2451525-0822 | 1/2"  | 13/16-16   | M22X1.5 | 13,0    | 17,5    | 39,0    | 27,0    |
| 1208020   | R1A2451525-1022 | 5/8"  | 1-14       | M22X1.5 | 15,5    | 17,5    | 42,0    | 27,0    |
| 1216274   | R1A2451525-1027 | 5/8"  | 1-14       | M27X2   | 15,5    | 18,5    | 46,0    | 32,0    |
| 1216276   | R1A2451525-1227 | 3/4"  | 1 3/16-12  | M27X2   | 17,0    | 21,0    | 48,5    | 32,0    |
| 1216277   | R1A2451525-1233 | 3/4"  | 1 3/16-12  | M33X2.0 | 17,0    | 21,5    | 51,5    | 41,0    |
| 1216278   | R1A2451525-1633 | 1"    | 1 7/16-12  | M33X2.0 | 17,5    | 21,5    | 52,0    | 41,0    |
| 1216279   | R1A2451525-1642 | 1"    | 1 7/16-12  | M42X2   | 17,5    | 22,0    | 54,5    | 50,0    |
| 1216280   | R1A2451525-2042 | 1"1/4 | 1 11/16-12 | M42X2   | 17,5    | 22,0    | 54,5    | 50,0    |
| 1216281   | R1A2451525-2048 | 1"1/4 | 1 11/16-12 | M48X2.0 | 17,5    | 24,5    | 55,5    | 55,0    |
| 1216282   | R1A2451525-2448 | 1"1/2 | 2-12       | M48X2.0 | 17,5    | 24,5    | 57,0    | 55,0    |

## // R1A245152I

Straight connector

ORFS Male - Metric Male with elastomer



| Item Code | Product Code    | OD1   | F1         | F2      | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1206959   | R1A245152I-0410 | 1/4"  | 9/16-18    | M10X1.0 | 10,0    | 8,0     | 25,0    | 17,0    |
| 1206960   | R1A245152I-0412 | 1/4"  | 9/16-18    | M12X1.5 | 10,0    | 12,0    | 29,5    | 17,0    |
| 1208035   | R1A245152I-0414 | 1/4"  | 9/16-18    | M14X1.5 | 10,0    | 12,0    | 30,5    | 19,0    |
| 1208036   | R1A245152I-0614 | 3/8"  | 11/16-16   | M14X1.5 | 11,0    | 12,0    | 32,0    | 22,0    |
| 1206961   | R1A245152I-0616 | 3/8"  | 11/16-16   | M16X1.5 | 11,0    | 12,0    | 32,0    | 22,0    |
| 1212592   | R1A245152I-0814 | 1/2"  | 13/16-16   | M14X1.5 | 13,0    | 12,0    | 34,0    | 22,0    |
| 1216283   | R1A245152I-0816 | 1/2"  | 13/16-16   | M16X1.5 | 13,0    | 12,0    | 34,0    | 22,0    |
| 1206962   | R1A245152I-0818 | 1/2"  | 13/16-16   | M18X1.5 | 13,0    | 12,0    | 36,5    | 24,0    |
| 1212593   | R1A245152I-0822 | 1/2"  | 13/16-16   | M22X1.5 | 13,0    | 14,0    | 38,5    | 27,0    |
| 1208191   | R1A245152I-1022 | 5/8"  | 1-14       | M22X1.5 | 15,5    | 14,0    | 41,0    | 27,0    |
| 1212594   | R1A245152I-1222 | 3/4"  | 1 3/16-12  | M22X1.5 | 17,0    | 14,0    | 44,0    | 32,0    |
| 1208192   | R1A245152I-1227 | 3/4"  | 1 3/16-12  | M27X2   | 17,0    | 16,0    | 46,0    | 32,0    |
| 1211535   | R1A245152I-1633 | 1"    | 1 7/16-12  | M33X2.0 | 17,5    | 18,0    | 50,0    | 41,0    |
| 1212597   | R1A245152I-1642 | 1"    | 1 7/16-12  | M42X2   | 17,5    | 20,0    | 54,0    | 50,0    |
| 1211536   | R1A245152I-2042 | 1"1/4 | 1 11/16-12 | M42X2   | 17,5    | 20,0    | 54,0    | 50,0    |
| 1211537   | R1A245152I-2448 | 1"1/2 | 2-12       | M48X2.0 | 17,5    | 22,0    | 57,5    | 55,0    |

## // R1A245452Q

45° adjustable elbow connector

ORFS Male - Metric Male with O-Ring and retaining ring



| Item Code | Product Code    | OD1   | F1         | F2      | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1210736   | R1A245452Q-0412 | 1/4"  | 9/16-18    | M12X1.5 | 16,0    | 30,0    | 14,0    | 17,0    |
| 1208115   | R1A245452Q-0616 | 3/8"  | 11/16-16   | M16X1.5 | 19,0    | 33,5    | 17,0    | 22,0    |
| 1210737   | R1A245452Q-0818 | 1/2"  | 13/16-16   | M18X1.5 | 20,5    | 37,0    | 19,0    | 24,0    |
| 1210738   | R1A245452Q-1022 | 5/8"  | 1-14       | M22X1.5 | 23,5    | 44,0    | 27,0    | 27,0    |
| 1211548   | R1A245452Q-1227 | 3/4"  | 1 3/16-12  | M27X2   | 26,0    | 50,5    | 27,0    | 32,0    |
| 1211549   | R1A245452Q-1633 | 1"    | 1 7/16-12  | M33X2.0 | 30,0    | 52,5    | 36,0    | 41,0    |
| 1211550   | R1A245452Q-2042 | 1"1/4 | 1 11/16-12 | M42X2   | 32,0    | 54,0    | 41,0    | 50,0    |
| 1211551   | R1A245452Q-2448 | 1"1/2 | 2-12       | M48X2.0 | 37,0    | 56,5    | 48,0    | 55,0    |

REV.2.1

## // R1A245952Q

90° adjustable elbow connector

ORFS Male - Metric Male with O-Ring and retaining ring

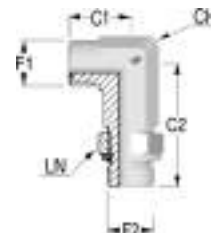


| Item Code | Product Code    | OD1   | F1         | F2      | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1210758   | R1A245952Q-0410 | 1/4"  | 9/16-18    | M10X1.0 | 21,5    | 30,5    | 14,0    | 14,0    |
| 1208159   | R1A245952Q-0412 | 1/4"  | 9/16-18    | M12X1.5 | 21,5    | 33,0    | 14,0    | 17,0    |
| 1212692   | R1A245952Q-0612 | 3/8"  | 11/16-16   | M12X1.5 | 25,0    | 35,5    | 17,0    | 17,0    |
| 1208042   | R1A245952Q-0614 | 3/8"  | 11/16-16   | M14X1.5 | 25,0    | 35,5    | 17,0    | 19,0    |
| 1208043   | R1A245952Q-0616 | 3/8"  | 11/16-16   | M16X1.5 | 25,0    | 37,5    | 17,0    | 22,0    |
| 1210759   | R1A245952Q-0818 | 1/2"  | 13/16-16   | M18X1.5 | 28,0    | 41,0    | 19,0    | 24,0    |
| 1210760   | R1A245952Q-0822 | 1/2"  | 13/16-16   | M22X1.5 | 31,0    | 49,0    | 19,0    | 27,0    |
| 1210761   | R1A245952Q-1022 | 5/8"  | 1-14       | M22X1.5 | 33,5    | 49,0    | 27,0    | 27,0    |
| 1210762   | R1A245952Q-1027 | 5/8"  | 1-14       | M27X2   | 33,5    | 55,0    | 27,0    | 32,0    |
| 1210763   | R1A245952Q-1227 | 3/4"  | 1 3/16-12  | M27X2   | 37,5    | 55,5    | 27,0    | 32,0    |
| 1210764   | R1A245952Q-1233 | 3/4"  | 1 3/16-12  | M33X2.0 | 37,5    | 59,5    | 36,0    | 41,0    |
| 1212693   | R1A245952Q-1627 | 1"    | 1 7/16-12  | M27X2   | 41,5    | 59,5    | 36,0    | 32,0    |
| 1211568   | R1A245952Q-1633 | 1"    | 1 7/16-12  | M33X2.0 | 41,5    | 59,5    | 36,0    | 41,0    |
| 1211569   | R1A245952Q-1642 | 1"    | 1 7/16-12  | M42X2   | 41,5    | 62,0    | 41,0    | 50,0    |
| 1211570   | R1A245952Q-2042 | 1"1/4 | 1 11/16-12 | M42X2   | 43,5    | 63,0    | 41,0    | 50,0    |
| 1211571   | R1A245952Q-2048 | 1"1/4 | 1 11/16-12 | M48X2.0 | 44,5    | 71,5    | 48,0    | 55,0    |
| 1211572   | R1A245952Q-2448 | 1"1/2 | 2-12       | M48X2.0 | 44,5    | 66,0    | 48,0    | 55,0    |

## // R1A245952Y

90° adjustable long elbow connector

ORFS Male - Metric Male with O-Ring and retaining ring

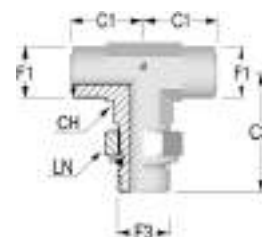


| Item Code | Product Code    | OD1   | F1         | F2      | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1212694   | R1A245952Y-0412 | 1/4"  | 9/16-18    | M12X1.5 | 21,5    | 56,5    | 14,0    | 17,0    |
| 1212695   | R1A245952Y-0616 | 3/8"  | 11/16-16   | M16X1.5 | 25,0    | 67,0    | 17,0    | 22,0    |
| 1212696   | R1A245952Y-0818 | 1/2"  | 13/16-16   | M18X1.5 | 28,0    | 75,0    | 19,0    | 24,0    |
| 1212697   | R1A245952Y-1022 | 5/8"  | 1-14       | M22X1.5 | 33,5    | 89,0    | 27,0    | 27,0    |
| 1212698   | R1A245952Y-1227 | 3/4"  | 1 3/16-12  | M27X2   | 37,5    | 100,0   | 27,0    | 32,0    |
| 1212699   | R1A245952Y-1633 | 1"    | 1 7/16-12  | M33X2.0 | 41,5    | 113,0   | 36,0    | 41,0    |
| 1212700   | R1A245952Y-2042 | 1"1/4 | 1 11/16-12 | M42X2   | 44,5    | 125,0   | 41,0    | 50,0    |
| 1212701   | R1A245952Y-2448 | 1"1/2 | 2-12       | M48X2.0 | 49,0    | 139,0   | 48,0    | 55,0    |

## // R1A245T52Q

Branch Tee adjustable elbow connector

ORFS Male - Metric Male with O-Ring and retaining ring

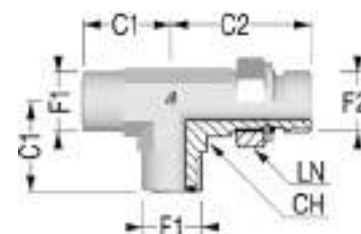


| Item Code | Product Code    | OD1   | F1         | F3      | C1 (mm) | C3 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1210784   | R1A245T52Q-0412 | 1/4"  | 9/16-18    | M12X1.5 | 21,5    | 33,0    | 14,0    | 17,0    |
| 1210785   | R1A245T52Q-0616 | 3/8"  | 11/16-16   | M16X1.5 | 25,0    | 37,5    | 17,0    | 22,0    |
| 1210786   | R1A245T52Q-0818 | 1/2"  | 13/16-16   | M18X1.5 | 28,0    | 41,0    | 19,0    | 24,0    |
| 1210787   | R1A245T52Q-1022 | 5/8"  | 1-14       | M22X1.5 | 33,5    | 49,0    | 27,0    | 27,0    |
| 1210788   | R1A245T52Q-1227 | 3/4"  | 1 3/16-12  | M27X2   | 37,5    | 55,5    | 27,0    | 32,0    |
| 1211524   | R1A245T52Q-1633 | 1"    | 1 7/16-12  | M33X2.0 | 41,5    | 59,5    | 36,0    | 41,0    |
| 1211525   | R1A245T52Q-2042 | 1"1/4 | 1 11/16-12 | M42X2   | 44,5    | 63,0    | 41,0    | 36,0    |
| 1211526   | R1A245T52Q-2448 | 1"1/2 | 2-12       | M48X2.0 | 49,0    | 71,5    | 48,0    | 55,0    |

## // R1A245L52Q

Run Tee adjustable elbow connector

ORFS Male - Metric Male with O-Ring and retaining ring



| Item Code | Product Code    | OD1   | F1         | F2      | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|---------|---------|---------|---------|---------|
| 1210820   | R1A245L52Q-0412 | 1/4"  | 9/16-18    | M12X1.5 | 21,5    | 33,0    | 14,0    | 17,0    |
| 1210821   | R1A245L52Q-0616 | 3/8"  | 11/16-16   | M16X1.5 | 25,0    | 37,5    | 17,0    | 22,0    |
| 1210822   | R1A245L52Q-0818 | 1/2"  | 13/16-16   | M18X1.5 | 28,0    | 41,0    | 19,0    | 24,0    |
| 1210709   | R1A245L52Q-1022 | 5/8"  | 1-14       | M22X1.5 | 33,5    | 49,0    | 27,0    | 27,0    |
| 1210823   | R1A245L52Q-1227 | 3/4"  | 1 3/16-12  | M27X2   | 37,5    | 55,5    | 27,0    | 32,0    |
| 1211513   | R1A245L52Q-1633 | 1"    | 1 7/16-12  | M33X2.0 | 41,5    | 59,5    | 36,0    | 41,0    |
| 1211514   | R1A245L52Q-2042 | 1"1/4 | 1 11/16-12 | M42X2   | 44,5    | 63,0    | 41,0    | 50,0    |
| 1211515   | R1A245L52Q-2448 | 1"1/2 | 2-12       | M48X2.0 | 49,0    | 71,5    | 48,0    | 55,0    |

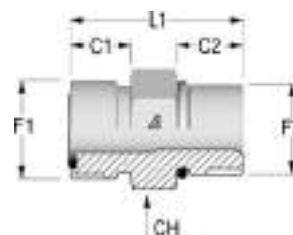
REV.2.1

## // SAE UNF

## // R1A2451305

Straight connector

ORFS Male - SAE UNF/UN Male with O-Ring

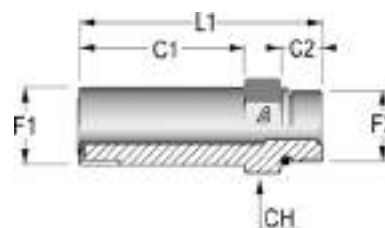


| Item Code | Product Code    | OD1    | F1         | F2        | C1 (mm) | C2 (mm) | CH (mm) | L1 (mm) |
|-----------|-----------------|--------|------------|-----------|---------|---------|---------|---------|
| 1206963   | R1A2451305-0404 | 1/4"   | 9/16-18    | 7/16-20   | 10,0    | 11,0    | 17,0    | 29,0    |
| 1206964   | R1A2451305-0406 | 1/4"   | 9/16-18    | 9/16-18   | 10,0    | 12,0    | 19,0    | 30,5    |
| 1212564   | R1A2451305-0604 | 3/8"   | 11/16-16   | 7/16-20   | 11,0    | 11,0    | 19,0    | 34,0    |
| 1207972   | R1A2451305-0606 | 3/8"   | 11/16-16   | 9/16-18   | 11,0    | 12,0    | 22,0    | 32,0    |
| 1210723   | R1A2451305-0608 | 3/8"   | 11/16-16   | 3/4-16    | 11,0    | 14,0    | 22,0    | 35,0    |
| 1208012   | R1A2451305-0806 | 1/2"   | 13/16-16   | 9/16-18   | 13,0    | 12,0    | 22,0    | 37,5    |
| 1208013   | R1A2451305-0808 | 1/2"   | 13/16-16   | 3/4-16    | 13,0    | 14,0    | 22,0    | 36,5    |
| 1207973   | R1A2451305-0810 | 1/2"   | 13/16-16   | 7/8-14    | 13,0    | 16,0    | 27,0    | 40,5    |
| 1212565   | R1A2451305-0812 | 1/2"   | 13/16-16   | 1 1/16-12 | 13,0    | 18,5    | 32,0    | 44,5    |
| 1208014   | R1A2451305-1008 | 5/8"   | 1-14       | 3/4-16    | 15,5    | 14,0    | 27,0    | 45,0    |
| 1206965   | R1A2451305-1010 | 5/8"   | 1-14       | 7/8-14    | 15,5    | 16,0    | 27,0    | 43,0    |
| 1207968   | R1A2451305-1012 | 5/8"   | 1-14       | 1 1/16-12 | 15,5    | 18,5    | 32,0    | 47,0    |
| 1212566   | R1A2451305-1210 | 3/4"   | 1 3/16-12  | 7/8-14    | 17,0    | 16,0    | 32,0    | 50,5    |
| 1207592   | R1A2451305-1212 | 3/4"   | 1 3/16-12  | 1 1/16-12 | 17,0    | 18,0    | 32,0    | 48,5    |
| 1207561   | R1A2451305-1216 | 3/4"   | 1 3/16-12  | 1 5/16-12 | 17,0    | 18,5    | 41,0    | 50,0    |
| 1212567   | R1A2451305-1220 | 3/4"   | 1 3/16-12  | 1 5/8-12  | 17,0    | 18,5    | 46,0    | 50,5    |
| 1210721   | R1A2451305-1612 | 1"     | 1 7/16-12  | 1 1/16-12 | 17,5    | 18,5    | 41,0    | 54,0    |
| 1208015   | R1A2451305-1616 | 1"     | 1 7/16-12  | 1 5/16-12 | 17,5    | 18,5    | 41,0    | 50,5    |
| 1210777   | R1A2451305-1620 | 1"     | 1 7/16-12  | 1 5/8-12  | 17,5    | 18,5    | 46,0    | 52,0    |
| 1212568   | R1A2451305-2016 | 1 1/4" | 1 11/16-12 | 1 5/16-12 | 17,5    | 18,5    | 46,0    | 58,0    |
| 1210778   | R1A2451305-2020 | 1 1/4" | 1 11/16-12 | 1 5/8-12  | 17,5    | 18,5    | 46,0    | 52,0    |
| 1211534   | R1A2451305-2424 | 1 1/2" | 2-12       | 1 7/8-12  | 17,5    | 18,5    | 55,0    | 54,0    |

## // R1A245130J

Long connector

ORFS Male - SAE UNF/UN Male with O-Ring

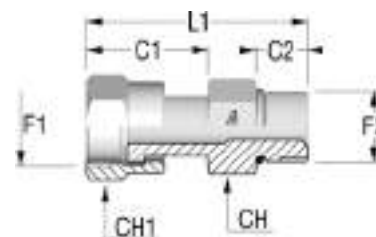


| Item Code | Product Code    | OD1    | F1         | F2        | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|------------|-----------|---------|---------|---------|---------|
| 1212556   | R1A245130J-0404 | 1/4"   | 9/16-18    | 7/16-20   | 34,0    | 9,0     | 52,5    | 17,0    |
| 1212557   | R1A245130J-0606 | 3/8"   | 11/16-16   | 9/16-18   | 37,0    | 10,0    | 58,0    | 22,0    |
| 1212558   | R1A245130J-0808 | 1/2"   | 13/16-16   | 3/4-16    | 44,0    | 11,0    | 68,0    | 22,0    |
| 1212559   | R1A245130J-1010 | 5/8"   | 1-14       | 7/8-14    | 52,0    | 12,5    | 79,5    | 27,0    |
| 1212560   | R1A245130J-1212 | 3/4"   | 1 3/16-12  | 1 1/16-12 | 64,0    | 15,0    | 95,5    | 32,0    |
| 1212561   | R1A245130J-1616 | 1"     | 1 7/16-12  | 1 5/16-12 | 72,5    | 15,0    | 105,0   | 41,0    |
| 1212562   | R1A245130J-2020 | 1 1/4" | 1 11/16-12 | 1 5/8-12  | 86,0    | 15,0    | 121,0   | 46,0    |
| 1212563   | R1A245130J-2424 | 1 1/2" | 2-12       | 1 7/8-12  | 97,0    | 15,0    | 133,5   | 55,0    |

## // R1A2411305

Straight connector

ORFS Female - SAE UNF/UN Male with O-Ring

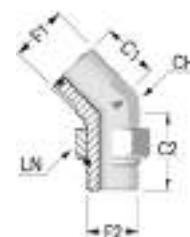


| Item Code | Product Code    | OD1    | F1         | F2        | C1 (mm) | C2 (mm) | L1 (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------------|--------|------------|-----------|---------|---------|---------|---------|----------|
| 1212508   | R1A2411305-0404 | 1/4"   | 9/16-18    | 7/16-20   | 24,4    | 11,0    | 45,2    | 17,0    | 19,0     |
| 1212509   | R1A2411305-0606 | 3/8"   | 11/16-16   | 9/16-18   | 27,5    | 12,0    | 50,0    | 19,0    | 22,0     |
| 1212510   | R1A2411305-0808 | 1/2"   | 13/16-16   | 3/4-16    | 33,0    | 14,0    | 60,0    | 22,0    | 24,0     |
| 1208302   | R1A2411305-1008 | 5/8"   | 1-14       | 3/4-16    | 37,5    | 14,0    | 65,0    | 24,0    | 30,0     |
| 1212511   | R1A2411305-1010 | 5/8"   | 1-14       | 7/8-14    | 37,5    | 16,0    | 66,5    | 27,0    | 30,0     |
| 1212512   | R1A2411305-1212 | 3/4"   | 1 3/16-12  | 1 1/16-12 | 41,5    | 18,0    | 73,5    | 32,0    | 36,0     |
| 1212513   | R1A2411305-1616 | 1"     | 1 7/16-12  | 1 5/16-12 | 43,8    | 18,5    | 82,0    | 41,0    | 41,0     |
| 1212514   | R1A2411305-2020 | 1 1/4" | 1 11/16-12 | 1 5/8-12  | 43,8    | 18,5    | 82,0    | 50,0    | 50,0     |
| 1212515   | R1A2411305-2424 | 1 1/2" | 2-12       | 1 7/8-12  | 47,5    | 18,5    | 81,0    | 55,0    | 60,0     |

## // R1A2454305

45° adjustable elbow connector

ORFS Male - SAE UNF/UN Male with O-Ring



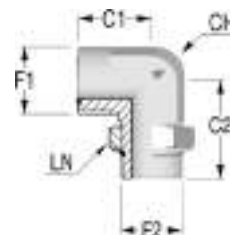
| Item Code | Product Code    | OD1    | F1         | F2        | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|--------|------------|-----------|---------|---------|---------|---------|
| 1210808   | R1A2454305-0404 | 1/4"   | 9/16-18    | 7/16-20   | 16,0    | 30,0    | 14,0    | 16,0    |
| 1210809   | R1A2454305-0406 | 1/4"   | 9/16-18    | 9/16-18   | 17,5    | 33,0    | 14,0    | 19,0    |
| 1210810   | R1A2454305-0604 | 3/8"   | 11/16-16   | 7/16-20   | 19,0    | 31,0    | 17,0    | 16,0    |
| 1210722   | R1A2454305-0606 | 3/8"   | 11/16-16   | 9/16-18   | 19,0    | 33,0    | 17,0    | 19,0    |
| 1207936   | R1A2454305-0608 | 3/8"   | 11/16-16   | 3/4-16    | 19,0    | 36,5    | 19,0    | 24,0    |
| 1210811   | R1A2454305-0806 | 1/2"   | 13/16-16   | 9/16-18   | 20,5    | 32,5    | 19,0    | 19,0    |
| 1210812   | R1A2454305-0808 | 1/2"   | 13/16-16   | 3/4-16    | 20,5    | 36,5    | 19,0    | 24,0    |
| 1210813   | R1A2454305-0810 | 1/2"   | 13/16-16   | 7/8-14    | 21,0    | 45,0    | 22,0    | 27,0    |
| 1211543   | R1A2454305-1008 | 5/8"   | 1-14       | 3/4-16    | 23,5    | 40,5    | 27,0    | 24,0    |
| 1210814   | R1A2454305-1010 | 5/8"   | 1-14       | 7/8-14    | 23,5    | 45,0    | 27,0    | 27,0    |
| 1210815   | R1A2454305-1012 | 5/8"   | 1-14       | 1 1/16-12 | 24,5    | 50,0    | 27,0    | 32,0    |
| 1210816   | R1A2454305-1210 | 3/4"   | 1 3/16-12  | 7/8-14    | 26,0    | 46,0    | 30,0    | 27,0    |
| 1207975   | R1A2454305-1212 | 3/4"   | 1 3/16-12  | 1 1/16-12 | 26,0    | 44,0    | 27,0    | 32,0    |
| 1211544   | R1A2454305-1216 | 3/4"   | 1 3/16-12  | 1 5/16-12 | 29,5    | 52,5    | 36,0    | 41,0    |
| 1207974   | R1A2454305-1612 | 1"     | 1 7/16-12  | 1 1/16-12 | 30,0    | 51,5    | 33,0    | 32,0    |
| 1210817   | R1A2454305-1616 | 1"     | 1 7/16-12  | 1 5/16-12 | 30,0    | 52,5    | 36,0    | 41,0    |
| 1211545   | R1A2454305-1620 | 1"     | 1 7/16-12  | 1 5/8-12  | 32,0    | 53,5    | 41,0    | 50,0    |
| 1211546   | R1A2454305-2020 | 1 1/4" | 1 11/16-12 | 1 5/8-12  | 32,0    | 48,5    | 41,0    | 50,0    |
| 1211547   | R1A2454305-2424 | 1 1/2" | 2-12       | 1 7/8-12  | 33,5    | 48,5    | 48,0    | 55,0    |

REV.2.1

## // R1A2459305

90° adjustable elbow connector

ORFS Male - SAE UNF/UN Male with O-Ring

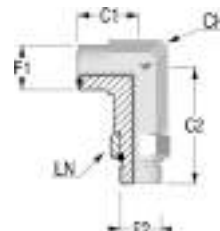


| Item Code | Product Code    | OD1   | F1         | F2        | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|-----------|---------|---------|---------|---------|
| 1207980   | R1A2459305-0404 | 1/4"  | 9/16-18    | 7/16-20   | 22,5    | 32,5    | 14,0    | 16,0    |
| 1207976   | R1A2459305-0406 | 1/4"  | 9/16-18    | 9/16-18   | 23,5    | 37,0    | 14,0    | 19,0    |
| 1208016   | R1A2459305-0604 | 3/8"  | 11/16-16   | 7/16-20   | 25,0    | 35,0    | 17,0    | 17,0    |
| 1207497   | R1A2459305-0606 | 3/8"  | 11/16-16   | 9/16-18   | 25,0    | 37,0    | 17,0    | 19,0    |
| 1210724   | R1A2459305-0608 | 3/8"  | 11/16-16   | 3/4-16    | 26,5    | 40,5    | 19,0    | 24,0    |
| 1210725   | R1A2459305-0806 | 1/2"  | 13/16-16   | 9/16-18   | 28,0    | 36,5    | 19,0    | 19,0    |
| 1207596   | R1A2459305-0808 | 1/2"  | 13/16-16   | 3/4-16    | 28,0    | 40,5    | 19,0    | 24,0    |
| 1207970   | R1A2459305-0810 | 1/2"  | 13/16-16   | 7/8-14    | 31,0    | 50,0    | 22,0    | 27,0    |
| 1210726   | R1A2459305-1008 | 5/8"  | 1-14       | 3/4-16    | 33,5    | 46,0    | 27,0    | 24,0    |
| 1207971   | R1A2459305-1010 | 5/8"  | 1-14       | 7/8-14    | 33,5    | 50,0    | 27,0    | 27,0    |
| 1207969   | R1A2459305-1012 | 5/8"  | 1-14       | 1 1/16-12 | 36,0    | 55,0    | 27,0    | 32,0    |
| 1210756   | R1A2459305-1210 | 3/4"  | 1 3/16-12  | 7/8-14    | 37,5    | 51,0    | 30,0    | 27,0    |
| 1207977   | R1A2459305-1212 | 3/4"  | 1 3/16-12  | 1 1/16-12 | 37,5    | 55,0    | 30,0    | 32,0    |
| 1210711   | R1A2459305-1216 | 3/4"  | 1 3/16-12  | 1 5/16-12 | 41,5    | 60,0    | 36,0    | 41,0    |
| 1207978   | R1A2459305-1612 | 1"    | 1 7/16-12  | 1 1/16-12 | 42,0    | 59,0    | 33,0    | 32,0    |
| 1210757   | R1A2459305-1616 | 1"    | 1 7/16-12  | 1 5/16-12 | 42,0    | 60,0    | 36,0    | 41,0    |
| 1211561   | R1A2459305-1620 | 1"    | 1 7/16-12  | 1 5/8-12  | 45,0    | 62,0    | 41,0    | 50,0    |
| 1211562   | R1A2459305-2016 | 1"1/4 | 1 11/16-12 | 1 5/16-12 | 45,0    | 62,0    | 41,0    | 41,0    |
| 1211563   | R1A2459305-2020 | 1"1/4 | 1 11/16-12 | 1 5/8-12  | 44,5    | 62,0    | 41,0    | 50,0    |
| 1211564   | R1A2459305-2024 | 1"1/4 | 1 11/16-12 | 1 7/8-12  | 49,0    | 66,0    | 48,0    | 55,0    |
| 1211565   | R1A2459305-2424 | 1"1/2 | 2-12       | 1 7/8-12  | 49,0    | 66,0    | 48,0    | 55,0    |

## // R1A245930J

90° adjustable long elbow connector

ORFS Male - SAE UNF/UN Male with O-Ring

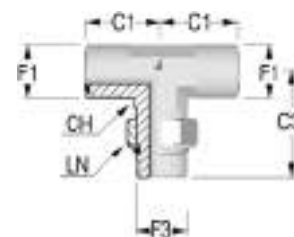


| Item Code | Product Code    | OD1   | F1         | F2        | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|-----------|---------|---------|---------|---------|
| 1212635   | R1A245930J-0404 | 1/4"  | 9/16-18    | 7/16-20   | 21,5    | 56,5    | 14,0    | 16,0    |
| 1212636   | R1A245930J-0406 | 1/4"  | 9/16-18    | 9/16-18   | 23,5    | 66,0    | 14,0    | 19,0    |
| 1212637   | R1A245930J-0606 | 3/8"  | 11/16-16   | 9/16-18   | 25,0    | 66,0    | 17,0    | 19,0    |
| 1212638   | R1A245930J-0608 | 3/8"  | 11/16-16   | 3/4-16    | 26,5    | 75,0    | 19,0    | 24,0    |
| 1212639   | R1A245930J-0808 | 1/2"  | 13/16-16   | 3/4-16    | 28,0    | 75,0    | 19,0    | 24,0    |
| 1212640   | R1A245930J-0810 | 1/2"  | 13/16-16   | 7/8-14    | 31,0    | 89,0    | 22,0    | 27,0    |
| 1212641   | R1A245930J-1010 | 5/8"  | 1-14       | 7/8-14    | 33,5    | 89,0    | 27,0    | 27,0    |
| 1212642   | R1A245930J-1012 | 5/8"  | 1-14       | 1 1/16-12 | 36,0    | 101,0   | 27,0    | 32,0    |
| 1212643   | R1A245930J-1212 | 3/4"  | 1 3/16-12  | 1 1/16-12 | 37,5    | 101,0   | 30,0    | 32,0    |
| 1212644   | R1A245930J-1216 | 3/4"  | 1 3/16-12  | 1 5/16-12 | 41,5    | 114,0   | 36,0    | 41,0    |
| 1212645   | R1A245930J-1616 | 1"    | 1 7/16-12  | 1 5/16-12 | 42,0    | 114,0   | 36,0    | 41,0    |
| 1212646   | R1A245930J-1620 | 1"    | 1 7/16-12  | 1 5/8-12  | 45,0    | 126,0   | 41,0    | 50,0    |
| 1212647   | R1A245930J-2020 | 1"1/4 | 1 11/16-12 | 1 5/8-12  | 45,0    | 126,0   | 41,0    | 50,0    |
| 1212648   | R1A245930J-2024 | 1"1/4 | 1 11/16-12 | 1 7/8-12  | 49,0    | 139,0   | 48,0    | 55,0    |
| 1212649   | R1A245930J-2424 | 1"1/2 | 2-12       | 1 7/8-12  | 49,0    | 139,0   | 48,0    | 55,0    |

## // R1A245T305

Branch Tee adjustable elbow connector

ORFS Male - SAE UNF/UN Male with O-Ring

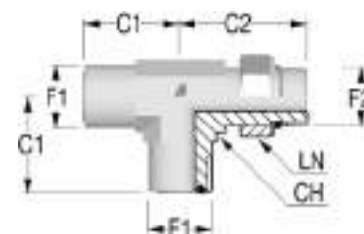


| Item Code | Product Code    | OD1   | F1         | F3        | C1 (mm) | C3 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|-----------|---------|---------|---------|---------|
| 1210720   | R1A245T305-0404 | 1/4"  | 9/16-18    | 7/16-20   | 21,5    | 32,5    | 14,0    | 16,0    |
| 1210780   | R1A245T305-0606 | 3/8"  | 11/16-16   | 9/16-18   | 25,0    | 37,0    | 17,0    | 19,0    |
| 1210781   | R1A245T305-0808 | 1/2"  | 13/16-16   | 3/4-16    | 28,0    | 40,5    | 19,0    | 24,0    |
| 1210782   | R1A245T305-1010 | 5/8"  | 1-14       | 7/8-14    | 33,5    | 50,0    | 27,0    | 27,0    |
| 1210783   | R1A245T305-1212 | 3/4"  | 1 3/16-12  | 1 1/16-12 | 37,5    | 55,0    | 30,0    | 32,0    |
| 1211521   | R1A245T305-1616 | 1"    | 1 7/16-12  | 1 5/16-12 | 42,0    | 60,0    | 36,0    | 41,0    |
| 1211522   | R1A245T305-2020 | 1"1/4 | 1 11/16-12 | 1 5/8-12  | 45,0    | 62,0    | 41,0    | 50,0    |
| 1211523   | R1A245T305-2424 | 1"1/2 | 2-12       | 1 7/8-12  | 49,0    | 66,0    | 48,0    | 55,0    |

## // R1A245L305

Run Tee adjustable elbow connector

ORFS Male - SAE UNF/UN Male with O-Ring



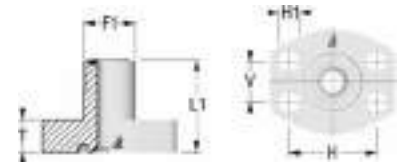
| Item Code | Product Code    | OD1   | F1         | F2        | C1 (mm) | C2 (mm) | CH (mm) | LN (mm) |
|-----------|-----------------|-------|------------|-----------|---------|---------|---------|---------|
| 1210798   | R1A245L305-0404 | 1/4"  | 9/16-18    | 7/16-20   | 21,5    | 32,5    | 14,0    | 16,0    |
| 1210799   | R1A245L305-0606 | 3/8"  | 11/16-16   | 9/16-18   | 25,0    | 37,0    | 17,0    | 19,0    |
| 1210818   | R1A245L305-0808 | 1/2"  | 13/16-16   | 3/4-16    | 28,0    | 40,5    | 19,0    | 24,0    |
| 1210819   | R1A245L305-1010 | 5/8"  | 1-14       | 7/8-14    | 33,5    | 50,0    | 27,0    | 27,0    |
| 1211509   | R1A245L305-1212 | 3/4"  | 1 3/16-12  | 1 1/16-12 | 37,5    | 55,0    | 30,0    | 32,0    |
| 1211510   | R1A245L305-1616 | 1"    | 1 7/16-12  | 1 5/16-12 | 42,0    | 60,0    | 36,0    | 41,0    |
| 1211511   | R1A245L305-2020 | 1"1/4 | 1 11/16-12 | 1 5/8-12  | 45,0    | 62,0    | 41,0    | 50,0    |
| 1211512   | R1A245L305-2424 | 1"1/2 | 2-12       | 1 7/8-12  | 49,0    | 66,0    | 48,0    | 55,0    |

## // FLANGES

## // R1A245133W

Straight flange SAE J518 code 61

ORFS Male - Low pressure

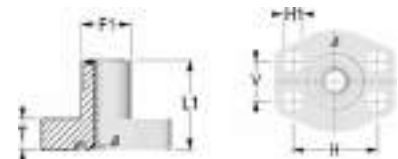


| Item Code | Product Code    | OD1    | F1         | F2    | L1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|--------|------------|-------|---------|--------|--------|--------|---------|
| 1212569   | R1A245133W-0608 | 3/8"   | 11/16-16   | 1/2   | 37,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212570   | R1A245133W-0808 | 1/2"   | 13/16-16   | 1/2   | 39,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212571   | R1A245133W-1008 | 5/8"   | 1-14       | 1/2   | 40,0    | 14,0   | 38,1   | 17,5   | 9,0     |
| 1212572   | R1A245133W-1012 | 5/8"   | 1-14       | 3/4   | 44,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212573   | R1A245133W-1212 | 3/4"   | 1 3/16-12  | 3/4   | 45,0    | 15,0   | 47,6   | 22,2   | 11,0    |
| 1212574   | R1A245133W-1216 | 3/4"   | 1 3/16-12  | 1     | 48,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212575   | R1A245133W-1616 | 1"     | 1 7/16-12  | 1     | 49,0    | 17,0   | 52,4   | 26,2   | 11,0    |
| 1212576   | R1A245133W-1620 | 1"     | 1 7/16-12  | 1 1/4 | 55,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212577   | R1A245133W-2020 | 1 1/4" | 1 11/16-12 | 1 1/4 | 55,0    | 21,0   | 58,7   | 30,2   | 11,5    |
| 1212578   | R1A245133W-2024 | 1 1/4" | 1 11/16-12 | 1 1/2 | 59,0    | 24,0   | 69,9   | 35,7   | 13,5    |
| 1212579   | R1A245133W-2424 | 1 1/2" | 2-12       | 1 1/2 | 61,0    | 24,0   | 69,9   | 35,7   | 13,5    |

## // R1A245136W

Straight flange SAE J518 code 62

ORFS Male - High pressure

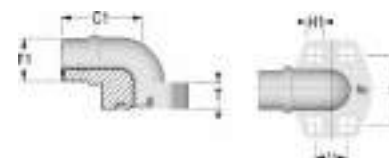


| Item Code | Product Code    | OD1    | F1         | F2    | L1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|--------|------------|-------|---------|--------|--------|--------|---------|
| 1212580   | R1A245136W-0608 | 3/8"   | 11/16-16   | 1/2   | 37,0    | 15,0   | 40,5   | 18,2   | 9,0     |
| 1212581   | R1A245136W-0808 | 1/2"   | 13/16-16   | 1/2   | 39,0    | 15,0   | 40,5   | 18,2   | 9,0     |
| 1212582   | R1A245136W-1008 | 5/8"   | 1-14       | 1/2   | 40,0    | 15,0   | 40,5   | 18,2   | 9,0     |
| 1212583   | R1A245136W-1012 | 5/8"   | 1-14       | 3/4   | 44,0    | 17,0   | 50,8   | 23,8   | 11,0    |
| 1212584   | R1A245136W-1212 | 3/4"   | 1 3/16-12  | 3/4   | 45,0    | 17,0   | 50,8   | 23,8   | 11,0    |
| 1212585   | R1A245136W-1216 | 3/4"   | 1 3/16-12  | 1     | 48,0    | 21,0   | 57,2   | 27,8   | 13,0    |
| 1212586   | R1A245136W-1616 | 1"     | 1 7/16-12  | 1     | 49,0    | 21,0   | 57,2   | 27,8   | 13,0    |
| 1212587   | R1A245136W-1620 | 1"     | 1 7/16-12  | 1 1/4 | 55,0    | 24,0   | 66,7   | 31,8   | 15,0    |
| 1212588   | R1A245136W-2020 | 1 1/4" | 1 11/16-12 | 1 1/4 | 55,0    | 24,0   | 66,7   | 31,8   | 15,0    |
| 1212589   | R1A245136W-2024 | 1 1/4" | 1 11/16-12 | 1 1/2 | 59,0    | 27,0   | 79,4   | 36,5   | 17,0    |
| 1212590   | R1A245136W-2424 | 1 1/2" | 2-12       | 1 1/2 | 61,0    | 27,0   | 79,4   | 36,5   | 17,0    |

## // R1A245933W

90° flange SAE J518 code 61

ORFS Male - Low pressure

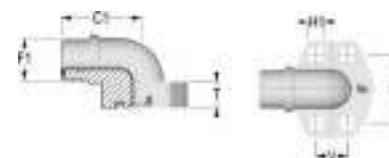


| Item Code | Product Code    | OD1    | F1         | F2    | C1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|--------|------------|-------|---------|--------|--------|--------|---------|
| 1212650   | R1A245933W-0608 | 3/8"   | 11/16-16   | 1/2   | 37,0    | 17,0   | 38,1   | 17,5   | 9,0     |
| 1212651   | R1A245933W-0808 | 1/2"   | 13/16-16   | 1/2   | 39,0    | 17,0   | 38,1   | 17,5   | 9,0     |
| 1212652   | R1A245933W-1008 | 5/8"   | 1-14       | 1/2   | 40,0    | 20,0   | 38,1   | 17,5   | 9,0     |
| 1212653   | R1A245933W-1012 | 5/8"   | 1-14       | 3/4   | 44,0    | 20,0   | 47,6   | 22,2   | 11,0    |
| 1212654   | R1A245933W-1212 | 3/4"   | 1 3/16-12  | 3/4   | 45,0    | 25,0   | 47,6   | 22,2   | 11,0    |
| 1212655   | R1A245933W-1216 | 3/4"   | 1 3/16-12  | 1     | 48,0    | 25,0   | 52,4   | 26,2   | 11,0    |
| 1212656   | R1A245933W-1616 | 1"     | 1 7/16-12  | 1     | 49,0    | 31,0   | 52,4   | 26,2   | 11,0    |
| 1212657   | R1A245933W-1620 | 1"     | 1 7/16-12  | 1 1/4 | 55,0    | 31,0   | 58,7   | 30,2   | 11,5    |
| 1212658   | R1A245933W-2020 | 1 1/4" | 1 11/16-12 | 1 1/4 | 55,0    | 31,0   | 58,7   | 30,2   | 11,5    |
| 1212659   | R1A245933W-2024 | 1 1/4" | 1 11/16-12 | 1 1/2 | 59,0    | 31,0   | 69,9   | 35,7   | 13,5    |
| 1212660   | R1A245933W-2424 | 1 1/2" | 2-12       | 1 1/2 | 61,0    | 37,0   | 69,9   | 35,7   | 13,5    |

## // R1A245936W

90° flange SAE J518 code 62

ORFS Male - High pressure



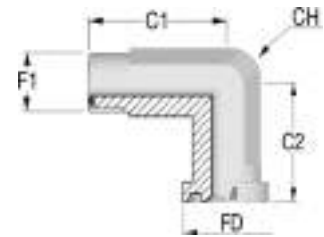
| Item Code | Product Code    | OD1    | F1         | F2    | C1 (mm) | T (mm) | H (mm) | V (mm) | H1 (mm) |
|-----------|-----------------|--------|------------|-------|---------|--------|--------|--------|---------|
| 1212670   | R1A245936W-0608 | 3/8"   | 11/16-16   | 1/2   | 37,0    | 17,0   | 40,5   | 18,2   | 9,0     |
| 1212671   | R1A245936W-0808 | 1/2"   | 13/16-16   | 1/2   | 39,0    | 17,0   | 40,5   | 18,2   | 9,0     |
| 1212672   | R1A245936W-1008 | 5/8"   | 1-14       | 1/2   | 40,0    | 20,0   | 40,5   | 18,2   | 9,0     |
| 1212673   | R1A245936W-1012 | 5/8"   | 1-14       | 3/4   | 44,0    | 20,0   | 50,8   | 23,8   | 11,0    |
| 1212674   | R1A245936W-1212 | 3/4"   | 1 3/16-12  | 3/4   | 45,0    | 25,0   | 50,8   | 23,8   | 11,0    |
| 1212675   | R1A245936W-1216 | 3/4"   | 1 3/16-12  | 1     | 48,0    | 25,0   | 57,2   | 27,8   | 13,0    |
| 1212676   | R1A245936W-1616 | 1"     | 1 7/16-12  | 1     | 49,0    | 31,0   | 57,2   | 27,8   | 13,0    |
| 1212677   | R1A245936W-1620 | 1"     | 1 7/16-12  | 1 1/4 | 55,0    | 31,0   | 66,7   | 31,8   | 15,0    |
| 1212678   | R1A245936W-2020 | 1 1/4" | 1 11/16-12 | 1 1/4 | 55,0    | 31,0   | 66,7   | 31,8   | 15,0    |
| 1212679   | R1A245936W-2024 | 1 1/4" | 1 11/16-12 | 1 1/2 | 59,0    | 37,0   | 79,4   | 36,5   | 17,0    |
| 1212680   | R1A245936W-2424 | 1 1/2" | 2-12       | 1 1/2 | 61,0    | 37,0   | 79,4   | 36,5   | 17,0    |

REV.2.1

## // R1A2459334

90° adjustable flange SAE J518 code 61

ORFS Male - Low pressure

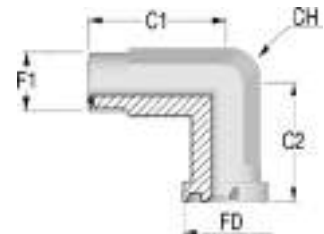


| Item Code | Product Code    | OD1   | F1         | F2    | FD (mm) | C1 (mm) | C2 (mm) | CH (mm) |
|-----------|-----------------|-------|------------|-------|---------|---------|---------|---------|
| 1212662   | R1A2459334-0808 | 1/2"  | 13/16-16   | 1/2   | 30,2    | 48,0    | 42,0    | 22,0    |
| 1212663   | R1A2459334-1008 | 5/8"  | 1-14       | 1/2   | 30,2    | 50,0    | 44,0    | 22,0    |
| 1212664   | R1A2459334-1212 | 3/4"  | 1 3/16-12  | 3/4   | 38,1    | 64,0    | 53,0    | 27,0    |
| 1212665   | R1A2459334-1616 | 1"    | 1 7/16-12  | 1     | 44,4    | 65,0    | 60,0    | 34,0    |
| 1212666   | R1A2459334-1620 | 1"    | 1 7/16-12  | 1 1/4 | 50,8    | 64,0    | 55,0    | 42,0    |
| 1212667   | R1A2459334-2020 | 1"1/4 | 1 11/16-12 | 1 1/4 | 50,8    | 64,0    | 55,0    | 42,0    |
| 1212668   | R1A2459334-2024 | 1"1/4 | 1 11/16-12 | 1 1/2 | 60,3    | 78,0    | 66,0    | 50,0    |
| 1212669   | R1A2459334-2424 | 1"1/2 | 2-12       | 1 1/2 | 60,3    | 78,0    | 66,0    | 50,0    |

## // R1A2459364

90° adjustable flange SAE J518 code 62

ORFS Male - High pressure

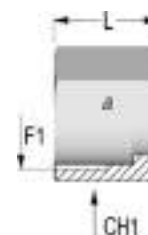


| Item Code | Product Code    | OD1   | F1         | F2    | FD (mm) | C1 (mm) | C2 (mm) | CH (mm) |
|-----------|-----------------|-------|------------|-------|---------|---------|---------|---------|
| 1212681   | R1A2459364-0608 | 3/8"  | 11/16-16   | 1/2   | 31,8    | 50,0    | 44,0    | 22,0    |
| 1212682   | R1A2459364-0808 | 1/2"  | 13/16-16   | 1/2   | 31,8    | 43,0    | 49,0    | 22,0    |
| 1212683   | R1A2459364-1008 | 5/8"  | 1-14       | 1/2   | 31,8    | 50,0    | 44,0    | 22,0    |
| 1212684   | R1A2459364-1012 | 5/8"  | 1-14       | 3/4   | 41,3    | 64,0    | 53,0    | 27,0    |
| 1212685   | R1A2459364-1212 | 3/4"  | 1 3/16-12  | 3/4   | 41,3    | 64,0    | 53,0    | 27,0    |
| 1212686   | R1A2459364-1216 | 3/4"  | 1 3/16-12  | 1     | 47,6    | 62,0    | 60,0    | 34,0    |
| 1212687   | R1A2459364-1616 | 1"    | 1 7/16-12  | 1     | 47,6    | 62,0    | 60,0    | 34,0    |
| 1212688   | R1A2459364-1620 | 1"    | 1 7/16-12  | 1 1/4 | 54,0    | 72,0    | 70,0    | 42,0    |
| 1212689   | R1A2459364-2020 | 1"1/4 | 1 11/16-12 | 1 1/4 | 54,0    | 72,0    | 70,0    | 42,0    |
| 1212690   | R1A2459364-2024 | 1"1/4 | 1 11/16-12 | 1 1/2 | 63,5    | 84,0    | 80,0    | 50,0    |
| 1212691   | R1A2459364-2424 | 1"1/2 | 2-12       | 1 1/2 | 63,5    | 84,0    | 80,0    | 50,0    |

## // ACCESSORIES

## // HX0D2403

Nut ORFS



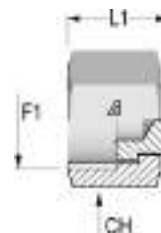
| Item Code | Product Code    | OD1 | F1         | L (mm) | CH1 (mm) |
|-----------|-----------------|-----|------------|--------|----------|
| 1223385   | HX0D2403-040000 | 6   | 9/16-18    | 14,5   | 17,0     |
| 1221423   | HX0D2403-060000 | 8   | 11/16-16   | 17,0   | 22,0     |
| 1209980   | HX0D2403-080000 | 12  | 13/16-16   | 21,0   | 24,0     |
| 1209992   | HX0D2403-100000 | 14  | 1-14       | 23,5   | 30,0     |
| 1210042   | HX0D2403-120000 | 18  | 1 3/16-12  | 26,0   | 36,0     |
| 1217528   | HX0D2403-160000 | 22  | 1 7/16-12  | 28,0   | 41,0     |
| 1217530   | HX0D2403-240000 | 35  | 2-12       | 28,0   | 57,0     |
| 1217529   | HX0D2403-200000 | 28  | 1 11/16-12 | 28,0   | 50,0     |

REV.2.1

## // PLUG

## // R1A2431000

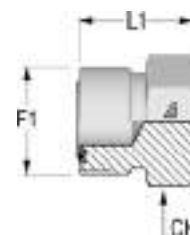
## Cap ORFS Female



| Item Code | Product Code    | OD1    | F1         | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|------------|---------|---------|
| 1207932   | R1A2431000-0400 | 1/4"   | 9/16-18    | 17,0    | 17,0    |
| 1207711   | R1A2431000-0600 | 3/8"   | 11/16-16   | 20,0    | 22,0    |
| 1207933   | R1A2431000-0800 | 1/2"   | 13/16-16   | 23,0    | 24,0    |
| 1208261   | R1A2431000-1000 | 5/8"   | 1-14       | 27,0    | 30,0    |
| 1208260   | R1A2431000-1200 | 3/4"   | 1 3/16-12  | 30,0    | 36,0    |
| 1208259   | R1A2431000-1600 | 1"     | 1 7/16-12  | 31,0    | 41,0    |
| 1208258   | R1A2431000-2000 | 1 1/4" | 1 11/16-12 | 31,0    | 50,0    |
| 1210844   | R1A2431000-2400 | 1 1/2" | 2-12       | 31,0    | 57,0    |

## // R1A2451000

## Plug ORFS Male



| Item Code | Product Code    | OD1    | F1         | L1 (mm) | CH (mm) |
|-----------|-----------------|--------|------------|---------|---------|
| 1207934   | R1A2451000-0400 | 1/4"   | 9/16-18    | 16,5    | 17,0    |
| 1207772   | R1A2451000-0600 | 3/8"   | 11/16-16   | 19,0    | 19,0    |
| 1207935   | R1A2451000-0800 | 1/2"   | 13/16-16   | 22,0    | 22,0    |
| 1208215   | R1A2451000-1000 | 5/8"   | 1-14       | 26,0    | 27,0    |
| 1208216   | R1A2451000-1200 | 3/4"   | 1 3/16-12  | 27,5    | 32,0    |
| 1208217   | R1A2451000-1600 | 1"     | 1 7/16-12  | 28,0    | 41,0    |
| 1208218   | R1A2451000-2000 | 1 1/4" | 1 11/16-12 | 28,0    | 46,0    |
| 1210824   | R1A2451000-2400 | 1 1/2" | 2-12       | 28,0    | 55,0    |



## // DIN 24° ADAPTERS

|             |     |                   |     |
|-------------|-----|-------------------|-----|
| // GE-R-ED  | 218 | // WE-NPT         | 235 |
| // GE-R     | 220 | // WE-MK          | 236 |
| // GE-R 60° | 222 | // TE-RK          | 237 |
| // GE-KR    | 223 | // TE-MK          | 238 |
| // GE-NPT   | 225 | // LE-RK          | 239 |
| // GE-M-ED  | 227 | // G-GR           | 240 |
| // GE-M-OR  | 229 | // W - 90°        | 242 |
| // GE-M     | 230 | // T - BRANCH TEE | 244 |
| // GE-MK    | 231 | // K - CROSS      | 246 |
| // GE-UNF   | 232 | // WSV            | 247 |
| // WE-RK    | 233 | // DKO/DKO        | 248 |

|                        |     |                    |     |
|------------------------|-----|--------------------|-----|
| // EVW-DKO .....       | 249 | // VSTI-R-ED ..... | 267 |
| // EVW .....           | 250 | // VSTI-M .....    | 268 |
| // EVT-DKO .....       | 251 | // PL-DKO .....    | 269 |
| // ELV-DKO .....       | 252 | // PL .....        | 270 |
| // EVGE-R-ED-DKO ..... | 253 | // ROV .....       | 271 |
| // KOR-DKO .....       | 254 | // D2S .....       | 272 |
| // WEE-R .....         | 256 | // ES4 .....       | 274 |
| // AS .....            | 257 | // M - NUT .....   | 275 |
| // ESV .....           | 258 | // M SQR .....     | 277 |
| // SV .....            | 259 | // M BV10 .....    | 278 |
| // SKO .....           | 260 | // BV10 RING ..... | 279 |
| // GAI-R .....         | 261 | // BV10 CONE ..... | 280 |
| // GAI-M .....         | 262 | // SWVE-R-ED ..... | 281 |
| // MAV-R .....         | 263 | // SWVE-R .....    | 282 |
| // MAVE-R .....        | 264 | // SWVE-M .....    | 284 |
| // RI-ED .....         | 265 | // SWVE-M-ED ..... | 285 |
| // RI .....            | 266 | // DSVW-M .....    | 286 |

## // GE-R-ED

## // V1A11M106I

Straight connector

DIN 24° Male - BSPP cylindric Male with elastomer

Light Series

GE-R-ED



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | G (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|--------|---------|---------|
| 1218098   | R1A-0784192000 | 6   | 1/8-28   | 8,5     | 8,0     | 13,9   | 23,5    | 14,0    |
| 1218419   | R1A-1784082000 | 6   | 1/4-19   | 10,0    | 12,0    | 18,9   | 29,0    | 19,0    |
| 1218439   | R1A-1784942000 | 6   | 3/8-19   | 11,5    | 12,0    | 21,9   | 30,5    | 22,0    |
| 1218430   | R1A-1784222000 | 8   | 1/8-28   | 9,5     | 8,0     | 13,9   | 24,5    | 14,0    |
| 1218099   | R1A-0784202000 | 8   | 1/4-19   | 10,0    | 12,0    | 18,9   | 29,0    | 19,0    |
| 1218431   | R1A-1784232000 | 8   | 3/8-19   | 11,5    | 12,0    | 21,9   | 30,5    | 22,0    |
| 1224277   | R1A-1784912000 | 8   | 1/2-14   | 12,0    | 14,0    | 26,9   | 33,0    | 27,0    |
| 1221049   | R1A-1784932000 | 10  | 1/8-28   | 10,5    | 8,0     | 13,9   | 25,5    | 17,0    |
| 1218100   | R1A-0784212000 | 10  | 1/4-19   | 11,0    | 12,0    | 18,9   | 30,0    | 19,0    |
| 1218426   | R1A-1784172000 | 10  | 3/8-19   | 12,5    | 12,0    | 21,9   | 31,5    | 22,0    |
| 1218427   | R1A-1784182000 | 10  | 1/2-14   | 13,0    | 14,0    | 26,9   | 34,0    | 27,0    |
| 1218101   | R1A-0784222000 | 12  | 3/8-19   | 12,5    | 12,0    | 21,9   | 31,5    | 22,0    |
| 1218094   | R1A-0784102000 | 12  | 1/4-19   | 12,5    | 12,0    | 18,9   | 31,5    | 19,0    |
| 1218095   | R1A-0784122000 | 12  | 1/2-14   | 13,0    | 14,0    | 26,9   | 34,0    | 27,0    |
| 1218429   | R1A-1784212000 | 12  | 3/4-14   | 14,0    | 16,0    | 31,9   | 37,0    | 32,0    |
| 1224278   | R1A-1785642000 | 15  | 1/4-19   | 13,0    | 12,0    | 18,9   | 32,0    | 24,0    |
| 1218418   | R1A-1784072000 | 15  | 3/8-19   | 13,5    | 12,0    | 21,9   | 32,5    | 24,0    |
| 1218102   | R1A-0784232000 | 15  | 1/2-14   | 14,0    | 14,0    | 26,9   | 35,0    | 27,0    |
| 1218428   | R1A-1784192000 | 15  | 3/4-14   | 15,0    | 16,0    | 31,9   | 38,0    | 32,0    |
| 1218434   | R1A-1784282000 | 18  | 3/4-14   | 14,5    | 16,0    | 31,9   | 38,0    | 32,0    |
| 1218103   | R1A-0784242000 | 18  | 1/2-14   | 14,5    | 14,0    | 26,9   | 36,0    | 27,0    |
| 1224830   | R1A-1785972000 | 18  | 1-11     | 15,5    | 18,0    | 39,9   | 41,0    | 41,0    |
| 1218104   | R1A-0784252000 | 22  | 3/4-14   | 16,5    | 16,0    | 31,9   | 40,0    | 32,0    |
| 1218425   | R1A-1784162000 | 22  | 1/2-14   | 16,5    | 14,0    | 26,9   | 38,0    | 32,0    |
| 1218438   | R1A-1784712000 | 22  | 1-11     | 17,5    | 18,0    | 39,9   | 43,0    | 41,0    |
| 1218105   | R1A-0784262000 | 28  | 1-11     | 17,5    | 18,0    | 39,9   | 43,0    | 41,0    |
| 1218422   | R1A-1784122000 | 28  | 3/4-14   | 17,5    | 16,0    | 31,9   | 41,0    | 41,0    |
| 1224279   | R1A-1784902000 | 28  | 1 1/4-11 | 18,5    | 20,0    | 49,9   | 46,0    | 50,0    |
| 1218106   | R1A-0784272000 | 35  | 1 1/4-11 | 17,5    | 20,0    | 49,9   | 48,0    | 50,0    |
| 1218435   | R1A-1784362000 | 35  | 1-11     | 17,5    | 18,0    | 39,9   | 46,0    | 46,0    |
| 1224346   | R1A-1785612000 | 35  | 1 1/2-11 | 19,5    | 22,0    | 54,9   | 52,0    | 55,0    |
| 1218107   | R1A-0784282000 | 42  | 1 1/2-11 | 19,0    | 22,0    | 54,9   | 52,0    | 55,0    |
| 1218441   | R1A-1785652000 | 42  | 1 1/4-11 | 19,0    | 20,0    | 49,9   | 50,0    | 55,0    |

REV.2.1

## // V1A12M106I

Straight connector

DIN 24° Male - BSPP cylindric Male with elastomer

Heavy Series

GE-R-ED



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | G (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|--------|---------|---------|
| 1218108   | R1A-0784292000 | 6   | 1/4-19   | 13,0    | 12,0    | 18,9   | 32,0    | 19,0    |
| 1218109   | R1A-0784302000 | 8   | 1/4-19   | 15,0    | 12,0    | 18,9   | 34,0    | 19,0    |
| 1218423   | R1A-1784132000 | 8   | 3/8-19   | 15,5    | 12,0    | 21,9   | 34,5    | 22,0    |
| 1218096   | R1A-0784152000 | 10  | 1/4-19   | 14,5    | 12,0    | 18,9   | 34,0    | 19,0    |
| 1218110   | R1A-0784312000 | 10  | 3/8-19   | 15,0    | 12,0    | 21,9   | 34,5    | 22,0    |
| 1218432   | R1A-1784242000 | 10  | 1/2-14   | 17,5    | 14,0    | 26,9   | 39,0    | 27,0    |
| 1218424   | R1A-1784142000 | 12  | 1/4-19   | 16,5    | 12,0    | 18,9   | 36,0    | 22,0    |
| 1218111   | R1A-0784322000 | 12  | 3/8-19   | 17,0    | 12,0    | 21,9   | 36,5    | 22,0    |
| 1218097   | R1A-0784172000 | 12  | 1/2-14   | 17,5    | 14,0    | 26,9   | 39,0    | 27,0    |
| 1241790   | R1A-1785922000 | 14  | 3/8-19   | 19,0    | 12,0    | 21,9   | 39,0    | 24,0    |
| 1218112   | R1A-0784332000 | 14  | 1/2-14   | 19,0    | 14,0    | 26,9   | 41,0    | 27,0    |
| 1218420   | R1A-1784092000 | 16  | 3/8-19   | 18,0    | 12,0    | 21,9   | 38,5    | 27,0    |
| 1218113   | R1A-0784342000 | 16  | 1/2-14   | 18,5    | 14,0    | 26,9   | 41,0    | 27,0    |
| 1218433   | R1A-1784262000 | 16  | 3/4-14   | 20,5    | 16,0    | 31,9   | 45,0    | 32,0    |
| 1218417   | R1A-1784062000 | 20  | 1/2-14   | 20,5    | 14,0    | 26,9   | 45,0    | 32,0    |
| 1218114   | R1A-0784352000 | 20  | 3/4-14   | 20,5    | 16,0    | 31,9   | 47,0    | 32,0    |
| 1218436   | R1A-1784382000 | 20  | 1-11     | 22,5    | 18,0    | 39,9   | 51,0    | 41,0    |
| 1222085   | R1A-1785632000 | 25  | 1/2-14   | 23,0    | 14,0    | 26,9   | 49,0    | 41,0    |
| 1218093   | R1A-0784032000 | 25  | 3/4-14   | 23,0    | 16,0    | 31,9   | 51,0    | 41,0    |
| 1218115   | R1A-0784362000 | 25  | 1-11     | 23,0    | 18,0    | 39,9   | 53,0    | 41,0    |
| 1218443   | R1A-1785772000 | 25  | 1 1/4-11 | 23,0    | 20,0    | 49,9   | 55,0    | 50,0    |
| 1222086   | R1A-1785712000 | 30  | 3/4-14   | 23,5    | 16,0    | 31,9   | 53,0    | 46,0    |
| 1218421   | R1A-1784112000 | 30  | 1-11     | 23,5    | 18,0    | 39,9   | 55,0    | 46,0    |
| 1218116   | R1A-0784372000 | 30  | 1 1/4-11 | 23,5    | 20,0    | 49,9   | 57,0    | 50,0    |
| 1218444   | R1A-1785962000 | 30  | 1 1/2-11 | 26,5    | 22,0    | 54,9   | 62,0    | 55,0    |
| 1218440   | R1A-1785212000 | 38  | 1 1/4-11 | 26,0    | 20,0    | 49,9   | 62,0    | 55,0    |
| 1218117   | R1A-0784382000 | 38  | 1 1/2-11 | 26,0    | 22,0    | 54,9   | 64,0    | 55,0    |

## // GE-R

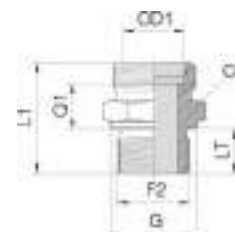
## // V1A11M106M

Straight connector

DIN 24° Male - BSPP cylindric flat Male

Light Series

GE-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | G (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|--------|---------|---------|
| 1217857   | R1A-0710002000 | 6   | 1/8-28   | 8,5     | 8,0     | 14,0   | 23,5    | 14,0    |
| 1217858   | R1A-0710022000 | 6   | 1/4-19   | 9,0     | 12,0    | 18,0   | 28,0    | 19,0    |
| 1217859   | R1A-0710032000 | 6   | 3/8-19   | 11,5    | 12,0    | 22,0   | 30,5    | 22,0    |
| 1217860   | R1A-0710042000 | 6   | 1/2-14   | 12,0    | 14,0    | 26,0   | 33,0    | 27,0    |
| 1217862   | R1A-0710062000 | 8   | 1/8-28   | 9,5     | 8,0     | 14,0   | 24,5    | 17,0    |
| 1217861   | R1A-0710052000 | 8   | 1/4-19   | 10,0    | 12,0    | 18,0   | 29,0    | 19,0    |
| 1217863   | R1A-0710072000 | 8   | 3/8-19   | 11,5    | 12,0    | 22,0   | 30,5    | 22,0    |
| 1217864   | R1A-0710082000 | 8   | 1/2-14   | 12,0    | 14,0    | 26,0   | 33,0    | 27,0    |
| 1217865   | R1A-0710102000 | 10  | 1/4-19   | 11,0    | 12,0    | 18,0   | 30,0    | 19,0    |
| 1217866   | R1A-0710122000 | 10  | 3/8-19   | 12,5    | 12,0    | 22,0   | 31,5    | 22,0    |
| 1217869   | R1A-0710162000 | 12  | 1/4-19   | 12,0    | 12,0    | 18,0   | 31,0    | 19,0    |
| 1217868   | R1A-0710152000 | 12  | 3/8-19   | 12,5    | 12,0    | 22,0   | 31,5    | 22,0    |
| 1217870   | R1A-0710172000 | 12  | 1/2-14   | 13,0    | 14,0    | 26,0   | 34,0    | 27,0    |
| 1217871   | R1A-0710182000 | 12  | 3/4-14   | 14,0    | 16,0    | 32,0   | 37,0    | 32,0    |
| 1217875   | R1A-0710232000 | 15  | 1/4-19   | 13,0    | 12,0    | 18,0   | 32,0    | 24,0    |
| 1217873   | R1A-0710212000 | 15  | 3/8-19   | 13,5    | 12,0    | 22,0   | 32,5    | 24,0    |
| 1217872   | R1A-0710202000 | 15  | 1/2-14   | 14,0    | 14,0    | 26,0   | 35,0    | 27,0    |
| 1217874   | R1A-0710222000 | 15  | 3/4-14   | 15,0    | 16,0    | 32,0   | 38,0    | 32,0    |
| 1217877   | R1A-0710262000 | 18  | 3/8-19   | 14,0    | 12,0    | 22,0   | 33,5    | 27,0    |
| 1217876   | R1A-0710252000 | 18  | 1/2-14   | 14,5    | 14,0    | 26,0   | 36,0    | 27,0    |
| 1217878   | R1A-0710272000 | 18  | 3/4-14   | 14,5    | 16,0    | 32,0   | 38,0    | 32,0    |
| 1217880   | R1A-0710312000 | 22  | 1/2-14   | 16,5    | 14,0    | 26,0   | 38,0    | 32,0    |
| 1217879   | R1A-0710302000 | 22  | 3/4-14   | 16,5    | 16,0    | 32,0   | 40,0    | 32,0    |
| 1217881   | R1A-0710322000 | 22  | 1-11     | 17,5    | 18,0    | 39,0   | 43,0    | 41,0    |
| 1217883   | R1A-0710362000 | 28  | 3/4-14   | 17,5    | 16,0    | 32,0   | 41,0    | 41,0    |
| 1217882   | R1A-0710352000 | 28  | 1-11     | 17,5    | 18,0    | 39,0   | 43,0    | 41,0    |
| 1221150   | R1A-0710372000 | 28  | 1 1/4-11 | 18,5    | 20,0    | 49,0   | 46,0    | 50,0    |
| 1221161   | R1A-0710412000 | 35  | 1-11     | 17,5    | 18,0    | 39,0   | 46,0    | 50,0    |
| 1217884   | R1A-0710402000 | 35  | 1 1/4-11 | 17,5    | 20,0    | 49,0   | 48,0    | 50,0    |
| 1217886   | R1A-0710462000 | 42  | 1 1/4-11 | 19,0    | 20,0    | 49,0   | 50,0    | 55,0    |
| 1217885   | R1A-0710452000 | 42  | 1 1/2-11 | 19,0    | 22,0    | 55,0   | 52,0    | 55,0    |

REV.2.1

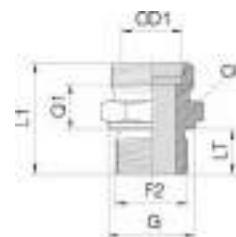
## // V1A12M106M

Straight connector

DIN 24° Male - BSPP cylindric flat Male

Heavy Series

GE-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | CH (mm) | L1 (mm) | G (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|--------|
| 1217887   | R1A-0710502000 | 6   | 1/4-19   | 13,0    | 12,0    | 19,0    | 32,0    | 18,0   |
| 1217888   | R1A-0710552000 | 8   | 1/4-19   | 15,0    | 12,0    | 19,0    | 34,0    | 18,0   |
| 1217889   | R1A-0710572000 | 8   | 3/8-19   | 15,5    | 12,0    | 22,0    | 34,5    | 22,0   |
| 1217891   | R1A-0710612000 | 10  | 1/4-19   | 14,5    | 12,0    | 19,0    | 34,0    | 18,0   |
| 1217890   | R1A-0710602000 | 10  | 3/8-19   | 15,0    | 12,0    | 22,0    | 34,5    | 22,0   |
| 1217893   | R1A-0710662000 | 12  | 1/4-19   | 16,5    | 12,0    | 22,0    | 36,0    | 18,0   |
| 1217892   | R1A-0710652000 | 12  | 3/8-19   | 17,0    | 12,0    | 22,0    | 36,5    | 22,0   |
| 1217894   | R1A-0710672000 | 12  | 1/2-14   | 17,5    | 14,0    | 27,0    | 39,0    | 26,0   |
| 1217896   | R1A-0710712000 | 14  | 3/8-19   | 19,0    | 12,0    | 24,0    | 39,0    | 22,0   |
| 1217895   | R1A-0710702000 | 14  | 1/2-14   | 19,0    | 14,0    | 27,0    | 41,0    | 26,0   |
| 1217898   | R1A-0710762000 | 16  | 3/8-19   | 18,0    | 12,0    | 27,0    | 38,5    | 22,0   |
| 1217897   | R1A-0710752000 | 16  | 1/2-14   | 18,5    | 14,0    | 27,0    | 41,0    | 26,0   |
| 1217899   | R1A-0710772000 | 16  | 3/4-14   | 20,5    | 16,0    | 32,0    | 45,0    | 32,0   |
| 1217901   | R1A-0710812000 | 20  | 1/2-14   | 20,5    | 14,0    | 32,0    | 45,0    | 26,0   |
| 1217900   | R1A-0710802000 | 20  | 3/4-14   | 20,5    | 16,0    | 32,0    | 47,0    | 32,0   |
| 1217902   | R1A-0710822000 | 20  | 1-11     | 22,5    | 18,0    | 41,0    | 51,0    | 39,0   |
| 1217904   | R1A-0710862000 | 25  | 3/4-14   | 23,0    | 16,0    | 41,0    | 51,0    | 32,0   |
| 1217903   | R1A-0710852000 | 25  | 1-11     | 23,0    | 18,0    | 41,0    | 53,0    | 39,0   |
| 1221138   | R1A-0710872000 | 25  | 1 1/4-11 | 23,0    | 20,0    | 50,0    | 55,0    | 49,0   |
| 1221157   | R1A-0710932000 | 30  | 3/4-14   | 23,5    | 16,0    | 46,0    | 53,0    | 32,0   |
| 1217906   | R1A-0710912000 | 30  | 1-11     | 23,5    | 18,0    | 46,0    | 55,0    | 39,0   |
| 1217905   | R1A-0710902000 | 30  | 1 1/4-11 | 23,5    | 20,0    | 50,0    | 57,0    | 49,0   |
| 1221167   | R1A-0710982000 | 38  | 1-11     | 26,0    | 18,0    | 55,0    | 60,0    | 39,0   |
| 1217908   | R1A-0710962000 | 38  | 1 1/4-11 | 26,0    | 20,0    | 55,0    | 62,0    | 49,0   |
| 1217907   | R1A-0710952000 | 38  | 1 1/2-11 | 26,0    | 22,0    | 55,0    | 64,0    | 55,0   |

## // GE-R 60°

## // V1A11M105M

Straight connector

DIN 24° Male - BSPP cylindric Male 60°

Light Series

GE-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|
| 1221025   | R1A-0708052000 | 8   | 1/4-19   | 10,0    | 12,0    | 29,0    | 19,0    |
| 1252207   | R1A-0708072000 | 8   | 3/8-19   | 11,5    | 12,0    | 30,5    | 22,0    |
| 1217829   | R1A-0708102000 | 10  | 1/4-19   | 11,0    | 12,0    | 30,0    | 19,0    |
| 1217830   | R1A-0708122000 | 10  | 3/8-19   | 12,5    | 12,0    | 31,5    | 22,0    |
| 1239929   | R1A-0708162000 | 12  | 1/4-19   | 12,0    | 12,0    | 31,0    | 19,0    |
| 1217831   | R1A-0708152000 | 12  | 3/8-19   | 12,5    | 12,0    | 31,5    | 22,0    |
| 1228196   | R1A-0708172000 | 12  | 1/2-14   | 13,0    | 14,0    | 34,0    | 27,0    |
| 1221093   | R1A-0708212000 | 15  | 3/8-19   | 13,5    | 12,0    | 32,5    | 24,0    |
| 1217832   | R1A-0708202000 | 15  | 1/2-14   | 14,0    | 14,0    | 35,0    | 27,0    |
| 1217833   | R1A-0708252000 | 18  | 1/2-14   | 14,5    | 14,0    | 36,0    | 27,0    |
| 1217835   | R1A-0708312000 | 22  | 1/2-14   | 16,5    | 14,0    | 38,0    | 32,0    |
| 1217834   | R1A-0708302000 | 22  | 3/4-14   | 16,5    | 16,0    | 40,0    | 32,0    |
| 1221148   | R1A-0708352000 | 28  | 1-11     | 17,5    | 18,0    | 43,0    | 41,0    |
| 1221144   | R1A-0708362000 | 28  | 3/4-14   | 19,5    | 16,0    | 43,0    | 41,0    |
| 1243512   | R1A-0708402000 | 35  | 1 1/4-11 | 17,5    | 20,0    | 48,0    | 50,0    |
| 1242330   | R1A-0708462000 | 42  | 1 1/4-11 | 19,0    | 20,0    | 50,0    | 55,0    |
| 1242326   | R1A-0708452000 | 42  | 1 1/2-11 | 19,0    | 22,0    | 52,0    | 55,0    |

## // V1A12M105M

Straight connector

DIN 24° Male - BSPP cylindric Male 60°

Heavy Series

GE-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|
| 1221082   | R1A-0708652000 | 12  | 3/8-19   | 17,0    | 12,0    | 36,5    | 22,0    |
| 1217836   | R1A-0708762000 | 16  | 3/8-19   | 18,5    | 12,0    | 39,0    | 24,0    |
| 1231448   | R1A-0708752000 | 16  | 1/2-14   | 18,5    | 14,0    | 41,0    | 27,0    |
| 1217838   | R1A-0708812000 | 20  | 1/2-14   | 20,5    | 14,0    | 45,0    | 32,0    |
| 1217837   | R1A-0708802000 | 20  | 3/4-14   | 20,5    | 16,0    | 47,0    | 32,0    |
| 1241791   | R1A-0708822000 | 20  | 1-11     | 22,5    | 18,0    | 51,0    | 41,0    |
| 1242327   | R1A-0708862000 | 25  | 3/4-14   | 23,0    | 16,0    | 51,0    | 41,0    |
| 1217839   | R1A-0708852000 | 25  | 1-11     | 23,0    | 18,0    | 53,0    | 41,0    |
| 1242328   | R1A-0708912000 | 30  | 1-11     | 23,5    | 18,0    | 55,0    | 46,0    |
| 1242329   | R1A-0708902000 | 30  | 1 1/4-11 | 23,5    | 20,0    | 57,0    | 50,0    |
| 1217841   | R1A-0708982000 | 38  | 1-11     | 26,0    | 18,0    | 60,0    | 55,0    |
| 1217840   | R1A-0708962000 | 38  | 1 1/4-11 | 26,0    | 20,0    | 62,0    | 55,0    |

REV.2.1

## // GE-KR

## // V1A32M107M

Straight connector

DIN 24° Male - BSPT cylindric flat Male

Extra Light Series

GE-RK



| Item Code | Product Code   | OD1 | F2     | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|
| 1217802   | R1A-0703002000 | 4   | 1/8-28 | 6,2     | 20,0    | 11,0    |
| 1217803   | R1A-0703102000 | 6   | 1/8-28 | 6,2     | 20,0    | 11,0    |
| 1217804   | R1A-0703152000 | 8   | 1/8-28 | 6,2     | 22,0    | 12,0    |
| 1221024   | R1A-0703172000 | 8   | 1/4-19 | 9,3     | 26,0    | 14,0    |

## // V1A11M107M

Straight connector

DIN 24° Male - BSPT cylindric flat Male

Light Series

GE-RK



| Item Code | Product Code   | OD1 | F2     | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|
| 1217805   | R1A-0704002000 | 6   | 1/8-28 | 6,2     | 22,0    | 14,0    |
| 1237318   | R1A-0704022000 | 6   | 1/4-19 | 9,3     | 26,0    | 14,0    |
| 1221027   | R1A-0704052000 | 8   | 1/4-19 | 9,3     | 27,0    | 17,0    |
| 1217806   | R1A-0704102000 | 10  | 1/4-19 | 9,3     | 28,0    | 17,0    |
| 1217807   | R1A-0704122000 | 10  | 3/8-19 | 9,3     | 28,0    | 19,0    |
| 1224268   | R1A-0704132000 | 10  | 1/2-14 | 10,4    | 31,0    | 24,0    |
| 1217808   | R1A-0704152000 | 12  | 3/8-19 | 9,3     | 29,0    | 19,0    |
| 1224823   | R1A-0704162000 | 12  | 1/4-19 | 9,3     | 29,0    | 19,0    |
| 1237319   | R1A-0704172000 | 12  | 1/2-14 | 10,4    | 31,0    | 24,0    |
| 1221094   | R1A-0704212000 | 15  | 3/8-19 | 9,3     | 30,0    | 24,0    |
| 1224269   | R1A-0704202000 | 15  | 1/2-14 | 10,4    | 32,0    | 24,0    |
| 1224824   | R1A-0704252000 | 18  | 1/2-14 | 10,4    | 33,0    | 27,0    |
| 1245762   | R1A-0704312000 | 22  | 1/2-14 | 10,4    | 35,0    | 32,0    |
| 1221131   | R1A-0704302000 | 22  | 3/4-14 | 12,4    | 37,0    | 32,0    |
| 1221147   | R1A-0704352000 | 28  | 1-11   | 13,4    | 40,0    | 41,0    |

// V1A12M107M

Straight connector  
DIN 24° Male - BSPT cylindric flat Male  
Heavy Series  
GE-RK



| Item Code | Product Code   | OD1 | F2     | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|
| 1221017   | R1A-0704502000 | 6   | 1/4-19 | 9,3     | 30,0    | 17,0    |
| 1221060   | R1A-0704602000 | 10  | 3/8-19 | 9,3     | 32,0    | 19,0    |
| 1221084   | R1A-0704652000 | 12  | 3/8-19 | 9,3     | 34,0    | 22,0    |
| 1217809   | R1A-0704752000 | 16  | 1/2-14 | 10,4    | 38,0    | 27,0    |
| 1224825   | R1A-0704802000 | 20  | 3/4-14 | 12,4    | 44,0    | 32,0    |

REV.2.1

## // GE-NPT

## // V1A32M128M

Straight connector

DIN 24° Male - NPTF Male

Extra Light Series

GE-NPT



| Item Code | Product Code   | OD1 | F2     | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|
| 1217810   | R1A-0705102000 | 6   | 1/8-27 | 6,7     | 21,9    | 11,0    |
| 1217811   | R1A-0705152000 | 8   | 1/8-27 | 6,7     | 23,9    | 12,0    |

## // V1A11M128M

Straight connector

DIN 24° Male - NPTF Male

Light Series

GE-NPT



| Item Code | Product Code   | OD1 | F2           | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|--------------|---------|---------|---------|
| 1221003   | R1A-0706002000 | 6   | 1/8-27       | 6,7     | 23,9    | 12,0    |
| 1217812   | R1A-0706022000 | 6   | 1/4-18       | 10,2    | 30,0    | 17,0    |
| 1217813   | R1A-0706052000 | 8   | 1/4-18       | 10,2    | 30,1    | 17,0    |
| 1217814   | R1A-0706102000 | 10  | 1/4-18       | 10,2    | 31,1    | 17,0    |
| 1221044   | R1A-0706122000 | 10  | 3/8-18       | 10,4    | 32,2    | 19,0    |
| 1217816   | R1A-0706162000 | 12  | 1/4-18       | 10,2    | 32,0    | 19,0    |
| 1217815   | R1A-0706152000 | 12  | 3/8-18       | 10,4    | 32,2    | 19,0    |
| 1221061   | R1A-0706172000 | 12  | 1/2-14       | 13,6    | 36,8    | 24,0    |
| 1224826   | R1A-0706212000 | 15  | 3/8-18       | 10,4    | 33,2    | 24,0    |
| 1217817   | R1A-0706202000 | 15  | 1/2-14       | 13,6    | 37,8    | 24,0    |
| 1217818   | R1A-0706252000 | 18  | 1/2-14       | 13,6    | 38,8    | 27,0    |
| 1217819   | R1A-0706302000 | 22  | 3/4-14       | 19,9    | 41,1    | 32,0    |
| 1217820   | R1A-0706352000 | 28  | 1-11 1/2     | 17,3    | 47,0    | 41,0    |
| 1217821   | R1A-0706402000 | 35  | 1 1/4-11 1/2 | 18,0    | 50,6    | 46,0    |
| 1217822   | R1A-0706452000 | 42  | 1 1/2-11 1/2 | 18,4    | 53,0    | 55,0    |

## // V1A12M128M

Straight connector

DIN 24° Male - NPTF Male

Heavy Series

GE-NPT



| Item Code | Product Code   | OD1 | F2       | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|
| 1224827   | R1A-0706502000 | 6   | 1/4-18   | 10,2    | 33,1    | 17,0    |
| 1221031   | R1A-0706552000 | 8   | 1/4-18   | 10,2    | 35,1    | 17,0    |
| 1249279   | R1A-0706632000 | 10  | 1/8-27   | 6,7     | 30,9    | 19,0    |
| 1249280   | R1A-0706612000 | 10  | 1/4-18   | 10,2    | 35,1    | 19,0    |
| 1221054   | R1A-0706602000 | 10  | 3/8-18   | 10,4    | 35,2    | 19,0    |
| 1217824   | R1A-0706662000 | 12  | 1/4-18   | 10,2    | 37,1    | 22,0    |
| 1217823   | R1A-0706652000 | 12  | 3/8-18   | 10,4    | 37,2    | 22,0    |
| 1217825   | R1A-0706672000 | 12  | 1/2-14   | 13,6    | 41,8    | 24,0    |
| 1217826   | R1A-0706752000 | 16  | 1/2-14   | 13,6    | 43,8    | 27,0    |
| 1221113   | R1A-0706802000 | 20  | 3/4-14   | 13,9    | 48,1    | 32,0    |
| 1217827   | R1A-0706852000 | 25  | 1-11 1/2 | 17,3    | 57,0    | 41,0    |

REV.2.1

## // GE-M-ED

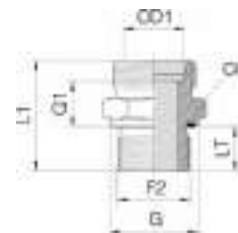
## // V1A11M152I

Straight connector

DIN 24° Male - Metric cylindric Male with elastomer

Light Series

GE-M-ED



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | LT (mm) | G (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|--------|---------|---------|
| 1218118   | R1A-0784392000 | 6   | M10X1.0 | 8,5     | 8,0     | 13,9   | 23,5    | 14,0    |
| 1224271   | R1A-1784612000 | 6   | M12X1.5 | 10,0    | 12,0    | 16,9   | 29,0    | 17,0    |
| 1221022   | R1A-0784402000 | 8   | M12X1.5 | 10,0    | 12,0    | 16,9   | 29,0    | 17,0    |
| 1224272   | R1A-0784112000 | 8   | M14X1.5 | 10,0    | 12,0    | 18,9   | 29,0    | 19,0    |
| 1224273   | R1A-1784862000 | 8   | M16X1.5 | 11,5    | 12,0    | 21,9   | 30,5    | 22,0    |
| 1224274   | R1A-1798492000 | 8   | M18X1.5 | 11,5    | 12,0    | 23,9   | 30,5    | 24,0    |
| 1218119   | R1A-0784412000 | 10  | M14X1.5 | 11,0    | 12,0    | 18,9   | 30,0    | 19,0    |
| 1217846   | R1A-1784602000 | 10  | M16X1.5 | 12,5    | 12,0    | 21,9   | 31,5    | 22,0    |
| 1224275   | R1A-0784042000 | 10  | M18X1.5 | 12,5    | 12,0    | 23,9   | 31,5    | 24,0    |
| 1231384   | R1A-1784402000 | 12  | M14X1.5 | 11,0    | 12,0    | 18,9   | 30,0    | 19,0    |
| 1218120   | R1A-0784422000 | 12  | M16X1.5 | 12,5    | 12,0    | 21,9   | 31,5    | 22,0    |
| 1223140   | R1A-1784482000 | 12  | M18X1.5 | 12,5    | 12,0    | 23,9   | 31,5    | 24,0    |
| 1223141   | R1A-1784492000 | 12  | M22X1.5 | 14,0    | 14,0    | 26,9   | 35,0    | 27,0    |
| 1224276   | R1A-1784562000 | 15  | M16X1.5 | 13,0    | 12,0    | 21,9   | 32,0    | 24,0    |
| 1218121   | R1A-0784432000 | 15  | M18X1.5 | 13,5    | 12,0    | 23,9   | 32,5    | 24,0    |
| 1218437   | R1A-1784502000 | 15  | M22X1.5 | 15,0    | 14,0    | 26,9   | 36,0    | 27,0    |
| 1223023   | R1A-1784452000 | 18  | M18X1.5 | 14,0    | 12,0    | 23,9   | 33,5    | 27,0    |
| 1218122   | R1A-0784442000 | 18  | M22X1.5 | 14,5    | 14,0    | 26,9   | 36,0    | 27,0    |
| 1221107   | R1A-1784472000 | 18  | M26X1.5 | 14,5    | 16,0    | 31,9   | 38,0    | 32,0    |
| 1221125   | R1A-1784462000 | 22  | M22X1.5 | 16,5    | 14,0    | 26,9   | 38,0    | 32,0    |
| 1218123   | R1A-0784452000 | 22  | M26X1.5 | 16,5    | 16,0    | 31,9   | 40,0    | 32,0    |
| 1251311   | R1A-1798422000 | 22  | M27X2   | 16,5    | 16,0    | 31,9   | 40,0    | 32,0    |
| 1221145   | R1A-1784592000 | 28  | M26X1.5 | 19,5    | 16,0    | 31,9   | 43,0    | 41,0    |
| 1218124   | R1A-0784462000 | 28  | M33X2.0 | 17,5    | 18,0    | 39,9   | 43,0    | 41,0    |
| 1218125   | R1A-0784472000 | 35  | M42X2   | 17,5    | 20,0    | 49,9   | 48,0    | 50,0    |
| 1218126   | R1A-0784482000 | 42  | M48X2.0 | 19,0    | 22,0    | 54,9   | 52,0    | 55,0    |

## // V1A12M152I

Straight connector

DIN 24° Male - Metric cylindric Male with elastomer

Heavy Series

GE-M-ED



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | LT (mm) | G (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|--------|---------|---------|
| 1221015   | R1A-0784492000 | 6   | M12X1.5 | 13,0    | 12,0    | 16,9   | 32,0    | 17,0    |
| 1218127   | R1A-0784502000 | 8   | M14X1.5 | 15,0    | 12,0    | 18,9   | 34,0    | 19,0    |
| 1218128   | R1A-0784512000 | 10  | M16X1.5 | 15,0    | 12,0    | 21,9   | 34,5    | 22,0    |
| 1249307   | R1A-1796332000 | 12  | M14X1.5 | 16,5    | 12,0    | 18,9   | 36,0    | 22,0    |
| 1246370   | R1A-1785172000 | 12  | M16X1.5 | 16,5    | 12,0    | 21,9   | 36,0    | 22,0    |
| 1218129   | R1A-0784522000 | 12  | M18X1.5 | 17,0    | 12,0    | 23,9   | 36,5    | 24,0    |
| 1223142   | R1A-1784832000 | 12  | M22X1.5 | 17,5    | 14,0    | 26,9   | 39,0    | 27,0    |
| 1218130   | R1A-0784532000 | 14  | M20X1.5 | 19,0    | 14,0    | 25,9   | 41,0    | 27,0    |
| 1245501   | R1A-1785372000 | 16  | M16X1.5 | 18,5    | 12,0    | 21,9   | 39,0    | 27,0    |
| 1218131   | R1A-0784542000 | 16  | M22X1.5 | 18,5    | 14,0    | 26,9   | 41,0    | 27,0    |
| 1231526   | R1A-0784022000 | 20  | M22X1.5 | 20,5    | 14,0    | 26,9   | 45,0    | 32,0    |
| 1218132   | R1A-0784552000 | 20  | M27X2   | 20,5    | 16,0    | 31,9   | 47,0    | 32,0    |
| 1218133   | R1A-0784562000 | 25  | M33X2.0 | 23,0    | 18,0    | 39,9   | 53,0    | 41,0    |
| 1221154   | R1A-0784572000 | 30  | M42X2   | 23,5    | 20,0    | 49,9   | 57,0    | 50,0    |
| 1218134   | R1A-0784582000 | 38  | M48X2.0 | 26,0    | 22,0    | 54,9   | 64,0    | 55,0    |

REV.2.1

GE-M-OR

V1A11M1525

Straight connector  
DIN 24° Male Metric cylindric Male with O-ring  
Light Series  
GE-M-OR



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|
| 1229092   | R1A-0746102000 | 10  | M14X1.5 | 11,0    | 11,0    | 29,0    | 19,0    |
| 1229093   | R1A-0746252000 | 18  | M22X1.5 | 14,5    | 13,0    | 35,0    | 27,0    |

## // GE-M

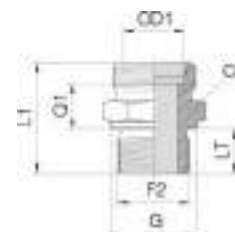
## // V1A11M150M

Straight connector

DIN 24° Male - Metric cylindric Male

Light Series

GE-M



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|
| 1217842   | R1A-0709002000 | 6   | M10X1.0 | 8,5     | 8,0     | 23,5    | 14,0    |
| 1217843   | R1A-0709052000 | 8   | M12X1.5 | 10,0    | 12,0    | 29,0    | 17,0    |
| 1246141   | R1A-0709142000 | 10  | M10X1.0 | 10,5    | 8,0     | 25,5    | 17,0    |
| 1217845   | R1A-0709112000 | 10  | M12X1.5 | 11,0    | 12,0    | 30,0    | 17,0    |
| 1217844   | R1A-0709102000 | 10  | M14X1.5 | 11,0    | 12,0    | 30,0    | 19,0    |
| 1218414   | R1A-1709142000 | 10  | M22X1.5 | 14,0    | 14,0    | 35,0    | 27,0    |
| 1224828   | R1A-1709162000 | 12  | M12X1.5 | 12,5    | 12,0    | 31,5    | 19,0    |
| 1217847   | R1A-0709152000 | 12  | M16X1.5 | 12,5    | 12,0    | 31,5    | 22,0    |
| 1217848   | R1A-0709172000 | 12  | M18X1.5 | 12,5    | 12,0    | 31,5    | 24,0    |
| 1217849   | R1A-0709202000 | 15  | M18X1.5 | 13,5    | 12,0    | 32,5    | 24,0    |
| 1217851   | R1A-0709262000 | 18  | M18X1.5 | 14,0    | 12,0    | 33,5    | 27,0    |
| 1217850   | R1A-0709252000 | 18  | M22X1.5 | 14,5    | 14,0    | 36,0    | 27,0    |
| 1221126   | R1A-0709312000 | 22  | M22X1.5 | 16,5    | 14,0    | 38,0    | 32,0    |
| 1217852   | R1A-0709302000 | 22  | M26X1.5 | 16,5    | 16,0    | 40,0    | 32,0    |
| 1217853   | R1A-0709352000 | 28  | M33X2.0 | 17,5    | 18,0    | 43,0    | 41,0    |

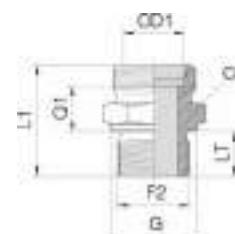
## // V1A12M150M

Straight connector

DIN 24° Male - Metric cylindric Male

Heavy Series

GE-M



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|
| 1217854   | R1A-0709602000 | 10  | M16X1.5 | 15,0    | 12,0    | 34,5    | 22,0    |
| 1217855   | R1A-0709652000 | 12  | M18X1.5 | 17,0    | 12,0    | 36,5    | 24,0    |
| 1221085   | R1A-0709702000 | 14  | M20X1.5 | 19,0    | 14,0    | 41,0    | 27,0    |
| 1221098   | R1A-0709792000 | 16  | M18X1.5 | 18,0    | 12,0    | 38,5    | 24,0    |
| 1217856   | R1A-0709752000 | 16  | M22X1.5 | 18,5    | 14,0    | 41,0    | 27,0    |
| 1221134   | R1A-0709852000 | 25  | M33X2.0 | 23,0    | 18,0    | 53,0    | 41,0    |
| 1222391   | R1A-0709902000 | 30  | M42X2   | 23,5    | 20,0    | 57,0    | 50,0    |

REV.2.1

## // GE-MK

## // V1A32M162M

Straight connector

DIN 24° Male - Metric conic Male

Extra Light Series

GE-MK



| Item Code | Product Code   | OD1 | F2      | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|
| 1221001   | R1A-0701002000 | 4   | M8X1.0  | 6,0     | 20,0    | 10,0    |
| 1217799   | R1A-0701102000 | 6   | M10X1.0 | 6,0     | 20,0    | 11,0    |
| 1221174   | R1A-0701982000 | 6   | M6X1    | 6,0     | 20,0    | 11,0    |
| 1217800   | R1A-0701112000 | 6   | M8X1.0  | 6,0     | 20,0    | 11,0    |
| 1217801   | R1A-0701152000 | 8   | M10X1.0 | 6,0     | 22,0    | 12,0    |

## // V1A11M162M

Straight connector

DIN 24° Male - Metric conic Male

Light Series

GE-MK



| Item Code | Product Code   | OD1 | F2      | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|
| 1221007   | R1A-0702002000 | 6   | M10X1.0 | 6,0     | 22,0    | 14,0    |
| 1221069   | R1A-0702152000 | 12  | M16X1.5 | 9,0     | 29,0    | 19,0    |

## // GE-UNF

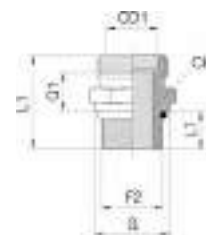
## // V1A11M1305

Straight connector

DIN 24° Male - SAE UNF/UN Male with O-Ring

Light Series

GE-UNF



| Item Code | Product Code   | OD1 | F2        | Q1 (mm) | LT (mm) | G (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|-----------|---------|---------|--------|---------|---------|
| 1221005   | R1A-0782402000 | 6   | 7/16-20   | 8,8     | 9,2     | 15,8   | 25,0    | 17,0    |
| 1221021   | R1A-0782412000 | 8   | 7/16-20   | 10,3    | 9,2     | 15,8   | 26,5    | 17,0    |
| 1218092   | R1A-0782962000 | 10  | 7/16-20   | 11,8    | 9,2     | 15,8   | 28,0    | 17,0    |
| 1221045   | R1A-0782442000 | 10  | 9/16-18   | 11,0    | 10,0    | 17,7   | 28,0    | 19,0    |
| 1218078   | R1A-0782462000 | 12  | 9/16-18   | 12,5    | 10,0    | 17,7   | 29,5    | 19,0    |
| 1221067   | R1A-0782482000 | 12  | 3/4-16    | 12,8    | 11,2    | 23,0   | 31,0    | 24,0    |
| 1218079   | R1A-0782502000 | 12  | 7/8-14    | 12,8    | 12,7    | 27,0   | 32,5    | 27,0    |
| 1218080   | R1A-0782522000 | 15  | 3/4-16    | 13,8    | 11,2    | 23,0   | 32,0    | 24,0    |
| 1218081   | R1A-0782532000 | 15  | 7/8-14    | 14,0    | 12,7    | 27,0   | 33,7    | 27,0    |
| 1221105   | R1A-0782542000 | 18  | 3/4-16    | 14,3    | 11,2    | 23,0   | 33,0    | 27,0    |
| 1221106   | R1A-0782552000 | 18  | 7/8-14    | 14,5    | 12,7    | 27,0   | 34,7    | 27,0    |
| 1218089   | R1A-0782902000 | 18  | 1 1/16-12 | 14,5    | 15,0    | 32,0   | 37,0    | 32,0    |
| 1221124   | R1A-0782562000 | 22  | 7/8-14    | 16,5    | 12,7    | 27,0   | 36,7    | 32,0    |
| 1218082   | R1A-0782572000 | 22  | 1 1/16-12 | 16,5    | 15,0    | 32,0   | 39,0    | 32,0    |
| 1221143   | R1A-0782592000 | 28  | 1 1/16-12 | 17,5    | 15,0    | 32,0   | 40,0    | 41,0    |
| 1221171   | R1A-0782622000 | 42  | 1 7/8-12  | 19,0    | 15,0    | 54,0   | 45,0    | 55,0    |

## // V1A12M1305

Straight connector

DIN 24° Male - SAE UNF/UN Male with O-Ring

Heavy Series

GE-UNF



| Item Code | Product Code   | OD1 | F2        | Q1 (mm) | LT (mm) | G (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|-----------|---------|---------|--------|---------|---------|
| 1221032   | R1A-0782882000 | 8   | 7/16-20   | 14,8    | 9,2     | 15,8   | 31,0    | 17,0    |
| 1218083   | R1A-0782692000 | 12  | 3/4-16    | 17,3    | 11,2    | 23,0   | 36,0    | 24,0    |
| 1218085   | R1A-0782742000 | 16  | 7/8-14    | 16,3    | 12,7    | 27,0   | 37,5    | 27,0    |
| 1218084   | R1A-0782732000 | 16  | 3/4-16    | 18,3    | 11,2    | 23,0   | 38,0    | 27,0    |
| 1246371   | R1A-0782752000 | 16  | 1 1/16-12 | 18,5    | 15,0    | 32,0   | 42,0    | 32,0    |
| 1221111   | R1A-0782792000 | 20  | 1 1/16-12 | 20,5    | 15,0    | 32,0   | 46,0    | 32,0    |
| 1218091   | R1A-0782942000 | 25  | 1 1/16-12 | 23,0    | 15,0    | 32,0   | 50,0    | 41,0    |
| 1218086   | R1A-0782802000 | 25  | 1 5/16-12 | 23,0    | 15,0    | 38,1   | 50,0    | 41,0    |

REV.2.1

## // WE-RK

## // V1A32M907M

90° connector

DIN 24° Male - BSPT Male

Extra Light Series

WE-RK



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|
| 1217941   | R1A-0715002000 | 4   | 1/8-28 | 15,0    | 11,0    | 17,0    | 6,2     | 9,0     |
| 1217942   | R1A-0715102000 | 6   | 1/8-28 | 15,0    | 9,5     | 17,0    | 6,2     | 11,0    |
| 1217943   | R1A-0715152000 | 8   | 1/8-28 | 17,0    | 11,5    | 20,0    | 6,2     | 12,0    |

## // V1A11M907M

90° connector

DIN 24° Male - BSPT Male

Light Series

WE-RK



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|
| 1217944   | R1A-0716002000 | 6   | 1/8-28 | 19,0    | 12,0    | 20,0    | 6,2     | 12,0    |
| 1217945   | R1A-0716022000 | 6   | 1/4-19 | 21,0    | 14,0    | 26,0    | 9,3     | 14,0    |
| 1217947   | R1A-0716062000 | 8   | 1/8-28 | 21,0    | 14,0    | 26,0    | 6,2     | 14,0    |
| 1217946   | R1A-0716052000 | 8   | 1/4-19 | 21,0    | 14,0    | 26,0    | 9,3     | 14,0    |
| 1217948   | R1A-0716102000 | 10  | 1/4-19 | 22,0    | 15,0    | 27,0    | 9,3     | 17,0    |
| 1217949   | R1A-0716122000 | 10  | 3/8-19 | 24,0    | 17,0    | 28,0    | 9,3     | 19,0    |
| 1224289   | R1A-0716132000 | 10  | 1/2-14 | 27,0    | 20,0    | 34,0    | 10,4    | 19,0    |
| 1217951   | R1A-0716162000 | 12  | 1/4-19 | 24,0    | 17,0    | 28,0    | 9,3     | 19,0    |
| 1217950   | R1A-0716152000 | 12  | 3/8-19 | 24,0    | 17,0    | 28,0    | 9,3     | 19,0    |
| 1217952   | R1A-0716172000 | 12  | 1/2-14 | 27,0    | 20,0    | 34,0    | 10,4    | 19,0    |
| 1217954   | R1A-0716212000 | 15  | 3/8-19 | 28,0    | 21,0    | 32,0    | 9,3     | 19,0    |
| 1217953   | R1A-0716202000 | 15  | 1/2-14 | 28,0    | 21,0    | 34,0    | 10,4    | 19,0    |
| 1217955   | R1A-0716252000 | 18  | 1/2-14 | 31,0    | 23,5    | 36,0    | 14,0    | 24,0    |
| 1221865   | R1A-0716272000 | 18  | 3/4-14 | 35,0    | 27,5    | 42,0    | 12,4    | 27,0    |
| 1217957   | R1A-0716342000 | 22  | 3/4-14 | 35,0    | 27,5    | 42,0    | 12,4    | 27,0    |

// V1A12M907M  
90° connector  
DIN 24° Male - BSPT Male  
Heavy Series  
WE-RK



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|
| 1217959   | R1A-0716502000 | 6   | 1/4-19 | 23,0    | 16,0    | 26,0    | 9,3     | 14,0    |
| 1217960   | R1A-0716552000 | 8   | 1/4-19 | 24,0    | 17,0    | 27,0    | 6,2     | 17,0    |
| 1217961   | R1A-0716602000 | 10  | 3/8-19 | 25,0    | 17,5    | 28,0    | 9,3     | 19,0    |
| 1217962   | R1A-0716652000 | 12  | 3/8-19 | 29,0    | 21,5    | 28,0    | 9,3     | 22,0    |
| 1224290   | R1A-0716672000 | 12  | 1/2-14 | 29,0    | 21,5    | 34,0    | 10,4    | 19,0    |
| 1217963   | R1A-0716702000 | 14  | 1/2-14 | 30,0    | 22,0    | 32,0    | 10,4    | 19,0    |
| 1217964   | R1A-0716752000 | 16  | 1/2-14 | 33,0    | 24,5    | 32,0    | 14,0    | 24,0    |
| 1221866   | R1A-0716842000 | 20  | 3/4-14 | 37,0    | 26,5    | 42,0    | 12,4    | 27,0    |

REV.2.1

## // WE-NPT

## // V1A32M928M

90° connector

DIN 24° Male - NPTF Male

Extra Light Series

WE-NPT



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|
| 1217969   | R1A-0717102000 | 6   | 1/8-27 | 15,0    | 9,5     | 17,0    | 6,7     | 11,0    |
| 1217970   | R1A-0717152000 | 8   | 1/8-27 | 17,0    | 11,5    | 20,0    | 6,7     | 12,0    |

## // V1A11M928M

90° connector

DIN 24° Male - NPTF Male

Light Series

WE-NPT



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|---------|
| 1221856   | R1A-0718002000 | 6   | 1/8-27   | 19,0    | 12,0    | 20,0    | 6,7     | 12,0    |
| 1237320   | R1A-0718172000 | 12  | 1/2-14   | 28,0    | 21,0    | 33,0    | 13,6    | 24,0    |
| 1217971   | R1A-0718202000 | 15  | 1/2-14   | 31,0    | 24,0    | 36,0    | 13,6    | 24,0    |
| 1237321   | R1A-0718252000 | 18  | 1/2-14   | 31,0    | 23,5    | 37,0    | 13,6    | 24,0    |
| 1221867   | R1A-0718302000 | 22  | 3/4-14   | 35,0    | 27,5    | 42,0    | 13,9    | 27,0    |
| 1224836   | R1A-0718352000 | 28  | 1-11 1/2 | 38,0    | 30,5    | 48,0    | 20,6    | 36,0    |

## // WE-MK

## // V1A32M962M

90° elbow connector

DIN 24° Male - Metric conic Male

Extra Light Series

WE-MK



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|
| 1217938   | R1A-0713102000 | 6   | M10X1.0 | 15,0    | 9,5     | 17,0    | 6,0     | 11,0    |
| 1223117   | R1A-0713962000 | 6   | M6X1    | 15,0    | 9,5     | 17,0    | 6,0     | 11,0    |
| 1217939   | R1A-0713112000 | 6   | M8X1.0  | 15,0    | 9,5     | 17,0    | 6,0     | 11,0    |
| 1217940   | R1A-0713152000 | 8   | M10X1.0 | 17,0    | 11,5    | 20,0    | 6,0     | 12,0    |

## // V1A11M962M

90° elbow connector

DIN 24° Male - Metric conic Male

Light Series

WE-MK



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|
| 1221857   | R1A-0714002000 | 6   | M10X1.0 | 19,0    | 12,0    | 20,0    | 9,0     | 12,0    |
| 1221858   | R1A-0714052000 | 8   | M12X1.5 | 21,0    | 14,0    | 26,0    | 9,0     | 14,0    |
| 1221859   | R1A-0714102000 | 10  | M14X1.5 | 22,0    | 15,0    | 27,0    | 12,0    | 17,0    |

REV.2.1

## // TE-RK

## // V1A32MT07M

Branch Tee connector

DIN 24° Male - BSPT Male

Extra Light Series

TE-RK



| Item Code | Product Code   | OD1 | F3     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|
| 1218002   | R1A-0729102000 | 6   | 1/8-28 | 30,0    | 9,5     | 17,0    | 6,2     | 9,0     |
| 1218003   | R1A-0729152000 | 8   | 1/8-28 | 34,0    | 11,5    | 20,0    | 6,2     | 12,0    |

## // V1A11MT07M

Branch Tee connector

DIN 24° Male - BSPT Male

Light Series

TE-RK



| Item Code | Product Code   | OD1 | F3     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|
| 1218004   | R1A-0730002000 | 6   | 1/8-28 | 38,0    | 12,0    | 20,0    | 6,2     | 12,0    |
| 1218005   | R1A-0730052000 | 8   | 1/4-19 | 42,0    | 14,0    | 26,0    | 9,3     | 14,0    |
| 1218006   | R1A-0730102000 | 10  | 1/4-19 | 44,0    | 15,0    | 27,0    | 9,3     | 17,0    |
| 1218007   | R1A-0730152000 | 12  | 3/8-19 | 48,0    | 17,0    | 28,0    | 9,3     | 19,0    |
| 1218008   | R1A-0730202000 | 15  | 1/2-14 | 56,0    | 21,0    | 34,0    | 10,4    | 19,0    |
| 1218009   | R1A-0730252000 | 18  | 1/2-14 | 62,0    | 23,5    | 36,0    | 10,4    | 24,0    |

## // V1A12MT07M

Branch Tee connector

DIN 24° Male - BSPT Male

Heavy Series

TE-RK



| Item Code | Product Code   | OD1 | F3     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|
| 1218012   | R1A-0730552000 | 8   | 1/4-19 | 48,0    | 17,0    | 27,0    | 9,3     | 17,0    |
| 1218013   | R1A-0730602000 | 10  | 3/8-19 | 50,0    | 17,5    | 28,0    | 9,3     | 19,0    |
| 1218014   | R1A-0730652000 | 12  | 3/8-19 | 58,0    | 21,5    | 28,0    | 9,3     | 22,0    |
| 1221797   | R1A-0730752000 | 16  | 1/2-14 | 66,0    | 24,5    | 32,0    | 10,4    | 24,0    |

// TE-MK

// V1A12MT62M

Branch Tee connector  
DIN 24° Male - Metric conic Male  
Extra Light Series  
TE-MK



| Item Code | Product Code   | OD2 | F3      | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|
| 1221794   | R1A-0728602000 | 10  | M16X1.5 | 50,0    | 17,5    | 28,0    | 12,0    | 19,0    |

REV.2.1

LE-RK

V1A11ML07M  
Run Tee connector  
DIN 24° Male - BSPT Male  
Light Series  
LE-RK



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|
| 1221351   | R1A-0724102000 | 10  | 1/4-19 | 22,0    | 15,0    | 49,0    | 9,3     | 17,0    |

## // G-GR

## // V1A32M132M

Straight union DIN 24° Male

Extra Light Series

G



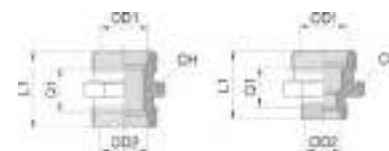
| Item Code | Product Code   | OD1 | OD2 | Q1 (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|-----|---------|---------|---------|
| 1217911   | R1A-0711102000 | 6   | 6   | 9,0     | 20,0    | 11,0    |
| 1217912   | R1A-0711152000 | 8   | 8   | 12,0    | 23,0    | 12,0    |

## // V1A11M111M

Straight union DIN 24° Male

Light Series

G &amp; GR



| Item Code | Product Code   | OD1 | OD2 | Q1 (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|-----|---------|---------|---------|
| 1217913   | R1A-0712002000 | 6   | 6   | 10,0    | 24,0    | 12,0    |
| 1221191   | R1A-0712062000 | 8   | 6   | 11,0    | 25,0    | 14,0    |
| 1217914   | R1A-0712052000 | 8   | 8   | 11,0    | 25,0    | 14,0    |
| 1221192   | R1A-0712122000 | 10  | 6   | 12,0    | 26,0    | 17,0    |
| 1221193   | R1A-0712112000 | 10  | 8   | 12,0    | 26,0    | 17,0    |
| 1217915   | R1A-0712102000 | 10  | 10  | 13,0    | 27,0    | 17,0    |
| 1217919   | R1A-0712182000 | 12  | 6   | 13,0    | 27,0    | 19,0    |
| 1217918   | R1A-0712172000 | 12  | 8   | 13,0    | 27,0    | 19,0    |
| 1217917   | R1A-0712162000 | 12  | 10  | 14,0    | 28,0    | 19,0    |
| 1217916   | R1A-0712152000 | 12  | 12  | 14,0    | 28,0    | 19,0    |
| 1207810   | R1A-0712242000 | 15  | 6   | 14,0    | 28,0    | 24,0    |
| 1224281   | R1A-0712232000 | 15  | 8   | 14,0    | 28,0    | 24,0    |
| 1224831   | R1A-0712222000 | 15  | 10  | 15,0    | 29,0    | 24,0    |
| 1224280   | R1A-0712212000 | 15  | 12  | 15,0    | 29,0    | 24,0    |
| 1217920   | R1A-0712202000 | 15  | 15  | 16,0    | 30,0    | 24,0    |
| 1224701   | R1A-0712292000 | 18  | 8   | 14,5    | 29,0    | 27,0    |
| 1224832   | R1A-0712272000 | 18  | 12  | 15,5    | 30,0    | 27,0    |
| 1224282   | R1A-0712262000 | 18  | 15  | 16,5    | 31,0    | 27,0    |
| 1217921   | R1A-0712252000 | 18  | 18  | 16,0    | 31,0    | 27,0    |
| 1224833   | R1A-0712332000 | 22  | 12  | 17,5    | 32,0    | 32,0    |
| 1224283   | R1A-0712322000 | 22  | 15  | 18,5    | 33,0    | 32,0    |
| 1221200   | R1A-0712312000 | 22  | 18  | 18,0    | 33,0    | 32,0    |
| 1217922   | R1A-0712302000 | 22  | 22  | 20,0    | 35,0    | 32,0    |
| 1221201   | R1A-0712372000 | 28  | 18  | 19,0    | 34,0    | 41,0    |
| 1221202   | R1A-0712362000 | 28  | 22  | 21,0    | 36,0    | 41,0    |
| 1217923   | R1A-0712352000 | 28  | 28  | 21,0    | 36,0    | 41,0    |
| 1224284   | R1A-0712412000 | 35  | 28  | 21,0    | 39,0    | 46,0    |
| 1217924   | R1A-0712402000 | 35  | 35  | 20,0    | 41,0    | 46,0    |
| 1245104   | R1A-0712462000 | 42  | 35  | 21,5    | 43,0    | 55,0    |
| 1217925   | R1A-0712452000 | 42  | 42  | 21,0    | 43,0    | 55,0    |

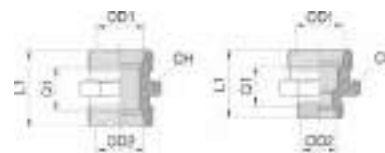
REV.2.1

## // V1A12M112M

Straight union DIN 24° Male

Heavy Series

GR



| Item Code | Product Code   | OD1 | OD2 | Q1 (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|-----|---------|---------|---------|
| 1217926   | R1A-0712502000 | 6   | 6   | 16,0    | 30,0    | 14,0    |
| 1217927   | R1A-0712552000 | 8   | 8   | 18,0    | 32,0    | 17,0    |
| 1224834   | R1A-0712612000 | 10  | 8   | 17,5    | 32,0    | 19,0    |
| 1217928   | R1A-0712602000 | 10  | 10  | 17,0    | 32,0    | 19,0    |
| 1217930   | R1A-0712682000 | 12  | 6   | 19,5    | 34,0    | 22,0    |
| 1224285   | R1A-0712662000 | 12  | 10  | 19,0    | 34,0    | 22,0    |
| 1217929   | R1A-0712652000 | 12  | 12  | 19,0    | 34,0    | 22,0    |
| 1217931   | R1A-0712702000 | 14  | 14  | 22,0    | 38,0    | 24,0    |
| 1221194   | R1A-0712782000 | 16  | 10  | 20,0    | 36,0    | 27,0    |
| 1221195   | R1A-0712772000 | 16  | 12  | 20,0    | 36,0    | 27,0    |
| 1221196   | R1A-0712762000 | 16  | 14  | 21,5    | 38,0    | 27,0    |
| 1217932   | R1A-0712752000 | 16  | 16  | 21,0    | 38,0    | 27,0    |
| 1221199   | R1A-0712812000 | 20  | 16  | 23,0    | 42,0    | 32,0    |
| 1217933   | R1A-0712802000 | 20  | 20  | 23,0    | 44,0    | 32,0    |
| 1224286   | R1A-0712862000 | 25  | 20  | 25,5    | 48,0    | 41,0    |
| 1217934   | R1A-0712852000 | 25  | 25  | 26,0    | 50,0    | 41,0    |
| 1224287   | R1A-0712912000 | 30  | 25  | 26,5    | 52,0    | 46,0    |
| 1217935   | R1A-0712902000 | 30  | 30  | 27,0    | 54,0    | 46,0    |
| 1224288   | R1A-0712972000 | 38  | 25  | 29,0    | 57,0    | 55,0    |
| 1249283   | R1A-0712962000 | 38  | 30  | 29,5    | 59,0    | 55,0    |
| 1217936   | R1A-0712952000 | 38  | 38  | 29,0    | 61,0    | 55,0    |

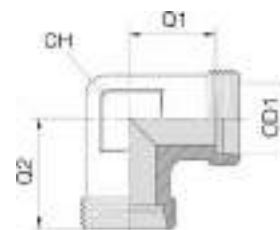
## // W - 90°

## // V1A32M932M

90° union DIN 24° Male

Extra Light Series

W



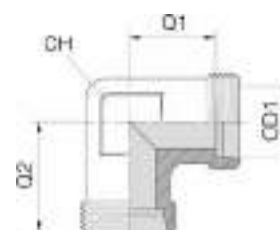
| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1217972   | R1A-0719002000 | 4   | 11,0    | 15,0    | 9,0     |
| 1217973   | R1A-0719102000 | 6   | 9,5     | 15,0    | 11,0    |
| 1217974   | R1A-0719152000 | 8   | 11,5    | 17,0    | 12,0    |

## // V1A11M911M

90° union DIN 24° Male

Light Series

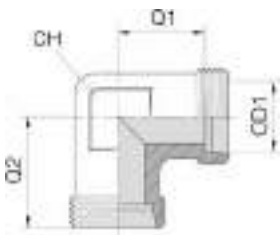
W



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1217975   | R1A-0720002000 | 6   | 12,0    | 19,0    | 12,0    |
| 1217976   | R1A-0720052000 | 8   | 14,0    | 21,0    | 14,0    |
| 1217977   | R1A-0720102000 | 10  | 15,0    | 22,0    | 17,0    |
| 1217978   | R1A-0720152000 | 12  | 17,0    | 24,0    | 19,0    |
| 1217979   | R1A-0720202000 | 15  | 21,0    | 28,0    | 19,0    |
| 1217980   | R1A-0720252000 | 18  | 23,5    | 31,0    | 24,0    |
| 1217981   | R1A-0720302000 | 22  | 27,5    | 35,0    | 27,0    |
| 1217982   | R1A-0720352000 | 28  | 30,5    | 38,0    | 36,0    |
| 1217983   | R1A-0720402000 | 35  | 34,5    | 45,0    | 41,0    |
| 1217984   | R1A-0720452000 | 42  | 40,0    | 51,0    | 50,0    |

REV.2.1

**// V1A12M912M**  
**90° union DIN 24° Male**  
**Heavy Series**  
**W**



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1217985   | R1A-0720502000 | 6   | 16,0    | 23,0    | 14,0    |
| 1217986   | R1A-0720552000 | 8   | 17,0    | 24,0    | 17,0    |
| 1217987   | R1A-0720602000 | 10  | 17,5    | 25,0    | 19,0    |
| 1217988   | R1A-0720652000 | 12  | 21,5    | 29,0    | 22,0    |
| 1217989   | R1A-0720702000 | 14  | 22,0    | 30,0    | 19,0    |
| 1217990   | R1A-0720752000 | 16  | 24,5    | 33,0    | 24,0    |
| 1217991   | R1A-0720802000 | 20  | 26,5    | 37,0    | 27,0    |
| 1217992   | R1A-0720852000 | 25  | 30,0    | 42,0    | 36,0    |
| 1217993   | R1A-0720902000 | 30  | 35,5    | 49,0    | 41,0    |
| 1217994   | R1A-0720952000 | 38  | 41,0    | 57,0    | 50,0    |

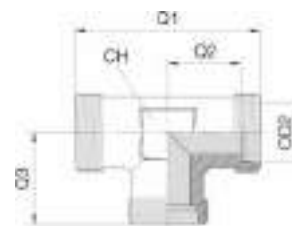
## // T - BRANCH TEE

## // V1A32MT32M

Branch Tee union DIN 24° Male

Extra Light Series

T



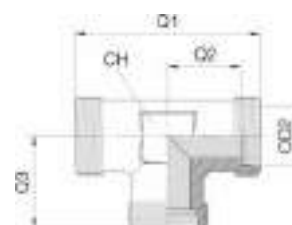
| Item Code | Product Code   | OD1 | OD2 | OD3 | Q1 (mm) | Q2 (mm) | Q3 (mm) | CH (mm) |
|-----------|----------------|-----|-----|-----|---------|---------|---------|---------|
| 1224839   | R1A-0733002000 | 4   | 4   | 4   | 30,0    | 11,0    | 15,0    | 9,0     |
| 1218016   | R1A-0733102000 | 6   | 6   | 6   | 30,0    | 9,5     | 15,0    | 9,0     |
| 1218017   | R1A-0733152000 | 8   | 8   | 8   | 34,0    | 11,5    | 17,0    | 12,0    |

## // V1A11MT11M

Branch Tee union DIN 24° Male

Light Series

T



| Item Code | Product Code   | OD1 | OD2 | OD3 | Q1 (mm) | Q2 (mm) | Q3 (mm) | CH (mm) |
|-----------|----------------|-----|-----|-----|---------|---------|---------|---------|
| 1218018   | R1A-0734002000 | 6   | 6   | 6   | 38,0    | 12,0    | 19,0    | 12,0    |
| 1246211   | R1A-0799512000 | 8   | 8   | 12  | 48,0    | 17,0    | 24,0    | 19,0    |
| 1218019   | R1A-0734052000 | 8   | 8   | 8   | 42,0    | 14,0    | 21,0    | 14,0    |
| 1218020   | R1A-0734102000 | 10  | 10  | 10  | 44,0    | 15,0    | 22,0    | 17,0    |
| 1224841   | R1A-0734122000 | 10  | 10  | 6   | 44,0    | 15,0    | 22,0    | 17,0    |
| 1224845   | R1A-0797322000 | 12  | 10  | 10  | 48,0    | 17,0    | 24,0    | 19,0    |
| 1218021   | R1A-0734152000 | 12  | 12  | 12  | 48,0    | 17,0    | 24,0    | 19,0    |
| 1224291   | R1A-0799472000 | 12  | 12  | 15  | 56,0    | 21,0    | 28,0    | 19,0    |
| 1224843   | R1A-0734222000 | 15  | 15  | 10  | 56,0    | 21,0    | 28,0    | 19,0    |
| 1224842   | R1A-0734212000 | 15  | 15  | 12  | 56,0    | 21,0    | 28,0    | 19,0    |
| 1218022   | R1A-0734202000 | 15  | 15  | 15  | 56,0    | 21,0    | 28,0    | 19,0    |
| 1224292   | R1A-0734272000 | 18  | 18  | 12  | 62,0    | 23,5    | 31,0    | 24,0    |
| 1224844   | R1A-0734262000 | 18  | 18  | 15  | 62,0    | 23,5    | 31,0    | 24,0    |
| 1218023   | R1A-0734252000 | 18  | 18  | 18  | 62,0    | 23,5    | 31,0    | 24,0    |
| 1224293   | R1A-0734322000 | 22  | 22  | 15  | 70,0    | 27,5    | 35,0    | 27,0    |
| 1218024   | R1A-0734302000 | 22  | 22  | 22  | 70,0    | 27,5    | 35,0    | 27,0    |
| 1224846   | R1A-0734362000 | 28  | 28  | 22  | 76,0    | 30,5    | 38,0    | 36,0    |
| 1218025   | R1A-0734352000 | 28  | 28  | 28  | 76,0    | 30,5    | 38,0    | 36,0    |
| 1218026   | R1A-0734402000 | 35  | 35  | 35  | 90,0    | 34,5    | 45,0    | 41,0    |
| 1218027   | R1A-0734452000 | 42  | 42  | 42  | 102,0   | 40,0    | 51,0    | 50,0    |

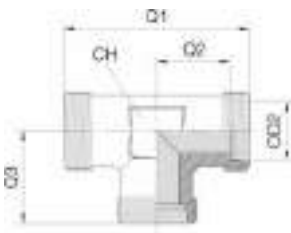
REV.2.1

V1A12MT12M

Branch Tee union DIN 24° Male

Heavy Series

T



| Item Code | Product Code   | OD1 | OD2 | OD3 | Q1 (mm) | Q2 (mm) | Q3 (mm) | CH (mm) |
|-----------|----------------|-----|-----|-----|---------|---------|---------|---------|
| 1218028   | R1A-0734502000 | 6   | 6   | 6   | 46,0    | 16,0    | 23,0    | 14,0    |
| 1218029   | R1A-0734552000 | 8   | 8   | 8   | 48,0    | 17,0    | 24,0    | 17,0    |
| 1218030   | R1A-0734602000 | 10  | 10  | 10  | 50,0    | 17,5    | 25,0    | 19,0    |
| 1218031   | R1A-0734652000 | 12  | 12  | 12  | 58,0    | 21,5    | 29,0    | 22,0    |
| 1218032   | R1A-0734702000 | 14  | 14  | 14  | 60,0    | 22,0    | 30,0    | 19,0    |
| 1246654   | R1A-0799292000 | 16  | 16  | 6   | 66,0    | 24,5    | 33,0    | 24,0    |
| 1218033   | R1A-0734752000 | 16  | 16  | 16  | 66,0    | 24,5    | 33,0    | 24,0    |
| 1218034   | R1A-0734802000 | 20  | 20  | 20  | 74,0    | 26,5    | 37,0    | 27,0    |
| 1218035   | R1A-0734852000 | 25  | 25  | 25  | 84,0    | 30,0    | 42,0    | 36,0    |
| 1218036   | R1A-0734902000 | 30  | 30  | 30  | 98,0    | 35,5    | 49,0    | 41,0    |
| 1218037   | R1A-0734952000 | 38  | 38  | 38  | 114,0   | 41,0    | 57,0    | 50,0    |

## // K - CROSS

## // V1A11MX11M

Cross union DIN 24° Male

Light Series

K



| Item Code | Product Code   | OD2 | Q1 (mm) | Q2 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1218038   | R1A-0736002000 | 6   | 38,0    | 12,0    | 12,0    |
| 1218039   | R1A-0736052000 | 8   | 42,0    | 14,0    | 12,0    |
| 1221283   | R1A-0736102000 | 10  | 44,0    | 15,0    | 14,0    |
| 1221284   | R1A-0736152000 | 12  | 48,0    | 17,0    | 17,0    |
| 1221286   | R1A-0736202000 | 15  | 56,0    | 21,0    | 19,0    |
| 1218040   | R1A-0736252000 | 18  | 62,0    | 23,5    | 24,0    |
| 1218041   | R1A-0736302000 | 22  | 70,0    | 27,5    | 27,0    |
| 1218042   | R1A-0736352000 | 28  | 76,0    | 30,5    | 36,0    |
| 1223136   | R1A-0736402000 | 35  | 90,0    | 34,5    | 41,0    |
| 1221290   | R1A-0736452000 | 42  | 102,0   | 40,0    | 50,0    |

## // V1A12MX12M

Cross union DIN 24° Male

Heavy Series

K



| Item Code | Product Code   | OD2 | Q1 (mm) | Q2 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1237322   | R1A-0736502000 | 6   | 46,0    | 16,0    | 12,0    |
| 1218043   | R1A-0736552000 | 8   | 48,0    | 17,0    | 14,0    |
| 1218044   | R1A-0736602000 | 10  | 50,0    | 17,5    | 17,0    |
| 1237310   | R1A-0736652000 | 12  | 58,0    | 21,5    | 17,0    |
| 1221285   | R1A-0736702000 | 14  | 60,0    | 22,0    | 19,0    |
| 1218045   | R1A-0736752000 | 16  | 66,0    | 24,5    | 24,0    |
| 1221287   | R1A-0736802000 | 20  | 74,0    | 26,5    | 27,0    |
| 1221288   | R1A-0736852000 | 25  | 84,0    | 30,0    | 36,0    |
| 1221289   | R1A-0736902000 | 30  | 98,0    | 35,5    | 41,0    |
| 1218046   | R1A-0736952000 | 38  | 114,0   | 41,0    | 50,0    |

REV.2.1

## // WSV

## // V1A11T911M

90° union DIN 24° Bulkhead

Light Series

WSV



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | L1 (mm) | CH (mm) | LN (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|---------|
| 1217575   | R1A-0138002066 | 6   | 14,0    | 27,0    | 12,0    | 19,0    | 48,0    | 12,0    | 17,0    |
| 1217576   | R1A-0138052066 | 8   | 17,0    | 27,0    | 14,0    | 21,0    | 51,0    | 12,0    | 19,0    |
| 1217577   | R1A-0138102066 | 10  | 18,0    | 28,0    | 15,0    | 22,0    | 53,0    | 14,0    | 22,0    |
| 1217578   | R1A-0138152066 | 12  | 20,0    | 29,0    | 17,0    | 24,0    | 56,0    | 17,0    | 24,0    |
| 1217579   | R1A-0138202066 | 15  | 23,0    | 31,0    | 21,0    | 28,0    | 61,0    | 19,0    | 30,0    |
| 1217580   | R1A-0138252066 | 18  | 24,0    | 32,5    | 23,5    | 31,0    | 64,0    | 24,0    | 36,0    |
| 1217581   | R1A-0138302066 | 22  | 30,0    | 34,5    | 27,5    | 35,0    | 72,0    | 27,0    | 41,0    |
| 1217582   | R1A-0138352066 | 28  | 34,0    | 35,5    | 30,5    | 38,0    | 77,0    | 36,0    | 46,0    |
| 1224850   | R1A-0138402066 | 35  | 39,0    | 36,5    | 34,5    | 45,0    | 86,0    | 41,0    | 55,0    |
| 1221880   | R1A-0138452066 | 42  | 43,0    | 36,0    | 40,0    | 51,0    | 90,0    | 50,0    | 65,0    |

## // V1A12T912M

90° union DIN 24° Bulkhead

Heavy Series

WSV



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | L1 (mm) | CH (mm) | LN (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|---------|
| 1221874   | R1A-0138502066 | 6   | 17,0    | 29,0    | 16,0    | 23,0    | 53,0    | 12,0    | 19,0    |
| 1217583   | R1A-0138552066 | 8   | 18,0    | 29,0    | 17,0    | 24,0    | 54,0    | 14,0    | 22,0    |
| 1217584   | R1A-0138602066 | 10  | 20,0    | 29,5    | 17,5    | 25,0    | 57,0    | 17,0    | 24,0    |
| 1217585   | R1A-0138652066 | 12  | 21,0    | 30,5    | 21,5    | 29,0    | 59,0    | 17,0    | 27,0    |
| 1217586   | R1A-0138702066 | 14  | 23,0    | 32,0    | 22,0    | 30,0    | 63,0    | 19,0    | 30,0    |
| 1217587   | R1A-0138752066 | 16  | 24,0    | 31,5    | 24,5    | 33,0    | 64,0    | 24,0    | 32,0    |
| 1221877   | R1A-0138802066 | 20  | 30,0    | 33,5    | 26,5    | 37,0    | 74,0    | 27,0    | 41,0    |
| 1221878   | R1A-0138852066 | 25  | 34,0    | 35,0    | 30,0    | 42,0    | 81,0    | 36,0    | 46,0    |
| 1217588   | R1A-0138902066 | 30  | 39,0    | 37,5    | 35,5    | 49,0    | 90,0    | 41,0    | 50,0    |
| 1221879   | R1A-0138952066 | 38  | 43,0    | 37,0    | 41,0    | 57,0    | 96,0    | 50,0    | 65,0    |

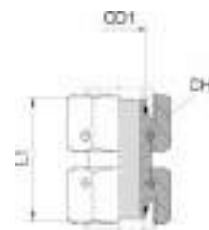
## // DKO/DKO

## // V1A1521152

Straight union DIN 24° Female

Light Series

DKO/DKO



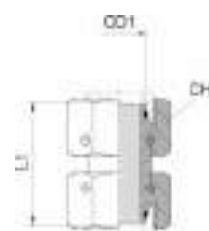
| Item Code | Product Code   | OD1 | L1 (mm) | CH1 (mm) |
|-----------|----------------|-----|---------|----------|
| 1218335   | R1A-1178002058 | 6   | 39,0    | 14,0     |
| 1218336   | R1A-1178012058 | 8   | 39,5    | 17,0     |
| 1218337   | R1A-1178022058 | 10  | 39,5    | 19,0     |
| 1218338   | R1A-1178032058 | 12  | 39,5    | 22,0     |
| 1218339   | R1A-1178042058 | 15  | 42,5    | 27,0     |
| 1218340   | R1A-1178052058 | 18  | 45,0    | 32,0     |
| 1218341   | R1A-1178062058 | 22  | 49,5    | 36,0     |
| 1218342   | R1A-1178072058 | 28  | 51,5    | 41,0     |
| 1218343   | R1A-1178082058 | 35  | 61,0    | 50,0     |
| 1218344   | R1A-1178092058 | 42  | 62,5    | 60,0     |

## // V1A1621162

Straight union DIN 24° Female

Heavy Series

DKO/DKO



| Item Code | Product Code   | OD1 | OD2 | L1 (mm) | CH1 (mm) |
|-----------|----------------|-----|-----|---------|----------|
| 1218345   | R1A-1178102058 | 6   | 6   | 40,5    | 17,0     |
| 1218346   | R1A-1178112058 | 8   | 8   | 40,5    | 19,0     |
| 1218347   | R1A-1178122058 | 10  | 10  | 43,5    | 22,0     |
| 1218348   | R1A-1178132058 | 12  | 12  | 44,0    | 24,0     |
| 1224745   | R1A-1178142058 | 14  | 14  | 48,5    | 27,0     |
| 1218349   | R1A-1178152058 | 16  | 16  | 49,0    | 30,0     |
| 1241965   | R1A-1178542058 | 20  | 12  | 52,0    | 36,0     |
| 1218350   | R1A-1178162058 | 20  | 20  | 60,5    | 36,0     |
| 1218351   | R1A-1178172058 | 25  | 25  | 67,5    | 46,0     |
| 1218352   | R1A-1178182058 | 30  | 30  | 72,5    | 50,0     |
| 1218353   | R1A-1178192058 | 38  | 38  | 83,0    | 60,0     |

REV.2.1

## // EVW-DKO

## // V1A11M9152

90° adjustable elbow connector

DIN 24° Male - Female with O-Ring

Light series

EVW/DKO



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|----------|
| 1218259   | R1A-1158032058 | 6   | 19,0    | 12,0    | 34,5    | 26,0    | 12,0    | 14,0     |
| 1218260   | R1A-1158082058 | 8   | 21,0    | 14,0    | 37,5    | 27,5    | 14,0    | 17,0     |
| 1218261   | R1A-1158132058 | 10  | 22,0    | 15,0    | 40,0    | 29,0    | 14,0    | 19,0     |
| 1218262   | R1A-1158182058 | 12  | 24,0    | 17,0    | 42,0    | 29,5    | 17,0    | 22,0     |
| 1218263   | R1A-1158232058 | 15  | 28,0    | 21,0    | 46,0    | 32,5    | 19,0    | 27,0     |
| 1218264   | R1A-1158282058 | 18  | 31,0    | 23,5    | 50,0    | 35,5    | 24,0    | 32,0     |
| 1218265   | R1A-1158332058 | 22  | 35,0    | 27,5    | 55,0    | 38,5    | 27,0    | 36,0     |
| 1218266   | R1A-1158382058 | 28  | 38,0    | 30,5    | 59,0    | 41,5    | 36,0    | 41,0     |
| 1218267   | R1A-1158432058 | 35  | 45,0    | 34,5    | 68,5    | 51,0    | 41,0    | 50,0     |
| 1218268   | R1A-1158482058 | 42  | 51,0    | 40,0    | 75,0    | 56,0    | 50,0    | 60,0     |

## // EVW

## // V1A11M4152

45° adjustable elbow connector

DIN 24° Male - Female with O-Ring

Light Series

EV/DKO



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|----------|
| 1224251   | R1A-1170082058 | 8   | 22,0    | 15,0    | 37,5    | 27,5    | 19,0    | 17,0     |
| 1224252   | R1A-1170132058 | 10  | 23,0    | 16,0    | 40,0    | 29,0    | 19,0    | 19,0     |
| 1224253   | R1A-1170182058 | 12  | 24,0    | 17,0    | 42,0    | 29,5    | 19,0    | 22,0     |
| 1224254   | R1A-1170232058 | 15  | 24,0    | 17,0    | 46,0    | 32,5    | 19,0    | 27,0     |
| 1224255   | R1A-1170282058 | 18  | 26,5    | 19,0    | 50,0    | 35,5    | 24,0    | 32,0     |
| 1224256   | R1A-1170332058 | 22  | 30,0    | 22,5    | 55,0    | 38,5    | 27,0    | 36,0     |
| 1224257   | R1A-1170382058 | 28  | 32,0    | 24,5    | 59,0    | 41,5    | 36,0    | 41,0     |
| 1224258   | R1A-1170432058 | 35  | 37,5    | 27,0    | 68,5    | 51,0    | 41,0    | 50,0     |
| 1224259   | R1A-1170482058 | 42  | 37,0    | 27,0    | 75,0    | 56,0    | 50,0    | 60,0     |

## // V1A12M4162

45° adjustable elbow connector

DIN 24° Male - Female with O-Ring

Heavy Series

EV/DKO



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|----------|
| 1224260   | R1A-1170582058 | 8   | 23,0    | 16,0    | 42,5    | 27,5    | 19,0    | 19,0     |
| 1224261   | R1A-1170632058 | 10  | 24,0    | 16,5    | 45,0    | 30,0    | 19,0    | 22,0     |
| 1224262   | R1A-1170682058 | 12  | 24,5    | 17,0    | 48,0    | 31,0    | 19,0    | 24,0     |
| 1224263   | R1A-1170782058 | 16  | 27,5    | 19,0    | 55,0    | 36,5    | 24,0    | 30,0     |
| 1224264   | R1A-1170832058 | 20  | 32,0    | 21,5    | 65,0    | 44,5    | 27,0    | 36,0     |
| 1224265   | R1A-1170882058 | 25  | 35,0    | 23,0    | 73,0    | 50,0    | 36,0    | 46,0     |
| 1224266   | R1A-1170932058 | 30  | 37,5    | 24,0    | 78,5    | 55,0    | 41,0    | 50,0     |
| 1224267   | R1A-1170982058 | 38  | 44,0    | 28,0    | 89,0    | 63,0    | 50,0    | 60,0     |

REV.2.1

## // EVT-DKO

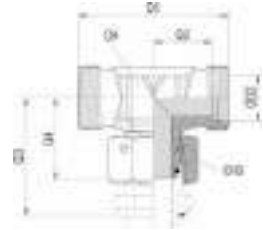
## // V1A11MT152

Branch Tee adjustable elbow connector

DIN 24° Male - Female with O-Ring

Light Series

EVT/DKO



| Item Code | Product Code   | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | CH (mm) | CH3 (mm) | OD2 |
|-----------|----------------|---------|---------|---------|---------|---------|----------|-----|
| 1218278   | R1A-1160032058 | 38,0    | 12,0    | 34,5    | 26,0    | 12,0    | 14,0     | 6   |
| 1218279   | R1A-1160082058 | 42,0    | 14,0    | 37,5    | 27,5    | 14,0    | 17,0     | 8   |
| 1218280   | R1A-1160132058 | 44,0    | 15,0    | 40,0    | 29,0    | 14,0    | 19,0     | 10  |
| 1218281   | R1A-1160182058 | 48,0    | 17,0    | 42,0    | 29,5    | 19,0    | 22,0     | 12  |
| 1218282   | R1A-1160232058 | 56,0    | 21,0    | 46,0    | 32,5    | 19,0    | 27,0     | 15  |
| 1218283   | R1A-1160282058 | 62,0    | 23,5    | 50,0    | 35,5    | 24,0    | 32,0     | 18  |
| 1220898   | R1A-1160332058 | 70,0    | 27,5    | 55,0    | 38,5    | 27,0    | 36,0     | 22  |
| 1218284   | R1A-1160382058 | 76,0    | 30,5    | 59,0    | 41,5    | 36,0    | 41,0     | 28  |
| 1218285   | R1A-1160432058 | 90,0    | 34,5    | 68,5    | 51,0    | 41,0    | 50,0     | 35  |
| 1218286   | R1A-1160482058 | 102,0   | 40,0    | 75,0    | 56,0    | 50,0    | 60,0     | 42  |

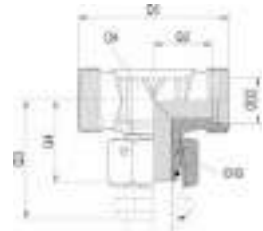
## // V1A12MT162

Branch Tee adjustable elbow connector

DIN 24° Male - Female with O-Ring

Heavy Series

EVT/DKO



| Item Code | Product Code   | OD2 | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | CH (mm) | CH3 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|----------|
| 1218287   | R1A-1160532058 | 6   | 46,0    | 16,0    | 40,0    | 27,0    | 14,0    | 17,0     |
| 1218288   | R1A-1160582058 | 8   | 48,0    | 17,0    | 42,5    | 27,5    | 17,0    | 19,0     |
| 1218289   | R1A-1160632058 | 10  | 50,0    | 17,5    | 45,0    | 30,0    | 19,0    | 22,0     |
| 1218290   | R1A-1160682058 | 12  | 58,0    | 21,5    | 48,0    | 31,0    | 17,0    | 24,0     |
| 1218291   | R1A-1160732058 | 14  | 60,0    | 22,0    | 54,0    | 35,0    | 19,0    | 27,0     |
| 1218292   | R1A-1160782058 | 16  | 66,0    | 24,5    | 55,0    | 36,5    | 24,0    | 30,0     |
| 1218293   | R1A-1160832058 | 20  | 74,0    | 26,5    | 65,0    | 44,5    | 27,0    | 36,0     |
| 1218294   | R1A-1160882058 | 25  | 84,0    | 30,0    | 73,0    | 50,0    | 36,0    | 46,0     |
| 1218295   | R1A-1160932058 | 30  | 98,0    | 35,5    | 78,5    | 55,0    | 41,0    | 50,0     |
| 1220901   | R1A-1160982058 | 38  | 114,0   | 41,0    | 89,0    | 63,0    | 50,0    | 60,0     |

## // ELV-DKO

## // V1A11ML152

Run Tee adjustable elbow connector

DIN 24° Male - Female with O-Ring

Light Series

EVL/DKO



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|----------|
| 1218296   | R1A-1162032058 | 6   | 19,0    | 12,0    | 34,5    | 26,0    | 12,0    | 14,0     |
| 1218297   | R1A-1162082058 | 8   | 21,0    | 14,0    | 37,5    | 27,5    | 14,0    | 17,0     |
| 1218298   | R1A-1162132058 | 10  | 22,0    | 15,0    | 40,0    | 29,0    | 14,0    | 19,0     |
| 1218299   | R1A-1162182058 | 12  | 24,0    | 17,0    | 42,0    | 29,5    | 19,0    | 22,0     |
| 1218300   | R1A-1162232058 | 15  | 28,0    | 21,0    | 46,0    | 32,5    | 19,0    | 27,0     |
| 1218301   | R1A-1162282058 | 18  | 31,0    | 23,5    | 50,0    | 35,5    | 24,0    | 32,0     |
| 1218302   | R1A-1162332058 | 22  | 35,0    | 27,5    | 55,0    | 38,5    | 27,0    | 36,0     |
| 1218303   | R1A-1162382058 | 28  | 38,0    | 30,5    | 59,0    | 41,5    | 36,0    | 41,0     |
| 1218304   | R1A-1162432058 | 35  | 45,0    | 34,5    | 68,5    | 51,0    | 41,0    | 50,0     |
| 1218305   | R1A-1162482058 | 42  | 51,0    | 40,0    | 75,0    | 56,0    | 50,0    | 60,0     |

## // V1A12ML162

Run Tee adjustable elbow connector

DIN 24° Male - Female with O-Ring

Heavy Series

EVL/DKO



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|----------|
| 1218306   | R1A-1162532058 | 6   | 23,0    | 16,0    | 40,0    | 27,0    | 12,0    | 17,0     |
| 1218307   | R1A-1162582058 | 8   | 24,0    | 17,0    | 42,5    | 27,5    | 17,0    | 19,0     |
| 1218308   | R1A-1162632058 | 10  | 25,0    | 17,5    | 45,0    | 30,0    | 19,0    | 22,0     |
| 1218309   | R1A-1162682058 | 12  | 29,0    | 21,5    | 48,0    | 31,0    | 17,0    | 24,0     |
| 1220889   | R1A-1162732058 | 14  | 30,0    | 22,0    | 54,0    | 35,0    | 19,0    | 27,0     |
| 1218310   | R1A-1162782058 | 16  | 33,0    | 24,5    | 55,0    | 36,5    | 24,0    | 30,0     |
| 1218311   | R1A-1162832058 | 20  | 37,0    | 26,5    | 65,0    | 44,5    | 27,0    | 36,0     |
| 1218312   | R1A-1162882058 | 25  | 42,0    | 30,0    | 73,0    | 50,0    | 36,0    | 46,0     |
| 1218313   | R1A-1162932058 | 30  | 49,0    | 35,5    | 78,5    | 55,0    | 41,0    | 50,0     |
| 1218314   | R1A-1162982058 | 38  | 57,0    | 41,0    | 89,0    | 63,0    | 50,0    | 60,0     |

REV.2.1

## // EVGE-R-ED-DKO

## // V1A152106I

Straight connector

DIN 24° Female with O-Ring - BSPP cylindric Male with elastomer

Light Series

EVGE-R-ED/DKO



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | G (mm) | CH (mm) | CH1 (mm) |
|-----------|----------------|-----|----------|---------|---------|--------|---------|----------|
| 1218315   | R1A-1165032000 | 6   | 1/8-28   | 24,5    | 8,0     | 13,9   | 14,0    | 14,0     |
| 1218316   | R1A-1165082000 | 8   | 1/4-19   | 29,5    | 12,0    | 18,9   | 19,0    | 17,0     |
| 1218317   | R1A-1165132000 | 10  | 1/4-19   | 27,5    | 12,0    | 18,9   | 19,0    | 19,0     |
| 1218318   | R1A-1165182000 | 12  | 3/8-19   | 34,0    | 12,0    | 21,9   | 22,0    | 22,0     |
| 1223139   | R1A-1198402000 | 12  | 1/2-14   | 32,0    | 14,0    | 26,9   | 27,0    | 22,0     |
| 1224820   | R1A-1198562000 | 15  | 3/8-19   | 32,5    | 12,0    | 21,9   | 22,0    | 27,0     |
| 1218319   | R1A-1165232000 | 15  | 1/2-14   | 32,0    | 14,0    | 26,9   | 27,0    | 27,0     |
| 1218320   | R1A-1165282000 | 18  | 1/2-14   | 31,5    | 14,0    | 26,9   | 27,0    | 32,0     |
| 1224249   | R1A-1198652000 | 18  | 3/4-14   | 31,5    | 16,0    | 31,9   | 32,0    | 32,0     |
| 1224250   | R1A-1198662000 | 22  | 1/2-14   | 32,0    | 14,0    | 26,9   | 27,0    | 36,0     |
| 1218322   | R1A-1165382000 | 28  | 1-11     | 35,0    | 18,0    | 39,9   | 41,0    | 41,0     |
| 1218323   | R1A-1165432000 | 35  | 1 1/4-11 | 42,5    | 20,0    | 49,9   | 50,0    | 50,0     |
| 1218324   | R1A-1165482000 | 42  | 1 1/2-11 | 46,5    | 22,0    | 54,9   | 55,0    | 60,0     |

## // V1A162106I

Straight connector

DIN 24° Female with O-Ring - BSPP cylindric Male with elastomer

Heavy Series

EVGE-R-ED/DKO



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | G (mm) | CH (mm) | CH1 (mm) |
|-----------|----------------|-----|----------|---------|---------|--------|---------|----------|
| 1220870   | R1A-1165632000 | 10  | 3/8-19   | 32,0    | 12,0    | 21,9   | 22,0    | 22,0     |
| 1246372   | R1A-1198582000 | 12  | 1/4-19   | 30,0    | 12,0    | 18,9   | 19,0    | 24,0     |
| 1218327   | R1A-1165682000 | 12  | 3/8-19   | 34,0    | 12,0    | 21,9   | 22,0    | 24,0     |
| 1220885   | R1A-1198572000 | 12  | 1/2-14   | 35,5    | 14,0    | 26,9   | 27,0    | 24,0     |
| 1218328   | R1A-1165782000 | 16  | 1/2-14   | 37,0    | 14,0    | 26,9   | 27,0    | 30,0     |
| 1218329   | R1A-1165832000 | 20  | 3/4-14   | 43,0    | 16,0    | 31,9   | 32,0    | 36,0     |
| 1218330   | R1A-1165882000 | 25  | 1-11     | 48,0    | 18,0    | 39,9   | 41,0    | 46,0     |
| 1218331   | R1A-1165932000 | 30  | 1 1/4-11 | 51,0    | 20,0    | 49,9   | 50,0    | 50,0     |
| 1218332   | R1A-1165982000 | 38  | 1 1/2-11 | 60,0    | 22,0    | 54,9   | 55,0    | 60,0     |

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ADAPTERS

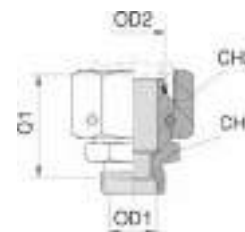
## // KOR-DKO

## // V1A11M1152

Reducers DIN 24° with O-Ring

Light Series

KOR/DKO



| Item Code | Product Code   | OD1 | OD2 | Q1 (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|-----|---------|---------|----------|
| 1218354   | R1A-1181002058 | 6   | 8   | 23,5    | 12,0    | 17,0     |
| 1218355   | R1A-1181012058 | 6   | 10  | 25,0    | 14,0    | 19,0     |
| 1218357   | R1A-1181032058 | 6   | 12  | 25,0    | 17,0    | 22,0     |
| 1218360   | R1A-1181062058 | 6   | 15  | 28,0    | 19,0    | 27,0     |
| 1218356   | R1A-1181022058 | 8   | 10  | 25,0    | 14,0    | 19,0     |
| 1218358   | R1A-1181042058 | 8   | 12  | 25,0    | 17,0    | 22,0     |
| 1218361   | R1A-1181072058 | 8   | 15  | 28,0    | 19,0    | 27,0     |
| 1221337   | R1A-1181112058 | 8   | 18  | 28,0    | 24,0    | 32,0     |
| 1218359   | R1A-1181052058 | 10  | 12  | 26,0    | 17,0    | 22,0     |
| 1218362   | R1A-1181082058 | 10  | 15  | 29,0    | 19,0    | 27,0     |
| 1218364   | R1A-1181122058 | 10  | 18  | 29,0    | 24,0    | 32,0     |
| 1218367   | R1A-1181172058 | 10  | 22  | 33,0    | 27,0    | 36,0     |
| 1218371   | R1A-1181232058 | 10  | 28  | 35,0    | 32,0    | 41,0     |
| 1221343   | R1A-1181372058 | 10  | 42  | 41,5    | 50,0    | 60,0     |
| 1218363   | R1A-1181092058 | 12  | 15  | 29,0    | 19,0    | 27,0     |
| 1218365   | R1A-1181132058 | 12  | 18  | 29,0    | 24,0    | 32,0     |
| 1218368   | R1A-1181182058 | 12  | 22  | 33,0    | 27,0    | 36,0     |
| 1224245   | R1A-1181242058 | 12  | 28  | 35,0    | 32,0    | 41,0     |
| 1218376   | R1A-1181382058 | 12  | 42  | 41,5    | 50,0    | 60,0     |
| 1218366   | R1A-1181142058 | 15  | 18  | 30,0    | 24,0    | 32,0     |
| 1218369   | R1A-1181192058 | 15  | 22  | 34,0    | 27,0    | 36,0     |
| 1218372   | R1A-1181252058 | 15  | 28  | 36,0    | 32,0    | 41,0     |
| 1224817   | R1A-1181322058 | 15  | 35  | 39,0    | 41,0    | 50,0     |
| 1224247   | R1A-1181392058 | 15  | 42  | 42,5    | 50,0    | 60,0     |
| 1218370   | R1A-1181202058 | 18  | 22  | 33,5    | 27,0    | 36,0     |
| 1218373   | R1A-1181262058 | 18  | 28  | 35,5    | 32,0    | 41,0     |
| 1224246   | R1A-1181332058 | 18  | 35  | 38,5    | 41,0    | 50,0     |
| 1218377   | R1A-1181412058 | 18  | 42  | 42,0    | 50,0    | 60,0     |
| 1218374   | R1A-1181272058 | 22  | 28  | 37,5    | 32,0    | 41,0     |
| 1221340   | R1A-1181342058 | 22  | 35  | 40,5    | 41,0    | 50,0     |
| 1218378   | R1A-1181422058 | 22  | 42  | 44,0    | 50,0    | 60,0     |
| 1218375   | R1A-1181352058 | 28  | 35  | 40,5    | 41,0    | 50,0     |
| 1218379   | R1A-1181432058 | 28  | 42  | 44,0    | 50,0    | 60,0     |
| 1218380   | R1A-1181442058 | 35  | 42  | 43,0    | 50,0    | 60,0     |

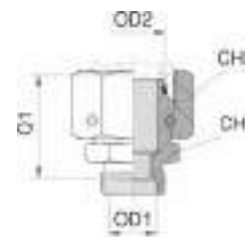
REV.2.1

## // V1A11M1162

Reducers DIN 24° with O-Ring

Light Series - Heavy Series

KOR/DKO



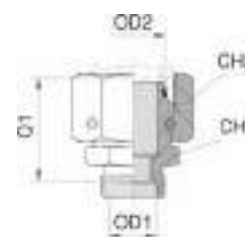
| Item Code | Product Code   | OD1 | OD2 | Q1 (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|-----|---------|---------|----------|
| 1249439   | R1A-1181932058 | 12  | 16  | 32,0    | 22,0    | 30,0     |
| 1221336   | R1A-1198602058 | 15  | 16  | 38,8    | 24,0    | 30,0     |

## // V1A12M1162

Reducers DIN 24° with O-Ring

Heavy Series

KOR/DKO



| Item Code | Product Code   | OD1 | OD2 | Q1 (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|-----|---------|---------|----------|
| 1218381   | R1A-1181452058 | 6   | 8   | 27,0    | 14,0    | 19,0     |
| 1218383   | R1A-1181462058 | 6   | 10  | 27,5    | 17,0    | 22,0     |
| 1218385   | R1A-1181482058 | 6   | 12  | 30,0    | 19,0    | 24,0     |
| 1218388   | R1A-1181552058 | 6   | 16  | 32,0    | 22,0    | 30,0     |
| 1218384   | R1A-1181472058 | 8   | 10  | 27,5    | 17,0    | 22,0     |
| 1218386   | R1A-1181492058 | 8   | 12  | 30,0    | 19,0    | 24,0     |
| 1218389   | R1A-1181562058 | 8   | 16  | 32,0    | 22,0    | 30,0     |
| 1218393   | R1A-1181612058 | 8   | 20  | 36,0    | 27,0    | 36,0     |
| 1221338   | R1A-1181672058 | 8   | 25  | 38,5    | 32,0    | 46,0     |
| 1221339   | R1A-1181742058 | 8   | 30  | 44,0    | 41,0    | 50,0     |
| 1221341   | R1A-1181832058 | 8   | 38  | 47,5    | 50,0    | 60,0     |
| 1218387   | R1A-1181502058 | 10  | 12  | 29,5    | 19,0    | 24,0     |
| 1218390   | R1A-1181572058 | 10  | 16  | 31,5    | 22,0    | 30,0     |
| 1218394   | R1A-1181622058 | 10  | 20  | 35,5    | 27,0    | 36,0     |
| 1218397   | R1A-1181682058 | 10  | 25  | 38,0    | 32,0    | 46,0     |
| 1218401   | R1A-1181752058 | 10  | 30  | 43,5    | 41,0    | 50,0     |
| 1218406   | R1A-1181842058 | 10  | 38  | 47,0    | 50,0    | 60,0     |
| 1224248   | R1A-1181542058 | 12  | 14  | 31,0    | 22,0    | 27,0     |
| 1218391   | R1A-1181582058 | 12  | 16  | 31,5    | 22,0    | 30,0     |
| 1218395   | R1A-1181632058 | 12  | 20  | 35,5    | 27,0    | 36,0     |
| 1218398   | R1A-1181692058 | 12  | 25  | 38,0    | 32,0    | 46,0     |
| 1218402   | R1A-1181762058 | 12  | 30  | 43,5    | 41,0    | 50,0     |
| 1221342   | R1A-1181852058 | 12  | 38  | 47,0    | 50,0    | 60,0     |
| 1224818   | R1A-1181592058 | 14  | 16  | 31,5    | 24,0    | 30,0     |
| 1218396   | R1A-1181652058 | 16  | 20  | 36,5    | 27,0    | 36,0     |
| 1218399   | R1A-1181712058 | 16  | 25  | 39,0    | 32,0    | 46,0     |
| 1218403   | R1A-1181782058 | 16  | 30  | 44,5    | 41,0    | 50,0     |
| 1218407   | R1A-1181862058 | 16  | 38  | 48,0    | 50,0    | 60,0     |
| 1218400   | R1A-1181722058 | 20  | 25  | 39,0    | 32,0    | 46,0     |
| 1218404   | R1A-1181792058 | 20  | 30  | 44,5    | 41,0    | 50,0     |
| 1218408   | R1A-1181872058 | 20  | 38  | 48,0    | 50,0    | 60,0     |
| 1218409   | R1A-1181882058 | 25  | 30  | 48,5    | 50,0    | 60,0     |
| 1218405   | R1A-1181802058 | 25  | 38  | 45,0    | 41,0    | 50,0     |
| 1218410   | R1A-1181892058 | 30  | 38  | 49,0    | 50,0    | 60,0     |

## // WEE-R

## // V1A11M906N

90° adjustable elbow connector

DIN 24° Male - BSPP cylindric Male with O-Ring and retaining ring

Light Series

WEE-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | LN (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|---------|--------|---------|---------|
| 1237323   | R1A-1144002081 | 6   | 1/8-28   | 21,0    | 14,0    | 21,0    | 29,0    | 8,0     | 13,9   | 14,0    | 14,0    |
| 1251302   | R1A-1144052081 | 8   | 1/4-19   | 23,0    | 16,0    | 26,0    | 38,0    | 12,0    | 18,9   | 17,0    | 19,0    |
| 1239975   | R1A-1144102081 | 10  | 1/4-19   | 24,0    | 17,0    | 26,0    | 38,0    | 12,0    | 18,9   | 17,0    | 19,0    |
| 1241811   | R1A-1144162081 | 12  | 1/4-19   | 24,0    | 17,0    | 26,0    | 48,0    | 12,0    | 18,9   | 17,0    | 19,0    |
| 1208112   | R1A-1144152081 | 12  | 3/8-19   | 26,0    | 19,0    | 29,0    | 41,0    | 12,0    | 21,9   | 19,0    | 22,0    |
| 1251303   | R1A-1144302081 | 22  | 3/4-14   | 35,0    | 27,5    | 39,0    | 55,0    | 16,0    | 35,9   | 27,0    | 36,0    |
| 1251304   | R1A-1144352081 | 28  | 1-11     | 40,0    | 32,5    | 50,5    | 68,5    | 18,0    | 40,9   | 41,0    | 41,0    |
| 1251305   | R1A-1144402081 | 35  | 1 1/4-11 | 46,5    | 36,0    | 56,0    | 76,0    | 20,0    | 49,9   | 50,0    | 50,0    |
| 1251306   | R1A-1144452081 | 42  | 1 1/2-11 | 51,0    | 40,0    | 57,5    | 79,5    | 22,0    | 54,9   | 50,0    | 55,0    |

## // V1A12M906N

90° adjustable elbow connector

DIN 24° Male - BSPP cylindric Male with O-Ring and retaining ring

Heavy Series

WEE-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | LN (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|---------|--------|---------|---------|
| 1237325   | R1A-1144502081 | 6   | 1/4-19   | 25,0    | 18,0    | 26,0    | 38,0    | 12,0    | 18,9   | 17,0    | 19,0    |
| 1251307   | R1A-1144552081 | 8   | 1/4-19   | 25,0    | 18,0    | 26,0    | 38,0    | 12,0    | 18,9   | 17,0    | 19,0    |
| 1251308   | R1A-1144602081 | 10  | 3/8-19   | 27,0    | 19,5    | 29,0    | 41,0    | 12,0    | 21,9   | 19,0    | 22,0    |
| 1251309   | R1A-1144652081 | 12  | 3/8-19   | 29,0    | 21,5    | 29,0    | 41,0    | 12,0    | 21,9   | 19,0    | 22,0    |
| 1231318   | R1A-1144752081 | 16  | 1/2-14   | 35,0    | 26,5    | 37,0    | 51,0    | 14,0    | 26,9   | 27,0    | 27,0    |
| 1223131   | R1A-1144802081 | 20  | 3/4-14   | 38,0    | 27,5    | 39,0    | 55,0    | 16,0    | 35,9   | 27,0    | 36,0    |
| 1237326   | R1A-1144902081 | 30  | 1 1/4-11 | 50,0    | 36,5    | 56,0    | 76,0    | 20,0    | 49,9   | 50,0    | 50,0    |
| 1237327   | R1A-1144952081 | 38  | 1 1/2-11 | 57,0    | 41,0    | 57,5    | 79,5    | 22,0    | 54,9   | 50,0    | 55,0    |

REV.2.1

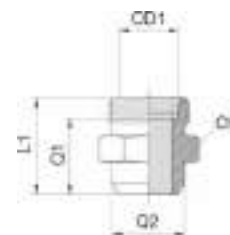
## // AS

## // V1A11M100S

Butt Weld straight coupling DIN 24°

Light Series

AS



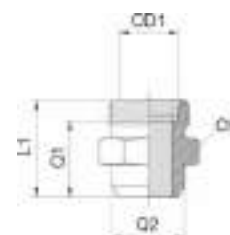
| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|
| 1224851   | R1A-0739000000 | 6   | 14,0    | 10,0    | 21,0    | 12,0    |
| 1224294   | R1A-0739050000 | 8   | 16,0    | 12,0    | 23,0    | 14,0    |
| 1224295   | R1A-0739100000 | 10  | 18,0    | 14,0    | 25,0    | 17,0    |
| 1220760   | R1A-0739150000 | 12  | 18,0    | 16,0    | 25,0    | 19,0    |
| 1220763   | R1A-0739200000 | 15  | 22,0    | 19,0    | 29,0    | 22,0    |
| 1220766   | R1A-0739250000 | 18  | 23,5    | 22,0    | 31,0    | 27,0    |
| 1224296   | R1A-0739300000 | 22  | 28,5    | 27,0    | 36,0    | 32,0    |
| 1220769   | R1A-0739350000 | 28  | 30,5    | 32,0    | 38,0    | 41,0    |
| 1224852   | R1A-0739400000 | 35  | 32,5    | 40,0    | 43,0    | 46,0    |
| 1220772   | R1A-0739450000 | 42  | 35,0    | 46,0    | 46,0    | 55,0    |

## // V1A12M100S

Butt Weld straight coupling DIN 24°

Heavy Series

AS



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|
| 1220761   | R1A-0739650000 | 12  | 24,5    | 17,0    | 32,0    | 22,0    |
| 1220762   | R1A-0739700000 | 14  | 27,0    | 19,0    | 35,0    | 24,0    |
| 1220765   | R1A-0739750000 | 16  | 26,5    | 21,0    | 35,0    | 27,0    |
| 1220767   | R1A-0739800000 | 20  | 29,5    | 26,0    | 40,0    | 32,0    |
| 1220768   | R1A-0739850000 | 25  | 32,0    | 31,0    | 44,0    | 41,0    |
| 1220770   | R1A-0739900000 | 30  | 35,5    | 36,0    | 49,0    | 46,0    |
| 1220771   | R1A-0739950000 | 38  | 38,0    | 44,0    | 54,0    | 55,0    |

## // ESV

## // V1A11M111S

Butt Weld long straight coupling DIN 24°

Light Series

ESV



| Item Code | Product Code   | OD1 | Q1 (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1220848   | R1A-0741050000 | 8   | 56,0    | 70,0    | 20,0    |
| 1220849   | R1A-0741100000 | 10  | 58,0    | 72,0    | 22,0    |
| 1220851   | R1A-0741150000 | 12  | 58,0    | 72,0    | 25,0    |
| 1220853   | R1A-0741200000 | 15  | 70,0    | 84,0    | 28,0    |
| 1220856   | R1A-0741250000 | 18  | 69,0    | 84,0    | 32,0    |
| 1220858   | R1A-0741300000 | 22  | 73,0    | 88,0    | 36,0    |
| 1220860   | R1A-0741350000 | 28  | 73,0    | 88,0    | 40,0    |
| 1220862   | R1A-0741400000 | 35  | 71,0    | 92,0    | 50,0    |
| 1220864   | R1A-0741450000 | 42  | 70,0    | 92,0    | 60,0    |

## // V1A12M112S

Butt Weld long straight coupling DIN 24°

Heavy Series

ESV



| Item Code | Product Code   | OD1 | Q1 (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1224853   | R1A-0741500000 | 6   | 60,0    | 74,0    | 20,0    |
| 1224854   | R1A-0741550000 | 8   | 60,0    | 74,0    | 22,0    |
| 1220850   | R1A-0741600000 | 10  | 59,0    | 74,0    | 25,0    |
| 1220852   | R1A-0741650000 | 12  | 59,0    | 74,0    | 28,0    |
| 1220855   | R1A-0741750000 | 16  | 71,0    | 88,0    | 35,0    |
| 1220857   | R1A-0741800000 | 20  | 71,0    | 92,0    | 38,0    |
| 1220859   | R1A-0741850000 | 25  | 72,0    | 96,0    | 45,0    |
| 1220861   | R1A-0741900000 | 30  | 73,0    | 100,0   | 50,0    |
| 1220863   | R1A-0741950000 | 38  | 72,0    | 104,0   | 60,0    |

REV.2.1

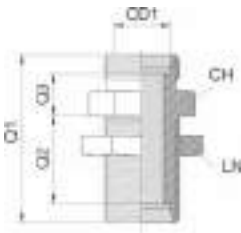
SV

V1A11T111M

Straight union DIN 24° Bulkhead

Light Series

SV



| Item Code | Product Code   | OD1 | Q1 (mm) | Q2 (mm) | Q3 (mm) | CH (mm) | LN (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|
| 1217556   | R1A-0137002066 | 6   | 48,0    | 27,0    | 7,0     | 17,0    | 17,0    |
| 1217557   | R1A-0137052066 | 8   | 49,0    | 27,0    | 8,0     | 19,0    | 19,0    |
| 1217558   | R1A-0137102066 | 10  | 52,0    | 28,0    | 10,0    | 22,0    | 22,0    |
| 1217559   | R1A-0137152066 | 12  | 53,0    | 29,0    | 10,0    | 24,0    | 24,0    |
| 1217560   | R1A-0137202066 | 15  | 57,0    | 31,0    | 12,0    | 27,0    | 30,0    |
| 1217561   | R1A-0137252066 | 18  | 61,0    | 32,5    | 13,5    | 32,0    | 36,0    |
| 1217562   | R1A-0137302066 | 22  | 66,0    | 34,5    | 16,5    | 36,0    | 41,0    |
| 1217563   | R1A-0137352066 | 28  | 69,0    | 35,5    | 18,5    | 41,0    | 46,0    |
| 1217564   | R1A-0137402066 | 35  | 76,0    | 36,5    | 18,5    | 50,0    | 55,0    |
| 1217565   | R1A-0137452066 | 42  | 77,0    | 36,0    | 19,0    | 60,0    | 65,0    |

## // SKO

## // V1A16F100S

Welding Plug with O-Ring DIN 24°

Heavy Series

SKO



| Item Code | Product Code   | OD1 | Q1 (mm) | L1 (mm) | Note              |
|-----------|----------------|-----|---------|---------|-------------------|
| 1221712   | R1A-0070619967 | 10  | 6,5     | 32,5    | FOR TUBE 10 X 1.5 |
| 1217550   | R1A-0070679967 | 12  | 8,0     | 32,5    | FOR TUBE 12 X 2   |
| 1221714   | R1A-0070669967 | 12  | 8,0     | 32,5    | FOR TUBE 12 X 1.5 |
| 1221718   | R1A-0070799967 | 16  | 10,0    | 39,0    | FOR TUBE 16 X 3   |
| 1221717   | R1A-0070779967 | 16  | 11,0    | 39,0    | FOR TUBE 16 X 2   |
| 1224672   | R1A-0070849967 | 20  | 12,0    | 45,0    | FOR TUBE 20 X 4   |
| 1222270   | R1A-0070839967 | 20  | 14,0    | 45,0    | FOR TUBE 20 X 3   |
| 1217551   | R1A-0070829967 | 20  | 14,0    | 45,0    | FOR TUBE 20 X 2.5 |
| 1221721   | R1A-0070889967 | 25  | 17,0    | 50,0    | FOR TUBE 25 X 4   |
| 1217552   | R1A-0070879967 | 25  | 18,0    | 50,0    | FOR TUBE 25 X 3   |
| 1217553   | R1A-0070939967 | 30  | 22,0    | 52,0    | FOR TUBE 30 X 4   |
| 1221723   | R1A-0070929967 | 30  | 23,0    | 52,0    | FOR TUBE 30 X 3   |
| 1217555   | R1A-0070989967 | 38  | 28,0    | 56,5    | FOR TUBE 38 X 5   |
| 1217554   | R1A-0070979967 | 38  | 30,0    | 56,5    | FOR TUBE 38 X 4   |

10mm and 12mm also Light Series.

REV.2.1

## // GAI-R

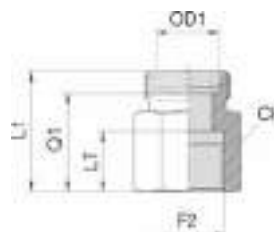
## // V1A11M106F

Straight connector

DIN 24° Male - BSPP cylindric Female

Light Series

GAI-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|
| 1218052   | R1A-0744002000 | 6   | 1/8-28   | 19,0    | 12,0    | 26,0    | 14,0    |
| 1224298   | R1A-0744032000 | 6   | 3/8-19   | 26,0    | 17,0    | 33,0    | 24,0    |
| 1218053   | R1A-0744052000 | 8   | 1/4-19   | 24,0    | 17,0    | 31,0    | 19,0    |
| 1218054   | R1A-0744072000 | 8   | 3/8-19   | 25,0    | 17,0    | 32,0    | 24,0    |
| 1218055   | R1A-0744102000 | 10  | 1/4-19   | 25,0    | 17,0    | 32,0    | 19,0    |
| 1220991   | R1A-0744122000 | 10  | 3/8-19   | 26,0    | 17,0    | 33,0    | 24,0    |
| 1249226   | R1A-0744132000 | 10  | 1/2-14   | 30,0    | 20,0    | 37,0    | 27,0    |
| 1218056   | R1A-0744152000 | 12  | 3/8-19   | 26,0    | 17,0    | 33,0    | 24,0    |
| 1220993   | R1A-0744172000 | 12  | 1/2-14   | 31,0    | 20,0    | 38,0    | 27,0    |
| 1218058   | R1A-0744212000 | 15  | 3/8-19   | 27,0    | 17,0    | 34,0    | 24,0    |
| 1218057   | R1A-0744202000 | 15  | 1/2-14   | 31,0    | 20,0    | 38,0    | 27,0    |
| 1218059   | R1A-0744252000 | 18  | 1/2-14   | 30,5    | 20,0    | 38,0    | 27,0    |
| 1218060   | R1A-0744302000 | 22  | 3/4-14   | 35,5    | 22,0    | 43,0    | 36,0    |
| 1218061   | R1A-0744352000 | 28  | 1-11     | 38,0    | 24,5    | 45,5    | 41,0    |
| 1218062   | R1A-0744402000 | 35  | 1 1/4-11 | 41,0    | 26,5    | 51,5    | 55,0    |
| 1218063   | R1A-0744452000 | 42  | 1 1/2-11 | 42,5    | 28,5    | 53,5    | 60,0    |

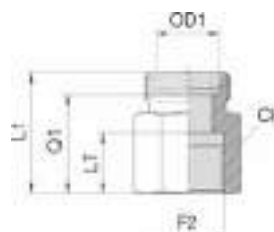
## // V1A12M106F

Straight connector

DIN 24° Male - BSPP cylindric Female

Heavy Series

GAI-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|
| 1218064   | R1A-0744502000 | 6   | 1/4-19   | 26,0    | 17,0    | 33,0    | 19,0    |
| 1218065   | R1A-0744552000 | 8   | 1/4-19   | 26,0    | 17,0    | 33,0    | 19,0    |
| 1218066   | R1A-0744602000 | 10  | 3/8-19   | 26,5    | 17,0    | 34,0    | 24,0    |
| 1218067   | R1A-0744652000 | 12  | 3/8-19   | 26,5    | 17,0    | 34,0    | 24,0    |
| 1218068   | R1A-0744702000 | 14  | 1/2-14   | 32,0    | 20,0    | 40,0    | 27,0    |
| 1218069   | R1A-0744752000 | 16  | 1/2-14   | 31,5    | 20,0    | 40,0    | 27,0    |
| 1218070   | R1A-0744802000 | 20  | 3/4-14   | 34,5    | 22,0    | 45,0    | 36,0    |
| 1218071   | R1A-0744852000 | 25  | 1-11     | 37,5    | 24,5    | 49,5    | 41,0    |
| 1221000   | R1A-0744902000 | 30  | 1 1/4-11 | 42,0    | 26,5    | 55,5    | 55,0    |
| 1218072   | R1A-0744952000 | 38  | 1 1/2-11 | 43,5    | 28,5    | 59,5    | 60,0    |

## // GAI-M

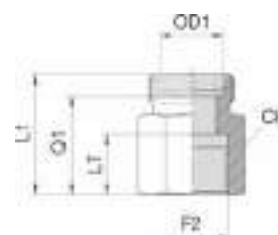
## // V1A11M150F

Straight connector

DIN 24° Male - Metric Female

Light Series

GAI-M



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|
| 1218047   | R1A-0743002000 | 6   | M10X1.0 | 19,5    | 12,5    | 26,5    | 14,0    |
| 1220994   | R1A-0743152000 | 12  | M16X1.5 | 26,0    | 17,0    | 33,0    | 22,0    |
| 1220998   | R1A-0743202000 | 15  | M18X1.5 | 28,0    | 17,0    | 35,0    | 24,0    |
| 1218048   | R1A-0743252000 | 18  | M22X1.5 | 29,5    | 19,0    | 37,0    | 30,0    |

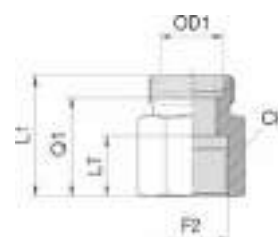
## // V1A12M150F

Straight connector

DIN 24° Male - Metric Female

Heavy Series

GAI-M



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|
| 1218049   | R1A-0743552000 | 8   | M14X1.5 | 26,0    | 17,0    | 33,0    | 19,0    |
| 1220992   | R1A-0743602000 | 10  | M16X1.5 | 26,5    | 17,0    | 34,0    | 22,0    |
| 1220996   | R1A-0743652000 | 12  | M18X1.5 | 27,5    | 17,0    | 35,0    | 24,0    |

REV.2.1

## // MAV-R

## // V1A11M106C

Gauge Coupling

DIN 24° Male

Light Series

MAV-R



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|---------|
| 1217589   | R1A-0142002081 | 6   | 1/4-19 | 7,5     | 4,6     | 18,8    | 14,5    | 29,0    | 19,0    |
| 1217590   | R1A-0142052081 | 8   | 1/4-19 | 7,5     | 4,6     | 18,8    | 14,5    | 29,0    | 19,0    |
| 1217593   | R1A-0142102081 | 10  | 1/4-19 | 8,5     | 4,6     | 18,8    | 14,5    | 30,0    | 19,0    |
| 1217596   | R1A-0142152081 | 12  | 1/4-19 | 8,5     | 4,6     | 18,8    | 14,5    | 30,0    | 19,0    |

## // V1A12M106C

Gauge Coupling

DIN 24° Male

Heavy Series

MAV-R



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|---------|
| 1221372   | R1A-0142502081 | 6   | 1/2-14 | 11,0    | 5,2     | 26,8    | 20,0    | 38,0    | 27,0    |
| 1217599   | R1A-0142552081 | 8   | 1/2-14 | 11,0    | 5,2     | 26,8    | 20,0    | 38,0    | 27,0    |
| 1217600   | R1A-0142602081 | 10  | 1/2-14 | 10,5    | 5,2     | 26,8    | 20,0    | 38,0    | 27,0    |
| 1217603   | R1A-0142662081 | 12  | 1/4-19 | 9,0     | 4,6     | 21,8    | 14,5    | 31,0    | 22,0    |
| 1217602   | R1A-0142652081 | 12  | 1/2-14 | 10,5    | 5,2     | 26,8    | 20,0    | 38,0    | 27,0    |

## // MAVE-R

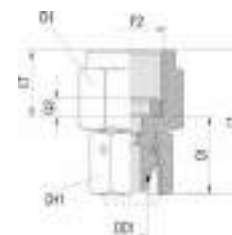
## // V1A152106C

Gauge Coupling

DIN 24° Female with O-Ring

Light Series

MAVE-R



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | LT (mm) | L1 (mm) | CH (mm) | CH1 (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|----------|
| 1224297   | R1A-1142002058 | 6   | 1/4-19 | 23,0    | 4,6     | 14,5    | 37,5    | 19,0    | 14,0     |
| 1218157   | R1A-1142052058 | 8   | 1/4-19 | 23,0    | 4,6     | 14,5    | 37,5    | 19,0    | 17,0     |
| 1224856   | R1A-1142102058 | 10  | 1/4-19 | 21,5    | 4,6     | 14,5    | 36,0    | 19,0    | 19,0     |

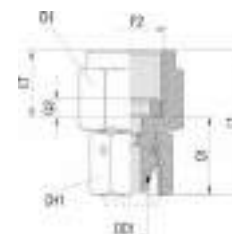
## // V1A162106C

Gauge Coupling

DIN 24° Female with O-Ring

Heavy Series

MAVE-R



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | LT (mm) | L1 (mm) | CH (mm) | CH1 (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|----------|
| 1249281   | R1A-1142662058 | 12  | 1/4-19 | 24,5    | 4,6     | 14,5    | 39,0    | 19,0    | 24,0     |

REV.2.1

## // RI-ED

## // V1A06F106I

Straight connector

BSPP Female - Male with elastomer

RI-ED



| Item Code | Product Code   | F1       | F2       | LT (mm) | G (mm) | L1 (mm) | CH (mm) | Note |
|-----------|----------------|----------|----------|---------|--------|---------|---------|------|
| 1218159   | R1A-1149012000 | 1/4-19   | 1/8-28   | 8,0     | 13,9   | 32,5    | 19,0    | B    |
| 1218158   | R1A-1149002000 | 3/8-19   | 1/8-28   | 8,0     | 13,9   | 33,5    | 24,0    | B    |
| 1218163   | R1A-1149052000 | 1/8-28   | 1/4-19   | 12,0    | 18,9   | 31,5    | 19,0    | B    |
| 1218162   | R1A-1149042000 | 3/8-19   | 1/4-19   | 12,0    | 18,9   | 37,5    | 24,0    | B    |
| 1218161   | R1A-1149032000 | 1/2-14   | 1/4-19   | 12,0    | 18,9   | 41,5    | 30,0    | B    |
| 1218160   | R1A-1149022000 | 3/4-14   | 1/4-19   | 12,0    | 18,9   | 44,5    | 36,0    | B    |
| 1218167   | R1A-1149092000 | 1/8-28   | 3/8-19   | 12,0    | 21,9   | 22,5    | 22,0    | A    |
| 1218166   | R1A-1149082000 | 1/4-19   | 3/8-19   | 12,0    | 21,9   | 37,5    | 22,0    | B    |
| 1218165   | R1A-1149072000 | 1/2-14   | 3/8-19   | 12,0    | 21,9   | 42,5    | 30,0    | B    |
| 1218164   | R1A-1149062000 | 3/4-14   | 3/8-19   | 12,0    | 21,9   | 45,5    | 36,0    | B    |
| 1218173   | R1A-1149152000 | 1/8-28   | 1/2-14   | 14,0    | 26,9   | 24,0    | 27,0    | A    |
| 1218172   | R1A-1149142000 | 1/4-19   | 1/2-14   | 14,0    | 26,9   | 24,0    | 27,0    | A    |
| 1218171   | R1A-1149132000 | 3/8-19   | 1/2-14   | 14,0    | 26,9   | 37,5    | 27,0    | B    |
| 1218170   | R1A-1149122000 | 3/4-14   | 1/2-14   | 14,0    | 26,9   | 47,5    | 36,0    | B    |
| 1218169   | R1A-1149112000 | 1-11     | 1/2-14   | 14,0    | 26,9   | 50,5    | 41,0    | B    |
| 1218168   | R1A-1149102000 | 1 1/2-11 | 1/2-14   | 14,0    | 26,9   | 54,5    | 55,0    | B    |
| 1218178   | R1A-1149202000 | 3/8-19   | 3/4-14   | 16,0    | 31,9   | 26,0    | 32,0    | A    |
| 1218179   | R1A-1149212000 | 1/4-19   | 3/4-14   | 16,0    | 31,9   | 26,0    | 32,0    | A    |
| 1218177   | R1A-1149192000 | 1/2-14   | 3/4-14   | 16,0    | 31,9   | 42,5    | 32,0    | B    |
| 1218176   | R1A-1149182000 | 1-11     | 3/4-14   | 16,0    | 31,9   | 52,5    | 41,0    | B    |
| 1218175   | R1A-1149172000 | 1 1/2-11 | 3/4-14   | 16,0    | 31,9   | 56,5    | 55,0    | B    |
| 1218174   | R1A-1149162000 | 1 1/4-11 | 3/4-14   | 16,0    | 31,9   | 58,5    | 60,0    | B    |
| 1218184   | R1A-1149262000 | 3/8-19   | 1-11     | 18,0    | 39,9   | 29,0    | 41,0    | A    |
| 1218183   | R1A-1149252000 | 1/2-14   | 1-11     | 18,0    | 39,9   | 29,0    | 41,0    | A    |
| 1218185   | R1A-1149272000 | 1/4-19   | 1-11     | 18,0    | 39,9   | 29,0    | 41,0    | A    |
| 1218182   | R1A-1149242000 | 3/4-14   | 1-11     | 18,0    | 39,9   | 49,0    | 41,0    | B    |
| 1218181   | R1A-1149232000 | 1 1/2-11 | 1-11     | 18,0    | 39,9   | 59,0    | 55,0    | B    |
| 1218180   | R1A-1149222000 | 1 1/4-11 | 1-11     | 18,0    | 39,9   | 61,0    | 60,0    | B    |
| 1218189   | R1A-1149312000 | 1/2-14   | 1 1/4-11 | 20,0    | 49,9   | 32,0    | 50,0    | A    |
| 1218188   | R1A-1149302000 | 3/4-14   | 1 1/4-11 | 20,0    | 49,9   | 32,0    | 50,0    | A    |
| 1218187   | R1A-1149292000 | 1-11     | 1 1/4-11 | 20,0    | 49,9   | 54,0    | 50,0    | B    |
| 1218186   | R1A-1149282000 | 1 1/4-11 | 1 1/4-11 | 20,0    | 49,9   | 62,0    | 60,0    | B    |
| 1218191   | R1A-1149332000 | 1-11     | 1 1/2-11 | 22,0    | 54,9   | 36,0    | 55,0    | A    |
| 1218193   | R1A-1149352000 | 1/2-14   | 1 1/2-11 | 22,0    | 54,9   | 36,0    | 55,0    | A    |
| 1218192   | R1A-1149342000 | 3/4-14   | 1 1/2-11 | 22,0    | 54,9   | 36,0    | 55,0    | A    |
| 1218190   | R1A-1149322000 | 1 1/4-11 | 1 1/2-11 | 22,0    | 54,9   | 60,0    | 55,0    | B    |

## // RI

## // V1A06F106M

Straight connector

BSPP Female - Male

RI



| Item Code | Product Code   | F1       | F2       | Q1 (mm) | LT (mm) | G (mm) | L1 (mm) | CH (mm) | Note |
|-----------|----------------|----------|----------|---------|---------|--------|---------|---------|------|
| 1217661   | R1A-0149012000 | 1/4-19   | 1/8-28   | 17,0    | 8,0     | 14,0   | 31,0    | 19,0    | B    |
| 1217660   | R1A-0149002000 | 3/8-19   | 1/8-28   | 17,0    | 8,0     | 14,0   | 32,0    | 24,0    | B    |
| 1217662   | R1A-0149022000 | 3/4-14   | 1/4-19   | 22,0    | 12,0    | 18,0   | 32,0    | 36,0    | B    |
| 1217663   | R1A-0149032000 | 1/2-14   | 1/4-19   | 20,0    | 12,0    | 18,0   | 32,0    | 27,0    | B    |
| 1217665   | R1A-0149052000 | 1/8-28   | 1/4-19   | 13,0    | 12,0    | 18,0   | 32,0    | 19,0    | B    |
| 1217664   | R1A-0149042000 | 3/8-19   | 1/4-19   | 17,0    | 12,0    | 18,0   | 32,0    | 24,0    | B    |
| 1217667   | R1A-0149072000 | 1/2-14   | 3/8-19   | 20,0    | 12,0    | 22,0   | 32,0    | 27,0    | B    |
| 1217668   | R1A-0149082000 | 1/4-19   | 3/8-19   | 17,0    | 12,0    | 22,0   | 32,0    | 22,0    | B    |
| 1217666   | R1A-0149062000 | 3/4-14   | 3/8-19   | 22,0    | 12,0    | 22,0   | 32,0    | 36,0    | B    |
| 1217669   | R1A-0149092000 | 1/8-28   | 3/8-19   | 8,0     | 12,0    | 22,0   | 32,0    | 22,0    | A    |
| 1217670   | R1A-0149112000 | 1-11     | 1/2-14   | 24,5    | 14,0    | 26,0   | 32,0    | 41,0    | B    |
| 1217671   | R1A-0149122000 | 3/4-14   | 1/2-14   | 22,0    | 14,0    | 26,0   | 32,0    | 36,0    | B    |
| 1217674   | R1A-0149152000 | 1/8-28   | 1/2-14   | 8,0     | 14,0    | 26,0   | 32,0    | 27,0    | A    |
| 1221627   | R1A-0149102000 | 1 1/2-11 | 1/2-14   | 26,5    | 14,0    | 26,0   | 32,0    | 55,0    | B    |
| 1217673   | R1A-0149142000 | 1/4-19   | 1/2-14   | 12,0    | 14,0    | 26,0   | 32,0    | 27,0    | A    |
| 1217672   | R1A-0149132000 | 3/8-19   | 1/2-14   | 17,0    | 14,0    | 26,0   | 32,0    | 27,0    | B    |
| 1217676   | R1A-0149182000 | 1-11     | 3/4-14   | 24,5    | 16,0    | 32,0   | 32,0    | 41,0    | B    |
| 1217679   | R1A-0149212000 | 1/4-19   | 3/4-14   | 12,0    | 16,0    | 32,0   | 32,0    | 32,0    | A    |
| 1221628   | R1A-0149172000 | 1 1/2-11 | 3/4-14   | 26,5    | 16,0    | 32,0   | 32,0    | 55,0    | B    |
| 1217675   | R1A-0149162000 | 1 1/4-11 | 3/4-14   | 28,5    | 16,0    | 32,0   | 32,0    | 60,0    | B    |
| 1217678   | R1A-0149202000 | 3/8-19   | 3/4-14   | 12,0    | 16,0    | 32,0   | 32,0    | 32,0    | A    |
| 1217677   | R1A-0149192000 | 1/2-14   | 3/4-14   | 20,0    | 16,0    | 32,0   | 32,0    | 32,0    | B    |
| 1217684   | R1A-0149262000 | 3/8-19   | 1-11     | 12,0    | 18,0    | 39,0   | 32,0    | 41,0    | A    |
| 1217680   | R1A-0149222000 | 1 1/4-11 | 1-11     | 28,5    | 18,0    | 39,0   | 32,0    | 60,0    | B    |
| 1217685   | R1A-0149272000 | 1/4-19   | 1-11     | 12,0    | 18,0    | 39,0   | 32,0    | 41,0    | A    |
| 1217683   | R1A-0149252000 | 1/2-14   | 1-11     | 14,0    | 18,0    | 39,0   | 32,0    | 41,0    | A    |
| 1217682   | R1A-0149242000 | 3/4-14   | 1-11     | 22,0    | 18,0    | 39,0   | 32,0    | 41,0    | B    |
| 1217681   | R1A-0149232000 | 1 1/2-11 | 1-11     | 26,5    | 18,0    | 39,0   | 32,0    | 55,0    | B    |
| 1221632   | R1A-0149282000 | 1 1/4-11 | 1 1/4-11 | 28,5    | 20,0    | 49,0   | 32,0    | 60,0    | B    |
| 1221633   | R1A-0149292000 | 1-11     | 1 1/4-11 | 24,5    | 20,0    | 49,0   | 32,0    | 50,0    | B    |
| 1221631   | R1A-0149302000 | 3/4-14   | 1 1/4-11 | 16,0    | 20,0    | 49,0   | 32,0    | 50,0    | A    |
| 1221630   | R1A-0149312000 | 1/2-14   | 1 1/4-11 | 14,0    | 20,0    | 49,0   | 32,0    | 50,0    | A    |
| 1221629   | R1A-0149352000 | 1/2-14   | 1 1/2-11 | 14,0    | 22,0    | 55,0   | 32,0    | 55,0    | A    |
| 1217688   | R1A-0149342000 | 3/4-14   | 1 1/2-11 | 16,0    | 22,0    | 55,0   | 32,0    | 55,0    | A    |
| 1217687   | R1A-0149332000 | 1-11     | 1 1/2-11 | 18,0    | 22,0    | 55,0   | 32,0    | 55,0    | A    |
| 1217686   | R1A-0149322000 | 1 1/2-11 | 1 1/2-11 | 26,5    | 22,0    | 55,0   | 32,0    | 55,0    | B    |

REV.2.1

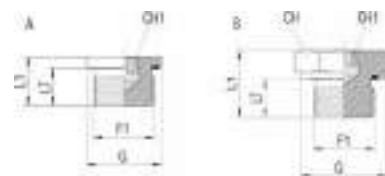
## // VSTI-R-ED

## // V1A06I000Z

Blanking Screw

BSPP Male with elastomer

VSTI-R-ED

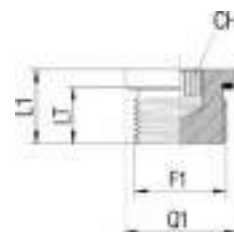


| Item Code | Product Code   | F1       | LT (mm) | G (mm) | L1 (mm) | CH (mm) | CH1 (mm) | Note |
|-----------|----------------|----------|---------|--------|---------|---------|----------|------|
| 1217774   | R1A-0189332100 | 1/8-28   | 8,0     | 14,0   | 12,3    |         | 5,0      | A    |
| 1217775   | R1A-0189342100 | 1/4-19   | 12,0    | 18,9   | 17,3    |         | 6,0      | A    |
| 1217776   | R1A-0189352100 | 3/8-19   | 12,0    | 22,0   | 17,3    |         | 8,0      | A    |
| 1217777   | R1A-0189362100 | 1/2-14   | 14,0    | 26,9   | 19,3    |         | 10,0     | A    |
| 1217778   | R1A-0189372100 | 3/4-14   | 16,0    | 32,0   | 21,3    |         | 12,0     | A    |
| 1217779   | R1A-0189382100 | 1-11     | 16,0    | 39,9   | 22,8    |         | 17,0     | A    |
| 1217780   | R1A-0189392100 | 1 1/4-11 | 16,0    | 49,9   | 22,8    |         | 22,0     | A    |
| 1217781   | R1A-0189402000 | 1 1/2-11 | 16,0    | 55,0   | 22,8    |         | 24,0     | A    |
| 1237312   | R1A-1189392100 | 1 1/4-11 | 20,0    | 57,0   | 38,0    | 60,0    | 22,0     | B    |
| 1251212   | R1A-1189402100 | 1 1/2-11 | 22,0    | 64,0   | 40,0    | 65,0    | 24,0     | B    |

## // VSTI-M

## // V1A50I0000

Socket head plug Metric cylindric with elastomer  
VSTI-M



| Item Code | Product Code   | F1      | Q1 (mm) | LT (mm) | L1 (mm) | CH (mm) |
|-----------|----------------|---------|---------|---------|---------|---------|
| 1221843   | R1A-0189142100 | M8X1.0  | 12,0    | 8,0     | 12,3    | 4,0     |
| 1204050   | R1A-0189202100 | M10X1.0 | 14,0    | 8,0     | 12,3    | 5,0     |
| 1206352   | R1A-0189212100 | M12X1.5 | 17,0    | 12,0    | 17,3    | 6,0     |
| 1204051   | R1A-0189222100 | M14X1.5 | 19,0    | 12,0    | 17,3    | 6,0     |
| 1204052   | R1A-0189232100 | M16X1.5 | 21,9    | 12,0    | 17,3    | 8,0     |
| 1236997   | R1A-0189242100 | M18X1.5 | 23,9    | 12,0    | 17,3    | 8,0     |
| 1204054   | R1A-0189252100 | M20X1.5 | 25,9    | 14,0    | 19,3    | 10,0    |
| 1204055   | R1A-0189262100 | M22X1.5 | 27,0    | 14,0    | 19,3    | 10,0    |
| 1222991   | R1A-0189272100 | M24X1.5 | 29,9    | 14,0    | 19,3    | 12,0    |
| 1204056   | R1A-0189282100 | M26X1.5 | 31,9    | 16,0    | 21,3    | 12,0    |
| 1237317   | R1A-0189292100 | M27X2   | 32,0    | 16,0    | 21,3    | 12,0    |
| 1221842   | R1A-0189302100 | M33X2.0 | 46,0    | 16,0    | 22,8    | 17,0    |
| 1236998   | R1A-0189312100 | M42X2   | 49,9    | 16,0    | 22,8    | 22,0    |
| 1231289   | R1A-0189322100 | M48X2.0 | 55,0    | 16,0    | 22,8    | 24,0    |

REV.2.1

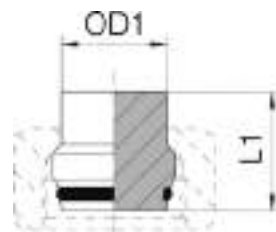
## // PL-DKO

## // V1A15F0000

Plug with O-Ring 24° DIN 2353

Light Series

PL/DKO



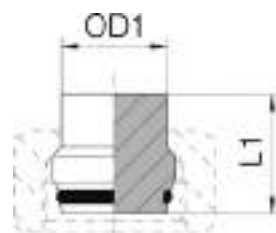
| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1237314   | R1A-1793142058 | 6   | 18,5    |
| 1237082   | R1A-1793152058 | 8   | 19,0    |
| 1237083   | R1A-1793162058 | 10  | 21,0    |
| 1231398   | R1A-1793172058 | 12  | 20,5    |
| 1231394   | R1A-1793082058 | 15  | 20,5    |
| 1237313   | R1A-1793092058 | 18  | 23,5    |
| 1231395   | R1A-1793102058 | 22  | 26,0    |
| 1237081   | R1A-1793112058 | 28  | 26,5    |
| 1231396   | R1A-1793122058 | 35  | 32,0    |
| 1231397   | R1A-1793132058 | 42  | 32,5    |

## // V1A16F0000

Plug with O-Ring 24° DIN 2353

Heavy Series

PL/DKO



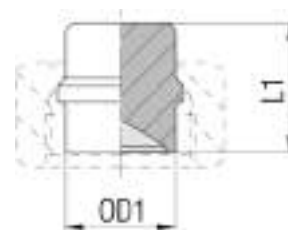
| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1237084   | R1A-1793182058 | 14  | 24,0    |
| 1231399   | R1A-1793192058 | 16  | 25,0    |
| 1231400   | R1A-1793202058 | 20  | 30,5    |
| 1231401   | R1A-1793212058 | 25  | 32,5    |
| 1231402   | R1A-1793222058 | 30  | 35,5    |

## // PL

## // V1A11M000Z

Blanking Plug DIN 24°

Light Series

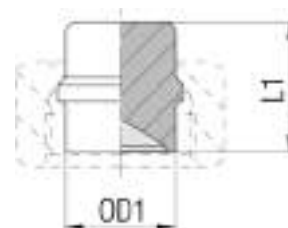


| Item Code | Product Code   | OD1 | F1      | L1 (mm) |
|-----------|----------------|-----|---------|---------|
| 1218140   | R1A-0793652000 | 6   | M12X1.5 | 19,5    |
| 1218141   | R1A-0793662000 | 8   | M14X1.5 | 19,5    |
| 1218142   | R1A-0793672000 | 10  | M16X1.5 | 21,0    |
| 1218143   | R1A-0793682000 | 12  | M18X1.5 | 21,8    |
| 1218144   | R1A-0793692000 | 15  | M22X1.5 | 22,0    |
| 1218145   | R1A-0793702000 | 18  | M26X1.5 | 24,0    |
| 1218146   | R1A-0793712000 | 22  | M30X2   | 26,0    |
| 1218147   | R1A-0793722000 | 28  | M36X2   | 26,5    |
| 1218148   | R1A-0793732000 | 35  | M45X2   | 32,0    |
| 1218149   | R1A-0793742000 | 42  | M52X2   | 32,5    |

## // V1A12M000Z

Blanking Plug DIN 24°

Heavy Series



| Item Code | Product Code   | OD1 | F1      | L1 (mm) |
|-----------|----------------|-----|---------|---------|
| 1218150   | R1A-0793792000 | 14  | M22X1.5 | 23,5    |
| 1218151   | R1A-0793802000 | 16  | M24X1.5 | 25,5    |
| 1218152   | R1A-0793812000 | 20  | M30X2   | 30,5    |
| 1218153   | R1A-0793822000 | 25  | M36X2   | 32,5    |
| 1218154   | R1A-0793832000 | 30  | M42X2   | 35,5    |
| 1218155   | R1A-0793842000 | 38  | M52X2   | 40,0    |

REV.2.1

## // ROV

## // V1A11M0000

Tube blanking screw DIN 24°

Light Series

ROV



| Item Code | Product Code   | OD1 | F1      | Q1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1204202   | R1A-0793342000 | 6   | M12X1.5 | 7,0     | 12,0    |
| 1204203   | R1A-0793352000 | 8   | M14X1.5 | 8,0     | 14,0    |
| 1206565   | R1A-0793362000 | 10  | M16X1.5 | 9,0     | 17,0    |
| 1206564   | R1A-0793372000 | 12  | M18X1.5 | 10,0    | 19,0    |
| 1206567   | R1A-0793382000 | 15  | M22X1.5 | 11,0    | 24,0    |
| 1204195   | R1A-0793392000 | 18  | M26X1.5 | 11,5    | 27,0    |
| 1204196   | R1A-0793402000 | 22  | M30X2   | 13,5    | 32,0    |
| 1204198   | R1A-0793412000 | 28  | M36X2   | 14,5    | 41,0    |
| 1204200   | R1A-0793422000 | 35  | M45X2   | 14,5    | 46,0    |

## // V1A12M0000

Tube blanking screw DIN 24°

Heavy Series

ROV



| Item Code | Product Code   | OD1 | F1      | Q1 (mm) | CH (mm) |
|-----------|----------------|-----|---------|---------|---------|
| 1207853   | R1A-0793442000 | 6   | M14X1.5 | 11,0    | 14,0    |
| 1206994   | R1A-0793452000 | 8   | M16X1.5 | 13,0    | 17,0    |
| 1206989   | R1A-0793462000 | 10  | M18X1.5 | 12,5    | 19,0    |
| 1206990   | R1A-0793472000 | 12  | M20X1.5 | 14,5    | 22,0    |
| 1224864   | R1A-0793482000 | 14  | M22X1.5 | 16,0    | 24,0    |
| 1211264   | R1A-0793492000 | 16  | M24X1.5 | 15,5    | 27,0    |
| 1206992   | R1A-0793502000 | 20  | M30X2   | 17,5    | 32,0    |
| 1204197   | R1A-0793512000 | 25  | M36X2   | 20,0    | 41,0    |
| 1204199   | R1A-0793522000 | 30  | M42X2   | 20,5    | 46,0    |
| 1204201   | R1A-0793532000 | 38  | M52X2   | 23,0    | 55,0    |

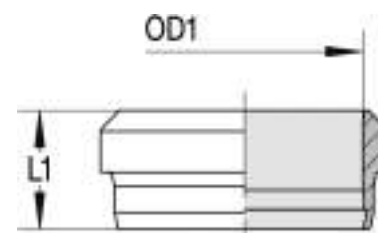
## // D2S

## // V1A32R0000

Double cutting ring DIN 24°

Extra Light Series

D2S



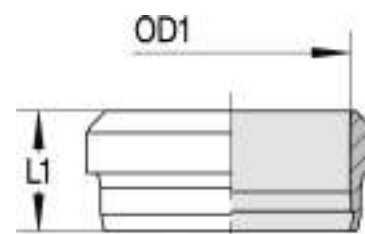
| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1205458   | R1A-0006102000 | 6   | 7,8     |
| 1237309   | R1A-0006152000 | 8   | 7,8     |

## // V1A11R0000

Double cutting ring DIN 24°

Light Series

D2S



| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1236905   | R1A-0019002100 | 6   | 9,2     |
| 1237342   | R1A-0019052100 | 8   | 9,2     |
| 1237328   | R1A-0019102100 | 10  | 10,0    |
| 1237329   | R1A-0019152100 | 12  | 10,0    |
| 1237331   | R1A-0019202100 | 15  | 10,2    |
| 1237333   | R1A-0019252100 | 18  | 10,5    |
| 1237335   | R1A-0019302100 | 22  | 11,2    |
| 1237337   | R1A-0019352100 | 28  | 11,2    |
| 1237339   | R1A-0019402100 | 35  | 13,4    |
| 1237341   | R1A-0019452100 | 42  | 13,4    |

Codes from 6 to 12 mm also Heavy Series.

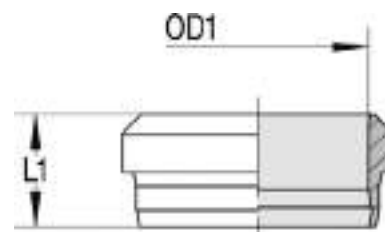
REV.2.1

## // V1A12R0000

Double cutting ring DIN 24°

Heavy Series

D2S



| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1237330   | R1A-0019702100 | 14  | 10,2    |
| 1237332   | R1A-0019752100 | 16  | 10,2    |
| 1237334   | R1A-0019802100 | 20  | 13,0    |
| 1237336   | R1A-0019852100 | 25  | 13,0    |
| 1237338   | R1A-0019902100 | 30  | 13,6    |
| 1237340   | R1A-0019952100 | 38  | 13,5    |

Codes from 6 to 12 mm same as Light Series ones.

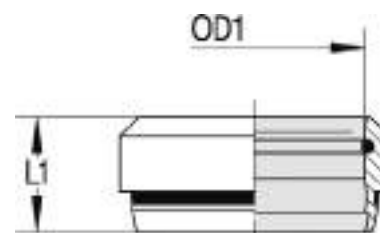
## // ES4

## // V1A11R000B

Double cutting ring with tight sealing DIN 24°

Light Series

ES4



| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1217225   | R1A-0011002039 | 6   | 8,8     |
| 1217226   | R1A-0011052039 | 8   | 8,8     |
| 1217228   | R1A-0011102039 | 10  | 9,8     |
| 1217230   | R1A-0011152039 | 12  | 9,8     |
| 1217232   | R1A-0011202039 | 15  | 10,2    |
| 1217234   | R1A-0011252039 | 18  | 10,2    |
| 1217235   | R1A-0011302039 | 22  | 11,5    |
| 1217237   | R1A-0011352039 | 28  | 11,5    |
| 1221702   | R1A-0011402039 | 35  | 13,5    |
| 1217239   | R1A-0011452039 | 42  | 13,5    |

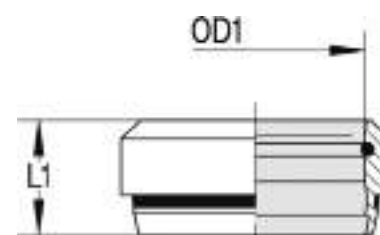
Codes from 6 to 12 mm also Heavy Series.

## // V1A12R000B

Double cutting ring with tight sealing DIN 24°

Heavy Series

ES4



| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1221700   | R1A-0011802039 | 20  | 12,5    |
| 1221701   | R1A-0011852039 | 25  | 12,5    |
| 1222403   | R1A-0011902039 | 30  | 13,5    |
| 1217244   | R1A-0011952039 | 38  | 13,5    |

Codes from 6 to 12 mm same as Light Series ones.

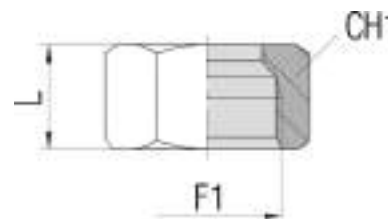
REV.2.1

## // M - NUT

## // VXA32D0000

Nut DIN 24°

Extra Light Series

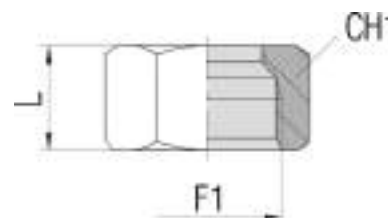


| Item Code | Product Code   | OD1 | F1    | L (mm) | CH1 (mm) |
|-----------|----------------|-----|-------|--------|----------|
| 1237315   | R1A-0003002100 | 4   | M8X1  | 11,0   | 10,0     |
| 1221352   | R1A-0003052100 | 5   | M10X1 | 11,5   | 12,0     |
| 1253158   | R1A-0003102100 | 6   | M10X1 | 11,5   | 12,0     |
| 1237316   | R1A-0003152100 | 8   | M12X1 | 12,0   | 14,0     |

## // VXA11D0000

Nut DIN 24°

Light Series

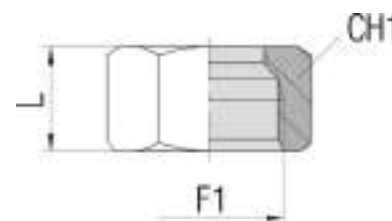


| Item Code | Product Code   | OD1 | F1      | L (mm) | CH1 (mm) |
|-----------|----------------|-----|---------|--------|----------|
| 1237359   | R1A-0004002100 | 6   | M12X1.5 | 14,5   | 14,0     |
| 1237360   | R1A-0004052100 | 8   | M14X1.5 | 15,5   | 17,0     |
| 1237343   | R1A-0004102100 | 10  | M16X1.5 | 15,5   | 19,0     |
| 1237345   | R1A-0004152100 | 12  | M18X1.5 | 15,5   | 22,0     |
| 1237348   | R1A-0004202100 | 15  | M22X1.5 | 17,0   | 27,0     |
| 1237350   | R1A-0004252100 | 18  | M26X1.5 | 18,0   | 32,0     |
| 1237352   | R1A-0004302100 | 22  | M30X2   | 20,0   | 36,0     |
| 1237354   | R1A-0004352100 | 28  | M36X2   | 21,0   | 41,0     |
| 1237356   | R1A-0004402100 | 35  | M45X2   | 24,0   | 50,0     |
| 1237358   | R1A-0004452100 | 42  | M52X2   | 24,0   | 60,0     |

## // VXA12D0000

Nut DIN 24°

Heavy Series



| Item Code | Product Code   | OD1 | F1      | L (mm) | CH1 (mm) |
|-----------|----------------|-----|---------|--------|----------|
| 1236904   | R1A-0004502100 | 6   | M14X1.5 | 16,5   | 17,0     |
| 1237361   | R1A-0004552100 | 8   | M16X1.5 | 16,5   | 19,0     |
| 1237344   | R1A-0004602100 | 10  | M18X1.5 | 17,5   | 22,0     |
| 1237346   | R1A-0004652100 | 12  | M20X1.5 | 17,5   | 24,0     |
| 1237347   | R1A-0004702100 | 14  | M22X1.5 | 20,5   | 27,0     |
| 1237349   | R1A-0004752100 | 16  | M24X1.5 | 20,5   | 30,0     |
| 1237351   | R1A-0004802100 | 20  | M30X2   | 24,0   | 36,0     |
| 1237353   | R1A-0004852100 | 25  | M36X2   | 27,0   | 46,0     |
| 1237355   | R1A-0004902100 | 30  | M42X2   | 29,0   | 50,0     |
| 1237357   | R1A-0004952100 | 38  | M52X2   | 32,5   | 60,0     |

REV.2.1

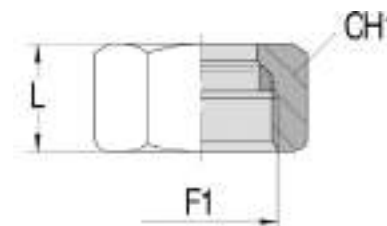
## // M SQR

## // VXA11D000V

Nut DIN 24° with clamping ring and seal

Light Series

VOSSForm



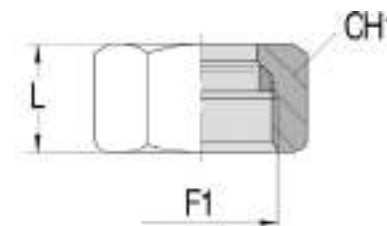
| Item Code | Product Code   | OD1 | F1      | L (mm) | CH1 (mm) |
|-----------|----------------|-----|---------|--------|----------|
| 1217245   | R1A-0015502167 | 6   | M12X1.5 | 14,5   | 14,0     |
| 1217246   | R1A-0015512167 | 8   | M14X1.5 | 14,5   | 17,0     |
| 1217247   | R1A-0015522167 | 10  | M16X1.5 | 15,5   | 19,0     |
| 1221357   | R1A-0015532167 | 12  | M18X1.5 | 15,5   | 22,0     |
| 1217248   | R1A-0015542167 | 15  | M22X1.5 | 17,0   | 27,0     |
| 1217249   | R1A-0015552167 | 18  | M26X1.5 | 18,0   | 32,0     |
| 1217250   | R1A-0015562167 | 22  | M30X2   | 20,0   | 36,0     |
| 1217251   | R1A-0015572167 | 28  | M36X2   | 21,0   | 41,0     |
| 1217252   | R1A-0015582167 | 35  | M45X2   | 24,0   | 50,0     |
| 1217253   | R1A-0015592167 | 42  | M52X2   | 24,0   | 60,0     |

## // VXA12D000V

Nut DIN 24° with clamping ring and seal

Heavy Series

VOSSForm



| Item Code | Product Code   | OD1 | F1      | L (mm) | CH1 (mm) |
|-----------|----------------|-----|---------|--------|----------|
| 1217254   | R1A-0015602167 | 6   | M14X1.5 | 16,5   | 17,0     |
| 1217255   | R1A-0015612167 | 8   | M16X1.5 | 16,5   | 19,0     |
| 1217256   | R1A-0015622167 | 10  | M18X1.5 | 17,5   | 22,0     |
| 1217257   | R1A-0015632167 | 12  | M20X1.5 | 17,5   | 24,0     |
| 1217259   | R1A-0015652167 | 16  | M24X1.5 | 20,5   | 30,0     |
| 1217260   | R1A-0015662167 | 20  | M30X2   | 24,0   | 36,0     |
| 1217261   | R1A-0015672167 | 25  | M36X2   | 27,0   | 46,0     |
| 1217262   | R1A-0015682167 | 30  | M42X2   | 29,0   | 50,0     |
| 1217263   | R1A-0015692167 | 38  | M52X2   | 32,5   | 60,0     |

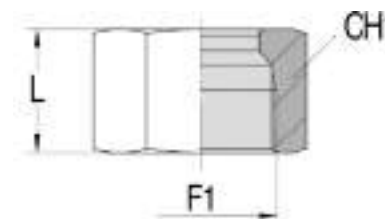
## // M BV10

## // VXA11D00BV

Nut DIN 24°

Light Series

BV10



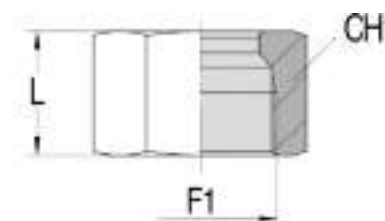
| Item Code | Product Code   | OD1 | F1      | L (mm) | CH1 (mm) |
|-----------|----------------|-----|---------|--------|----------|
| 1221355   | R1A-0032102100 | 10  | M16X1.5 | 18,8   | 19,0     |
| 1217336   | R1A-0032202100 | 15  | M22X1.5 | 20,3   | 27,0     |
| 1217337   | R1A-0032252100 | 18  | M26X1.5 | 21,3   | 32,0     |
| 1234951   | R1A-0032302100 | 22  | M30X2   | 24,0   | 36,0     |
| 1217338   | R1A-0032352100 | 28  | M36X2   | 25,0   | 41,0     |
| 1217339   | R1A-0032452100 | 42  | M52X2   | 28,0   | 60,0     |

## // VXA12D00BV

Nut DIN 24°

Heavy Series

BV10



| Item Code | Product Code   | OD1 | F1      | L (mm) | CH1 (mm) |
|-----------|----------------|-----|---------|--------|----------|
| 1217340   | R1A-0032602100 | 10  | M18X1.5 | 21,5   | 22,0     |
| 1217341   | R1A-0032652100 | 12  | M20X1.5 | 21,5   | 24,0     |
| 1217342   | R1A-0032752100 | 16  | M24X1.5 | 26,0   | 30,0     |
| 1217343   | R1A-0032802100 | 20  | M30X2   | 30,5   | 36,0     |
| 1217344   | R1A-0032852100 | 25  | M36X2   | 38,0   | 46,0     |
| 1217345   | R1A-0032902100 | 30  | M42X2   | 39,0   | 50,0     |
| 1217347   | R1A-0032952100 | 38  | M52X2   | 46,0   | 60,0     |
| 1221354   | R1A-0032552100 | 8   | M16X1.5 | 20,0   | 19,0     |

REV.2.1

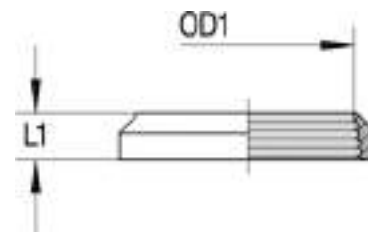
## // BV10 RING

## // V1A11R000Z

Clamping Ring DIN 24°

Light Series

BV10



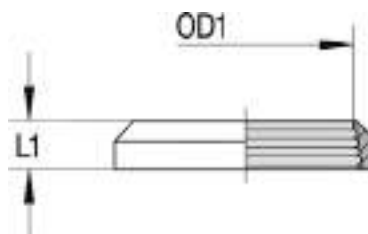
| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1217326   | R1A-0031151900 | 12  | 3,8     |
| 1221344   | R1A-0031201900 | 15  | 4,5     |
| 1221346   | R1A-0031251900 | 18  | 4,5     |
| 1217327   | R1A-0031451900 | 42  | 7,0     |

## // V1A12R000Z

Clamping Ring DIN 24°

Light Series

BV10



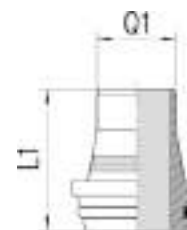
| Item Code | Product Code   | OD1 | L1 (mm) |
|-----------|----------------|-----|---------|
| 1221644   | R1A-0031551900 | 8   | 4,5     |
| 1217328   | R1A-0031601900 | 10  | 4,5     |
| 1217329   | R1A-0031651900 | 12  | 4,5     |
| 1217330   | R1A-0031751900 | 16  | 6,5     |
| 1217331   | R1A-0031801900 | 20  | 9,0     |
| 1217332   | R1A-0031851900 | 25  | 10,0    |
| 1217333   | R1A-0031901900 | 30  | 10,0    |
| 1217335   | R1A-0031951900 | 38  | 13,5    |

## // BV10 CONE

## // V1ABV10CZK

ZAKO Flare Coupling with O-ring

Push In



| Item Code | Product Code   | Note         | Q1 (mm) | L1 (mm) |
|-----------|----------------|--------------|---------|---------|
| 1221649   | R1A-0034569900 | S08X1,5 TUBE | 5,2     | 20,0    |
| 1221645   | R1A-0034699900 | S12X3,0 TUBE | 6,2     | 22,5    |
| 1217352   | R1A-0034629900 | S10X2,0 TUBE | 6,2     | 21,0    |
| 1217351   | R1A-0034619900 | S10X1,5 TUBE | 7,2     | 21,0    |
| 1217359   | R1A-0034839900 | S20X3,0 TUBE | 14,3    | 32,0    |
| 1217348   | R1A-0034279900 | L18X2,0 TUBE | 14,3    | 22,0    |
| 1223216   | R1A-0034269900 | L18X1,5 TUBE | 15,2    | 22,0    |
| 1217358   | R1A-0034829900 | S20X2,5 TUBE | 15,3    | 32,0    |
| 1217349   | R1A-0034329900 | L22X2,0 TUBE | 18,3    | 23,5    |
| 1217361   | R1A-0034879900 | S25X3,0 TUBE | 19,3    | 34,5    |
| 1217360   | R1A-0034869900 | S25X2,5 TUBE | 20,3    | 34,5    |
| 1221345   | R1A-0034219900 | L15X1,5 TUBE | 21,5    | 12,2    |
| 1217364   | R1A-0034939900 | S30X4,0 TUBE | 22,3    | 34,5    |
| 1217363   | R1A-0034929900 | S30X3,0 TUBE | 24,3    | 34,5    |
| 1217350   | R1A-0034479900 | L42X3,0 TUBE | 26,3    | 38,0    |
| 1217366   | R1A-0034989900 | S38X5,0 TUBE | 28,3    | 38,0    |
| 1217365   | R1A-0034979900 | S38X4,0 TUBE | 30,3    | 38,0    |
| 1221646   | R1A-0034819900 | S20X2,0 TUBE | 32,0    | 16,3    |
| 1221648   | R1A-0034949900 | S30X5,0 TUBE | 34,5    | 20,3    |
| 1221647   | R1A-0034889900 | S25X4,0 TUBE | 34,5    | 17,3    |

REV.2.1

## // SWVE-R-ED

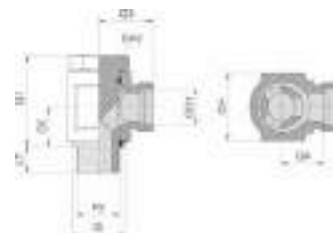
## // V1A11ME03I

Banjo adjustable

DIN 24° - BSPP Male with soft seal

Light Series

SWVE-R-ED



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1218229   | R1A-1157012081 | 6   | 1/8-28   | 25,3    | 10,5    | 19,0    | 12,0    | 8,0     | 14,9   | 19,0    | 14,0     |
| 1218231   | R1A-1157062081 | 8   | 1/4-19   | 31,5    | 14,0    | 21,5    | 14,5    | 12,0    | 18,9   | 22,0    | 19,0     |
| 1218233   | R1A-1157112081 | 10  | 1/4-19   | 33,0    | 14,0    | 22,5    | 15,5    | 12,0    | 18,9   | 22,0    | 19,0     |
| 1218235   | R1A-1157162081 | 12  | 3/8-19   | 38,5    | 16,5    | 25,0    | 18,0    | 12,0    | 21,9   | 27,0    | 22,0     |
| 1218236   | R1A-1157212081 | 15  | 1/2-14   | 45,5    | 21,5    | 29,0    | 22,0    | 14,0    | 26,9   | 32,0    | 27,0     |
| 1218238   | R1A-1157262081 | 18  | 1/2-14   | 47,5    | 21,5    | 29,0    | 21,5    | 14,0    | 26,9   | 36,0    | 27,0     |
| 1218240   | R1A-1157312081 | 22  | 3/4-14   | 56,5    | 24,0    | 36,0    | 28,5    | 16,0    | 32,9   | 46,0    | 36,0     |
| 1218242   | R1A-1157362081 | 28  | 1-11     | 68,0    | 30,5    | 39,0    | 31,5    | 18,0    | 39,9   | 50,0    | 41,0     |
| 1220785   | R1A-1157412081 | 35  | 1 1/4-11 | 78,0    | 35,5    | 46,0    | 35,5    | 20,0    | 49,9   | 60,0    | 50,0     |

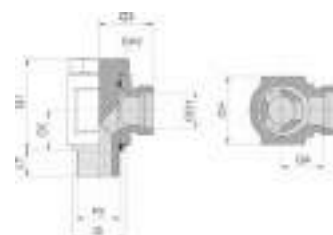
## // V1A12ME03I

Banjo adjustable

DIN 24° - BSPP Male with soft seal

Heavy Series

SWVE-R-ED



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1218244   | R1A-1157512081 | 6   | 1/4-19   | 30,5    | 14,0    | 23,5    | 16,5    | 12,0    | 18,9   | 22,0    | 19,0     |
| 1218212   | R1A-1153512081 | 6   | 1/4-19   | 27,0    | 12,0    | 22,0    | 15,0    | 9,0     | 18,9   | 19,0    | 19,0     |
| 1218246   | R1A-1157562081 | 8   | 1/4-19   | 31,0    | 14,0    | 23,5    | 16,5    | 12,0    | 18,9   | 22,0    | 19,0     |
| 1218247   | R1A-1157612081 | 10  | 3/8-19   | 37,0    | 16,5    | 26,0    | 18,5    | 12,0    | 21,9   | 27,0    | 22,0     |
| 1218249   | R1A-1157662081 | 12  | 3/8-19   | 37,5    | 16,5    | 26,0    | 18,5    | 12,0    | 21,9   | 27,0    | 22,0     |
| 1220781   | R1A-1157712081 | 14  | 1/2-14   | 44,0    | 21,5    | 31,0    | 23,0    | 14,0    | 26,9   | 32,0    | 27,0     |
| 1218251   | R1A-1157762081 | 16  | 1/2-14   | 47,0    | 21,5    | 31,0    | 22,5    | 14,0    | 26,9   | 36,0    | 27,0     |
| 1218253   | R1A-1157812081 | 20  | 3/4-14   | 55,0    | 24,0    | 38,0    | 27,5    | 16,0    | 32,9   | 46,0    | 36,0     |
| 1218255   | R1A-1157862081 | 25  | 1-11     | 66,5    | 30,5    | 43,0    | 31,0    | 18,0    | 39,9   | 50,0    | 41,0     |
| 1218257   | R1A-1157912081 | 30  | 1 1/4-11 | 75,5    | 35,5    | 50,0    | 36,5    | 20,0    | 49,9   | 60,0    | 50,0     |
| 1218258   | R1A-1157962081 | 38  | 1 1/2-11 | 86,5    | 40,5    | 57,0    | 41,0    | 22,0    | 55,9   | 70,0    | 60,0     |

## // SWVE-R

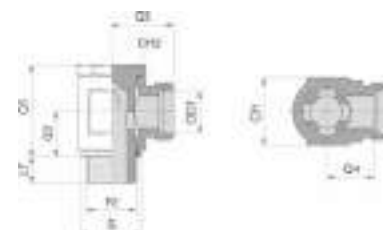
## // V1A32ME06M

Banjo adjustable

DIN 24° - BSPP Male with metal sealing-edge ring

Extra Light Series

SWVE-R



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1221763   | R1A-1152002081 | 4   | 1/8-28 | 18,5    | 8,0     | 15,5    | 11,5    | 6,0     | 14,0   | 14,0    | 14,0     |
| 1218202   | R1A-1152102081 | 6   | 1/8-28 | 20,5    | 9,0     | 15,5    | 10,0    | 6,0     | 14,0   | 14,0    | 14,0     |
| 1218203   | R1A-1152152081 | 8   | 1/8-28 | 22,5    | 10,0    | 16,5    | 11,0    | 6,0     | 14,0   | 14,0    | 14,0     |

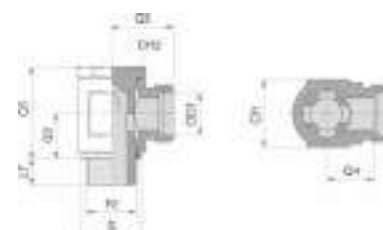
## // V1A11ME06M

Banjo adjustable

DIN 24° - BSPP Male with metal sealing-edge ring

Light Series

SWVE-R



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1218204   | R1A-1153002081 | 6   | 1/8-28 | 23,5    | 10,0    | 17,5    | 10,5    | 6,0     | 14,0   | 14,0    | 14,0     |
| 1218205   | R1A-1153052081 | 8   | 1/4-19 | 27,0    | 12,0    | 20,0    | 13,0    | 9,0     | 18,0   | 19,0    | 19,0     |
| 1218206   | R1A-1153102081 | 10  | 1/4-19 | 28,0    | 13,0    | 21,0    | 14,0    | 9,0     | 18,0   | 19,0    | 19,0     |
| 1218207   | R1A-1153152081 | 12  | 3/8-19 | 33,0    | 15,5    | 22,5    | 15,5    | 9,0     | 22,0   | 22,0    | 22,0     |
| 1218208   | R1A-1153202081 | 15  | 1/2-14 | 38,0    | 19,0    | 26,0    | 19,0    | 11,0    | 26,0   | 27,0    | 27,0     |
| 1218209   | R1A-1153252081 | 18  | 1/2-14 | 44,0    | 22,0    | 27,5    | 20,0    | 11,0    | 26,0   | 30,0    | 27,0     |
| 1218210   | R1A-1153302081 | 22  | 3/4-14 | 48,0    | 24,0    | 32,5    | 25,0    | 13,0    | 32,0   | 36,0    | 32,0     |

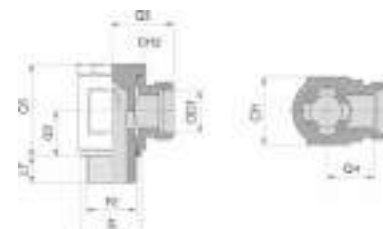
## // V1A12ME06M

Banjo adjustable

DIN 24° - BSPP Male with metal sealing-edge ring

Heavy Series

SWVE-R



| Item Code | Product Code   | OD1 | F2     | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|--------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1218211   | R1A-1153502081 | 6   | 1/4-19 | 27,0    | 12,0    | 22,0    | 15,0    | 9,0     | 18,0   | 19,0    | 19,0     |
| 1218213   | R1A-1153552081 | 8   | 1/4-19 | 28,0    | 13,0    | 22,0    | 15,0    | 9,0     | 18,0   | 19,0    | 19,0     |
| 1218214   | R1A-1153602081 | 10  | 3/8-19 | 33,0    | 15,5    | 23,5    | 16,0    | 9,0     | 22,0   | 22,0    | 22,0     |
| 1218215   | R1A-1153652081 | 12  | 3/8-19 | 36,0    | 16,5    | 23,5    | 16,0    | 9,0     | 22,0   | 24,0    | 22,0     |
| 1218217   | R1A-1153752081 | 16  | 1/2-14 | 42,0    | 20,5    | 29,5    | 21,0    | 11,0    | 26,0   | 30,0    | 27,0     |
| 1221766   | R1A-1153802081 | 20  | 3/4-14 | 48,0    | 24,0    | 34,5    | 24,0    | 13,0    | 32,0   | 36,0    | 32,0     |

REV.2.1

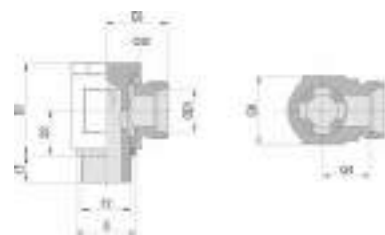
## // V1A11ME035

Banjo adjustable

DIN 24° - BSPP Male with sealing-edge ring

Light Series

SWVE-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1218228   | R1A-1157002081 | 6   | 1/8-28   | 25,3    | 10,5    | 19,0    | 12,0    | 8,0     | 14,0   | 19,0    | 14,0     |
| 1218230   | R1A-1157052081 | 8   | 1/4-19   | 31,5    | 14,0    | 21,5    | 14,5    | 12,0    | 18,0   | 22,0    | 19,0     |
| 1218232   | R1A-1157102081 | 10  | 1/4-19   | 33,0    | 14,0    | 22,5    | 15,5    | 12,0    | 18,0   | 22,0    | 19,0     |
| 1218234   | R1A-1157152081 | 12  | 3/8-19   | 38,5    | 16,5    | 25,0    | 18,0    | 12,0    | 22,0   | 27,0    | 22,0     |
| 1220840   | R1A-1157202081 | 15  | 1/2-14   | 45,5    | 21,5    | 29,0    | 22,0    | 14,0    | 26,0   | 32,0    | 27,0     |
| 1218237   | R1A-1157252081 | 18  | 1/2-14   | 47,5    | 21,5    | 29,0    | 21,5    | 14,0    | 26,0   | 36,0    | 27,0     |
| 1218239   | R1A-1157302081 | 22  | 3/4-14   | 56,5    | 24,0    | 36,0    | 28,5    | 16,0    | 32,0   | 46,0    | 36,0     |
| 1218241   | R1A-1157352081 | 28  | 1-11     | 68,0    | 30,5    | 39,0    | 31,5    | 18,0    | 39,0   | 50,0    | 41,0     |
| 1218243   | R1A-1157452081 | 42  | 1 1/2-11 | 88,5    | 40,5    | 51,0    | 40,0    | 22,0    | 55,0   | 70,0    | 60,0     |

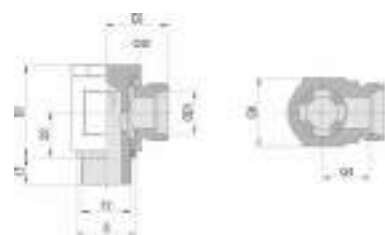
## // V1A12ME035

Banjo adjustable

DIN 24° - BSPP Male with sealing-edge ring

Heavy Series

SWVE-R



| Item Code | Product Code   | OD1 | F2       | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|----------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1220836   | R1A-1157502081 | 6   | 1/4-19   | 30,5    | 14,0    | 23,5    | 16,5    | 12,0    | 18,0   | 22,0    | 19,0     |
| 1218245   | R1A-1157552081 | 8   | 1/4-19   | 31,0    | 14,0    | 23,5    | 16,5    | 12,0    | 18,0   | 22,0    | 19,0     |
| 1220837   | R1A-1157602081 | 10  | 3/8-19   | 37,0    | 16,5    | 26,0    | 18,5    | 12,0    | 22,0   | 27,0    | 22,0     |
| 1218248   | R1A-1157652081 | 12  | 3/8-19   | 37,5    | 16,5    | 26,0    | 18,5    | 12,0    | 22,0   | 27,0    | 22,0     |
| 1218250   | R1A-1157752081 | 16  | 1/2-14   | 47,0    | 21,5    | 31,0    | 22,5    | 14,0    | 26,0   | 36,0    | 27,0     |
| 1218252   | R1A-1157802081 | 20  | 3/4-14   | 55,0    | 24,0    | 38,0    | 27,5    | 16,0    | 32,0   | 46,0    | 36,0     |
| 1218254   | R1A-1157852081 | 25  | 1-11     | 66,5    | 30,5    | 43,0    | 31,0    | 18,0    | 39,0   | 50,0    | 41,0     |
| 1218256   | R1A-1157902081 | 30  | 1 1/4-11 | 75,5    | 35,5    | 50,0    | 36,5    | 20,0    | 49,0   | 60,0    | 50,0     |
| 1220843   | R1A-1157952081 | 38  | 1 1/2-11 | 86,5    | 40,5    | 57,0    | 41,0    | 22,0    | 55,0   | 70,0    | 60,0     |

## // SWVE-M

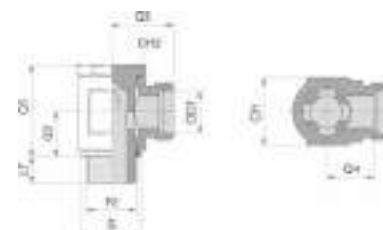
## // V1A11ME50M

Banjo adjustable

DIN 24° - Metric Male with metal sealing-edge ring

Light Series

SWVE-M



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1218197   | R1A-1151002081 | 6   | M10X1.0 | 23,5    | 10,0    | 17,5    | 10,5    | 6,0     | 14,0   | 14,0    | 14,0     |
| 1218198   | R1A-1151102081 | 10  | M14X1.5 | 28,0    | 13,0    | 21,0    | 14,0    | 9,0     | 19,0   | 19,0    | 19,0     |
| 1218199   | R1A-1151152081 | 12  | M16X1.5 | 33,0    | 15,0    | 22,5    | 15,5    | 9,0     | 21,0   | 22,0    | 22,0     |
| 1218200   | R1A-1151202081 | 15  | M18X1.5 | 38,0    | 18,5    | 24,5    | 17,5    | 9,0     | 23,0   | 24,0    | 24,0     |

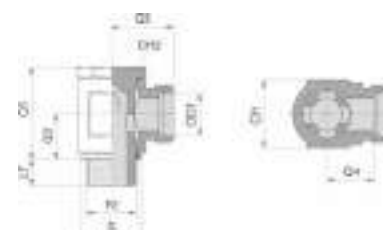
## // V1A12ME50M

Banjo adjustable

DIN 24° - Metric Male with metal sealing-edge ring

Heavy Series

SWVE-M



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1221764   | R1A-1151502081 | 6   | M12X1.5 | 27,0    | 12,0    | 21,0    | 14,0    | 9,0     | 17,0   | 17,0    | 17,0     |
| 1218201   | R1A-1151552081 | 8   | M14X1.5 | 28,0    | 13,0    | 22,0    | 15,0    | 9,0     | 19,0   | 19,0    | 19,0     |
| 1221765   | R1A-1151752081 | 16  | M22X1.5 | 42,0    | 20,5    | 29,5    | 21,0    | 11,0    | 27,0   | 30,0    | 27,0     |

REV.2.1

SWVE-M-ED

V1A11ME50I

Banjo adjustable  
DIN 24° - Metric Male with soft seal  
Light Series  
SWVE-M-ED



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1218218   | R1A-1155012081 | 6   | M10X1.0 | 25,3    | 10,5    | 19,0    | 12,0    | 8,0     | 14,9   | 19,0    | 14,0     |
| 1218221   | R1A-1155112081 | 10  | M14X1.5 | 33,0    | 14,0    | 22,5    | 15,5    | 12,0    | 18,9   | 22,0    | 19,0     |
| 1220780   | R1A-1155162081 | 12  | M16X1.5 | 38,5    | 16,5    | 25,0    | 18,0    | 12,0    | 21,9   | 27,0    | 22,0     |
| 1218223   | R1A-1155212081 | 15  | M18X1.5 | 42,5    | 18,5    | 28,0    | 21,0    | 12,0    | 23,9   | 30,0    | 24,0     |

## // DSVW-M

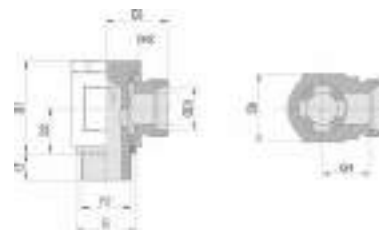
## // V1A11ME505

Banjo adjustable

DIN 24° - Metric Male with sealing-edge ring

Light Series

DSVW-M



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1218219   | R1A-1155052081 | 8   | M12X1.5 | 31,5    | 14,0    | 21,5    | 14,5    | 12,0    | 17,0   | 22,0    | 17,0     |
| 1218220   | R1A-1155102081 | 10  | M14X1.5 | 33,0    | 14,0    | 22,5    | 15,5    | 12,0    | 19,0   | 22,0    | 19,0     |
| 1218222   | R1A-1155152081 | 12  | M16X1.5 | 38,5    | 16,5    | 25,0    | 18,0    | 12,0    | 21,0   | 27,0    | 22,0     |
| 1220839   | R1A-1155202081 | 15  | M18X1.5 | 42,5    | 18,5    | 28,0    | 21,0    | 12,0    | 23,0   | 30,0    | 24,0     |

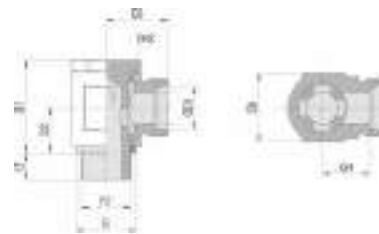
## // V1A12ME505

Banjo adjustable

DIN 24° - Metric Male with sealing-edge ring

Heavy Series

DSVW-M



| Item Code | Product Code   | OD1 | F2      | Q1 (mm) | Q2 (mm) | Q3 (mm) | Q4 (mm) | LT (mm) | G (mm) | CH (mm) | CH2 (mm) |
|-----------|----------------|-----|---------|---------|---------|---------|---------|---------|--------|---------|----------|
| 1220835   | R1A-1155502081 | 6   | M12X1.5 | 30,5    | 14,0    | 23,5    | 16,5    | 12,0    | 17,0   | 22,0    | 17,0     |
| 1224299   | R1A-1155552081 | 8   | M14X1.5 | 31,0    | 14,0    | 23,5    | 16,5    | 12,0    | 19,0   | 22,0    | 19,0     |
| 1218224   | R1A-1155602081 | 10  | M16X1.5 | 37,0    | 16,5    | 26,0    | 18,5    | 12,0    | 21,0   | 27,0    | 22,0     |
| 1218226   | R1A-1155802081 | 20  | M27X2   | 55,0    | 24,0    | 38,0    | 27,5    | 16,0    | 32,0   | 46,0    | 36,0     |
| 1220842   | R1A-1155852081 | 25  | M33X2.0 | 66,5    | 30,5    | 43,0    | 31,0    | 18,0    | 39,0   | 50,0    | 41,0     |



## // PRESSURE WASH ADAPTERS

// PRESSURE WASH ..... 288

## // PRESSURE WASH

## // PWA50M

Pressure Wash Straight union  
Metric Male



| Item Code | F1      | F2      | Notes           |
|-----------|---------|---------|-----------------|
| 1220554   | M22X1.5 | M22X1.5 | STANDARD LENGTH |
| 1220555   | M22X1.5 | M22X1.5 | LONG LENGTH     |

## // PWA50M06M

Pressure Wash Straight Connector  
Metric Male - BSPP Male



| Item Code | F1      | F2     |
|-----------|---------|--------|
| 1220551   | M22X1.5 | 1/4-19 |
| 1220552   | M22X1.5 | 3/8-19 |

## // PWA06M50F

Pressure Wash Straight Connector  
BSPP Male - Metric Swivel Female



| Item Code | F1     | F2      |
|-----------|--------|---------|
| 1220610   | 1/4-19 | M22X1.5 |
| 1220550   | 3/8-19 | M22X1.5 |

REV.2.1

**// PWA06F50F**  
**Pressure Wash Straight Connector**  
**BSPP Female - Metric Swivel Female**



| Item Code | F1     | F2      |
|-----------|--------|---------|
| 1220548   | 1/4-19 | M22X1.5 |
| 1220549   | 3/8-19 | M22X1.5 |

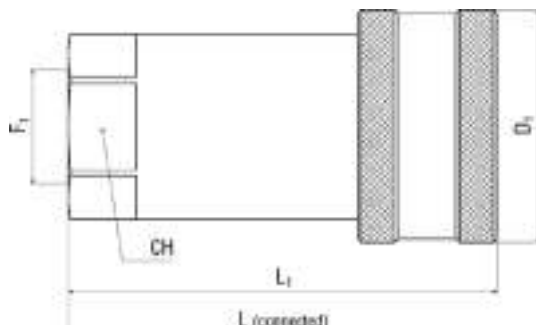


## // HYDRAULIC QUICK COUPLINGS

|                    |     |                                           |     |
|--------------------|-----|-------------------------------------------|-----|
| // SVK ISO A ..... | 291 | // DIAGNOSTIC .....                       | 302 |
| // SVK ISO B ..... | 293 | // SCREW TYPE .....                       | 303 |
| // TEMA .....      | 294 | // MULTI COUPLING .....                   | 307 |
| // PUSH PULL ..... | 296 | // SVK ISO B - CAP & PLUG .....           | 319 |
| // FLAT FACE ..... | 298 | // FLAT FACE - CAP .....                  | 320 |
| // BRAKE .....     | 300 | // SCREW TYPE - SOCKET & PROTECTION ..... | 321 |

REV.2.1

## // SVK ISO A

// STANDARD ISO 7241 A - POPPET  
SVK-ISO-AFemale coupling - Female thread  
ISO 7241 A

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2.

**Material:** galvanised steel with hardened parts subject to wear. NBR O-rings (other materials optional). Cr-III zinc plating through additional passivation for improved surface protection.

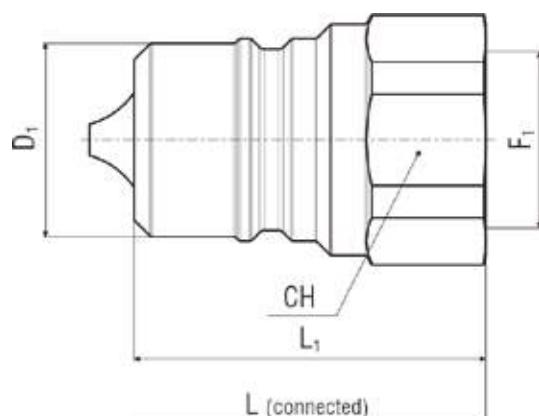
**Temperature Range:** -20 °C +100 °C

**Thread Standard:** BSPP connection according to DIN 3852-2-X, NPTF connection according to ANSI B1-20.3.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1       | D1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|----------|---------|---------|---------|--------|
| 1219613   | 4         | 6,0     | 1/4"    | 35,0           | 140,0             | BSPP     | 1/4-19   | 26,0    | 19,0    | 50,0    | 74,2   |
| 1232129   | 6         | 10,0    | 3/8"    | 31,5           | 126,0             | BSPP     | 1/2-14   | 32,0    | 27,0    | 56,0    | 74,5   |
| 1219617   | 8         | 13,0    | 1/2"    | 27,0           | 108,0             | BSPP     | 1/2-14   | 38,5    | 27,0    | 66,0    | 88,2   |
| 1219609   | 12        | 19,0    | 3/4"    | 25,0           | 100,0             | BSPP     | 3/4-14   | 48,0    | 34,0    | 82,5    | 110,4  |
| 1219619   | 16        | 25,0    | 1"      | 20,0           | 80,0              | BSPP     | 1-11     | 56,0    | 41,0    | 100,0   | 132,9  |
| 1223504   | 20        | 32,0    | 1 1/4"  | 20,0           | 80,0              | BSPP     | 1 1/4-11 | 70,0    | 50,0    | 117,0   | 150,0  |
| 1219620   | 24        | 38,0    | 1 1/2"  | 16,0           | 64,0              | BSPP     | 1 1/2-11 | 84,5    | 60,0    | 133,0   | 167,0  |
| 1223392   | 32        | 51,0    | 2"      | 10,0           | 40,0              | BSPP     | 2-11     | 99,0    | 75,0    | 165,0   | 210,0  |

Rated flow / pressure drop compliant with ISO 7241-1 standard. Specific instructions for installation, use and maintenance are separately provided.

## // STANDARD ISO 7241 A - POPPET SVK-ISO-A



### Male coupling - Female thread ISO 7241 A

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2.

**Material:** galvanised steel with hardened parts subject to wear. NBR O-rings (other materials optional). Cr-III zinc plating through additional passivation for improved surface protection.

**Temperature Range:** -20 °C +100 °C

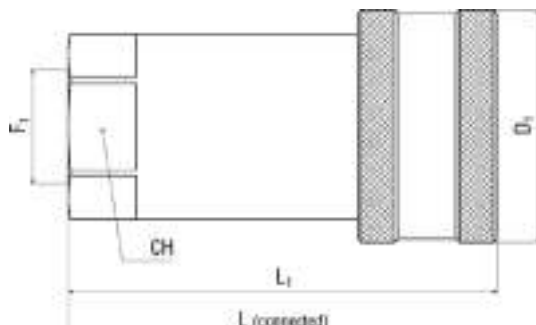
**Thread Standard:** BSPP connection according to DIN 3852-2-X, NPTF connection according to ANSI B1-20.3.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1       | D1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|----------|---------|---------|---------|--------|
| 1219611   | 4         | 6,0     | 1/4"    | 35,0           | 140,0             | BSPP     | 1/4-19   | 11,8    | 19,0    | 38,5    | 74,2   |
| 1219606   | 6         | 10,0    | 3/8"    | 31,5           | 126,0             | BSPP     | 3/8-19   | 17,3    | 22,0    | 36,5    | 78,5   |
| 1219615   | 8         | 13,0    | 1/2"    | 27,0           | 108,0             | BSPP     | 1/2-14   | 20,5    | 27,0    | 44,0    | 88,2   |
| 1219608   | 12        | 19,0    | 3/4"    | 25,0           | 100,0             | BSPP     | 3/4-14   | 29,0    | 34,0    | 55,0    | 110,4  |
| 1219618   | 16        | 25,0    | 1"      | 20,0           | 80,0              | BSPP     | 1-11     | 34,3    | 41,0    | 66,0    | 132,9  |
| 1223512   | 20        | 32,0    | 1 1/4"  | 20,0           | 80,0              | BSPP     | 1 1/4-11 | 45,0    | 50,0    | 75,0    | 150,0  |
| 1223511   | 24        | 38,0    | 1 1/2"  | 16,0           | 64,0              | BSPP     | 1 1/2-11 | 55,0    | 60,0    | 83,5    | 167,0  |
| 1223395   | 32        | 51,0    | 2"      | 10,0           | 40,0              | BSPP     | 2-11     | 65,0    | 75,0    | 105,0   | 210,0  |

Rated flow / pressure drop compliant with ISO 7241-1 standard. Specific instructions for installation, use and maintenance are separately provided.

REV.2.1

## // SVK ISO B

// STANDARD ISO 7241 B - POPPET  
SVK-ISO-BFemale coupling - Female thread  
ISO 7241 B

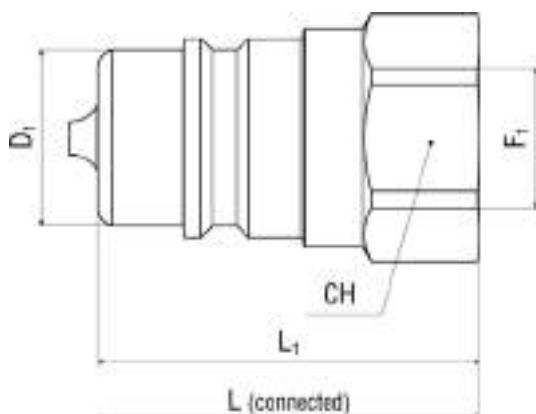
**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2.

**Material:** galvanised steel with hardened parts subject to wear. NBR O-rings (other materials optional). Cr-III zinc plating through additional passivation for improved surface protection. Also available in stainless steel.

**Temperature Range:** -20 °C +100 °C

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1     | D1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|--------|---------|---------|---------|--------|
| 1223633   | 4         | 6,0     | 1/4"    | 30,0           | 120,0             | BSPP     | 1/4-19 | 28,5    | 19,0    | 58,0    | 72,0   |
| 1223636   | 6         | 10,0    | 3/8"    | 28,0           | 112,0             | BSPP     | 3/8-19 | 35,0    | 24,0    | 65,0    | 81,0   |
| 1223632   | 8         | 13,0    | 1/2"    | 25,0           | 100,0             | BSPP     | 1/2-14 | 44,5    | 28,5    | 74,0    | 93,5   |
| 1223635   | 12        | 19,0    | 3/4"    | 20,0           | 80,0              | BSPP     | 3/4-14 | 54,0    | 36,0    | 92,0    | 113,0  |
| 1223631   | 16        | 25,0    | 1"      | 15,0           | 60,0              | BSPP     | 1-11   | 63,5    | 41,0    | 103,0   | 127,0  |

Rated flow / pressure drop compliant with ISO 7241-1 standard. Specific instructions for installation, use and maintenance are separately provided.

// STANDARD ISO 7241 B - POPPET  
SVK-ISO-BMale coupling - Female thread  
ISO 7241 B

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2.

**Material:** galvanised steel with hardened parts subject to wear. NBR O-rings (other materials optional). Cr-III zinc plating through additional passivation for improved surface protection. Also available in stainless steel.

**Temperature Range:** -20 °C +100 °C

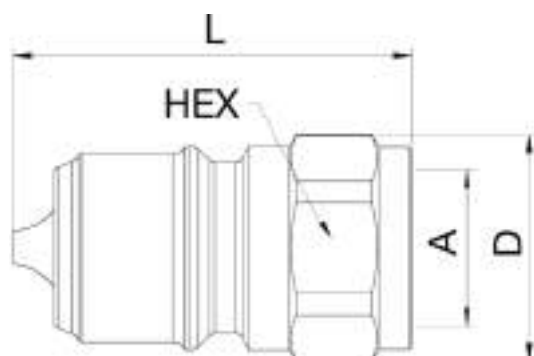
| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1     | D1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|--------|---------|---------|---------|--------|
| 1223639   | 4         | 6,0     | 1/4"    | 30,0           | 120,0             | BSPP     | 1/4-19 | 14,2    | 19,0    | 36,0    | 72,0   |
| 1223642   | 6         | 10,0    | 3/8"    | 28,0           | 112,0             | BSPP     | 3/8-19 | 19,1    | 24,0    | 40,0    | 81,0   |
| 1223638   | 8         | 13,0    | 1/2"    | 25,0           | 100,0             | BSPP     | 1/2-14 | 23,5    | 28,5    | 46,5    | 93,5   |
| 1223641   | 12        | 19,0    | 3/4"    | 20,0           | 80,0              | BSPP     | 3/4-14 | 31,4    | 36,0    | 56,0    | 113,0  |
| 1223637   | 16        | 25,0    | 1"      | 15,0           | 60,0              | BSPP     | 1-11   | 37,8    | 41,0    | 63,0    | 127,0  |

Rated flow / pressure drop compliant with ISO 7241-1 standard. Specific instructions for installation, use and maintenance are separately provided.

## // TEMA

## // LOCKABLE TYPE - POPPET T-SERIES

## Tema T-Series without pressure eliminator

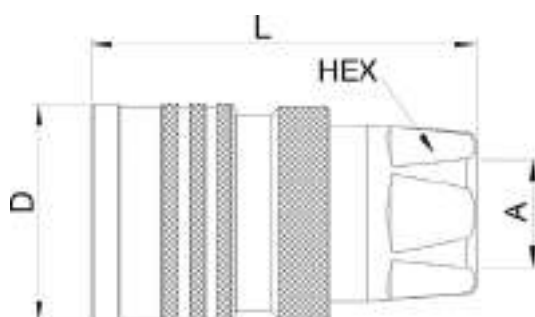


| Item Code | ID (Dash) | WP Conn. (Mpa) | Thread 1 | F1     | CH (mm) | L1 (mm) |
|-----------|-----------|----------------|----------|--------|---------|---------|
| 1219462   | 6         | 35,0           | BSPP     | 3/8-19 | 22,0    | 42,0    |
| 1219475   | 12        | 30,0           | BSPP     | 3/4-14 | 36,0    | 52,0    |
| 1219490   | 4         | 45,0           | BSPP     | 1/4-19 | 19,0    | 45,0    |
| 1219498   | 8         | 32,0           | BSPP     | 1/2-14 | 27,0    | 46,0    |
| 1219513   | 16        | 28,0           | BSPP     | 1-11   | 46,0    | 60,0    |

rated flow / pressure drop values on request. Other sizes and connection types available on request.

## // LOCKABLE TYPE - POPPET T-SERIES

## Tema T-Series without pressure eliminator



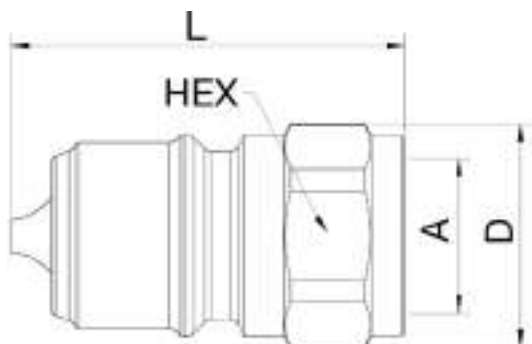
| Item Code | ID (Dash) | WP Conn. (Mpa) | Thread 1 | F1     | CH (mm) | L1 (mm) |
|-----------|-----------|----------------|----------|--------|---------|---------|
| 1219494   | 4         | 45,0           | BSPP     | 1/4-19 | 21,0    | 64,0    |
| 1219481   | 12        | 28,0           | BSPP     | 3/4-14 | 38,0    | 73,0    |
| 1219470   | 6         | 35,0           | BSPP     | 3/8-19 | 24,0    | 60,0    |
| 1219505   | 8         | 30,0           | BSPP     | 1/2-14 | 30,0    | 65,0    |
| 1219517   | 16        | 25,0           | BSPP     | 1-11   | 45,0    | 88,0    |

rated flow / pressure drop values on request. Other sizes and connection types available on request.

REV.2.1

## // LOCKABLE TYPE PRESSURE ELIMINATION SYSTEM - T-SERIES

Tema T-Series with pressure elimination

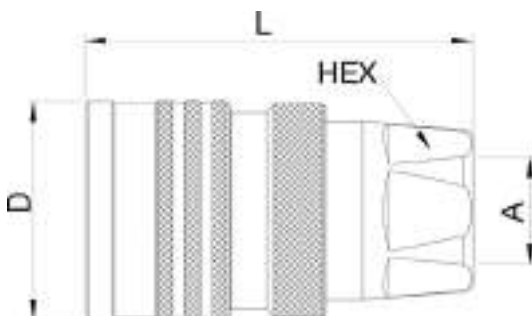


| Item Code | ID (Dash) | WP Conn. (Mpa) | Thread 1 | F1     | CH (mm) | L1 (mm) |
|-----------|-----------|----------------|----------|--------|---------|---------|
| 1219459   | 6         | 35,0           | BSPP     | 3/8-19 | 22,0    | 60,0    |
| 1219472   | 12        | 30,0           | BSPP     | 3/4-14 | 36,0    | 53,0    |
| 1219500   | 8         | 32,0           | BSPP     | 1/2-14 | 27,0    | 47,0    |
| 1219511   | 16        | 28,0           | BSPP     | 1-11   | 46,0    | 61,0    |

rated flow / pressure drop values on request. Other sizes and connection types available on request

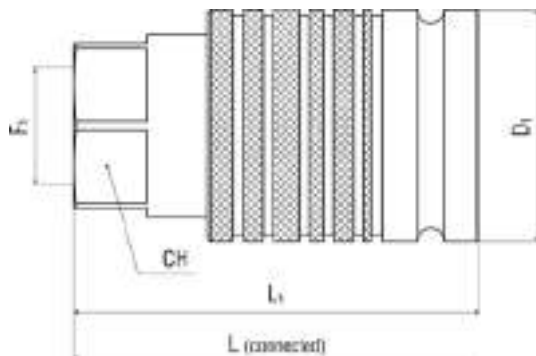
## // LOCKABLE TYPE PRESSURE ELIMINATION SYSTEM - POPPET T-SERIES

Tema T-Series with pressure elimination



| Item Code | ID (Dash) | WP Conn. (Mpa) | Thread 1 | F1     | CH (mm) | L1 (mm) |
|-----------|-----------|----------------|----------|--------|---------|---------|
| 1219465   | 6         | 35,0           | BSPP     | 3/8-19 | 24,0    | 60,0    |
| 1219478   | 12        | 28,0           | BSPP     | 3/4-14 | 38,0    | 72,0    |
| 1219507   | 8         | 30,0           | BSPP     | 1/2-14 | 30,0    | 65,0    |
| 1219515   | 16        | 25,0           | BSPP     | 1-11   | 75,0    | 88,0    |

## // PUSH PULL

// STANDARD ISO 7241 A PUSH PULL -  
POPPET SVK-1H-ISO-ATOP  
COATFemale coupling - Female thread  
ISO 7241 A

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

**Material:** galvanised steel with hardened parts subject to wear. HNBR O-rings (other materials optional). Galvanised steel threaded adapters for various connection types. Thermoplastic dust cap and dust plug (see SVK-ISO-A). TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

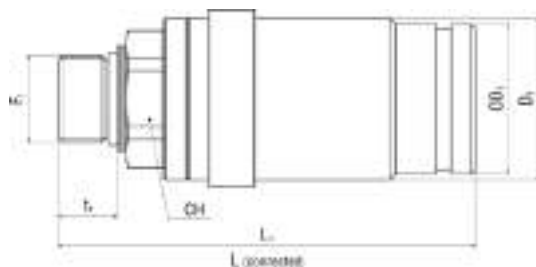
**Temperature Range:** -30 °C +125 °C

**Thread Standard:** BSPP connection according to DIN 3852-2-X, NPTF connection according to ANSI B1-20.3, metric connection according to DIN 3852, SAE UNF/UN connection according to SAE J 1926-1.

| Item Code | Product Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1     | D1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|--------------|-----------|---------|---------|----------------|-------------------|----------|--------|---------|---------|---------|--------|
| 1234559   | R1Q-1234559  | 8         | 13,0    | 1/2"    | 25,0           | 100,0             | BSPP     | 1/2-14 | 38,0    | 27,0    | 63,5    | 86,7   |

Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided.

## // STANDARD ISO 5675 - POPPET SRK-1H

PATENT  
PENDINGTOP  
COATFemale coupling - Male thread  
ISO 5675

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

**Material:** galvanised steel with hardened parts subject to wear. TPE poppet valve seal (PTFE optional). HNBR O-rings (other materials optional). Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

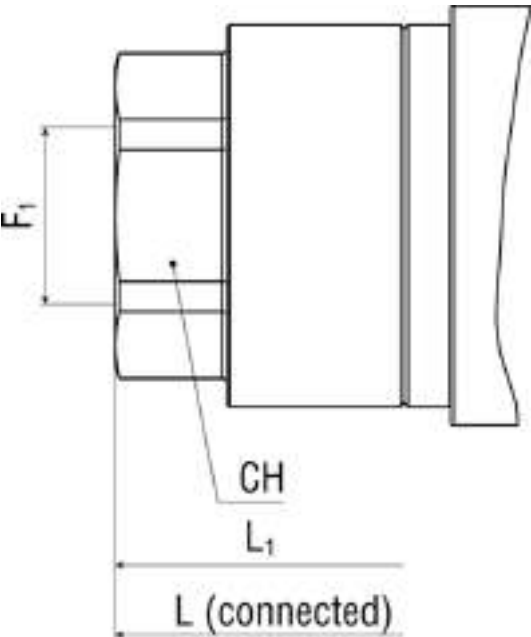
**Thread Standard:** metric connection according to ISO 6149-2 (DIN 3852).

| Item Code | Product Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1      | OD1 | D1 (mm) | t1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|--------------|-----------|---------|---------|----------------|-------------------|----------|---------|-----|---------|---------|---------|---------|--------|
| 1232324   | R1Q-1232324  | 8         | 13,0    | 1/2"    | 25,0           | 100,0             | D24L     | M22X1.5 | 38  | 41,0    | 15,0    | 32,0    | 106,0   | 142,2  |

Rated flow / pressure drop values on request. Other sizes and connection types available on request.

REV.2.1

STANDARD ISO 5675 - POPPET SRK-1H



PATENT  
PENDING

TOP  
COAT

Female coupling - Female thread  
ISO 5675

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

**Material:** galvanised steel with hardened parts subject to wear. TPE poppet valve seal (PTFE optional). HNBR O-rings (other materials optional). Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

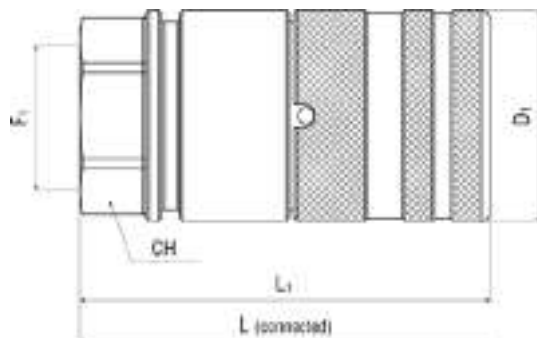
**Temperature Range:** -30 °C +125 °C

**Thread Standard:** BSPP connection according to DIN 3852-2-X, NPTF connection according to ANSI B1-20.3.

| Item Code | Product Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1     | D1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|--------------|-----------|---------|---------|----------------|-------------------|----------|--------|---------|---------|---------|--------|
| 1235028   | R1Q-1235028  | 8         | 13,0    | 1/2"    | 25,0           | 100,0             | BSPP     | 1/2-14 | 41,0    | 32,0    | 104,0   | 140,2  |

Rated flow / pressure drop values on request. Other sizes and connection types available on request.

## // FLAT FACE

// STANDARD ISO 16028 - FLAT FACE  
FPKPATENT  
PENDINGTOP  
COATFemale coupling - Female thread  
ISO 16028

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

**Material:** galvanised steel with hardened parts subject to wear. HNBR seals (other materials on request). Backup rings PTFE. Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

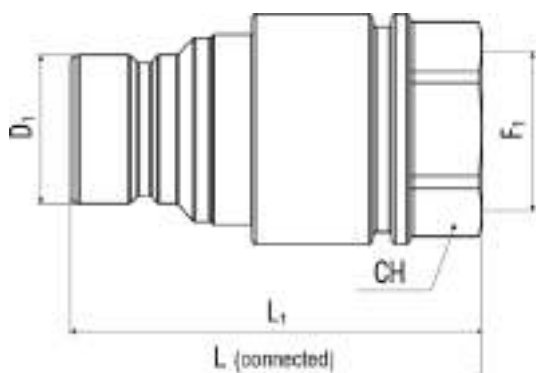
**Thread Standard:** BSPP connection according to DIN 3852-2-X, NPTF connection according to ANSI B1-20.3, metric connection according to ISO 6149-1, SAE UNF/UN connection according to SAE J 1926-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1       | D1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|----------|---------|---------|---------|--------|
| 1229101   | 4         | 6,0     | 1/4"    | 35,0           | 140,0             | BSPP     | 1/4-19   | 26,0    | 22,0    | 57,8    | 97,0   |
| 1229102   | 6         | 10,0    | 3/8"    | 35,0           | 140,0             | BSPP     | 3/8-19   | 32,0    | 27,0    | 69,3    | 117,0  |
| 1224380   | 6         | 10,0    | 3/8"    | 35,0           | 140,0             | BSPP     | 1/2-14   | 32,0    | 27,0    | 69,3    | 117,0  |
| 1245443   | 6         | 10,0    | 3/8"    | 35,0           | 140,0             | BSPP     | 3/8-19   | 32,0    | 27,0    | 87,5    |        |
| 1224381   | 8         | 13,0    | 1/2"    | 35,0           | 140,0             | BSPP     | 3/4-14   | 38,0    | 32,0    | 74,5    | 125,0  |
| 1229103   | 8         | 13,0    | 1/2"    | 35,0           | 140,0             | BSPP     | 1/2-14   | 38,0    | 32,0    | 74,5    | 125,0  |
| 1249493   | 8         | 13,0    | 1/2"    | 35,0           | 140,0             | BSPP     | 1/2-14   | 38,0    | 36,0    | 74,5    | 125,0  |
| 1232287   | 10        | 16,0    | 5/8"    | 35,0           | 140,0             | BSPP     | 3/4-14   | 40,0    | 34,0    | 81,3    | 134,0  |
| 1229105   | 12        | 19,0    | 3/4"    | 35,0           | 140,0             | BSPP     | 3/4-14   | 48,0    | 42,0    | 93,0    | 156,0  |
| 1224382   | 12        | 19,0    | 3/4"    | 35,0           | 140,0             | BSPP     | 1-11     | 48,0    | 42,0    | 93,0    | 156,0  |
| 1249492   | 12        | 19,0    | 3/4"    | 35,0           | 140,0             | BSPP     | 3/4-14   | 48,0    | 46,0    | 93,0    | 156,0  |
| 1231464   | 16        | 25,0    | 1"      | 35,0           | 140,0             | BSPP     | 1-11     | 55,0    | 50,0    | 101,0   | 177,0  |
| 1229106   | 16        | 25,0    | 1"      | 35,0           | 140,0             | BSPP     | 1 1/4-11 | 55,0    | 50,0    | 101,0   | 177,0  |

Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided.

REV.2.1

## // STANDARD ISO 16028 - FLAT FACE FPK

PATENT  
PENDINGTOP  
COAT

### Male coupling - Female thread ISO 16028

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

**Material:** galvanised steel with hardened parts subject to wear. HNBR seals (other materials on request). Backup rings PTFE. Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

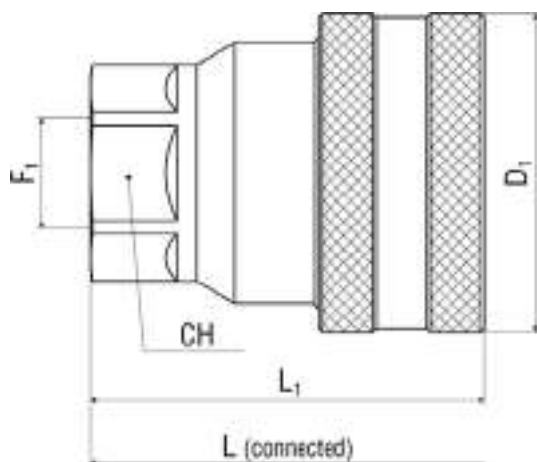
**Temperature Range:** -30 °C +125 °C

**Thread Standard:** BSPP connection according to DIN 3852-2-X, NPTF connection according to ANSI B1-20.3, metric connection according to ISO 6149-1, SAE UNF/UN connection according to SAE J 1926-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1       | D1 (mm) | CH (mm) | L1 (mm) | L (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|----------|---------|---------|---------|--------|
| 1229109   | 4         | 6,0     | 1/4"    | 35,0           | 140,0             | BSPP     | 1/4-19   | 16,2    | 20,0    | 50,5    | 97,0   |
| 1229111   | 6         | 10,0    | 3/8"    | 35,0           | 140,0             | BSPP     | 1/2-14   | 19,7    | 27,0    | 64,0    | 117,0  |
| 1229110   | 6         | 10,0    | 3/8"    | 35,0           | 140,0             | BSPP     | 3/8-19   | 19,7    | 27,0    | 64,0    | 117,0  |
| 1229112   | 8         | 13,0    | 1/2"    | 35,0           | 140,0             | BSPP     | 1/2-14   | 24,6    | 32,0    | 72,0    | 129,0  |
| 1224377   | 8         | 13,0    | 1/2"    | 35,0           | 140,0             | BSPP     | 3/4-14   | 24,6    | 32,0    | 68,0    | 125,0  |
| 1232288   | 10        | 16,0    | 5/8"    | 35,0           | 140,0             | BSPP     | 3/4-14   | 27,0    | 34,0    | 70,0    | 134,0  |
| 1224378   | 12        | 19,0    | 3/4"    | 35,0           | 140,0             | BSPP     | 1-11     | 29,9    | 42,0    | 85,0    | 156,0  |
| 1229113   | 12        | 19,0    | 3/4"    | 35,0           | 140,0             | BSPP     | 3/4-14   | 29,9    | 42,0    | 85,0    | 156,0  |
| 1249981   | 12        | 19,0    | 3/4"    | 35,0           | 140,0             | BSPP     | 3/4-14   | 29,9    | 46,0    | 85,0    | 156,0  |
| 1231463   | 16        | 25,0    | 1"      | 35,0           | 140,0             | BSPP     | 1-11     | 36,0    | 50,0    | 99,0    | 177,0  |
| 1229114   | 16        | 25,0    | 1"      | 35,0           | 140,0             | BSPP     | 1 1/4-11 | 36,0    | 50,0    | 99,0    | 177,0  |

Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided.

## // BRAKE

// STANDARD ISO 5676 - BRAKE VALVE  
BKTOP  
COATFemale coupling - Female thread  
ISO 5676

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

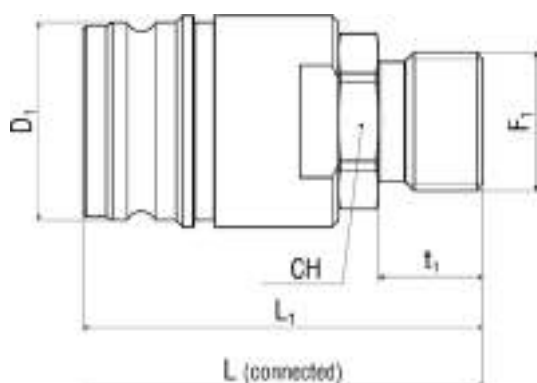
**Material:** galvanised steel with hardened parts subject to wear. HNBR O-rings (other materials optional). Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

**Thread Standard:** BSPP connection according to DIN 3852-2-X, metric connection according to ISO 6149-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1      | D1 (mm) | CH (mm) | L1 (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|---------|---------|---------|---------|
| 1219432   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | BSPP     | 1/2-14  | 44,0    | 27,0    | 58,7    |
| 1219386   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | BSPP     | 3/8-19  | 44,0    | 27,0    | 54,7    |
| 1233607   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | MET      | M18X1.5 | 44,0    | 27,0    | 50,7    |

Rated flow / pressure drop values on request. Other sizes and connection types available on request.

// STANDARD ISO 5676 - BRAKE  
COUPLING BKTOP  
COATMale coupling - Male thread  
ISO 5676

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

**Material:** galvanised steel with hardened parts subject to wear. HNBR O-rings (other materials optional). Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

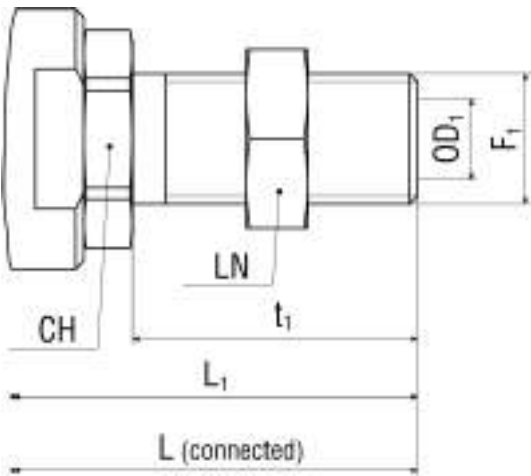
**Thread Standard:** BSPP connection according to DIN 3852-2-X.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1     | D1 (mm) | t1 (mm) | CH (mm) | L1 (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|--------|---------|---------|---------|---------|
| 1246439   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | BSP60    | 1/2-14 | 30,0    | 14,0    | 27,0    | 64,0    |
| 1219429   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | BSPP     | 1/2-14 | 30,0    | 16,0    | 24,0    | 61,0    |
| 1249106   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | BSPP     | 1/2-14 | 30,0    | 16,0    | 24,0    | 61,0    |
| 1252258   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | BSPP     | 1/2-14 | 32,0    |         | 27,0    | 59,0    |

Rated flow / pressure drop values on request. Other sizes and connection types available on request.

REV.2.1

STANDARD ISO 5676 - BRAKE  
COUPLING BK



TOP  
COAT

Male coupling - Metric 24° light/heavy series  
bulkhead  
ISO 5676

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

**Material:** galvanised steel with hardened parts subject to wear. HNBR O-rings (other materials optional). Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

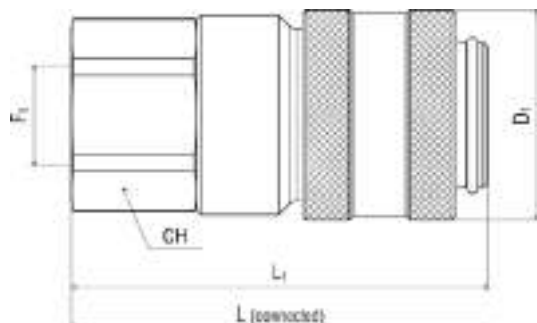
**Temperature Range:** -30 °C +125 °C

**Thread Standard:** metric connection according to DIN EN ISO 8434-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1      | OD1 | D1 (mm) | t1 (mm) | CH (mm) | LN (mm) | L1 (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|---------|-----|---------|---------|---------|---------|---------|
| 1219431   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | D24L     | M16X1.5 | 10  | 30,0    | 35,0    | 24,0    | 22,0    | 80,0    |
| 1233608   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | D24L     | M18X1.5 | 12  | 30,0    | 36,0    | 24,0    | 24,0    | 81,0    |
| 1219430   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | D24L     | M22X1.5 | 15  | 30,0    | 38,0    | 24,0    | 27,0    | 83,0    |
| 1233609   | 6         | 10,0    | 3/8"    | 25,0           | 100,0             | D24S     | M20X1.5 | 12  | 30,0    | 38,0    | 24,0    | 27,0    | 83,0    |

Rated flow / pressure drop values on request. Other sizes and connection types available on request.

## // DIAGNOSTIC

// STANDARD ISO 15171-1 -  
DIAGNOSTIC DKTOP  
COATFemale coupling - Female thread  
ISO 15171-1

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

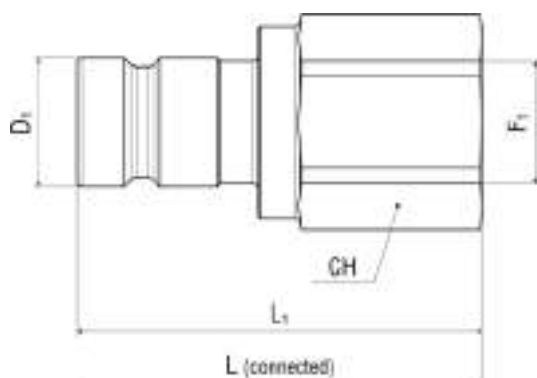
**Material:** galvanised steel with hardened parts subject to wear. HNBR O-rings (other materials optional). Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

**Thread Standard:** NPTF connection according to ANSI B1-20.3, metric connection according to ISO 6149-1, SAE UNF/UN connection according to SAE J 1926-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1     | D1 (mm) | CH (mm) | L1 (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|--------|---------|---------|---------|
| 1233582   | 4         | 6,0     | 1/4"    | 47,0           | 188,0             | NPTF     | 1/8-27 | 25,0    | 21,0    | 50,0    |
| 1233583   | 4         | 6,0     | 1/4"    | 47,0           | 188,0             | NPTF     | 1/4-18 | 25,0    | 21,0    | 50,0    |

Rated flow / pressure drop values on request. Other sizes and connection types available on request.

// STANDARD ISO 15171-1 -  
DIAGNOSTIC DKTOP  
COATMale coupling - Female thread  
ISO 15171-1

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 T1+T2. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatic and water hydraulics in appropriate materials on request.

**Material:** galvanised steel with hardened parts subject to wear. HNBR O-rings (other materials optional). Thermoplastic dust cap and dust plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

**Thread Standard:** NPTF connection according to ANSI B1-20.3.

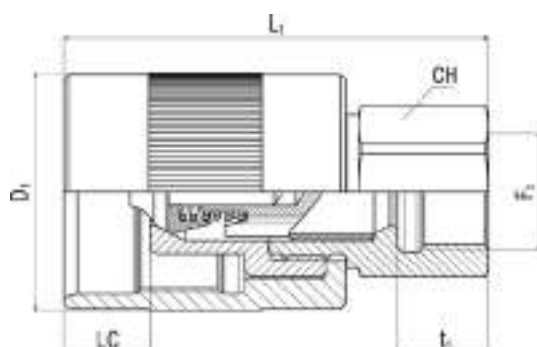
| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | BP Disconn. (Mpa) | Thread 1 | F1     | D1 (mm) | CH (mm) | L1 (mm) |
|-----------|-----------|---------|---------|----------------|-------------------|----------|--------|---------|---------|---------|
| 1233587   | 4         | 6,0     | 1/4"    | 47,0           | 188,0             | NPTF     | 1/8-27 | 12,6    | 19,0    | 39,8    |
| 1233588   | 4         | 6,0     | 1/4"    | 47,0           | 188,0             | NPTF     | 1/4-18 | 12,6    | 19,0    | 45,3    |

Rated flow / pressure drop values on request. Other sizes and connection types available on request.

REV.2.1

## // SCREW TYPE

## // SCREW COUPLING - POPPET HDK

**Female coupling (fixed part) - Female thread ISO 14541**

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

**Material:** galvanised steel. TPE poppet valve seal (PTFE optional). HNBR O-rings (other materials optional). Polyethylene dust cap and plug. Stainless steel compression spring. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

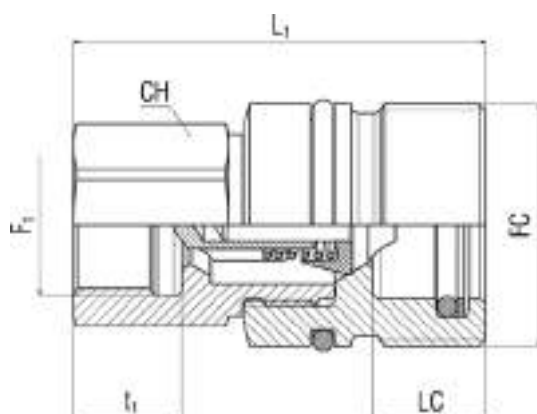
**Temperature Range:** -30 °C +125 °C

**Thread Standard:** metric connection according to DIN EN ISO 8434-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | Thread 1 | F1       | FC    | t1 (mm) | CH (mm) | LC (mm) | L1 (mm) |
|-----------|-----------|---------|---------|----------------|----------|----------|-------|---------|---------|---------|---------|
| 1219538   | 5         | 8,0     | 5/16"   | 45,0           | BSPP     | 3/8-19   | M28x2 | 14,0    | 22,0    | 14,5    | 55,0    |
| 1219537   | 8         | 13,0    | 1/2"    | 40,0           | BSPP     | 1/2-14   | M36x2 | 16,0    | 27,0    | 17,0    | 60,5    |
| 1219535   | 16        | 25,0    | 1"      | 31,5           | BSPP     | 1-11     | M48x3 | 20,0    | 41,0    | 26,0    | 92,5    |
| 1219536   | 16        | 25,0    | 1"      | 31,5           | BSPP     | 3/4-14   | M48x3 | 18,0    | 41,0    | 26,0    | 89,5    |
| 1230056   | 20        | 32,0    | 1 1/4"  | 31,5           | BSPP     | 1 1/4-11 | M70x3 |         | 55,0    | 36,0    | 115,0   |

Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided.

## // SCREW COUPLING - POPPET HDK

**Male coupling (loose part) - Female thread ISO 14541**

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

**Material:** galvanised steel. TPE poppet valve seal (PTFE optional). HNBR O-rings (other materials optional). Polyethylene dust cap and plug. Stainless steel compression spring. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

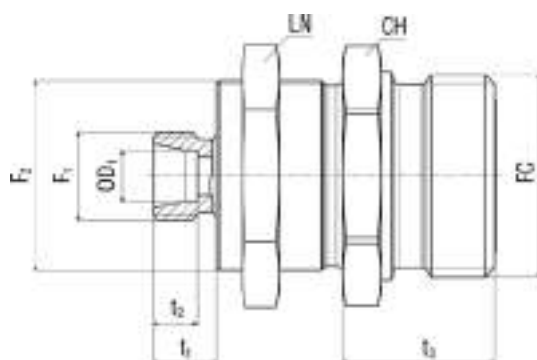
**Temperature Range:** -30 °C +125 °C

**Thread Standard:** BSPP connection according to DIN 3852-2-X, NPTF connection according to ANSI B1-20.3, SAE UNF/UN connection according to SAE J 1926-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | Thread 1 | F1       | D1 (mm) | t1 (mm) | CH (mm) | LC (mm) | L1 (mm) |
|-----------|-----------|---------|---------|----------------|----------|----------|---------|---------|---------|---------|---------|
| 1219530   | 5         | 8,0     | 5/16"   | 45,0           | BSPP     | 3/8-19   | 34,0    | 14,0    | 22,0    | 12,5    | 65,0    |
| 1219529   | 8         | 13,0    | 1/2"    | 40,0           | BSPP     | 1/2-14   | 42,0    | 16,0    | 27,0    | 15,5    | 74,5    |
| 1219528   | 16        | 25,0    | 1"      | 31,5           | BSPP     | 3/4-14   | 55,0    | 18,0    | 41,0    | 11,0    | 98,0    |
| 1219527   | 16        | 25,0    | 1"      | 31,5           | BSPP     | 1-11     | 55,0    | 20,0    | 41,0    | 11,0    | 101,0   |
| 1230063   | 20        | 32,0    | 1 1/4"  | 31,5           | BSPP     | 1 1/4-11 | 80,0    |         | 55,0    | 10,0    | 117,0   |

Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided.

## // SCREW COUPLING - FLAT FACE RK

TOP  
COAT**Female coupling (fixed part with hexagon nut)  
- Metric 24° light/heavy series**

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

**Material:** galvanised steel housing and internal components. Brass vent sleeve in the loose half. All seals HNBR (FPM seals optional). Polyethylene dust cap and plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

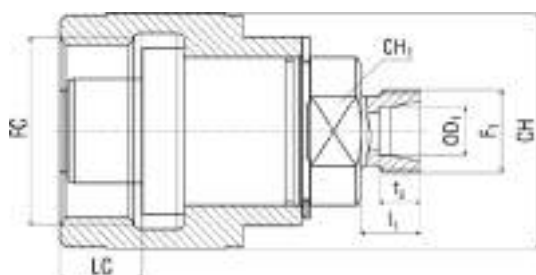
**Thread Standard:** metric connection according to DIN 8434-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | Thread 1 | F1      | F2      | OD1 | FC    | t1 (mm) | t2 (mm) | t3 (mm) | CH (mm) | LN (mm) |
|-----------|-----------|---------|---------|----------------|----------|---------|---------|-----|-------|---------|---------|---------|---------|---------|
| 1228975   | 6         | 10,0    | 3/8"    | 31,5           | D24L     | M16X1.5 | M30x1   | 10  | M32x3 | 11,0    | 7,0     | 24,0    | 36,0    | 36,0    |
| 1228977   | 6         | 10,0    | 3/8"    | 31,5           | D24L     | M18X1.5 | M30x1   | 12  | M32x3 | 11,0    | 7,0     | 24,0    | 36,0    | 36,0    |
| 1228973   | 6         | 10,0    | 3/8"    | 31,5           | D24L     | M14X1.5 | M30x1   | 8   | M32x3 | 10,0    | 7,0     | 24,0    | 36,0    | 36,0    |
| 1228979   | 10        | 16,0    | 5/8"    | 31,5           | D24L     | M22X1.5 | M45x1,5 | 15  | M48x3 | 12,0    | 7,0     | 35,0    | 55,0    | 55,0    |
| 1228981   | 10        | 16,0    | 5/8"    | 31,5           | D24L     | M26X1.5 | M45x1,5 | 18  | M48x3 | 12,0    | 7,5     | 35,0    | 55,0    | 55,0    |
| 1228983   | 16        | 25,0    | 1"      | 16,0           | D24L     | M30X2   | M56x1,5 | 22  | M60x3 | 14,0    | 7,5     | 34,0    | 64,0    | 70,0    |
| 1228985   | 16        | 25,0    | 1"      | 16,0           | D24L     | M36X2   | M56x1,5 | 28  | M60x3 | 14,0    | 7,5     | 34,0    | 64,0    | 70,0    |
| 1228987   | 6         | 10,0    | 3/8"    | 31,5           | D24S     | M18X1.5 | M30x1   | 10  | M32x3 | 12,0    | 7,5     | 24,0    | 36,0    | 36,0    |
| 1228989   | 6         | 10,0    | 3/8"    | 31,5           | D24S     | M20X1.5 | M30x1   | 12  | M32x3 | 12,0    | 7,5     | 24,0    | 36,0    | 36,0    |
| 1228990   | 6         | 10,0    | 3/8"    | 31,5           | D24S     | M22X1.5 | M30x1   | 14  | M32x3 | 14,0    | 8,0     | 24,0    | 36,0    | 36,0    |
| 1222558   | 10        | 16,0    | 5/8"    | 31,5           | D24S     | M24X1.5 | M45x1,5 | 16  | M48x3 | 14,0    | 8,5     | 35,0    | 55,0    | 55,0    |
| 1228993   | 10        | 16,0    | 5/8"    | 31,5           | D24S     | M30X2   | M45x1,5 | 20  | M48x3 | 16,0    | 10,5    | 35,0    | 55,0    | 55,0    |
| 1243350   | 10        | 16,0    | 5/8"    | 31,5           | D24S     | M30X2   | M45x1,5 | 20  | M48x3 | 16,0    | 10,5    | 35,0    | 55,0    | 55,0    |
| 1228995   | 16        | 25,0    | 1"      | 16,0           | D24S     | M36X2   | M56x1,5 | 25  | M60x3 | 18,0    | 12,0    | 34,0    | 64,0    | 70,0    |
| 1228997   | 16        | 25,0    | 1"      | 16,0           | D24S     | M42X2   | M56x1,5 | 30  | M60x3 | 20,0    | 13,5    | 34,0    | 64,0    | 70,0    |

Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided.

REV.2.1

## // SCREW COUPLING - FLAT FACE RK

TOP  
COAT**Male coupling (loose part) - Metric 24° light/ heavy series**

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

**Material:** galvanised steel housing and internal components. Brass vent sleeve in the loose half. All seals HNBR (FPM seals optional). Polyethylene dust cap and plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

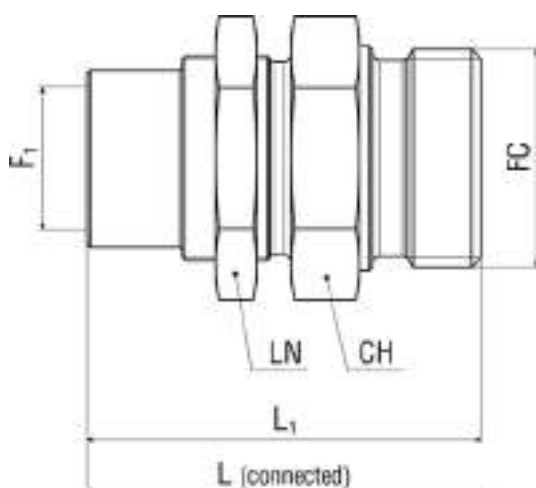
**Temperature Range:** -30 °C +125 °C

**Thread Standard:** metric connection according to DIN 8434-1.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | Thread 1 | F1      | OD1 | FC    | LC (mm) | t1 (mm) | t2 (mm) | CH (mm) | CH1 (mm) |
|-----------|-----------|---------|---------|----------------|----------|---------|-----|-------|---------|---------|---------|---------|----------|
| 1229630   | 6         | 10,0    | 3/8"    | 31,5           | D24L     | M16X1.5 | 10  | M32x3 | 14,0    | 11,0    | 7,0     | 40,0    | 32,0     |
| 1229631   | 6         | 10,0    | 3/8"    | 31,5           | D24L     | M18X1.5 | 12  | M32x3 | 14,0    | 11,0    | 7,0     | 40,0    | 32,0     |
| 1229629   | 6         | 10,0    | 3/8"    | 31,5           | D24L     | M14X1.5 | 8   | M32x3 | 14,0    | 10,0    | 7,0     | 40,0    | 32,0     |
| 1229632   | 10        | 16,0    | 5/8"    | 31,5           | D24L     | M22X1.5 | 15  | M48x3 | 24,0    | 12,0    | 7,0     | 60,0    | 32,0     |
| 1229633   | 10        | 16,0    | 5/8"    | 31,5           | D24L     | M26X1.5 | 18  | M48x3 | 24,0    | 12,0    | 7,5     | 60,0    | 32,0     |
| 1229634   | 16        | 25,0    | 1"      | 16,0           | D24L     | M30X2   | 22  | M60x3 | 28,0    | 14,0    | 7,5     | 154,0   | 41,0     |
| 1229635   | 16        | 25,0    | 1"      | 16,0           | D24L     | M36X2   | 28  | M60x3 | 28,0    | 14,0    | 7,5     | 154,0   | 41,0     |
| 1229636   | 6         | 10,0    | 3/8"    | 31,5           | D24S     | M18X1.5 | 10  | M32x3 | 14,0    | 12,0    | 7,5     | 40,0    | 32,0     |
| 1229637   | 6         | 10,0    | 3/8"    | 31,5           | D24S     | M20X1.5 | 12  | M32x3 | 14,0    | 12,0    | 7,5     | 40,0    | 32,0     |
| 1229638   | 6         | 10,0    | 3/8"    | 31,5           | D24S     | M22X1.5 | 14  | M32x3 | 14,0    | 14,0    | 8,0     | 40,0    | 32,0     |
| 1222559   | 10        | 16,0    | 5/8"    | 31,5           | D24S     | M24X1.5 | 16  | M48x3 | 24,0    | 14,0    | 8,5     | 60,0    | 32,0     |
| 1229640   | 10        | 16,0    | 5/8"    | 31,5           | D24S     | M30X2   | 20  | M48x3 | 24,0    | 16,0    | 10,5    | 60,0    | 32,0     |
| 1229641   | 16        | 25,0    | 1"      | 16,0           | D24S     | M36X2   | 25  | M60x3 | 28,0    | 18,0    | 12,0    | 154,0   | 41,0     |
| 1229642   | 16        | 25,0    | 1"      | 16,0           | D24S     | M42X2   | 30  | M60x3 | 28,0    | 20,0    | 13,5    | 154,0   | 41,0     |

Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided.

## // SCREW COUPLING - FLAT FACE RK

TOP  
COAT**Female coupling (fixed part with hexagon nut) - Female thread**

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

**Material:** galvanised steel housing and internal components. Brass vent sleeve in the loose half. All seals HNBR (FPM seals optional). Polyethylene dust cap and plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

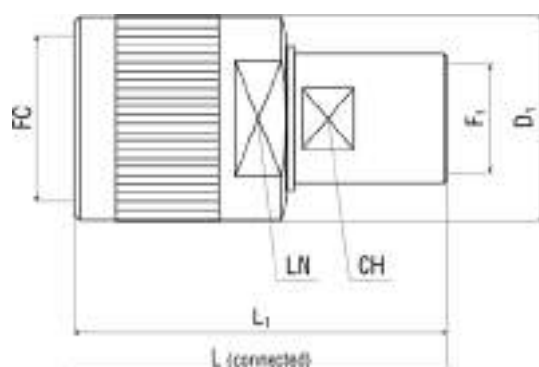
**Temperature Range:** -30 °C +125 °C

**Thread Standard:** BSPP connection according to DIN 3852-2-X.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | Thread 1 | F1     | FC    | CH (mm) | LN (mm) | L1 (mm) | L (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|--------|
| 1232376   | 6         | 10,0    | 3/8"    | 31,5           | BSPP     | 1/2-14 | M32x3 | 36,0    | 36,0    | 58,0    | 116,0  |
| 1232377   | 10        | 16,0    | 5/8"    | 31,5           | BSPP     | 3/4-14 | M48x3 | 55,0    | 55,0    | 82,0    | 144,0  |
| 1232378   | 16        | 25,0    | 1"      | 16,0           | BSPP     | 1-11   | M60x3 | 64,0    | 70,0    | 78,0    | 165,5  |

Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided.

## // SCREW COUPLING - FLAT FACE RK



## Male coupling (loose part) - Female thread

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

**Material:** galvanised steel housing and internal components. Brass vent sleeve in the loose half. All seals HNBR (FPM seals optional). Polyethylene dust cap and plug. TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

**Thread Standard:** BSPP connection according to DIN 3852-2-X.

| Item Code | ID (Dash) | ID (mm) | ID (in) | WP Conn. (Mpa) | Thread 1 | F1     | FC    | D1 (mm) | CH (mm) | CH1 (mm) | L1 (mm) | L (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|----------|---------|--------|
| 1232379   | 6         | 10,0    | 3/8"    | 31,5           | BSPP     | 1/2-14 | M32x3 | 40,0    | 22,0    | 32,0     | 37,0    | 116,0  |
| 1232380   | 10        | 16,0    | 5/8"    | 31,5           | BSPP     | 3/4-14 | M48x3 | 60,0    | 32,0    | 50,0     | 86,0    | 144,0  |
| 1232381   | 16        | 25,0    | 1"      | 16,0           | BSPP     | 1-11   | M60x3 | 154,0   | 41,0    | 41,0     | 88,5    | 165,5  |

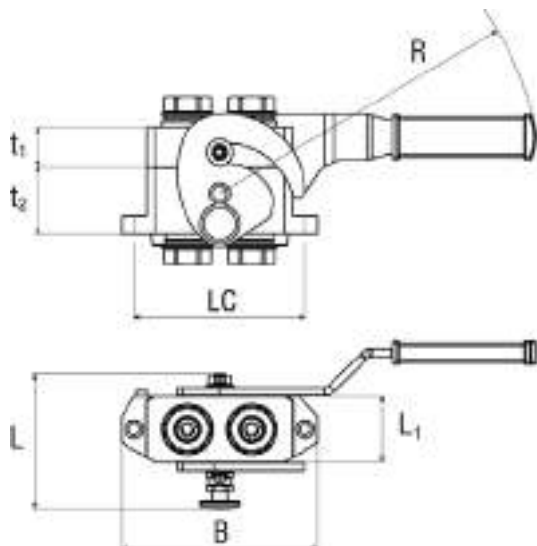
Other sizes and connection types available on request. Specific instructions for installation, use and maintenance are separately provided. Code 1232381: D1 with hand wheel

REV.2.1

## // MULTI COUPLING

## // MULTI-K 2X3/8" AND MULTI-K 2X1/2"

Mobile male - Female thread

PATENT  
PENDINGTOP  
COAT

| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1232490   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 2x3/8 | 30,0    |         | 130,0   | 50,0    | 102,0  | 149,0  | 245    |
| 1232492   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 2x1/2 | 30,0    |         | 130,0   | 50,0    | 102,0  | 149,0  | 245    |

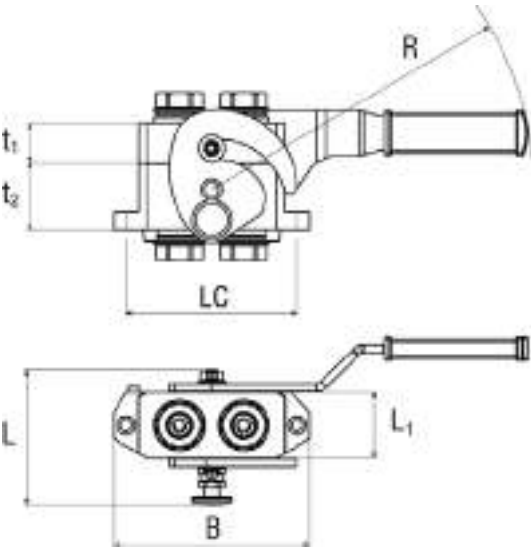
A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

// MULTI-K 2X3/8" AND MULTI-K 2X1/2"

Fixed female - Female thread

PATENT  
PENDING

TOP  
COAT



| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1232491   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 2x3/8 |         | 51,0    | 130,0   | 50,0    | 102,0  | 149,0  | 245    |
| 1232493   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 2x1/2 |         | 51,0    | 130,0   | 50,0    | 102,0  | 149,0  | 245    |

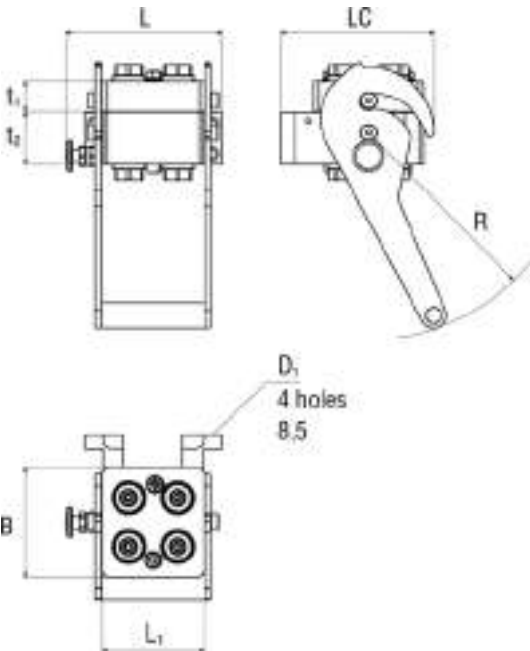
A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

REV.2.1

MULTI-K 4X3/8"Q AND MULTI-K 4X1/2"Q - 250 BAR

PATENT  
PENDING

TOP  
COAT



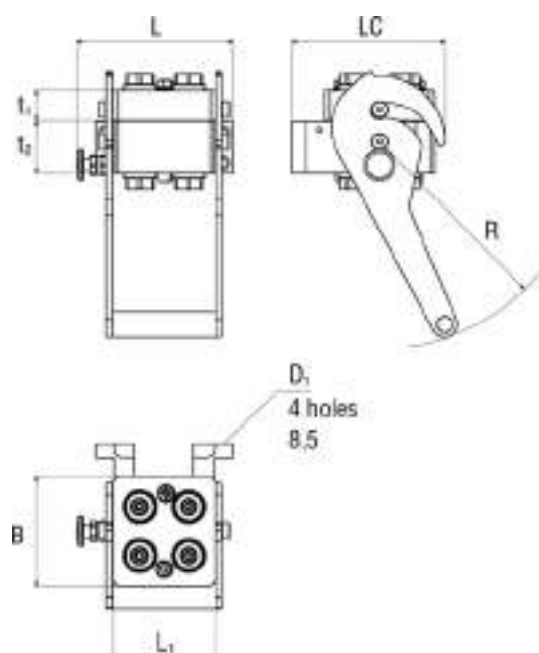
| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1232494   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 4x3/8 | 30,0    |         | 150,0   | 100,0   | 153,0  | 108,0  | 203    |
| 1232496   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 4x1/2 | 30,0    |         | 150,0   | 100,0   | 153,0  | 108,0  | 203    |

A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

## // MULTI-K 4X3/8"Q AND MULTI-K 4X1/2"Q - 250 BAR

PATENT  
PENDINGTOP  
COAT

Fixed female - Female thread



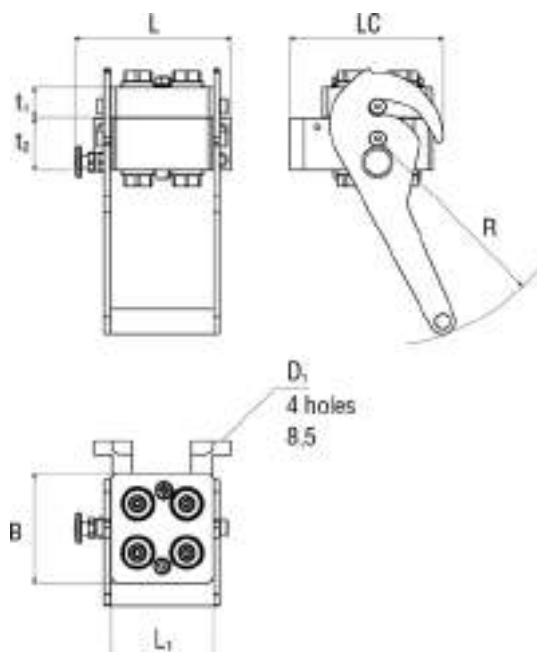
| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1232495   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 4x3/8 |         | 51,0    | 150,0   | 100,0   | 153,0  | 108,0  | 203    |
| 1232497   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 4x1/2 |         | 51,0    | 150,0   | 100,0   | 153,0  | 108,0  | 203    |

A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

REV.2.1

## // MULTI-K 4X3/8"Q AND MULTI-K 4X1/2"Q - 350 BAR

Mobile male - Female thread

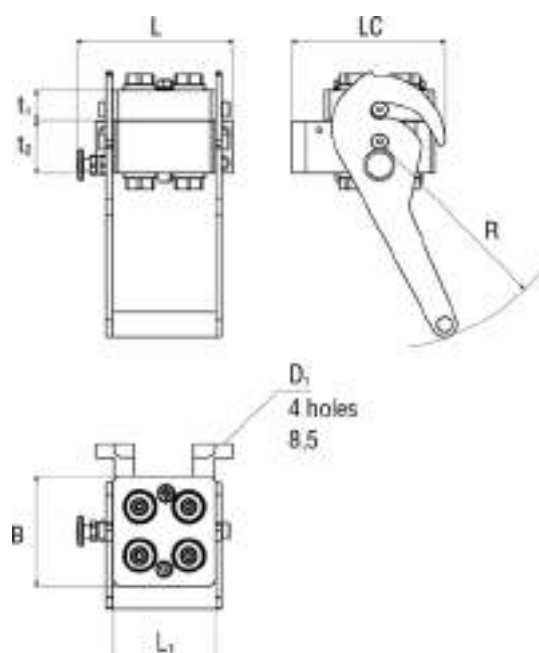


| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1245848   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 4x3/8 | 30,0    |         | 150,0   | 100,0   | 153,0  | 108,0  | 203    |
| 1245852   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 4x1/2 | 30,0    |         | 150,0   | 100,0   | 153,0  | 108,0  | 203    |

A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

## // MULTI-K 4X3/8"Q AND MULTI-K 4X1/2"Q - 350 BAR

Fixed female - Female thread



| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1245849   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 4x3/8 |         | 51,0    | 150,0   | 100,0   | 153,0  | 108,0  | 203    |
| 1245853   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 4x1/2 |         | 51,0    | 150,0   | 100,0   | 153,0  | 108,0  | 203    |

A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

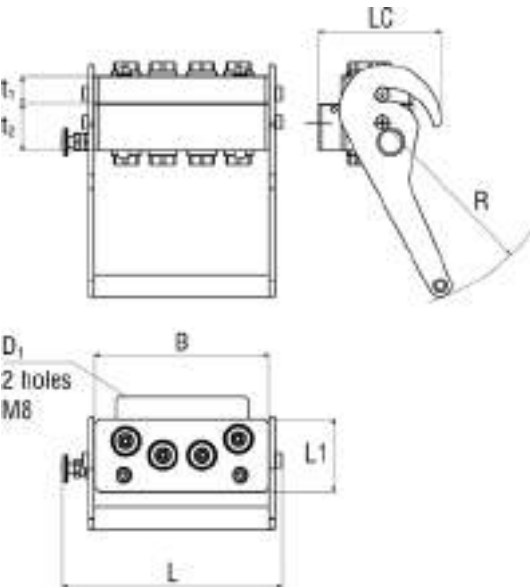
REV.2.1

MULTI-K 4X3/8" AND MULTI-K 4X1/2"

Mobile male - Female thread

PATENT  
PENDING

TOP  
COAT



| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1232311   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 4x3/8 | 30,0    |         | 134,0   | 79,6    | 241,0  | 192,0  | 203    |
| 1232498   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 4x1/2 | 30,0    |         | 134,0   | 79,6    | 241,0  | 192,0  | 203    |

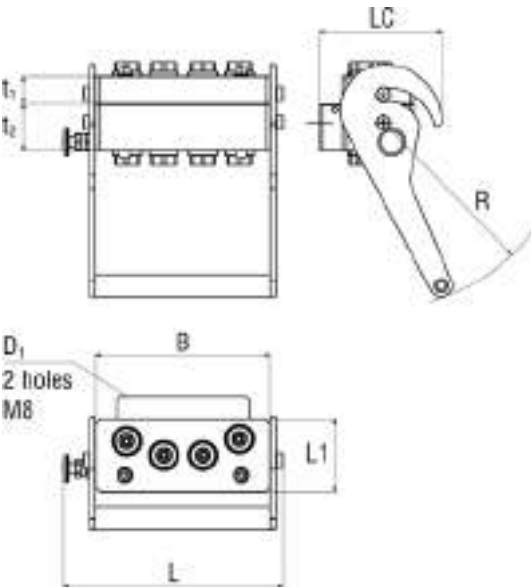
A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

// MULTI-K 4X3/8" AND MULTI-K 4X1/2"

Fixed female - Female thread

PATENT  
PENDING

TOP  
COAT

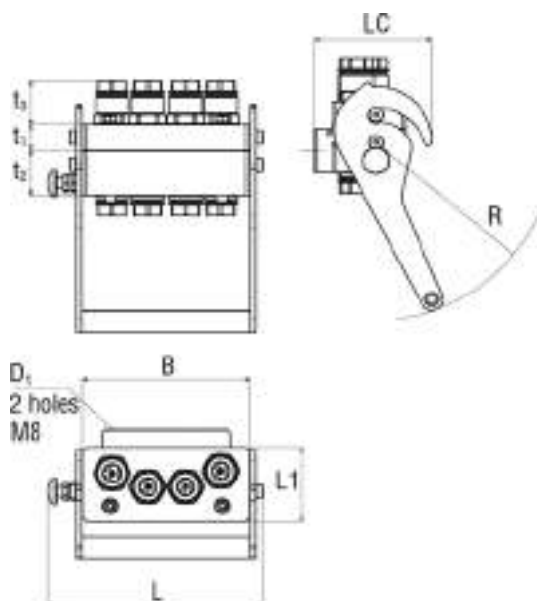


| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1232190   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 4x3/8 |         | 51,0    | 134,0   | 79,6    | 241,0  | 192,0  | 203    |
| 1233704   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 4x1/2 |         | 51,0    | 134,0   | 85,0    | 241,0  | 192,0  | 203    |

A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

REV.2.1

## // MULTI-K CPR 4X3/8" AND MULTI-K CPR 4X1/2"

TOP  
COATMobile male connectable under pressure -  
Female thread

| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | t3 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|---------|--------|--------|--------|
| 1235030   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 4x3/8 | 30,0    |         | 41,9    | 134,0   | 85,0    | 241,0  | 192,0  | 203    |
| 1233703   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 4x1/2 | 30,0    |         | 51,5    | 134,0   | 85,0    | 241,0  | 192,0  | 203    |

A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided

## // MULTI-K 3X3/8" AND MULTI-K 2X1/2"

PATENT  
PENDING

Mobile male - Female thread

TOP  
COAT

| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines       | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------------|---------|---------|---------|---------|--------|--------|--------|
| 1232500   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 3x3/8+2x1/2 | 30,0    |         | 127,0   | 112,0   | 201,0  | 152,0  | 203    |

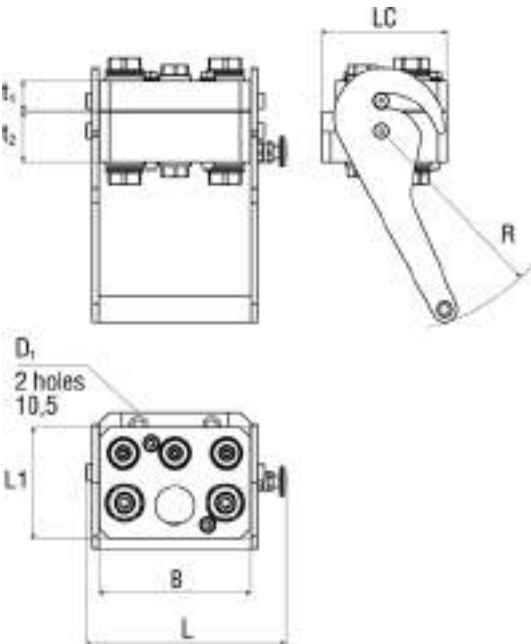
A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

// MULTI-K 3X3/8" AND MULTI-K 2X1/2"

Fixed female - Female thread

PATENT  
PENDING

TOP  
COAT



| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines       | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------------|---------|---------|---------|---------|--------|--------|--------|
| 1232501   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 3x3/8+2x1/2 |         | 50,0    | 127,0   | 112,0   | 201,0  | 152,0  | 203    |

A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

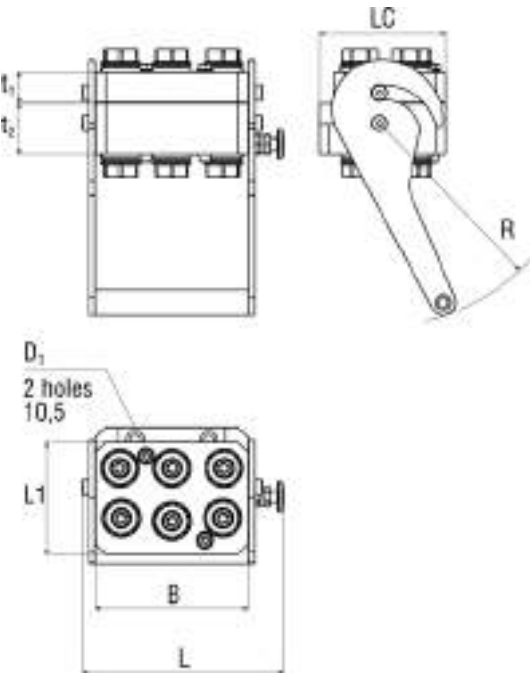
REV.2.1

MULTI-K 6X3/8" AND MULTI-K 6X1/2"

Mobile male - Female thread

PATENT  
PENDING

TOP  
COAT



| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1232502   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 6x3/8 | 30,0    |         | 127,0   | 112,0   | 201,0  | 152,0  | 203    |
| 1232504   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 6x1/2 | 30,0    |         | 127,0   | 112,0   | 201,0  | 152,0  | 203    |

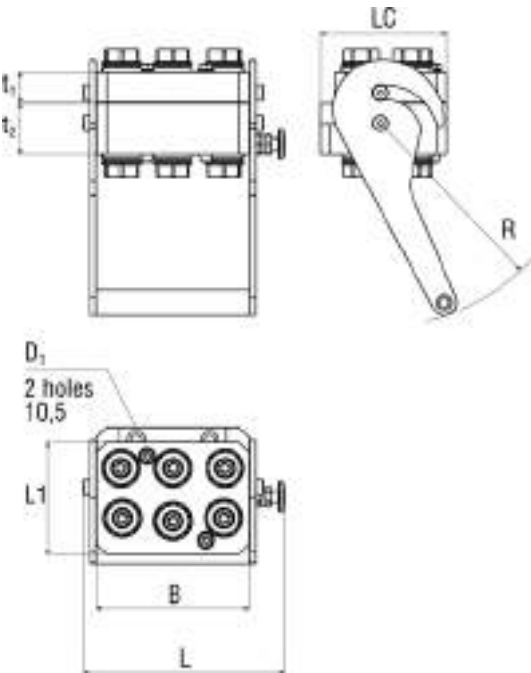
A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

// MULTI-K 6X3/8" AND MULTI-K 6X1/2"

Fixed female - Female thread

PATENT  
PENDING

TOP  
COAT



| Item Code | ID (Dash) | ID (mm) | ID (in) | BP Conn. (Mpa) | Thread 1 | F1     | Lines | t1 (mm) | t2 (mm) | LC (mm) | L1 (mm) | L (mm) | B (mm) | R (mm) |
|-----------|-----------|---------|---------|----------------|----------|--------|-------|---------|---------|---------|---------|--------|--------|--------|
| 1232503   | 6         | 10,0    | 3/8"    | 100,0          | BSPP     | 3/8-19 | 6x3/8 |         | 50,0    | 127,0   | 112,0   | 201,0  | 152,0  | 203    |
| 1232505   | 8         | 13,0    | 1/2"    | 100,0          | BSPP     | 1/2-14 | 6x1/2 |         | 50,0    | 127,0   | 112,0   | 201,0  | 152,0  | 203    |

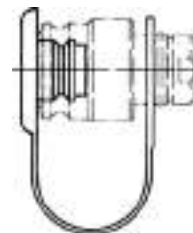
A complete range of spare parts and accessories are available. Specific instructions for installation, use and maintenance are separately provided. Electric connection also available.

## // SVK ISO B - CAP &amp; PLUG

## // STANDARD ISO 7241 B - POPPET SVK-ISO-B

Dust plug for female coupling

ISO 7241 B

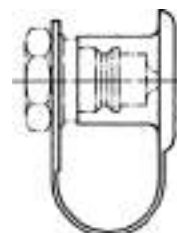


| Item Code | Colour | Material | ID (Dash) | ID (mm) | ID (in) |
|-----------|--------|----------|-----------|---------|---------|
| 1224400   | RED    | PE       | 4         | 6,0     | 1/4"    |
| 1224401   | RED    | PE       | 6         | 10,0    | 3/8"    |
| 1224402   | RED    | PE       | 8         | 13,0    | 1/2"    |
| 1224403   | RED    | PE       | 12        | 19,0    | 3/4"    |
| 1224404   | RED    | PE       | 16        | 25,0    | 1"      |

## // STANDARD ISO 7241 B - POPPET SVK-ISO-B

Dust cap for male coupling

ISO 7241 B



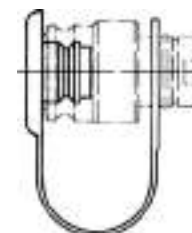
| Item Code | Colour | Material | ID (Dash) | ID (mm) | ID (in) |
|-----------|--------|----------|-----------|---------|---------|
| 1224394   | RED    | PE       | 4         | 6,0     | 1/4"    |
| 1224395   | RED    | PE       | 6         | 10,0    | 3/8"    |
| 1224396   | RED    | PE       | 8         | 13,0    | 1/2"    |
| 1224397   | RED    | PE       | 12        | 19,0    | 3/4"    |
| 1224398   | RED    | PE       | 16        | 25,0    | 1"      |

## // FLAT FACE - CAP

## // STANDARD ISO 16028 - FLAT FACE FPK

Dust cap for female coupling

ISO 16028

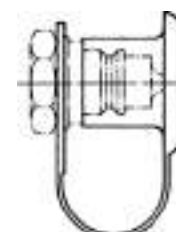


| Item Code | Colour | Material | ID (Dash) | ID (mm) | ID (in) |
|-----------|--------|----------|-----------|---------|---------|
| 1224407   | RED    | PE       | 4         | 6,0     | 1/4"    |
| 1224408   | RED    | PE       | 6         | 10,0    | 3/8"    |
| 1224409   | RED    | PE       | 8         | 13,0    | 1/2"    |
| 1223544   | RED    | PE       | 10        | 16,0    | 5/8"    |
| 1223537   | RED    | PE       | 12        | 19,0    | 3/4"    |
| 1223539   | RED    | PE       | 16        | 25,0    | 1"      |

## // STANDARD ISO 16028 - FLAT FACE FPK

Dust cap for male coupling

ISO 16028



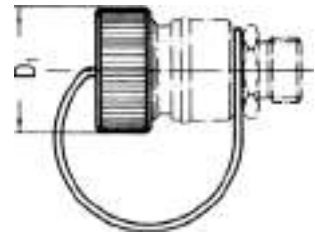
| Item Code | Colour | Material | ID (Dash) | ID (mm) | ID (in) |
|-----------|--------|----------|-----------|---------|---------|
| 1223532   | RED    | PE       | 4         | 6,0     | 1/4"    |
| 1223536   | RED    | PE       | 6         | 10,0    | 3/8"    |
| 1223531   | RED    | PE       | 8         | 13,0    | 1/2"    |
| 1223535   | RED    | PE       | 10        | 16,0    | 5/8"    |
| 1223528   | RED    | PE       | 12        | 19,0    | 3/4"    |
| 1223530   | RED    | PE       | 16        | 25,0    | 1"      |

REV.2.1

## // SCREW TYPE - SOCKET &amp; PROTECTION

## // SCREW COUPLING - POPPET HDK

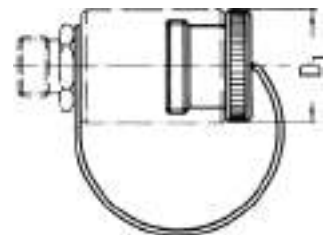
Dust cap for female coupling (fixed part)  
ISO 14541



| Item Code | Material | ID (Dash) | ID (mm) | ID (in) | D1 (mm) |
|-----------|----------|-----------|---------|---------|---------|
| 1228904   | PE       | 5         | 8,0     | 5/16"   | 34,0    |
| 1228899   | PE       | 8         | 13,0    | 1/2"    | 42,0    |
| 1228901   | PE       | 16        | 25,0    | 1"      | 55,0    |
| 1228902   | PE       | 20        | 32,0    | 1 1/4"  | 80,0    |

## // SCREW COUPLING - POPPET HDK

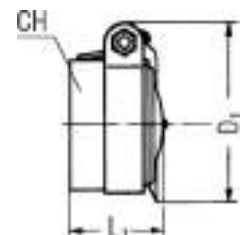
Dust plug for male coupling (loose part)  
ISO 14541



| Item Code | Material | ID (Dash) | ID (mm) | ID (in) | D1 (mm) |
|-----------|----------|-----------|---------|---------|---------|
| 1228897   | PE       | 5         | 8,0     | 5/16"   | 34,0    |
| 1228892   | PE       | 8         | 13,0    | 1/2"    | 42,0    |
| 1228894   | PE       | 16        | 25,0    | 1"      | 55,0    |
| 1228895   | PE       | 20        | 32,0    | 1 1/4"  | 80,0    |

## // SCREW COUPLING - FLAT FACE RK

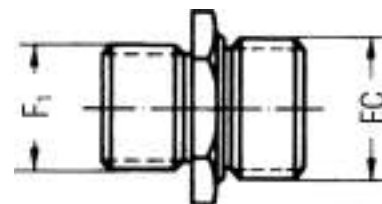
Dust protection D



| Item Code | ID (Dash) | ID (mm) | ID (in) | D1 (mm) | CH (mm) | L1 (mm) |
|-----------|-----------|---------|---------|---------|---------|---------|
| 1228890   | 6         | 10,0    | 3/8"    | 68,0    | 46,0    | 35,0    |
| 1228888   | 10        | 16,0    | 5/8"    | 95,5    | 70,0    | 50,0    |
| 1228889   | 16        | 25,0    | 1"      | 107,0   |         | 47,0    |

## // SCREW COUPLING - FLAT FACE RK

Blind socket E



| Item Code | ID (Dash) | ID (mm) | ID (in) | Thread 1 | F1      | FC    |
|-----------|-----------|---------|---------|----------|---------|-------|
| 1228867   | 6         | 10,0    | 3/8"    | MET      | M30X1.5 | M32x3 |
| 1228848   | 10        | 16,0    | 5/8"    | MET      | M45X1.5 | M48x3 |
| 1228857   | 16        | 25,0    | 1"      | MET      |         | M60x3 |



## // CLAMPS

|                                        |     |
|----------------------------------------|-----|
| // LIGHT SERIES DIN 3015 PART 1 .....  | 324 |
| // HEAVY SERIES DIN 3015 PART 2 .....  | 333 |
| // TWIN SERIES B DIN 3015 PART 3 ..... | 338 |

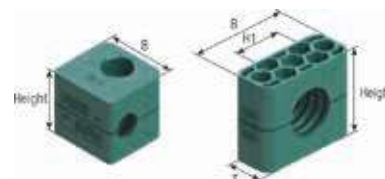
## // LIGHT SERIES DIN 3015 PART 1

## // RPYCHA

Clamp - Smooth

Light Series

Polypropylene - Green



| Item Code | Group of Pipe Clamp | OD (mm) | T (mm) | B (mm) | H1 (mm) | Height (mm) |
|-----------|---------------------|---------|--------|--------|---------|-------------|
| 1901599   | 0                   | 6       | 30     | 28     |         | 27          |
| 1901340   | 0                   | 8       | 30     | 28     |         | 27          |
| 1901342   | 0                   | 10      | 30     | 28     |         | 27          |
| 1901600   | 0                   | 12      | 30     | 28     |         | 27          |
| 1901344   | 1                   | 6       | 30     | 34     | 20,0    | 27          |
| 1901601   | 1                   | 8       | 30     | 34     | 20,0    | 27          |
| 1901347   | 1                   | 10      | 30     | 34     | 20,0    | 27          |
| 1901349   | 1                   | 12      | 30     | 34     | 20,0    | 27          |
| 1900520   | 2                   | 13,5    | 30     | 42     | 26,0    | 33          |
| 1901351   | 2                   | 14      | 30     | 42     | 26,0    | 33          |
| 1901353   | 2                   | 15      | 30     | 42     | 26,0    | 33          |
| 1901355   | 2                   | 16      | 30     | 42     | 26,0    | 33          |
| 1901358   | 2                   | 18      | 30     | 42     | 26,0    | 33          |
| 1901360   | 3                   | 20      | 30     | 49     | 33,0    | 35          |
| 1902040   | 3                   | 21,3    | 30     | 49     | 33,0    | 35          |
| 1901364   | 3                   | 22      | 30     | 49     | 33,0    | 35          |
| 1901366   | 3                   | 25      | 30     | 49     | 33,0    | 35          |
| 1901368   | 4                   | 28      | 30     | 59     | 40,0    | 42          |
| 1901370   | 4                   | 30      | 30     | 59     | 40,0    | 42          |
| 1901372   | 5                   | 32      | 30     | 71     | 52,0    | 58          |
| 1901375   | 5                   | 35      | 30     | 71     | 52,0    | 58          |
| 1901377   | 5                   | 38      | 30     | 71     | 52,0    | 58          |
| 1901379   | 5                   | 40      | 30     | 71     | 52,0    | 58          |
| 1901603   | 5                   | 42      | 30     | 71     | 52,0    | 58          |
| 1900810   | 6                   | 45      | 30     | 86     | 66,0    | 66          |
| 1901604   | 6                   | 48,3    | 30     | 86     | 66,0    | 66          |
| 1901385   | 6                   | 50,8    | 30     | 86     | 66,0    | 66          |

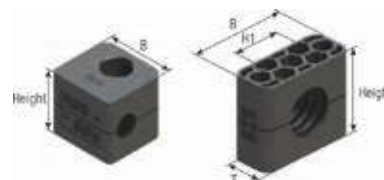
REV.2.1

## // RPYCHA\_A

Clamp - Smooth

Light Series

Polypropylene - Black



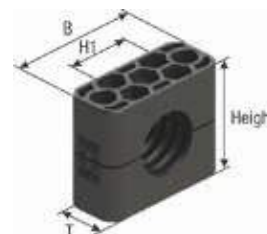
| Item Code | Group of Pipe Clamp | OD (mm) | B (mm) | T (mm) | H1 (mm) | Height (mm) |
|-----------|---------------------|---------|--------|--------|---------|-------------|
| 1901339   | 0                   | 6       | 28     | 30     |         | 27          |
| 1901341   | 0                   | 8       | 28     | 30     |         | 27          |
| 1901343   | 0                   | 12      | 28     | 30     |         | 27          |
| 1901345   | 1                   | 6       | 34     | 30     | 20,0    | 27          |
| 1901346   | 1                   | 8       | 34     | 30     | 20,0    | 27          |
| 1901348   | 1                   | 10      | 34     | 30     | 20,0    | 27          |
| 1901350   | 1                   | 12      | 34     | 30     | 20,0    | 27          |
| 1901352   | 2                   | 14      | 42     | 30     | 26,0    | 33          |
| 1901354   | 2                   | 15      | 42     | 30     | 26,0    | 33          |
| 1901356   | 2                   | 16      | 42     | 30     | 26,0    | 33          |
| 1901357   | 2                   | 17,2    | 42     | 30     | 26,0    | 33          |
| 1901359   | 2                   | 18      | 42     | 30     | 26,0    | 33          |
| 1901361   | 3                   | 20      | 49     | 30     | 33,0    | 35          |
| 1901363   | 3                   | 21,3    | 49     | 30     | 33,0    | 35          |
| 1901365   | 3                   | 22      | 49     | 30     | 33,0    | 35          |
| 1901367   | 3                   | 25      | 49     | 30     | 33,0    | 35          |
| 1901369   | 4                   | 28      | 59     | 30     | 40,0    | 42          |
| 1901371   | 4                   | 30      | 59     | 30     | 40,0    | 42          |
| 1901373   | 5                   | 32      | 71     | 30     | 52,0    | 58          |
| 1901374   | 5                   | 33,7    | 71     | 30     | 52,0    | 58          |

## // RRYCBA

Clamp - Profiled

Light Series

Polyamide, Black



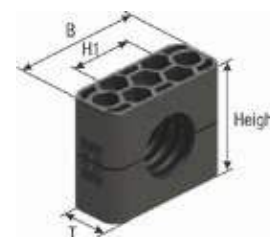
| Item Code | Group of Pipe Clamp | OD (mm) | H1 (mm) | T (mm) | Height (mm) | B (mm) |
|-----------|---------------------|---------|---------|--------|-------------|--------|
| 1901319   | 1                   | 6       | 20,0    | 30     | 27          | 34     |
| 1901324   | 1                   | 6,4     | 20,0    | 30     | 27          | 34     |
| 1901320   | 1                   | 8       | 20,0    | 30     | 27          | 34     |
| 1901321   | 1                   | 9,5     | 20,0    | 30     | 27          | 34     |
| 1901322   | 1                   | 10      | 20,0    | 30     | 27          | 34     |
| 1901323   | 1                   | 12      | 20,0    | 30     | 27          | 34     |
| 1901325   | 2                   | 12,7    | 26,0    | 30     | 33          | 42     |
| 1901326   | 2                   | 13,5    | 26,0    | 30     | 33          | 42     |
| 1901327   | 2                   | 15      | 26,0    | 30     | 33          | 42     |
| 1901328   | 2                   | 16      | 26,0    | 30     | 33          | 42     |
| 1901329   | 2                   | 17,2    | 26,0    | 30     | 33          | 42     |
| 1901330   | 2                   | 18      | 26,0    | 30     | 33          | 42     |
| 1901331   | 3                   | 19      | 33,0    | 30     | 35          | 49     |
| 1901332   | 3                   | 20      | 33,0    | 30     | 35          | 49     |
| 1901333   | 3                   | 21,3    | 33,0    | 30     | 35          | 49     |
| 1901334   | 3                   | 22      | 33,0    | 30     | 35          | 49     |
| 1901335   | 4                   | 26,9    | 40,0    | 30     | 42          | 59     |
| 1901336   | 4                   | 28      | 40,0    | 30     | 42          | 59     |
| 1901337   | 4                   | 30      | 40,0    | 30     | 42          | 59     |
| 1901338   | 5                   | 38      | 52,0    | 30     | 58          | 71     |

## // RGYCBA

Clamp - Profiled

Light Series

Rubber, Black



| Item Code | Group of Pipe Clamp | OD (mm) | T (mm) | B (mm) | H1 (mm) | Height (mm) |
|-----------|---------------------|---------|--------|--------|---------|-------------|
| 1901387   | 1                   | 12      | 30     | 34     | 20,0    | 27          |
| 1901388   | 2                   | 15      | 30     | 40     | 26,0    | 33          |
| 1901389   | 2                   | 16      | 30     | 40     | 26,0    | 33          |
| 1901390   | 2                   | 18      | 30     | 40     | 26,0    | 33          |
| 1901391   | 3                   | 25      | 30     | 48     | 33,0    | 35          |
| 1901393   | 5                   | 42      | 30     | 68     | 52,0    | 58          |

## // R5YCBA

Clamp - Smooth

Light Series

Aluminium



| Item Code | Group of Pipe Clamp | OD (mm) | T (mm) | B (mm) | H1 (mm) | Height (mm) |
|-----------|---------------------|---------|--------|--------|---------|-------------|
| 1901299   | 1                   | 6       | 30     | 34     | 20,0    | 27          |
| 1901300   | 1                   | 8       | 30     | 34     | 20,0    | 27          |
| 1901301   | 1                   | 10      | 30     | 34     | 20,0    | 27          |
| 1901302   | 1                   | 12      | 30     | 34     | 20,0    | 27          |
| 1901303   | 2                   | 14      | 30     | 42     | 26,0    | 33          |
| 1901304   | 2                   | 15      | 30     | 42     | 26,0    | 33          |
| 1901305   | 2                   | 16      | 30     | 42     | 26,0    | 33          |
| 1901306   | 2                   | 17,2    | 30     | 42     | 26,0    | 33          |
| 1901307   | 2                   | 18      | 30     | 42     | 26,0    | 33          |
| 1901308   | 3                   | 20      | 30     | 49     | 33,0    | 35          |
| 1901789   | 3                   | 21,3    | 30     | 49     | 33,0    | 35          |
| 1901309   | 3                   | 22      | 30     | 49     | 33,0    | 35          |
| 1901310   | 3                   | 25      | 30     | 49     | 33,0    | 35          |
| 1901311   | 4                   | 26,9    | 30     | 59     | 40,0    | 42          |
| 1901312   | 4                   | 28      | 30     | 59     | 40,0    | 42          |
| 1901313   | 4                   | 30      | 30     | 59     | 40,0    | 42          |
| 1901314   | 5                   | 32      | 30     | 71     | 52,0    | 58          |
| 1901315   | 5                   | 33,7    | 30     | 71     | 52,0    | 58          |
| 1901316   | 5                   | 35      | 30     | 71     | 52,0    | 58          |
| 1901317   | 5                   | 38      | 30     | 71     | 52,0    | 58          |
| 1901318   | 5                   | 42      | 30     | 71     | 52,0    | 58          |

REV.2.1

## // R1YCIA

Weldplate

Light Series

Phosphated Steel



| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901227   | 0                   | 30     |         |
| 1901229   | 1                   | 36     | 20,0    |
| 1901231   | 2                   | 42     | 26,0    |
| 1901233   | 3                   | 50     | 33,0    |
| 1901235   | 4                   | 59     | 40,0    |
| 1901237   | 5                   | 72     | 52,0    |
| 1901240   | 6                   | 88     | 66,0    |

## // R3YCIA

Weldplate

Light Series

Stainless Steel 316



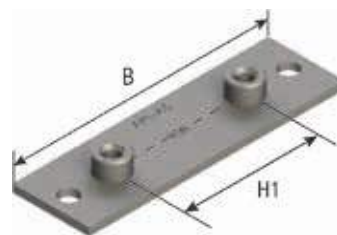
| Item Code | Group of Pipe Clamp | B (mm) | T (mm) | H1 (mm) | Height (mm) |
|-----------|---------------------|--------|--------|---------|-------------|
| 1901228   | 0                   | 30     | 3      |         | 30          |
| 1901230   | 1                   | 36     | 3      | 20,0    | 30          |
| 1901232   | 2                   | 42     | 3      | 26,0    | 30          |
| 1901234   | 3                   | 50     | 3      | 33,0    | 30          |
| 1901236   | 4                   | 59     | 3      | 40,0    | 30          |
| 1901239   | 5                   | 72     | 3      | 52,0    | 30          |

## // R1YCIA-L

Weldplate Wide

Light Series

Phosphated Steel



| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901241   | 1                   | 64     | 20,0    |
| 1901242   | 2                   | 70     | 26,0    |
| 1901243   | 3                   | 78     | 33,0    |
| 1901245   | 4                   | 87     | 40,0    |
| 1901246   | 5                   | 100    | 52,0    |

## // R1YCIA

Weldplate

Light Series

Phosphated Steel



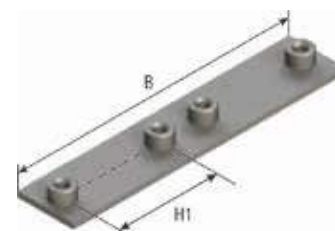
| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901227   | 0                   | 30     |         |
| 1901229   | 1                   | 36     | 20,0    |
| 1901231   | 2                   | 42     | 26,0    |
| 1901233   | 3                   | 50     | 33,0    |
| 1901235   | 4                   | 59     | 40,0    |
| 1901237   | 5                   | 72     | 52,0    |
| 1901240   | 6                   | 88     | 66,0    |

## // R3YCHA-DB

Weldplate - Multi

Light Series

Phosphated Steel



| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901224   | 1                   | 69     | 20,0    |
| 1901225   | 2                   | 86     | 26,0    |
| 1901226   | 3                   | 104    | 33,0    |

## // R1YCSA

Top Plate

Light Series

Cr-VI-free



| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901557   | 0                   | 28     | 30,0    |
| 1901558   | 1                   | 37     | 20,0    |
| 1901559   | 2                   | 43     | 26,0    |
| 1901560   | 3                   | 50     | 33,0    |
| 1901561   | 4                   | 57     | 40,0    |
| 1901562   | 5                   | 69     | 52,0    |
| 1901563   | 6                   | 83     | 66,0    |

REV.2.1

## // R3YCSA

Top Plate

Light Series

Stainless Steel 316



| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901279   | 0                   | 28     | 30,0    |
| 1901280   | 1                   | 34     | 20,0    |
| 1901281   | 2                   | 40     | 26,0    |
| 1901282   | 3                   | 48     | 33,0    |
| 1901283   | 4                   | 57     | 40,0    |
| 1901284   | 5                   | 70     | 52,0    |

## // R3YCVA

Hexagon Bolt

Light Series

Stainless Steel 316



| Item Code | Group of Pipe Clamp | Size  |
|-----------|---------------------|-------|
| 1901487   | 1                   | M6X30 |
| 1901488   | 2                   | M6X35 |
| 1901489   | 3                   | M6X40 |
| 1901490   | 4                   | M6X45 |
| 1901491   | 5                   | M6X60 |

## // R1YCEA

Rail Nut

Cr-VI-free



| Item Code | Product Code       | Size  |
|-----------|--------------------|-------|
| 1901493   | R1YCEA0-0060000_DH | M6X12 |

## // R1YCVA-TW

Hexagon Bolt

Twin Series

Cr-VI-free



| Item Code | Group of Pipe Clamp | Size  |
|-----------|---------------------|-------|
| 1901656   | 1                   | M6X30 |
| 1901657   | 2                   | M6X35 |
| 1901648   | 2                   | M8X35 |
| 1901658   | 3                   | M6X40 |
| 1901649   | 3                   | M8X45 |
| 1901659   | 4                   | M6X45 |
| 1901650   | 4                   | M8X50 |
| 1901660   | 5                   | M6X60 |
| 1901651   | 5                   | M8X60 |

## // R1YCVA-C

Unbraco Bolt

Light Series

Cr-VI-free



| Item Code | Group of Pipe Clamp | Size  |
|-----------|---------------------|-------|
| 1901574   | 1                   | M6X20 |
| 1901579   | 2                   | M6X25 |
| 1901580   | 3                   | M6X30 |
| 1901581   | 4                   | M6X35 |
| 1901582   | 5                   | M6X50 |
| 1901583   | 6                   | M6X60 |

## // R3YCVA-C

Unbraco Bolt

Light Series

Stainless Steel 316



| Item Code | Group of Pipe Clamp | Size  |
|-----------|---------------------|-------|
| 1901291   | 1                   | M6X20 |
| 1901292   | 2                   | M6X25 |
| 1901293   | 3                   | M6X30 |
| 1901847   | 4                   | M6X35 |
| 1903174   | 4                   | M6X40 |
| 1901848   | 5                   | M6X50 |

REV.2.1

## // R1YCRA

Rail Mount

Cr-VI-free



| Item Code | B (mm) | Rail Height (mm) | Rail Length (m) |
|-----------|--------|------------------|-----------------|
| 1901497   | 28     | 14               | 2               |

## // R1YCEA

Rail Nut

Cr-VI-free



| Item Code | Size  |
|-----------|-------|
| 1901493   | M6X12 |

## // R3YCEA

Rail Nut

Stainless Steel 316



| Item Code | Size  |
|-----------|-------|
| 1901494   | M6X12 |

## // R3YCRA

Rail Mount

Stainless Steel 316



| Item Code | B (mm) | Rail Height (mm) | Rail Length (m) |
|-----------|--------|------------------|-----------------|
| 1901215   | 28     | 14               | 2               |

## // R3YCVA-H

Construction Bolt

Light Series

Stainless Steel 316



| Item Code | Group of Pipe Clamp | Size  |
|-----------|---------------------|-------|
| 1901255   | 0                   | M6X20 |
| 1901256   | 1                   | M6X20 |
| 1901258   | 2                   | M6X25 |
| 1901260   | 3                   | M6x28 |
| 1901262   | 4                   | M6x34 |
| 1901264   | 5                   | M6X50 |

REV.2.1

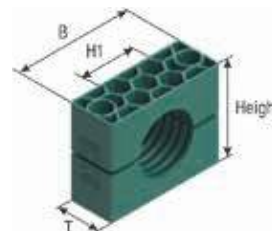
## // HEAVY SERIES DIN 3015 PART 2

## // RPYCBB

Clamp - Profiled

Heavy Series

Polypropylene, Green



| Item Code | Group of Pipe Clamp | OD (mm) | T (mm) | B (mm) | H1 (mm) | Height (mm) |
|-----------|---------------------|---------|--------|--------|---------|-------------|
| 1901606   | 1                   | 8       | 30     | 56     | 33,0    | 32          |
| 1901607   | 1                   | 12      | 30     | 56     | 33,0    | 32          |
| 1901447   | 1                   | 14      | 30     | 56     | 33,0    | 32          |
| 1901448   | 1                   | 15      | 30     | 56     | 33,0    | 32          |
| 1901608   | 1                   | 16      | 30     | 56     | 33,0    | 32          |
| 1901609   | 1                   | 18      | 30     | 56     | 33,0    | 32          |
| 1901610   | 2                   | 22      | 30     | 71     | 45,0    | 48          |
| 1901611   | 2                   | 28      | 30     | 71     | 45,0    | 48          |
| 1901451   | 3                   | 30      | 30     | 86     | 60,0    | 60          |
| 1901612   | 3                   | 32      | 30     | 86     | 60,0    | 60          |
| 1901613   | 3                   | 35      | 30     | 86     | 60,0    | 60          |
| 1901614   | 3                   | 38      | 30     | 86     | 60,0    | 60          |
| 1901615   | 3                   | 42      | 30     | 86     | 60,0    | 60          |
| 1901616   | 3                   | 42      | 30     | 86     | 60,0    | 60          |
| 1901454   | 4                   | 44,5    | 30     | 120    | 90,0    | 90          |
| 1901455   | 4                   | 52      | 45     | 117    | 90,0    | 90          |
| 1901619   | 4                   | 60,3    | 45     | 117    | 90,0    | 90          |
| 1901457   | 4                   | 70      | 45     | 117    | 90,0    | 90          |
| 1901458   | 5                   | 80      | 60     | 154    | 122,0   | 120         |
| 1901459   | 5                   | 88,9    | 60     | 154    | 122,0   | 120         |

## // R5YCB

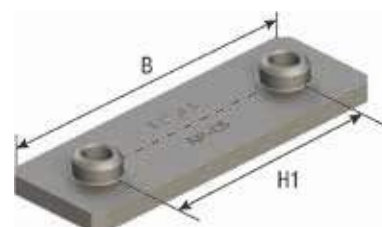
**Clamp - Smooth**  
**Heavy Series**  
**Aluminium**



| Item Code | Group of Pipe Clamp | OD (mm) | T (mm) | B (mm) | H1 (mm) | Height (mm) |
|-----------|---------------------|---------|--------|--------|---------|-------------|
| 1901426   | 1                   | 6       | 30     | 56     | 33,0    | 32          |
| 1901427   | 1                   | 8       | 30     | 56     | 33,0    | 32          |
| 1901428   | 1                   | 10      | 30     | 56     | 33,0    | 32          |
| 1901429   | 1                   | 12      | 30     | 56     | 33,0    | 32          |
| 1901430   | 1                   | 15      | 30     | 56     | 33,0    | 32          |
| 1901431   | 1                   | 16      | 30     | 56     | 33,0    | 32          |
| 1901432   | 2                   | 20      | 30     | 71     | 45,0    | 48          |
| 1901433   | 2                   | 25      | 30     | 71     | 45,0    | 48          |
| 1901435   | 2                   | 28      | 30     | 71     | 45,0    | 48          |
| 1901605   | 2                   | 30      | 30     | 71     | 45,0    | 48          |
| 1901436   | 3                   | 30      | 30     | 86     | 60,0    | 60          |
| 1901438   | 3                   | 35      | 30     | 86     | 60,0    | 60          |
| 1901439   | 3                   | 38      | 30     | 86     | 60,0    | 60          |
| 1901440   | 3                   | 42      | 30     | 86     | 60,0    | 60          |
| 1901441   | 4                   | 48,3    | 45     | 117    | 90,0    | 90          |
| 1901442   | 4                   | 50      | 45     | 117    | 90,0    | 90          |
| 1901443   | 4                   | 60,3    | 45     | 117    | 90,0    | 90          |
| 1901444   | 4                   | 65      | 45     | 117    | 90,0    | 90          |
| 1901445   | 5                   | 76,1    | 60     | 154    | 122,0   | 120         |
| 1901446   | 5                   | 88,9    | 60     | 154    | 122,0   | 120         |

## // R1YCI

**Weldplate**  
**Heavy Series**  
**Phosphated Steel**



| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901542   | 1                   | 73     | 33,0    |
| 1901543   | 2                   | 84     | 45,0    |
| 1901544   | 3                   | 100    | 60,0    |
| 1901545   | 4                   | 140    | 90,0    |
| 1901546   | 5                   | 180    | 122,0   |
| 1901223   | 6                   | 225    | 168,0   |

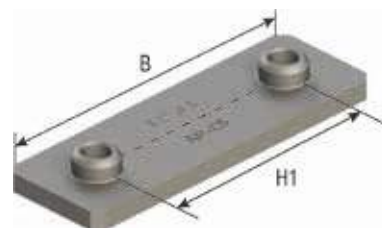
REV.2.1

## // R3YCIB

Weldplate

Heavy Series

Stainless Steel 316



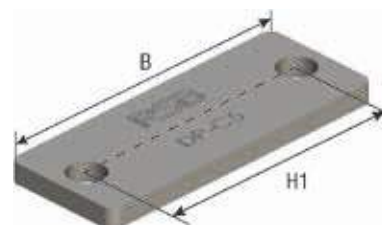
| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901221   | 1                   | 73     | 33,0    |
| 1901222   | 2                   | 84     | 45,0    |
| 1901861   | 4                   | 140    | 90,0    |
| 1901862   | 6                   | 88     | 66,0    |
| 1902142   | 6                   | 225    | 168,0   |

## // R1YCSB

Top Plate

Heavy Series

Cr-VI-free



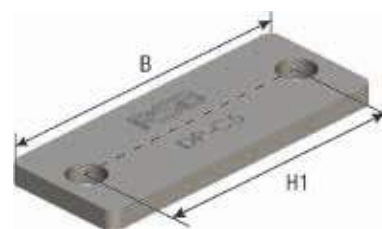
| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901568   | 1                   | 55     | 33,0    |
| 1901569   | 2                   | 70     | 45,0    |
| 1901570   | 3                   | 85     | 60,0    |
| 1901571   | 4                   | 115    | 90,0    |
| 1901572   | 5                   | 152    | 122,0   |

## // R3YCSB

Top Plate

Heavy Series

Stainless Steel 316



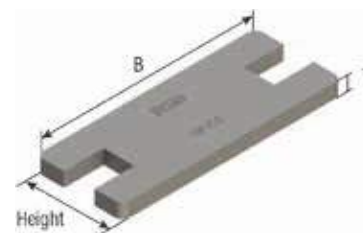
| Item Code | Group of Pipe Clamp | B (mm) | H1 (mm) |
|-----------|---------------------|--------|---------|
| 1901288   | 1                   | 55     | 33,0    |
| 1901289   | 2                   | 70     | 45,0    |
| 1906369   | 3                   | 85     | 60,0    |
| 1905794   | 4                   | 115    | 90,0    |
| 1902143   | 6                   | 205    | 168,0   |

## // R1YCID

Locking Plate

Heavy Series

Cr-VI-free



| Item Code | T (mm) | B (mm) | Height (mm) |
|-----------|--------|--------|-------------|
| 1901475   | 8      | 55     | 30          |
| 1901476   | 8      | 70     | 30          |
| 1901477   | 8      | 85     | 30          |
| 1901478   | 10     | 115    | 45          |
| 1901479   | 10     | 152    | 60          |

## // R1YCVB

Hexagon Bolt

Heavy Series

Cr-VI-free



| Item Code | Group of Pipe Clamp | Size    |
|-----------|---------------------|---------|
| 1901652   | 1                   | M10X45  |
| 1901653   | 2                   | M10X60  |
| 1901654   | 3                   | M10X70  |
| 1901485   | 4                   | M12X100 |
| 1901655   | 5                   | M16X130 |
| 1901486   | 6                   | M20X190 |

## // R3YCVB

Hexagon Bolt

Heavy Series

Stainless Steel 316



| Item Code | Group of Pipe Clamp | Size    |
|-----------|---------------------|---------|
| 1901482   | 1                   | M10X45  |
| 1901483   | 2                   | M10X60  |
| 1901484   | 3                   | M10X70  |
| 1902160   | 4                   | M12X100 |
| 1902144   | 6                   | M20X190 |

REV.2.1

## // R1YCVB-H

Construction Bolt

Heavy Series

Cr-VI-free



| Item Code | Group of Pipe Clamp | Size   |
|-----------|---------------------|--------|
| 1901269   | 1                   | M10X25 |
| 1901270   | 2                   | M10X40 |
| 1901271   | 3                   | M10X50 |
| 1901272   | 4                   | M12X80 |

## // R3YCVB-H

Construction Bolt

Heavy Series

Stainless Steel 316



| Item Code | Group of Pipe Clamp | Size   |
|-----------|---------------------|--------|
| 1902161   | 4                   | M12X80 |

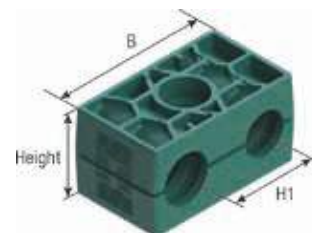
## // TWIN SERIES B DIN 3015 PART 3

## // RPYCGA

Twin Clamp - Smooth

Light Series

Polypropylene



| Item Code | Group of Pipe Clamp | OD (mm) | T (mm) | B (mm) | H1 (mm) | Height (mm) | Colour |
|-----------|---------------------|---------|--------|--------|---------|-------------|--------|
| 1901395   | 1                   | 6       | 30     | 36     | 20,0    | 27          | BLK    |
| 1901397   | 1                   | 8       | 30     | 36     | 20,0    | 27          | BLK    |
| 1901399   | 1                   | 10      | 30     | 36     | 20,0    | 27          | BLK    |
| 1901401   | 1                   | 12      | 30     | 36     | 20,0    | 27          | BLK    |
| 1901403   | 2                   | 14      | 30     | 53     | 29,0    | 27,4        | BLK    |
| 1901405   | 2                   | 15      | 30     | 53     | 29,0    | 27,4        | BLK    |
| 1901407   | 2                   | 16      | 30     | 53     | 29,0    | 27,4        | BLK    |
| 1901409   | 2                   | 18      | 30     | 53     | 29,0    | 27,4        | BLK    |
| 1901411   | 3                   | 20      | 30     | 67     | 36,0    | 37          | BLK    |
| 1901413   | 3                   | 22      | 30     | 67     | 36,0    | 37          | BLK    |
| 1901415   | 3                   | 25      | 30     | 67     | 36,0    | 37          | BLK    |
| 1901417   | 4                   | 28      | 30     | 82     | 45,0    | 42          | BLK    |
| 1901419   | 4                   | 30      | 30     | 82     | 45,0    | 42          | BLK    |
| 1901394   | 1                   | 6       | 30     | 36     | 20,0    | 27          | GRN    |
| 1901396   | 1                   | 8       | 30     | 36     | 20,0    | 27          | GRN    |
| 1901398   | 1                   | 10      | 30     | 36     | 20,0    | 27          | GRN    |
| 1901400   | 1                   | 12      | 30     | 36     | 20,0    | 27          | GRN    |
| 1901402   | 2                   | 14      | 30     | 53     | 29,0    | 27,4        | GRN    |
| 1901404   | 2                   | 15      | 30     | 53     | 29,0    | 27,4        | GRN    |
| 1901406   | 2                   | 16      | 30     | 53     | 29,0    | 27,4        | GRN    |
| 1901408   | 2                   | 18      | 30     | 53     | 29,0    | 27,4        | GRN    |
| 1901410   | 3                   | 20      | 30     | 67     | 36,0    | 37          | GRN    |
| 1901412   | 3                   | 22      | 30     | 67     | 36,0    | 37          | GRN    |
| 1901414   | 3                   | 25      | 30     | 67     | 36,0    | 37          | GRN    |
| 1901416   | 4                   | 28      | 30     | 82     | 45,0    | 42          | GRN    |
| 1901418   | 4                   | 30      | 30     | 82     | 45,0    | 42          | GRN    |
| 1901420   | 5                   | 32      | 30     | 106    | 56,0    | 54          | GRN    |
| 1901421   | 5                   | 35      | 30     | 106    | 56,0    | 54          | GRN    |
| 1901422   | 5                   | 38      | 30     | 106    | 56,0    | 54          | GRN    |
| 1901423   | 5                   | 42      | 30     | 106    | 56,0    | 54          | GRN    |

REV.2.1

## // R1YCHA

Weldplate

Twin Series

Phosphated Steel



| Item Code | Group of Pipe Clamp | T (mm) | B (mm) | Height (mm) |
|-----------|---------------------|--------|--------|-------------|
| 1901537   | 1                   | 3      | 37     | 30          |
| 1901538   | 2                   | 5      | 55     | 30          |
| 1901539   | 3                   | 5      | 70     | 30          |
| 1901540   | 4                   | 5      | 85     | 30          |
| 1901541   | 5                   | 5      | 110    | 30          |

## // R1YCTA

Top Plate

Twin Series

Cr-VI-free



| Item Code | Group of Pipe Clamp | T (mm) | B (mm) | Height (mm) |
|-----------|---------------------|--------|--------|-------------|
| 1901564   | 1                   | 7      | 34     | 30          |
| 1901565   | 2                   | 7      | 51     | 30          |
| 1901566   | 3                   | 7      | 64     | 30          |
| 1901567   | 4                   | 7      | 78     | 30          |
| 1901287   | 5                   | 7      | 102    | 30          |

## // R1YCVA-TW

Hexagon Bolt

Twin Series

Cr-VI-free



| Item Code | Group of Pipe Clamp | Size  |
|-----------|---------------------|-------|
| 1901656   | 1                   | M6X30 |
| 1901657   | 2                   | M6X35 |
| 1901648   | 2                   | M8X35 |
| 1901658   | 3                   | M6X40 |
| 1901649   | 3                   | M8X45 |
| 1901659   | 4                   | M6X45 |
| 1901650   | 4                   | M8X50 |
| 1901660   | 5                   | M6X60 |
| 1901651   | 5                   | M8X60 |

## // R3YCVA-TW

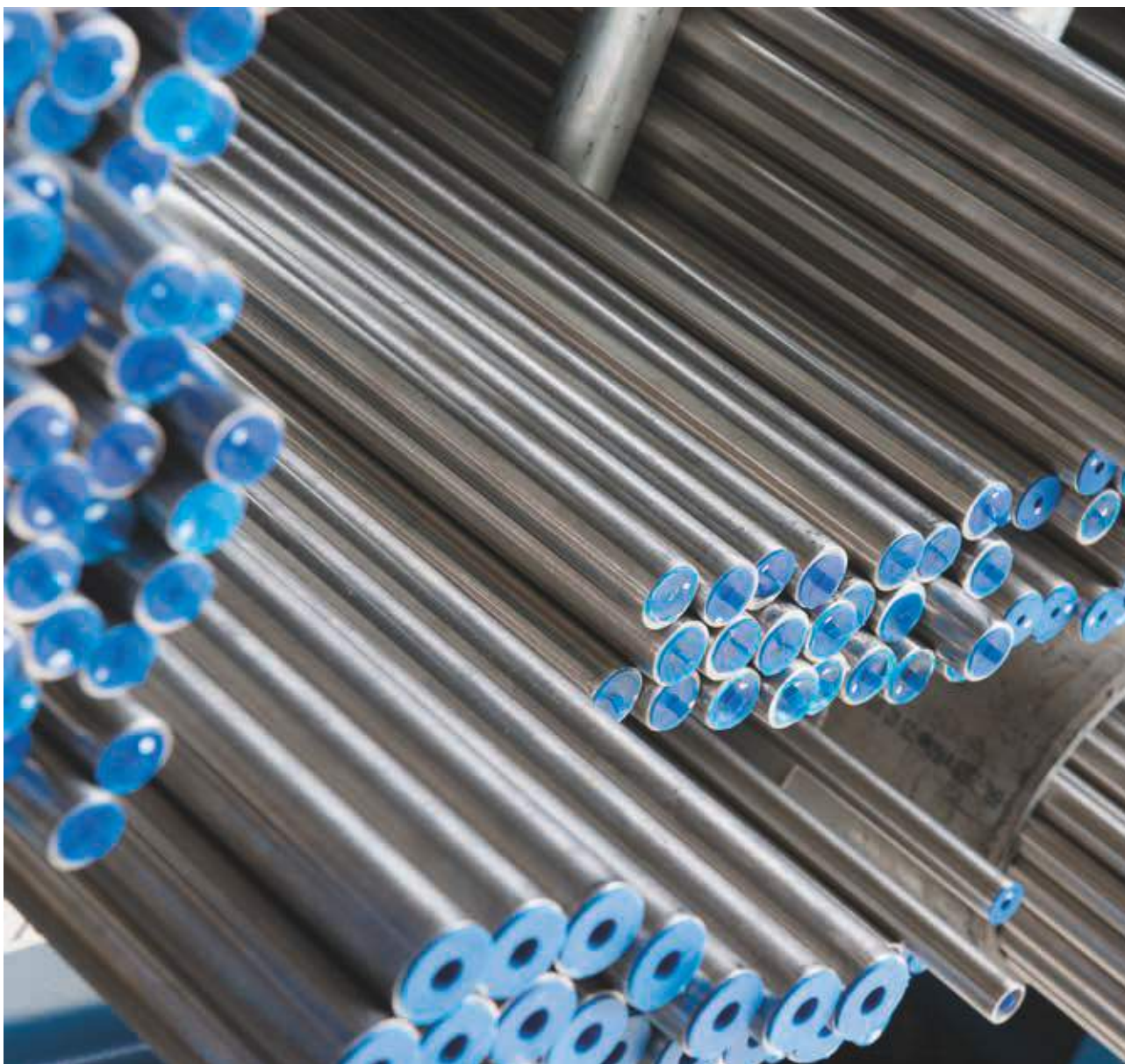
Hexagon Bolt

Twin Series

Stainless Steel 316



| Item Code | Group of Pipe Clamp | Size  |
|-----------|---------------------|-------|
| 1901480   | 1                   | M6X35 |
| 1901481   | 2                   | M8X35 |



## // PIPES

|                         |     |
|-------------------------|-----|
| // CARBON STEEL.....    | 342 |
| // STAINLESS STEEL..... | 347 |

## // CARBON STEEL

## // R0B810

Seamless Carbon Steel Raw - E235

UNI EN 10305-4



| Item Code | Product Code  | OD Tube (mm) | DN Pipe (mm) | Length (mm) |
|-----------|---------------|--------------|--------------|-------------|
| 8002714   | R0B810-006010 | 6,00         | 1,000        | 6000        |
| 8002713   | R0B810-006015 | 6,00         | 1,500        | 6000        |
| 8002712   | R0B810-006020 | 6,00         | 2,000        | 6000        |
| 8002711   | R0B810-008010 | 8,00         | 1,000        | 6000        |
| 8002710   | R0B810-008015 | 8,00         | 1,500        | 6000        |
| 8002709   | R0B810-008020 | 8,00         | 2,000        | 6000        |
| 8002708   | R0B810-010010 | 10,00        | 1,000        | 6000        |
| 8004110   | R0B810-010012 | 10,00        | 1,200        | 6000        |
| 8002707   | R0B810-010015 | 10,00        | 1,500        | 6000        |
| 8002706   | R0B810-010020 | 10,00        | 2,000        | 6000        |
| 8002705   | R0B810-010035 | 10,00        | 3,500        | 6000        |
| 8002704   | R0B810-012010 | 12,00        | 1,000        | 6000        |
| 8002703   | R0B810-012015 | 12,00        | 1,500        | 6000        |
| 8002702   | R0B810-012020 | 12,00        | 2,000        | 6000        |
| 8005515   | R0B810-012250 | 12,00        | 2,500        | 6000        |
| 8002701   | R0B810-012030 | 12,00        | 3,000        | 6000        |
| 8002698   | R0B810-014010 | 14,00        | 1,000        | 6000        |
| 8003986   | R0B810-018030 | 14,00        | 1,000        | 6000        |
| 8002697   | R0B810-014015 | 14,00        | 1,500        | 6000        |
| 8002696   | R0B810-014020 | 14,00        | 2,000        | 6000        |
| 8003427   | R0B810-014025 | 14,00        | 2,500        | 6000        |
| 8002695   | R0B810-015010 | 15,00        | 1,000        | 6000        |
| 8002694   | R0B810-015015 | 15,00        | 1,500        | 6000        |
| 8002693   | R0B810-015020 | 15,00        | 2,000        | 6000        |
| 8004111   | R0B810-015025 | 15,00        | 2,500        | 6000        |
| 8004112   | R0B810-016010 | 16,00        | 1,000        | 6000        |
| 8002692   | R0B810-016015 | 16,00        | 1,500        | 6000        |
| 8002691   | R0B810-016020 | 16,00        | 2,000        | 6000        |
| 8002690   | R0B810-016025 | 16,00        | 2,500        | 6000        |
| 8002689   | R0B810-016030 | 16,00        | 3,000        | 6000        |
| 8002688   | R0B710-018010 | 18,00        | 1,000        | 6300        |
| 8002687   | R0B810-018015 | 18,00        | 1,500        | 6000        |
| 8002686   | R0B810-018020 | 18,00        | 2,000        | 6000        |
| 8002685   | R0B810-020010 | 20,00        | 1,000        | 6000        |
| 8002684   | R0B810-020015 | 20,00        | 1,500        | 6000        |
| 8002683   | R0B810-020020 | 20,00        | 2,000        | 6000        |
| 8002682   | R0B810-020025 | 20,00        | 2,500        | 6000        |
| 8002681   | R0B810-020030 | 20,00        | 3,000        | 6000        |
| 8002680   | R0B810-020040 | 20,00        | 4,000        | 6000        |
| 8004799   | R0B810-022010 | 22,00        | 1,000        | 6000        |
| 8002679   | R0B810-022015 | 22,00        | 1,500        | 6000        |
| 8002678   | R0B810-022020 | 22,00        | 2,000        | 6000        |
| 8002677   | R0B810-022025 | 22,00        | 2,500        | 6000        |
| 8002676   | R0B810-022030 | 22,00        | 3,000        | 6000        |
| 8004118   | R0B810-025010 | 25,00        | 1,000        | 6000        |
| 8002675   | R0B810-025015 | 25,00        | 1,500        | 6000        |
| 8002674   | R0B810-025020 | 25,00        | 2,000        | 6000        |
| 8002673   | R0B810-025025 | 25,00        | 2,500        | 6000        |
| 8002672   | R0B810-025030 | 25,00        | 3,000        | 6000        |
| 8002671   | R0B810-025035 | 25,00        | 3,500        | 6000        |
| 8002670   | R0B810-025040 | 25,00        | 4,000        | 6000        |

REV.2.1

| Item Code | Product Code  | OD Tube (mm) | DN Pipe (mm) | Length (mm) |
|-----------|---------------|--------------|--------------|-------------|
| 8002669   | R0B810-028015 | 28,00        | 1,500        | 6000        |
| 8002668   | R0B810-028020 | 28,00        | 2,000        | 6000        |
| 8004119   | R0B810-028025 | 28,00        | 2,500        | 6000        |
| 8002667   | R0B810-028030 | 28,00        | 3,000        | 6000        |
| 8002666   | R0B810-028040 | 28,00        | 4,000        | 6000        |
| 8002665   | R0B810-028050 | 28,00        | 5,000        | 6000        |
| 8002664   | R0B810-030020 | 30,00        | 2,000        | 6000        |
| 8002663   | R0B810-030025 | 30,00        | 2,500        | 6000        |
| 8002662   | R0B810-030030 | 30,00        | 3,000        | 6000        |
| 8002661   | R0B810-030040 | 30,00        | 4,000        | 6000        |
| 8002660   | R0B810-030050 | 30,00        | 5,000        | 6000        |
| 8002652   | R0B810-035015 | 35,00        | 1,500        | 6000        |
| 8002651   | R0B810-035020 | 35,00        | 2,000        | 6000        |
| 8002650   | R0B810-035025 | 35,00        | 2,500        | 6000        |
| 8002649   | R0B810-035030 | 35,00        | 3,000        | 6000        |
| 8002648   | R0B810-035040 | 35,00        | 4,000        | 6000        |
| 8002647   | R0B810-035050 | 35,00        | 5,000        | 6000        |
| 8002645   | R0B810-038020 | 38,00        | 2,000        | 6000        |
| 8002644   | R0B810-038030 | 38,00        | 3,000        | 6000        |
| 8002643   | R0B810-038040 | 38,00        | 4,000        | 6000        |
| 8002642   | R0B810-038050 | 38,00        | 5,000        | 6000        |
| 8003808   | R0B810-038060 | 38,00        | 6,000        | 6000        |
| 8003646   | R0B810-038070 | 38,00        | 7,000        | 6000        |
| 8002640   | R0B810-042020 | 42,00        | 2,000        | 6000        |
| 8002639   | R0B810-042030 | 42,00        | 3,000        | 6000        |
| 8002638   | R0B810-042050 | 42,00        | 5,000        | 6000        |
| 8002630   | R0B810-050030 | 50,00        | 3,000        | 6000        |
| 8002629   | R0B810-050060 | 50,00        | 6,000        | 6000        |
| 8002628   | R0B810-050080 | 50,00        | 8,000        | 6000        |
| 8002625   | R0B810-060020 | 60,00        | 2,000        | 6000        |
| 8002624   | R0B810-060030 | 60,00        | 3,000        | 6000        |

## // R0B710

Seamless Carbon Steel Raw - E355

UNI EN 10305-4



| Item Code | Product Code   | OD Tube (mm) | DN Pipe (mm) | Length (mm) |
|-----------|----------------|--------------|--------------|-------------|
| 8006005   | R0B710-0080100 | 8,00         | 1,000        | 6000        |
| 8005125   | R0B710-012015  | 12,00        | 1,500        | 6000        |
| 8002721   | R0B710-016015  | 16,00        | 1,500        | 6000        |
| 8002745   | R0B710-016020  | 16,00        | 2,000        | 6000        |
| 8005954   | R0B710-016025  | 16,00        | 2,500        | 6000        |
| 8005896   | R0B710-020015  | 20,00        | 1,500        | 6000        |
| 8005505   | R0B710-020250  | 20,00        | 2,500        | 6000        |
| 8005822   | R0B710-025015  | 25,00        | 1,500        | 6000        |
| 8002744   | R0B710-025020  | 25,00        | 2,000        | 6000        |
| 8002743   | R0B710-025030  | 25,00        | 3,000        | 6000        |
| 8002742   | R0B710-025035  | 25,00        | 3,500        | 6000        |
| 8005939   | R0B710-025050  | 25,00        | 5,000        | 6000        |
| 8005190   | R0B710-02803   | 28,00        | 3,000        | 6000        |
| 8002741   | R0B710-028040  | 28,00        | 4,000        | 6000        |
| 8004719   | R0B710-028050  | 28,00        | 5,000        | 6000        |
| 8003645   | R0B710-030040  | 30,00        | 4,000        | 6000        |
| 8005135   | R0B710-038040  | 38,00        | 4,000        | 6000        |
| 8003705   | R0B710-038050  | 38,00        | 5,000        | 6000        |
| 8005684   | R0B710-038060  | 38,00        | 6,000        | 6000        |
| 8002737   | R0B710-050080  | 50,00        | 8,000        | 6000        |
| 8002736   | R0B710-060050  | 60,00        | 5,000        | 6000        |
| 8002735   | R0B710-065080  | 65,00        | 8,000        | 6000        |

## // R1B810

Seamless Carbon Steel Plated - E235

UNI EN 10305-4



| Item Code | Product Code  | OD Tube (mm) | DN Pipe (mm) | Length (mm) |
|-----------|---------------|--------------|--------------|-------------|
| 8002607   | R1B810-006010 | 6,00         | 1,000        | 6000        |
| 8002606   | R1B810-006015 | 6,00         | 1,500        | 6000        |
| 8005193   | R1B810-006002 | 6,00         | 2,000        | 6000        |
| 8002605   | R1B810-008010 | 8,00         | 1,000        | 6000        |
| 8002603   | R1B810-008015 | 8,00         | 1,500        | 6000        |
| 8005092   | R1B810-008002 | 8,00         | 2,000        | 6000        |
| 8002602   | R1B810-010010 | 10,00        | 1,000        | 6000        |
| 8002600   | R1B810-010015 | 10,00        | 1,500        | 6000        |
| 8002599   | R1B810-010020 | 10,00        | 2,000        | 6000        |
| 8002598   | R1B810-012010 | 12,00        | 1,000        | 6000        |
| 8002597   | R1B810-012015 | 12,00        | 1,500        | 6000        |
| 8002595   | R1B810-012020 | 12,00        | 2,000        | 6000        |
| 8005200   | R1B810-012025 | 12,00        | 2,500        | 6000        |
| 8002594   | R1B810-014020 | 14,00        | 2,000        | 6000        |
| 8002593   | R1B810-015015 | 15,00        | 1,500        | 6000        |
| 8002591   | R1B810-015020 | 15,00        | 2,000        | 6000        |
| 8005617   | R1B710-015200 | 15,00        | 2,000        | 6000        |

REV.2.1

| Item Code | Product Code  | OD Tube (mm) | DN Pipe (mm) | Length (mm) |
|-----------|---------------|--------------|--------------|-------------|
| 8002589   | R1B810-015025 | 15,00        | 2,500        | 6000        |
| 8002588   | R1B810-016010 | 16,00        | 1,000        | 6000        |
| 8002587   | R1B810-016015 | 16,00        | 1,500        | 6000        |
| 8002586   | R1B810-016020 | 16,00        | 2,000        | 6000        |
| 8005303   | R1B710-016250 | 16,00        | 2,500        | 6000        |
| 8002585   | R1B810-016025 | 16,00        | 2,500        | 6000        |
| 8003460   | R1B810-015010 | 16,00        | 2,500        | 6000        |
| 8004113   | R1B810-018010 | 18,00        | 1,000        | 6000        |
| 8002584   | R1B810-018015 | 18,00        | 1,500        | 6000        |
| 8002583   | R1B810-018020 | 18,00        | 2,000        | 6000        |
| 8003797   | R1B810-018025 | 18,00        | 2,500        | 6000        |
| 8002581   | R1B810-020015 | 20,00        | 1,500        | 6000        |
| 8002580   | R1B810-020020 | 20,00        | 2,000        | 6000        |
| 8002579   | R1B810-020025 | 20,00        | 2,500        | 6000        |
| 8002578   | R1B810-020030 | 20,00        | 3,000        | 6000        |
| 8005891   | R1B810-020035 | 20,00        | 3,500        | 6000        |
| 8004116   | R1B810-022010 | 22,00        | 1,000        | 6000        |
| 8002577   | R1B810-022015 | 22,00        | 1,500        | 6000        |
| 8002576   | R1B810-022020 | 22,00        | 2,000        | 6000        |
| 8003798   | R1B810-022030 | 22,00        | 2,500        | 6000        |
| 8002574   | R1B810-022025 | 22,00        | 2,500        | 6000        |
| 8002573   | R1B810-025015 | 25,00        | 1,500        | 6000        |
| 8002572   | R1B810-025020 | 25,00        | 2,000        | 6000        |
| 8002571   | R1B810-025025 | 25,00        | 2,500        | 6000        |
| 8005217   | R1B710-02503  | 25,00        | 3,000        | 6000        |
| 8002570   | R1B810-025030 | 25,00        | 3,000        | 6000        |
| 8003801   | R1B810-025040 | 25,00        | 4,000        | 6000        |
| 8002568   | R1B810-028015 | 28,00        | 1,500        | 6000        |
| 8002567   | R1B810-028020 | 28,00        | 2,000        | 6000        |
| 8004120   | R1B810-028025 | 28,00        | 2,500        | 6000        |
| 8002565   | R1B810-028030 | 28,00        | 3,000        | 6000        |
| 8002564   | R1B810-030030 | 30,00        | 3,000        | 6000        |
| 8002563   | R1B810-030040 | 30,00        | 4,000        | 6000        |
| 8002562   | R1B810-035020 | 35,00        | 2,000        | 6000        |
| 8003806   | R1B810-035030 | 35,00        | 3,000        | 6000        |
| 8002561   | R1B810-038020 | 38,00        | 2,000        | 6000        |
| 8003151   | R1B810-038030 | 38,00        | 3,000        | 6000        |
| 8005076   | R1B710-03804  | 38,00        | 4,000        | 6000        |
| 8003429   | R1B810-038040 | 38,00        | 4,000        | 6000        |
| 8003807   | R1B810-038050 | 38,00        | 5,000        | 6000        |
| 8003810   | R1B810-042020 | 42,00        | 2,000        | 6000        |
| 8003811   | R1B810-042030 | 42,00        | 3,000        | 6000        |
| 8005923   | R1B810-042040 | 42,00        | 4,000        | 6000        |

## // R1B710

Seamless Carbon Steel Plated - E355

UNI EN 10305-4



| Item Code | Product Code   | OD Tube (mm) | DN Pipe (mm) | Length (mm) |
|-----------|----------------|--------------|--------------|-------------|
| 8005667   | R1B710-016020  | 16,00        | 2,000        | 6000        |
| 8003771   | R1B710-020020  | 20,00        | 2,000        | 6000        |
| 8005668   | R1B710-020025  | 20,00        | 2,500        | 6000        |
| 8004117   | R1B710-022020  | 22,00        | 2,000        | 6000        |
| 8005924   | R1B710-028025  | 28,00        | 2,500        | 6000        |
| 8005925   | R1B710-030030  | 30,00        | 3,000        | 6000        |
| 8005926   | R1B710-030040  | 30,00        | 4,000        | 6000        |
| 8005927   | R1B710-0500050 | 50,00        | 5,000        | 6000        |

REV.2.1

## // STAINLESS STEEL

## // R3BS10

Seamless Stainless Steel AISI 316L  
EN 10216-5



| Item Code | Product Code  | OD Tube (mm) | DN Pipe (mm) | Length (mm) |
|-----------|---------------|--------------|--------------|-------------|
| 8003789   | R3BS10-006010 | 6,00         | 1,000        | 5000/7000   |
| 8003790   | R3BS10-008010 | 8,00         | 1,000        | 5000/7000   |
| 8003866   | R3BS10-010010 | 10,00        | 1,000        | 5000/7000   |
| 8003130   | R3BS10-015015 | 15,00        | 1,500        | 5000/7000   |
| 8005339   | R3BS10-006015 | 60,00        | 1,500        | 5000/7000   |
| 8003791   | R3BS10-080015 | 8,00         | 1,500        | 6000        |
| 8003786   | R3BS10-016020 | 16,00        | 2,000        | 6000        |
| 8003788   | R3BS10-028020 | 28,00        | 2,000        | 6000        |
| 8002559   | R3BS10-025020 | 25,00        | 2,000        | 5000/7000   |
| 8003787   | R3BS10-020025 | 20,00        | 2,500        | 6000        |
| 8005112   | R3BS10-02503  | 25,00        | 3,000        | 5000/7000   |
| 8005417   | R3BS10-003804 | 38,00        | 4,000        | 5000/7000   |
| 8005111   | R3BS10-030040 | 30,00        | 4,000        | 5000/7000   |

## // R3BT10

Seamless Stainless Steel - AISI 316 TI  
EN 10216-5



| Item Code | Product Code  | OD Tube (mm) | DN Pipe (mm) | Length (mm) |
|-----------|---------------|--------------|--------------|-------------|
| 8005368   | R3BT10-035020 | 35,00        | 2,000        | 5000/7000   |
| 8005134   | R3BT10-038050 | 38,00        | 5,000        | 5000/7000   |



## // ACCESSORIES

|                                             |     |                                   |     |
|---------------------------------------------|-----|-----------------------------------|-----|
| // SAFE-WRAP .....                          | 349 | // LOWER MOUNT .....              | 366 |
| // WIPCHECK .....                           | 350 | // BACK MOUNT .....               | 367 |
| // PLASTIC .....                            | 353 | // ACCESSORY .....                | 368 |
| // TEXTILE .....                            | 355 | // THREADED FLANGES .....         | 369 |
| // HIGH TEMPERATURE & FIRE PROTECTION ..... | 356 | // THREADED COUNTER FLANGES ..... | 370 |
| // PRESSURE WASH .....                      | 358 | // BUTT WELD CONTROL FLANGE ..... | 371 |
| // NON-RETURN VALVES .....                  | 359 | // O-RING .....                   | 372 |
| // BALL VALVES 2-WAY .....                  | 363 | // PROFILED GASKET .....          | 375 |
| // BALL VALVES 3-WAY .....                  | 364 | // BONDED SEAL .....              | 376 |
| // SWIVEL CONNECTOR .....                   | 365 |                                   |     |

## // SAFE-WRAP

## // RTY1G0P\_VC

**Black Textile Sleeve with Velcro®****Application:** hose protection and hose bundling.**Benefits:** very easy and fast to install.

- excellent tensile strength
- abrasion resistant
- 100% water repellant

**Material:** polyamide with PU coating and Velcro®-brand fasteners**Temperature:** -20 °C +120 °C (-4 °F +248 °F)

| Item Code | ID (mm) | L (m) |
|-----------|---------|-------|
| 1905729   | 40      | 25,0  |
| 1902060   | 60      | 0,8   |
| 1902539   | 60      | 1,0   |
| 1902540   | 60      | 1,2   |
| 1901814   | 60      | 10,0  |
| 1901813   | 80      | 10,0  |
| 1901820   | 100     | 10,0  |
| 1901884   | 120     | 10,0  |
| 1901885   | 150     | 50,0  |
| 1903103   | 170     | 0,9   |
| 1901886   | 175     | 50,0  |
| 1903102   | 195     | 0,9   |

## // WIPCHECK

## // R1YCCD1

**Retention System for DIN 24° Adapter**  
**Complete Whip Chain**

**Notes:** Not suitable for high-pressure air and compressed gas hoses



| Item Code | Product Code    | Max OD (mm) | Cable L (mm) | WP (bar) | Notes       |
|-----------|-----------------|-------------|--------------|----------|-------------|
| 1902249   | R1YCCD1-1450300 | 15          | 300          | 450      | SMALL PLATE |
| 1902252   | R1YCCD1-1700200 | 17          | 300          | 445      | SMALL PLATE |
| 1902510   | R1YCCD1-1850200 | 19          | 300          | 420      | SMALL PLATE |
| 1902511   | R1YCCD1-2050200 | 21          | 300          | 420      | SMALL PLATE |
| 1902257   | R1YCCD1-2250300 | 23          | 300          | 420      | SMALL PLATE |
| 1902259   | R1YCCD1-2450200 | 25          | 300          | 420      | SMALL PLATE |
| 1902262   | R1YCCD1-2650200 | 27          | 300          | 420      | SMALL PLATE |
| 1902266   | R1YCCD1-3050200 | 31          | 300          | 420      | SMALL PLATE |
| 1902269   | R1YCCD1-3400450 | 34          | 450          | 420      | LARGE PLATE |
| 1902271   | R1YCCD1-3650450 | 37          | 450          | 420      | LARGE PLATE |
| 1902276   | R1YCCD1-4250450 | 43          | 450          | 420      | LARGE PLATE |
| 1902280   | R1YCCD1-4550450 | 46          | 450          | 420      | LARGE PLATE |
| 1902512   | R1YCCD1-4900450 | 49          | 450          | 420      | LARGE PLATE |
| 1902284   | R1YCCD1-5250450 | 53          | 450          | 380      | LARGE PLATE |
| 1902289   | R1YCCD1-6000450 | 60          | 450          | 350      | LARGE PLATE |

## // R1YCCF1

**Retention System for SAE 3K-6K Flanges**  
**Complete Whip Chain**

**Notes:** Not suitable for high-pressure air and compressed gas hoses



| Item Code | Product Code    | Max OD (mm) | Cable L (mm) | WP (bar) | Notes       |
|-----------|-----------------|-------------|--------------|----------|-------------|
| 1902298   | R1YCCF1-0850300 | 9           | 300          | 415      | SMALL PLATE |
| 1902513   | R1YCCF1-1050300 | 11          | 300          | 420      | SMALL PLATE |
| 1902243   | R1YCCF1-1050450 | 11          | 450          | 420      | LARGE PLATE |
| 1902246   | R1YCCF1-1250450 | 13          | 450          | 420      | LARGE PLATE |
| 1901675   | R1YCCF1-1450450 | 15          | 450          | 420      | LARGE PLATE |
| 1901670   | R1YCCF1-1650450 | 17          | 450          | 420      | LARGE PLATE |
| 1901083   | R1YCCF1-2050450 | 21          | 450          | 350      | LARGE PLATE |

REV.2.1

## // R1YCCJ1

**Retention System for JIC 37° Adapter**  
**Complete Whip Chain**
**Notes:** Not suitable for high-pressure air and compressed gas hoses


| Item Code | Product Code     | Max OD (mm) | Cable L (mm) | WP (bar) | Notes       |
|-----------|------------------|-------------|--------------|----------|-------------|
| 1904781   | R1YCCJ1-115300   | 12          | 300          | 450      | SMALL PLATE |
| 1904782   | R1YCCJ1-132300   | 13          | 300          | 450      | SMALL PLATE |
| 1904783   | R1YCCJ1-148300   | 15          | 300          | 450      | SMALL PLATE |
| 1904784   | R1YCCJ1-195300   | 20          | 300          | 420      | SMALL PLATE |
| 1904785   | R1YCCJ1-228300   | 23          | 300          | 420      | SMALL PLATE |
| 1904786   | R1YCCJ1-275300   | 28          | 300          | 420      | SMALL PLATE |
| 1904787   | R1YCCJ1-307300   | 31          | 300          | 420      | SMALL PLATE |
| 1904788   | R1YCCJ1-340450   | 34          | 450          | 420      | SMALL PLATE |
| 1904789   | R1YCCJ1-340450_L | 34          | 450          | 420      | LARGE PLATE |
| 1904791   | R1YCCJ1-415450   | 42          | 450          | 420      | SMALL PLATE |
| 1904790   | R1YCCJ1-415450_L | 42          | 450          | 420      | LARGE PLATE |
| 1904793   | R1YCCJ1-480450   | 48          | 450          | 420      | SMALL PLATE |
| 1904792   | R1YCCJ1-480450_L | 48          | 450          | 420      | LARGE PLATE |
| 1904794   | R1YCCJ1-640450   | 64          | 450          | 350      | SMALL PLATE |

## // R1YCCH1

**Retention System**  
**Bolt Clamp**
**Notes:** Not suitable for high-pressure air and compressed gas hoses


| Item Code | Product Code    | Product Code    | Hose OD Range (mm) | Notes   |
|-----------|-----------------|-----------------|--------------------|---------|
| 1902244   | R1YCCH1-0110115 | R1YCCH1-0110115 | 11 - 11.5          | M6 BOLT |
| 1902245   | R1YCCH1-0120125 | R1YCCH1-0120125 | 12 - 12.5          | M6 BOLT |
| 1902247   | R1YCCH1-0130135 | R1YCCH1-0130135 | 13 - 13.5          | M6 BOLT |
| 1902248   | R1YCCH1-0140150 | R1YCCH1-0140150 | 14 - 15            | M6 BOLT |
| 1902250   | R1YCCH1-0160170 | R1YCCH1-0160170 | 16 - 17            | M6 BOLT |
| 1902251   | R1YCCH1-0170180 | R1YCCH1-0170180 | 17 - 18            | M6 BOLT |
| 1902253   | R1YCCH1-0180190 | R1YCCH1-0180190 | 18 - 19            | M6 BOLT |
| 1902254   | R1YCCH1-0200210 | R1YCCH1-0200210 | 20 - 21            | M6 BOLT |
| 1902255   | R1YCCH1-0210220 | R1YCCH1-0210220 | 21 - 22            | M6 BOLT |
| 1902256   | R1YCCH1-0220230 | R1YCCH1-0220230 | 22 - 23            | M6 BOLT |
| 1902258   | R1YCCH1-0240250 | R1YCCH1-0240250 | 24 - 25            | M6 BOLT |
| 1902260   | R1YCCH1-0250260 | R1YCCH1-0250260 | 25 - 26            | M6 BOLT |
| 1902261   | R1YCCH1-0260270 | R1YCCH1-0260270 | 26 - 27            | M6 BOLT |
| 1902263   | R1YCCH1-0270280 | R1YCCH1-0270280 | 27 - 28            | M6 BOLT |
| 1902264   | R1YCCH1-0280290 | R1YCCH1-0280290 | 28 - 29            | M6 BOLT |
| 1902265   | R1YCCH1-0300310 | R1YCCH1-0300310 | 30 - 31            | M6 BOLT |
| 1902267   | R1YCCH1-0320330 | R1YCCH1-0320330 | 32 - 33            | M6 BOLT |
| 1902268   | R1YCCH1-0340350 | R1YCCH1-0340350 | 34 - 35            | M6 BOLT |
| 1902270   | R1YCCH1-0360370 | R1YCCH1-0360370 | 36 - 37            | M6 BOLT |
| 1902272   | R1YCCH1-0380390 | R1YCCH1-0380390 | 38 - 39            | M6 BOLT |
| 1902273   | R1YCCH1-0390400 | R1YCCH1-0390400 | 39 - 40            | M6 BOLT |
| 1902274   | R1YCCH1-0400410 | R1YCCH1-0400410 | 40 - 41            | M6 BOLT |
| 1902275   | R1YCCH1-0420430 | R1YCCH1-0420430 | 42 - 43            | M6 BOLT |
| 1902277   | R1YCCH1-0430440 | R1YCCH1-0430440 | 43 - 44            | M6 BOLT |
| 1902278   | R1YCCH1-0440450 | R1YCCH1-0440450 | 44 - 45            | M6 BOLT |

| Item Code | Product Code    | Product Code    | Hose OD Range (mm) | Notes   |
|-----------|-----------------|-----------------|--------------------|---------|
| 1902279   | R1YCCH1-0450470 | R1YCCH1-0450470 | 45 - 47            | M8 BOLT |
| 1902281   | R1YCCH1-0480500 | R1YCCH1-0480500 | 48 - 50            | M8 BOLT |
| 1901672   | R1YCCH1-0480510 | R1YCCH1-0480510 | 48 - 51            | M8 BOLT |
| 1902283   | R1YCCH1-0510530 | R1YCCH1-0510530 | 51 - 53            | M8 BOLT |
| 1902285   | R1YCCH1-0530540 | R1YCCH1-0530540 | 53 - 54            | M8 BOLT |
| 1902286   | R1YCCH1-0540560 | R1YCCH1-0540560 | 54 - 56            | M8 BOLT |
| 1901589   | R1YCCH1-0560600 | R1YCCH1-0560600 | 56 - 60            | M8 BOLT |
| 1902287   | R1YCCH1-0570590 | R1YCCH1-0570590 | 57 - 59            | M8 BOLT |
| 1902288   | R1YCCH1-0600620 | R1YCCH1-0600620 | 60 - 62            | M8 BOLT |
| 1902290   | R1YCCH1-0630650 | R1YCCH1-0630650 | 63 - 65            | M8 BOLT |
| 1902291   | R1YCCH1-0660680 | R1YCCH1-0660680 | 66 - 68            | M8 BOLT |
| 1902292   | R1YCCH1-0690710 | R1YCCH1-0690710 | 69 - 71            | M8 BOLT |
| 1902293   | R1YCCH1-0720740 | R1YCCH1-0720740 | 72 - 74            | M8 BOLT |
| 1902294   | R1YCCH1-0750770 | R1YCCH1-0750770 | 75 - 77            | M8 BOLT |
| 1902295   | R1YCCH1-0780800 | R1YCCH1-0780800 | 78 - 80            | M8 BOLT |
| 1902296   | R1YCCH1-0810830 | R1YCCH1-0810830 | 81 - 83            | M8 BOLT |
| 1902297   | R1YCCH1-0840860 | R1YCCH1-0840860 | 84 - 86            | M8 BOLT |
| 1902299   | R1YCCH1-0870890 | R1YCCH1-0870890 | 87 - 89            | M8 BOLT |
| 1902300   | R1YCCH1-0900920 | R1YCCH1-0900920 | 90 - 92            | M8 BOLT |
| 1902301   | R1YCCH1-0930950 | R1YCCH1-0930950 | 93 - 95            | M8 BOLT |

## // R1YCCV1

## Retention System

## Plate for Various systems

**Notes:** Not suitable for high-pressure air and compressed gas hoses



| Item Code | Product Code    | Max OD (mm) | Cable L (mm) | WP (bar) | Notes       |
|-----------|-----------------|-------------|--------------|----------|-------------|
| 1902509   | R1YCCV1-1300450 | 13          | 450          | 420      | LARGE PLATE |

Large plate

REV.2.1

## // PLASTIC

## // RJS1AG0

**Black Plastic Protective Flat Coil Sleeve****Application:** protective sleeve aslo suitable for group bundling of hose lines.**Temperature:** -20 °C to +84 °C (-4 °F to +180 °F)**Material:** HDPE (high-density polyethylene)

| Item Code | Product Code    | ID (mm) | OD (mm) | T (mm) | L (m) |
|-----------|-----------------|---------|---------|--------|-------|
| 1902552   | RJS1AG0-0100000 | 10,5    | 13,3    | 1,4    | 25,0  |
| 1902554   | RJS1AG0-0130000 | 13,4    | 16      | 1,3    | 25,0  |
| 1902555   | RJS1AG0-0160000 | 16      | 20      | 2      | 25,0  |
| 1901061   | RJS1AG0-0213000 | 21      | 25      | 2,2    | 3,0   |
| 1901062   | RJS1AG0-0216000 | 21      | 25      | 2,2    | 6,0   |
| 1903096   | RJS1AG0-0220000 | 21,6    | 25      | 1,7    | 25,0  |
| 1902556   | RJS1AG0-0200000 | 20,6    | 25      | 2,2    | 50,0  |
| 1901072   | RJS1AG0-0270650 | 27      | 32      | 2,5    | 0,7   |
| 1901073   | RJS1AG0-0270900 | 27      | 32      | 2,5    | 0,9   |
| 1901063   | RJS1AG0-0271300 | 27      | 32      | 2,5    | 1,3   |
| 1901637   | RJS1AG0-0271500 | 27      | 32      | 2,5    | 1,5   |
| 1901070   | RJS1AG0-0276000 | 27      | 32      | 2,5    | 6,0   |
| 1901067   | RJS1AG0-0270000 | 27      | 32      | 2,5    | 50,0  |
| 1902051   | RJS1AG0-0350000 | 34,6    | 40      | 2,7    | 25,0  |
| 1901074   | RJS1AG0-0431200 | 43      | 50      | 3,4    | 1,2   |
| 1901079   | RJS1AG0-0436000 | 43      | 50      | 3,4    | 6,0   |
| 1901076   | RJS1AG0-0430000 | 43,2    | 50      | 3,4    | 25,0  |
| 1902520   | RJS1AG0-0550000 | 55,6    | 63      | 3,7    | 25,0  |
| 1901081   | RJS1AG0-0661200 | 66      | 75      | 4,4    | 1,2   |
| 1901087   | RJS1AG0-0666000 | 66      | 75      | 4,4    | 6,0   |
| 1901142   | RJS1AG0-0660000 | 66,2    | 75      | 4,4    | 20,0  |
| 1901089   | RJS1AG0-0800000 | 80,2    | 90      | 4,9    | 20,0  |
| 1901043   | RJS1AG0-0991000 | 99      | 110     | 5,5    | 1,0   |
| 1901048   | RJS1AG0-0996000 | 99      | 110     | 5,5    | 6,0   |
| 1902560   | RJS1AG0-0990000 | 99      | 110     | 5,5    | 15,0  |
| 1901052   | RJS1AG0-1271200 | 127     | 140     | 6,5    | 1,2   |
| 1902521   | RJS1AG0-1270000 | 127     | 140     | 6,5    | 10,0  |

## // RJS1KG0

**Yellow Plastic Protective Flat Coil Sleeve****Application:** protective sleeve aslo suitable for group bundling of hose lines.**Temperature:** -20 °C to +84 °C (-4 °F to +180 °F)**Material:** HDPE (high-density polyethylene)

| Item Code | Product Code    | ID (mm) | OD (mm) | T (mm) | Pitch (mm) | L (m) |
|-----------|-----------------|---------|---------|--------|------------|-------|
| 1902551   | RJS1KG0-0100000 | 10      | 12      | 1,2    | 10,5       | 25,0  |
| 1902553   | RJS1KG0-0130000 | 13,4    | 16      | 1,3    | 12         | 25,0  |
| 1901057   | RJS1KG0-0160000 | 16      | 20      | 2      | 20         | 25,0  |
| 1901060   | RJS1KG0-0200000 | 20,6    | 25      | 2,2    | 21         | 50,0  |
| 1901058   | RJS1KG0-0211300 | 21      | 25      | 2,2    | 25         | 1,3   |
| 1901064   | RJS1KG0-0271300 | 27      | 32      | 2,5    | 30         | 1,3   |
| 1902548   | RJS1KG0-0271500 | 27      | 32      | 2,5    | 30         | 1,5   |
| 1901069   | RJS1KG0-0273000 | 27      | 32      | 2,5    | 30         | 3,0   |
| 1901071   | RJS1KG0-0276000 | 27      | 32      | 2,5    | 30         | 6,0   |
| 1902557   | RJS1KG0-0270000 | 27      | 32      | 2,5    | 22         | 50,0  |
| 1903210   | RJS1KG0-0350000 | 34,6    | 40      | 2,7    | 24         | 25,0  |
| 1901075   | RJS1KG0-0431200 | 43      | 50      | 3,4    | 30         | 1,2   |
| 1902549   | RJS1KG0-0431550 | 43      | 50      | 3,4    | 30         | 1,6   |
| 1901080   | RJS1KG0-0436000 | 43      | 50      | 3,4    | 30         | 6,0   |
| 1901077   | RJS1KG0-0430000 | 43,2    | 50      | 3,4    | 30         | 25,0  |
| 1903212   | RJS1KG0-0550000 | 55,6    | 63      | 3,7    | 37         | 25,0  |
| 1904151   | RJS1KG0-0660800 | 66      | 75      | 4,4    | 42         | 0,8   |
| 1901082   | RJS1KG0-0661200 | 66      | 75      | 4,4    | 42         | 1,2   |
| 1902550   | RJS1KG0-0661500 | 66      | 75      | 4,4    | 42         | 1,5   |
| 1901088   | RJS1KG0-0666000 | 66      | 75      | 4,4    | 42         | 6,0   |
| 1901141   | RJS1KG0-0660000 | 66      | 75      | 4,4    | 42         | 20,0  |
| 1902558   | RJS1KG0-0800000 | 80      | 90      | 4,9    | 45         | 15,0  |
| 1901044   | RJS1KG0-0991000 | 99      | 110     | 5,5    | 50         | 1,0   |
| 1901045   | RJS1KG0-0991500 | 99      | 110     | 5,5    | 50         | 1,5   |
| 1901049   | RJS1KG0-0996000 | 99      | 110     | 5,5    | 50         | 6,0   |
| 1902559   | RJS1KG0-0990000 | 99      | 110     | 5,5    | 50         | 10,0  |

## // RJS1HG0

**Red Plastic Protective Flat Coil Sleeve****Application:** protective sleeve aslo suitable for group bundling of hose lines.**Temperature:** -20 °C to +84 °C (-4 °F to +180 °F)**Material:** HDPE (high-density polyethylene)

| Item Code | Product Code    | ID (mm) | OD (mm) | T (mm) | Pitch (mm) | L (m) |
|-----------|-----------------|---------|---------|--------|------------|-------|
| 1906648   | RJS1HG0-0431200 | 43      | 50      | 3,4    | 30         | 25,0  |

REV.2.1

## // TEXTILE

## // RTYOG0A

**Black Textile Sleeve****Application:** protection from abrasion, weather and high temperature.**Material:** polyethersulfone (PES).**Temperature:** -40 °C +100 °C (-40 °F +212 °F)

| Item Code | Product Code    | ID (mm) | T (mm) |
|-----------|-----------------|---------|--------|
| 1900143   | RTYOG0A-02000T0 | 20      | 0,8    |
| 1900147   | RTYOG0A-02500T0 | 25      | 0,8    |
| 1900142   | RTYOG0A-03000T0 | 30      | 0,8    |
| 1902519   | RTYOG0A-03500T0 | 35      | 0,8    |
| 1900145   | RTYOG0A-04000T0 | 40      | 0,8    |
| 1900168   | RTYOG0A-04500T0 | 45      | 0,8    |
| 1900183   | RTYOG0A-05000T0 | 50      | 0,8    |
| 1900167   | RTYOG0A-06500T0 | 65      | 0,8    |
| 1900157   | RTYOG0A-07500T0 | 75      | 0,8    |
| 1900148   | RTYOG0A-08500T0 | 85      | 0,8    |
| 1900151   | RTYOG0A-09000T0 | 90      | 0,8    |
| 1905585   | RTYOG0A-10900T0 | 109     | 0,8    |
| 1903845   | RTYOG0A-15000T0 | 150     | 0,8    |

## // HIGH TEMPERATURE &amp; FIRE PROTECTION

## // RLYGAS0\_ST

## Fire Protection Sleeve

## Industrial Grade

**Application:** hose and fittings protection from very high temperature.

Specially designed to withstand molten metal splashes.

**Material:** glass fiber and iron oxide red silicone rubber.

**Temperature:** - continuous up to +260 °C (500 °F)

- intermittent 15-20 minutes up to 1090 °C (2000 °F)

- Intermittant 15-30 seconds up to 1650 °C (3000 °F)



| Item Code | Product Code       | ID (mm) |
|-----------|--------------------|---------|
| 1906619   | RLYGAS0-0100000_ST | 10      |
| 1906620   | RLYGAS0-0130000_ST | 13      |
| 1904931   | RLYGAS0-0160000_ST | 16      |
| 1905036   | RLYGAS0-0190000_ST | 20      |
| 1904984   | RLYGAS0-0220000_ST | 22      |
| 1905554   | RLYGAS0-0250000_ST | 25      |
| 1904967   | RLYGAS0-0290000_ST | 29      |
| 1904932   | RLYGAS0-0320000_ST | 32      |
| 1904968   | RLYGAS0-0380000_ST | 38      |
| 1904933   | RLYGAS0-0410000_ST | 41      |
| 1905185   | RLYGAS0-0440000_ST | 44      |
| 1905553   | RLYGAS0-0510000_ST | 51      |
| 1905336   | RLYGAS0-0570000_ST | 57      |
| 1905332   | RLYGAS0-0640000_ST | 64      |
| 1905529   | RLYGAS0-0700000_ST | 70      |
| 1906658   | RLYGAS0-0760000_ST | 76      |

REV.2.1

## // RLYGAS0

## Fire Protection Sleeve

## UL 1441 and VW1 Flame Test Certified

**Application:** hose and fittings protection from very high temperature.

Specially designed to withstand molten metal splashes.

**Material:** glass fiber and iron oxide red silicone rubber.**Temperature:** - continuous up to +260 °C (500 °F)

- intermittent 15-20 minutes up to 1090 °C (2000 °F)

- Intermittant 15-30 seconds up to 1650 °C (3000 °F)



| Item Code | Product Code    | ID (mm) |
|-----------|-----------------|---------|
| 1901117   | RLYGAS0-0080000 | 8       |
| 1901119   | RLYGAS0-0100000 | 10      |
| 1902134   | RLYGAS0-0130000 | 13      |
| 1901103   | RLYGAS0-0160000 | 16      |
| 1902136   | RLYGAS0-0190000 | 19      |
| 1902137   | RLYGAS0-0220000 | 22      |
| 1902547   | RLYGAS0-0250000 | 25      |
| 1901151   | RLYGAS0-0290000 | 29      |
| 1902133   | RLYGAS0-0320000 | 32      |
| 1901153   | RLYGAS0-0350000 | 35      |
| 1901110   | RLYGAS0-0380000 | 38      |
| 1901111   | RLYGAS0-0410000 | 41      |
| 1902135   | RLYGAS0-0510000 | 51      |
| 1901113   | RLYGAS0-0570000 | 57      |
| 1901114   | RLYGAS0-0640000 | 64      |
| 1901156   | RLYGAS0-0700000 | 70      |
| 1902545   | RLYGAS0-0760000 | 76      |

DNV-GL Certified to 800°C/30mins. (ISO15540 &amp; ISO15541) &amp; DIN EN45545-2

## // ROYOT00

## Red Smooth Silicone Tape

## High Temperature

**General:** non-adhesive, self-bonding, self-curing, liquid-tight insulation tape.**Application:** hose protective tape.

Specially designed to withstand continuous high temperature.

**Temperature:** -40 °C +246 °C (-40 °F +475 °F)**Notes:** Installation: Stretch tape during installation using at least a 50% overlap. For best results, use on clean, dry surfaces free from dirt and oil.

| Item Code | Product Code    | T (mm) | L (m) | B (mm) |
|-----------|-----------------|--------|-------|--------|
| 1901101   | ROYOT00-0250000 | 0,6    | 11,0  | 25     |

## // PRESSURE WASH

## // RGYGM0

Bend Restrictor  
Smooth



| Item Code | ID (mm) | L (mm) | Colour |
|-----------|---------|--------|--------|
| 1901552   | 12,3    |        | BLK    |
| 1901879   | 13      | 165    | BLU    |
| 1901551   | 17      | 148    | BLU    |
| 1901553   | 17      | 148    | BLK    |
| 1900055   | 17,5    | 118    | BLK    |
| 1900056   | 19,5    | 150    | BLK    |
| 1901550   | 20,6    | 147    | BLU    |

## // RGYGM1

Bend Restrictor  
Corrugated



| Item Code | ID (mm) | L (mm) | Colour |
|-----------|---------|--------|--------|
| 1904987   | 16      | 118    | BLK    |
| 1904988   | 21      | 128    | BLK    |

## // NON-RETURN VALVES

## // NON RETURN VALVE - RV

## Female thread

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

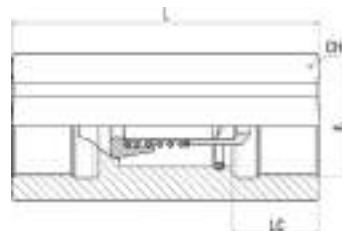
**Material:** galvanized steel housing and poppet valve. Brass housing also available. TPE seals (PTFE optional). TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

**Benefits:** one-piece housing. Low pressure drop.

**Thread Standard:** BSPP connection according to DIN 3852-2-X, metric connection according to DIN 3852.

**Viscosity Range:** to 400 cSt (53 °E)



| Item Code | ID (Dash) | ID (mm) | ID (in) | WP (bar) | Opening pressure (bar) | Thread 1P | F1     | CH (mm) | LC (mm) | L (mm) |
|-----------|-----------|---------|---------|----------|------------------------|-----------|--------|---------|---------|--------|
| 1232166   | 4         | 6,0     | 1/4"    | 400      | 0,5                    | BSPP      | 1/4-19 | 19,0    | 14,0    | 50,0   |
| 1232156   | 4         | 6,0     | 1/4"    | 400      | 2,0                    | BSPP      | 1/4-19 | 19,0    | 14,0    | 50,0   |
| 1232157   | 4         | 6,0     | 1/4"    | 400      | 4,0                    | BSPP      | 1/4-19 | 19,0    | 14,0    | 50,0   |
| 1219731   | 6         | 10,0    | 3/8"    | 400      | 0,5                    | BSPP      | 3/8-19 | 22,0    | 14,0    | 50,0   |
| 1232158   | 6         | 10,0    | 3/8"    | 400      | 2,0                    | BSPP      | 3/8-19 | 22,0    | 14,0    | 50,0   |
| 1232159   | 6         | 10,0    | 3/8"    | 400      | 4,0                    | BSPP      | 3/8-19 | 22,0    | 14,0    | 50,0   |
| 1219730   | 8         | 13,0    | 1/2"    | 315      | 0,5                    | BSPP      | 1/2-14 | 27,0    | 16,0    | 57,0   |
| 1232160   | 8         | 13,0    | 1/2"    | 315      | 2,0                    | BSPP      | 1/2-14 | 27,0    | 16,0    | 57,0   |
| 1232161   | 8         | 13,0    | 1/2"    | 315      | 4,0                    | BSPP      | 1/2-14 | 27,0    | 16,0    | 57,0   |
| 1232167   | 12        | 19,0    | 3/4"    | 250      | 0,5                    | BSPP      | 3/4-14 | 36,0    | 16,0    | 65,0   |
| 1232162   | 12        | 19,0    | 3/4"    | 250      | 2,0                    | BSPP      | 3/4-14 | 36,0    | 16,0    | 65,0   |
| 1232163   | 12        | 19,0    | 3/4"    | 250      | 4,0                    | BSPP      | 3/4-14 | 36,0    | 16,0    | 65,0   |
| 1228917   | 16        | 25,0    | 1"      | 250      | 0,5                    | BSPP      | 1-11   | 41,0    | 18,0    | 73,0   |
| 1232164   | 16        | 25,0    | 1"      | 250      | 2,0                    | BSPP      | 1-11   | 41,0    | 18,0    | 73,0   |
| 1232165   | 16        | 25,0    | 1"      | 250      | 4,0                    | BSPP      | 1-11   | 41,0    | 18,0    | 73,0   |

Specific instructions for installation, use and maintenance are separately provided.

## // NON RETURN VALVE - RV

## Male thread

**Application:** suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

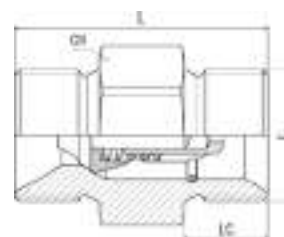
**Material:** galvanized steel housing and poppet valve. Brass housing also available. TPE seals (PTFE optional). TOP COAT Cr-III zinc plating through additional trivalent passivation for outstanding surface protection.

**Temperature Range:** -30 °C +125 °C

**Benefits:** one-piece housing. Low pressure drop.

**Thread Standard:** BSPP connection according to DIN 3852-2-X, metric connection according to DIN 3852.

**Viscosity Range:** to 400 cSt (53 °E)

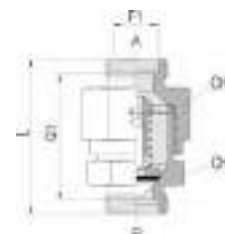


| Item Code | ID (Dash) | ID (mm) | ID (in) | WP (bar) | Opening pressure (bar) | Thread 1P | F1     | CH (mm) | LC (mm) | L (mm) |
|-----------|-----------|---------|---------|----------|------------------------|-----------|--------|---------|---------|--------|
| 1242221   | 6         | 10,0    | 3/8"    | 350      | 1,0                    | BSPP      | 3/8-19 | 22,0    | 12,0    | 40,0   |
| 1242225   | 6         | 10,0    | 3/8"    | 350      | 3,0                    | BSPP      | 3/8-19 | 22,0    | 12,0    | 40,0   |
| 1242598   | 6         | 10,0    | 3/8"    | 350      | 6,0                    | BSPP      | 3/8-19 | 22,0    | 12,0    | 40,0   |
| 1242227   | 8         | 13,0    | 1/2"    | 350      | 1,0                    | BSPP      | 1/2-14 | 27,0    | 14,0    | 44,0   |
| 1242231   | 8         | 13,0    | 1/2"    | 350      | 3,0                    | BSPP      | 1/2-14 | 27,0    | 14,0    | 44,0   |
| 1242600   | 8         | 13,0    | 1/2"    | 350      | 6,0                    | BSPP      | 1/2-14 | 27,0    | 14,0    | 44,0   |
| 1242233   | 12        | 19,0    | 3/4"    | 350      | 1,0                    | BSPP      | 3/4-14 | 32,0    | 17,0    | 51,0   |
| 1242234   | 12        | 19,0    | 3/4"    | 350      | 3,0                    | BSPP      | 3/4-14 | 32,0    | 17,0    | 51,0   |
| 1242601   | 12        | 19,0    | 3/4"    | 350      | 6,0                    | BSPP      | 3/4-14 | 32,0    | 17,0    | 51,0   |
| 1242612   | 16        | 25,0    | 1"      | 320      | 1,0                    | BSPP      | 1-11   | 40,0    | 19,5    | 65,0   |
| 1242615   | 16        | 25,0    | 1"      | 320      | 3,0                    | BSPP      | 1-11   | 40,0    | 19,5    | 65,0   |
| 1242617   | 16        | 25,0    | 1"      | 320      | 6,0                    | BSPP      | 1-11   | 40,0    | 19,5    | 65,0   |

## // NON-RETURN VALVES RHD

## Male thread 1,0 BAR

**Application:** Non-return valves enable a flow in one direction and block it in the opposite direction.



| Item Code | F1      | WP (bar) | Opening pressure (bar) | CH (mm) | CH1 (mm) | L (mm) | Q1 (mm) | Flow Direction | Temp. Range (°C) |
|-----------|---------|----------|------------------------|---------|----------|--------|---------|----------------|------------------|
| 1253638   | M12X1.5 | 250      | 1,0                    | 17,0    | 17,0     | 43,0   | 29,0    | 2-1            | -40 - 120        |
| 1246836   | M14X1.5 | 250      | 1,0                    | 19,0    | 19,0     | 44,0   | 30,0    | 2-1            | -40 - 120        |
| 1246837   | M16X1.5 | 250      | 1,0                    | 22,0    | 24,0     | 54,5   | 40,5    | 2-1            | -40 - 120        |
| 1246838   | M18X1.5 | 250      | 1,0                    | 27,0    | 30,0     | 57,5   | 43,5    | 2-1            | -40 - 120        |
| 1246839   | M22X1.5 | 250      | 1,0                    | 30,0    | 32,0     | 61,5   | 47,5    | 2-1            | -40 - 120        |
| 1246840   | M26X1.5 | 160      | 1,0                    | 36,0    | 36,0     | 66,5   | 51,5    | 2-1            | -40 - 120        |
| 1246841   | M30X2   | 160      | 1,0                    | 41,0    | 46,0     | 76,5   | 61,5    | 2-1            | -40 - 120        |
| 1246842   | M36X2   | 100      | 1,0                    | 50,0    | 55,0     | 85,0   | 70,0    | 2-1            | -40 - 120        |
| 1246843   | M45X2   | 100      | 1,0                    | 60,0    | 65,0     | 95,5   | 74,5    | 2-1            | -40 - 120        |
| 1246844   | M52X2   | 100      | 1,0                    | 65,0    | 75,0     | 99,5   | 77,5    | 2-1            | -40 - 120        |

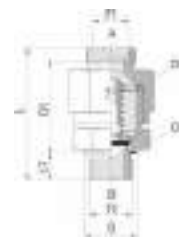
Other opening pressures upon request

REV.2.1

## // NON-RETURN VALVES RHV-R

## Male thread 1,0 bar

**Application:** Non-return valves enable a flow in one direction and block it in the opposite direction.



| Item Code | F1      | F2       | WP (bar) | Opening pressure (bar) | CH (mm) | CH1 (mm) | LC (mm) | L (mm) | Q1 (mm) | G (mm) | Flow Direction | Temp. Range (°C) |
|-----------|---------|----------|----------|------------------------|---------|----------|---------|--------|---------|--------|----------------|------------------|
| 1253641   | M12X1.5 | 1/8-28   | 250      | 1,0                    | 17,0    | 17,0     | 8,0     | 44,0   | 29,0    | 13,9   | 2-1            | -40 - 120        |
| 1253642   | M14X1.5 | 1/4-19   | 250      | 1,0                    | 19,0    | 19,0     | 12,0    | 49,0   | 30,0    | 18,9   | 2-1            | -40 - 120        |
| 1253647   | M14X1.5 | 1/4-19   | 630      | 1,0                    | 19,0    | 19,0     | 12,0    | 50,5   | 31,5    | 18,9   | 2-1            | -40 - 120        |
| 1253643   | M16X1.5 | 1/4-19   | 250      | 1,0                    | 22,0    | 24,0     | 12,0    | 59,5   | 40,5    | 18,9   | 2-1            | -40 - 120        |
| 1253648   | M16X1.5 | 1/4-19   | 630      | 1,0                    | 19,0    | 19,0     | 12,0    | 50,5   | 31,5    | 18,9   | 2-1            | -40 - 120        |
| 1219771   | M18X1.5 | 3/8-19   | 250      | 1,0                    | 27,0    | 30,0     | 12,0    | 61,5   | 42,5    | 21,9   | 2-1            | -40 - 120        |
| 1253649   | M18X1.5 | 3/8-19   | 630      | 1,0                    | 22,0    | 24,0     | 12,0    | 57,5   | 38,0    | 21,9   | 2-1            | -40 - 120        |
| 1253644   | M22X1.5 | 1/2-14   | 250      | 1,0                    | 30,0    | 32,0     | 14,0    | 66,5   | 45,5    | 26,9   | 2-1            | -40 - 120        |
| 1253645   | M26X1.5 | 1/2-14   | 160      | 1,0                    | 36,0    | 14,0     | 14,0    | 72,5   | 51,0    | 26,9   | 2-1            | -40 - 120        |
| 1253650   | M30X2   | 3/4-14   | 400      | 1,0                    | 41,0    | 46,0     | 16,0    | 78,5   | 52,0    | 31,9   | 2-1            | -40 - 120        |
| 1247770   | M30X2   | 3/4-14   | 160      | 1,0                    | 41,0    | 16,0     | 16,0    | 80,0   | 56,5    | 31,9   | 2-1            | -40 - 120        |
| 1253651   | M36X2   | 1-11     | 400      | 1,0                    | 46,0    | 50,0     | 18,0    | 87,5   | 57,5    | 39,9   | 2-1            | -40 - 120        |
| 1247771   | M36X2   | 1-11     | 100      | 1,0                    | 50,0    | 18,0     | 18,0    | 92,0   | 66,5    | 39,9   | 2-1            | -40 - 120        |
| 1247773   | M42X2   | 1 1/4-11 | 250      | 1,0                    | 55,0    | 60,0     | 20,0    | 97,5   | 64,0    | 49,9   | 2-1            | -40 - 120        |
| 1247772   | M45X2   | 1 1/4-11 | 100      | 1,0                    | 60,0    | 20,0     | 20,0    | 102,5  | 72,0    | 49,9   | 2-1            | -40 - 120        |
| 1253646   | M52X2   | 1 1/2-11 | 100      | 1,0                    | 65,0    | 22,0     | 22,0    | 109,5  | 76,5    | 54,9   | 2-1            | -40 - 120        |
| 1253652   | M52X2   | 1 1/2-11 | 250      | 1,0                    | 65,0    | 70,0     | 22,0    | 109,5  | 71,5    | 54,9   | 2-1            | -40 - 120        |

Other opening pressures upon request

## // NON-RETURN VALVES RHZ-R

## Male thread 1,0 BAR

**Application:** Non-return valves enable a flow in one direction and block it in the opposite direction.



| Item Code | F1      | F2       | WP (bar) | Opening pressure (bar) | CH (mm) | CH1 (mm) | LC (mm) | L (mm) | Q1 (mm) | G (mm) | Flow Direction | Temp. Range (°C) |
|-----------|---------|----------|----------|------------------------|---------|----------|---------|--------|---------|--------|----------------|------------------|
| 1253653   | M12X1.5 | 1/8-28   | 250      | 1,0                    | 17,0    | 17,0     | 8,0     | 43,0   | 28,0    | 13,9   | 1-2            | -40 - 120        |
| 1253654   | M14X1.5 | 1/4-19   | 250      | 1,0                    | 19,0    | 19,0     | 12,0    | 47,5   | 28,5    | 18,9   | 1-2            | -40 - 120        |
| 1253660   | M14X1.5 | 1/4-19   | 630      | 1,0                    | 19,0    | 19,0     | 12,0    | 50,5   | 31,5    | 18,9   | 1-2            | -40 - 120        |
| 1246851   | M16X1.5 | 1/4-19   | 630      | 1,0                    | 19,0    | 19,0     | 12,0    | 50,5   | 31,5    | 18,9   | 1-2            | -40 - 120        |
| 1253655   | M16X1.5 | 1/4-19   | 250      | 1,0                    | 22,0    | 24,0     | 12,0    | 59,0   | 40,0    | 18,9   | 1-2            | -40 - 120        |
| 1247318   | M18X1.5 | 3/8-19   | 630      | 1,0                    | 22,0    | 24,0     | 12,0    | 57,5   | 38,0    | 21,9   | 1-2            | -40 - 120        |
| 1246852   | M18X1.5 | 3/8-19   | 250      | 1,0                    | 27,0    | 30,0     | 12,0    | 60,5   | 41,5    | 21,9   | 1-2            | -40 - 120        |
| 1253661   | M20X1.5 | 3/8-19   | 630      | 1,0                    | 24,0    | 27,0     | 12,0    | 60,5   | 41,0    | 21,9   | 1-2            | -40 - 120        |
| 1253656   | M22X1.5 | 1/2-14   | 250      | 1,0                    | 30,0    | 32,0     | 14,0    | 65,0   | 44,0    | 26,9   | 1-2            | -40 - 120        |
| 1253662   | M24X1.5 | 1/2-14   | 400      | 1,0                    | 32,0    | 36,0     | 14,0    | 70,5   | 48,0    | 26,9   | 1-2            | -40 - 120        |
| 1247317   | M26X1.5 | 1/2-14   | 160      | 1,0                    | 36,0    | 36,0     | 14,0    | 69,5   | 48,0    | 26,9   | 1-2            | -40 - 120        |
| 1251451   | M30X2   | 3/4-14   | 400      | 1,0                    | 41,0    | 46,0     | 16,0    | 78,5   | 52,0    | 31,9   | 1-2            | -40 - 120        |
| 1219776   | M30X2   | 3/4-14   | 160      | 1,0                    | 41,0    | 46,0     | 16,0    | 80,5   | 57,0    | 31,9   | 1-2            | -40 - 120        |
| 1253663   | M36X2   | 1-11     | 400      | 1,0                    | 46,0    | 50,0     | 18,0    | 87,0   | 57,0    | 39,9   | 1-2            | -40 - 120        |
| 1253657   | M36X2   | 1-11     | 100      | 1,0                    | 50,0    | 55,0     | 18,0    | 92,5   | 67,0    | 39,9   | 1-2            | -40 - 120        |
| 1253664   | M42X2   | 1 1/4-11 | 250      | 1,0                    | 55,0    | 60,0     | 20,0    | 99,5   | 66,0    | 49,9   | 1-2            | -40 - 120        |
| 1253658   | M45X2   | 1 1/4-11 | 100      | 1,0                    | 60,0    | 65,0     | 20,0    | 102,0  | 71,5    | 49,9   | 1-2            | -40 - 120        |
| 1253665   | M52X2   | 1 1/2-11 | 250      | 1,0                    | 65,0    | 70,0     | 22,0    | 110,5  | 72,5    | 54,9   | 1-2            | -40 - 120        |
| 1253659   | M52X2   | 1 1/2-11 | 100      | 1,0                    | 65,0    | 75,0     | 22,0    | 108,5  | 75,5    | 54,9   | 1-2            | -40 - 120        |

Other opening pressures upon request

BALL VALVES 2-WAY

2W-BKH-BMK

Series BKH-MKH DIN-ISO 1219  
BSP Female



| Item Code | ID (mm) | F1       | WP (bar) | CH (mm) | L (mm) |
|-----------|---------|----------|----------|---------|--------|
| 1222636   | 4,0     | 1/8-28   | 500      | 19,0    | 69,0   |
| 1219687   | 6,0     | 1/4-19   | 500      | 22,0    | 69,0   |
| 1219667   | 10,0    | 3/8-19   | 500      | 27,0    | 72,0   |
| 1219672   | 13,0    | 1/2-14   | 500      | 30,0    | 84,0   |
| 1219678   | 20,0    | 3/4-14   | 420      | 41,0    | 95,0   |
| 1219683   | 25,0    | 1 1/4-11 | 315      | 50,0    | 120,0  |
| 1219681   | 25,0    | 1-11     | 420      | 50,0    | 113,0  |
| 1219685   | 40,0    | 1 1/2-11 | 400      | 70,0    | 139,0  |
| 1219686   | 50,0    | 2-11     | 400      | 80,0    | 129,0  |

NPTF female and stainless steel version available on request

## // BALL VALVES 3-WAY

## // 3W-VBK3

Series BK3 - DIN 2429

BSP Female



| Item Code | ID (mm) | F1     | WP (bar) | CH (mm) | L (mm) |
|-----------|---------|--------|----------|---------|--------|
| 1219689   | 6,0     | 1/4-19 | 500      | 19,0    | 69,0   |
| 1219670   | 10,0    | 3/8-19 | 500      | 27,0    | 73,0   |
| 1219675   | 12,0    | 1/2-14 | 500      | 30,0    | 82,0   |
| 1219680   | 20,0    | 3/4-14 | 420      | 41,0    | 93,0   |
| 1219682   | 25,0    | 1-11   | 420      | 50,0    | 115,0  |

NPTF female and stainless steel version available on request

REV.2.1

## // SWIVEL CONNECTOR

## // SWCDH-BSPP

## SWIVEL CONNECTOR BSP

## Solid Female - Solid Male

Temperature: -40 °C +100 °C

Viscosity Range: 10 to 200 cSt

Sealing: NBR

Material: Galvanized steel

Notes: For different conditions of use and cavities, contact the sales department



| Item Code | Config. | Thread 1 | ID (Dash) | F1       | Thread 2 | F2       | CH (mm) | L1 (mm) | WP (bar) | Max Contin. Speed (rpm) |
|-----------|---------|----------|-----------|----------|----------|----------|---------|---------|----------|-------------------------|
| 1221176   | 90      | BSP60    | 4         | 1/4-19   | BSP60    | 1/4-19   | 30,0    | 71,0    | 400      | 500                     |
| 1221177   | 90      | BSP60    | 6         | 3/8-19   | BSP60    | 3/8-19   | 34,0    | 77,0    | 400      | 400                     |
| 1221178   | 90      | BSP60    | 8         | 1/2-14   | BSP60    | 1/2-14   | 38,0    | 86,0    | 360      | 370                     |
| 1221179   | 90      | BSP60    | 12        | 3/4-14   | BSP60    | 3/4-14   | 50,0    | 100,0   | 310      | 280                     |
| 1221180   | 90      | BSP60    | 16        | 1-11     | BSP60    | 1-11     | 59,5    | 113,0   | 280      | 230                     |
| 1221181   | 90      | BSP60    | 20        | 1 1/4-11 | BSP60    | 1 1/4-11 |         | 118,0   | 250      | 200                     |
| 1221182   | 90      | BSP60    | 24        | 1 1/2-11 | BSP60    | 1 1/2-11 |         | 138,0   | 210      | 170                     |
| 1233594   | 90      | BSP60    | 32        | 2-11     | BSP60    | 2-11     |         | 152,0   | 180      | 140                     |
| 1221183   | @0      | BSP60    | 4         | 1/4-19   | BSP60    | 1/4-19   | 30,0    | 63,0    | 400      | 500                     |
| 1221184   | @0      | BSP60    | 6         | 3/8-19   | BSP60    | 3/8-19   | 34,0    | 66,0    | 400      | 400                     |
| 1221185   | @0      | BSP60    | 8         | 1/2-14   | BSP60    | 1/2-14   | 36,0    | 73,0    | 360      | 370                     |
| 1221186   | @0      | BSP60    | 12        | 3/4-14   | BSP60    | 3/4-14   | 45,0    | 80,0    | 310      | 280                     |
| 1221187   | @0      | BSP60    | 16        | 1-11     | BSP60    | 1-11     | 60,0    | 90,0    | 280      | 230                     |
| 1221188   | @0      | BSP60    | 20        | 1 1/4-11 | BSP60    | 1 1/4-11 | 60,0    | 98,0    | 250      | 200                     |
| 1221189   | @0      | BSP60    | 24        | 1 1/2-11 | BSP60    | 1 1/2-11 | 70,0    | 107,0   | 210      | 170                     |
| 1221190   | @0      | BSP60    | 32        | 2-11     | BSP60    | 2-11     | 80,0    | 112,0   | 180      | 140                     |

@0 = straight configuration

## // SWCDT-BSPP

## SWIVEL CONNECTOR BSP

## Swivel Female - Solid Female

Temperature: -40 °C +100 °C

Viscosity Range: 10 to 200 cSt

Sealing: NBR

Material: Galvanized steel

Notes: For different conditions of use and cavities, contact the sales department



| Item Code | Config. | Thread 1 | Conn. 1       | ID (Dash) | F1     | Thread 2 | Conn. 2      | F2       | CH (mm) | L1 (mm) | WP (bar) | Max Contin. Speed (rpm) |
|-----------|---------|----------|---------------|-----------|--------|----------|--------------|----------|---------|---------|----------|-------------------------|
| 1222342   | @0      | BSP60    | Swivel Female | 4         | 1/4-19 | BSPP     | Solid Female | 3/8-19   | 22,0    | 53,0    | 250      | 60                      |
| 1222341   | @0      | BSP60    | Swivel Female | 8         | 1/2-14 | BSPP     | Solid Female | 3/4-14   | 32,0    | 71,0    | 250      | 60                      |
| 1222343   | @0      | BSP60    | Swivel Female | 12        | 3/4-14 | BSPP     | Solid Female | 1-11     | 40,0    | 80,0    | 250      | 60                      |
| 1222339   | @0      | BSP60    | Swivel Female | 16        | 1-11   | BSPP     | Solid Female | 1 1/4-11 | 50,0    | 94,0    | 200      | 60                      |

@0 = straight configuration

## // LOWER MOUNT

## // R2YM63R

**Stainless Steel 304 Glycerine Gauge DN63**  
**Lower Mount**



| Item Code | Pressure Range (bar) | Thread 1 | F1     | Accuracy Class |
|-----------|----------------------|----------|--------|----------------|
| 1222456   | -1 +0 Bar            | BSPP     | 1/4-19 | 1,6            |
| 1222455   | 0 +4 Bar             | BSPP     | 1/4-19 | 1,6            |
| 1224654   | -1 +5 Bar            | BSPP     | 1/4-19 | 1,6            |
| 1210076   | 0 +10 Bar            | BSPP     | 1/4-19 | 1,6            |
| 1210074   | 0 +25 Bar            | BSPP     | 1/4-19 | 1,6            |
| 1210082   | 0 +60 Bar            | BSPP     | 1/4-19 | 1,6            |
| 1210065   | 0 +100 Bar           | BSPP     | 1/4-19 | 1,6            |
| 1210067   | 0 +160 Bar           | BSPP     | 1/4-19 | 1,6            |
| 1210068   | 0 +250 Bar           | BSPP     | 1/4-19 | 1,6            |
| 1210069   | 0 +400 Bar           | BSPP     | 1/4-19 | 1,6            |
| 1210070   | 0 +600 Bar           | BSPP     | 1/4-19 | 1,6            |
| 1232050   | 0 +1000 Bar          | BSPP     | 1/4-19 | 1,6            |

## // R2YM10R

**Stainless Steel 304 Glycerine Gauge DN100**  
**Lower Mount**



| Item Code | Pressure Range (bar) | Thread 1 | F1     | Accuracy Class |
|-----------|----------------------|----------|--------|----------------|
| 1222449   | 0 +4 Bar             | BSPP     | 1/2-14 | 1              |
| 1222452   | 0 +6 Bar             | BSPP     | 1/2-14 | 1              |
| 1222444   | 0 +10 Bar            | BSPP     | 1/2-14 | 1              |
| 1222445   | 0 +16 Bar            | BSPP     | 1/2-14 | 1              |
| 1222447   | 0 +25 Bar            | BSPP     | 1/2-14 | 1              |
| 1222448   | 0 +40 Bar            | BSPP     | 1/2-14 | 1              |
| 1222450   | 0 +60 Bar            | BSPP     | 1/2-14 | 1              |
| 1210168   | 0 +100 Bar           | BSPP     | 1/2-14 | 1              |
| 1210090   | 0 +160 Bar           | BSPP     | 1/2-14 | 1              |
| 1210089   | 0 +250 Bar           | BSPP     | 1/2-14 | 1              |
| 1232049   | 0 +315 Bar           | BSPP     | 1/2-14 | 1              |
| 1210078   | 0 +400 Bar           | BSPP     | 1/2-14 | 1              |
| 1210088   | 0 +600 Bar           | BSPP     | 1/2-14 | 1              |
| 1228545   | 0 +1000 Bar          | BSPP     | 1/2-14 | 1              |

REV.2.1

## // BACK MOUNT

## // R2YM63A

**Stainless Steel 304 Glycerine Gauge DN63**  
**Back Mount**



| Item Code | Pressure Range (bar) | Gauge Size    | Thread 1 | F1     | Conn. Position | Accuracy Class |
|-----------|----------------------|---------------|----------|--------|----------------|----------------|
| 1225832   | 0 +4 Bar             | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |
| 1210085   | 0 +10 Bar            | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |
| 1210151   | 0 +25 Bar            | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |
| 1210084   | 0 +60 Bar            | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |
| 1210083   | 0 +100 Bar           | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |
| 1210071   | 0 +160 Bar           | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |
| 1210072   | 0 +250 Bar           | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |
| 1210162   | 0 +400 Bar           | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |
| 1210086   | 0 +600 Bar           | 2"1/2 (63 mm) | BSPP     | 1/4-19 | Back Mount     | 1,6            |

## // R2YM10A

**Stainless Steel 304 Glycerine Gauge DN100**  
**Back Mount**



| Item Code | Pressure Range (bar) | Thread 1 | F1     | Accuracy Class |
|-----------|----------------------|----------|--------|----------------|
| 1232084   | 0 +4 Bar             | BSPP     | 1/2-14 | 1              |
| 1222451   | 0 +6 Bar             | BSPP     | 1/2-14 | 1              |
| 1222443   | 0 +10 Bar            | BSPP     | 1/2-14 | 1              |
| 1228549   | 0 +16 Bar            | BSPP     | 1/2-14 | 1              |
| 1222446   | 0 +25 Bar            | BSPP     | 1/2-14 | 1              |
| 1228550   | 0 +40 Bar            | BSPP     | 1/2-14 | 1              |
| 1228551   | 0 +60 Bar            | BSPP     | 1/2-14 | 1              |
| 1228552   | 0 +100 Bar           | BSPP     | 1/2-14 | 1              |
| 1223147   | 0 +160 Bar           | BSPP     | 1/2-14 | 1              |
| 1223148   | 0 +250 Bar           | BSPP     | 1/2-14 | 1              |
| 1232085   | 0 +315 Bar           | BSPP     | 1/2-14 | 1              |
| 1223150   | 0 +400 Bar           | BSPP     | 1/2-14 | 1              |
| 1223149   | 0 +600 Bar           | BSPP     | 1/2-14 | 1              |

## // ACCESSORY

// RGYMA00\_BR **NEW**

Gauge Bracket



| Item Code | Product Code    | Material  |
|-----------|-----------------|-----------|
| 1223028   | RGYMA00-BRCK000 | Aluminium |

REV.2.1

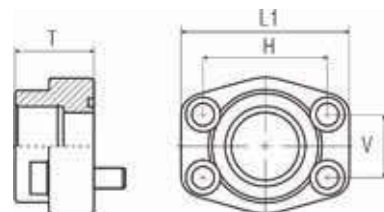
## // THREADED FLANGES

## // R0A33W106F

3000 psi Flange

BSPP Female

AVP



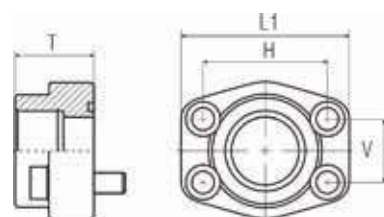
| Item Code | Product Code    | F1    | T (mm) | H (mm) | V (mm) | L1 (mm) | WP (bar) |
|-----------|-----------------|-------|--------|--------|--------|---------|----------|
| 1220959   | R0A33W106F-0808 | 1/2   | 36,0   | 38,1   | 17,5   | 57,0    | 345      |
| 1220967   | R0A33W106F-1212 | 3/4   | 36,0   | 47,6   | 22,3   | 66,0    | 345      |
| 1222389   | R0A33W106F-1616 | 1     | 38,0   | 52,4   | 26,2   | 71,0    | 345      |
| 1222387   | R0A33W106F-2020 | 1 1/4 | 41,0   | 58,7   | 30,2   | 80,0    | 275      |
| 1220949   | R0A33W106F-2424 | 1 1/2 | 44,0   | 69,9   | 35,7   | 94,0    | 210      |
| 1220963   | R0A33W106F-3232 | 2     | 45,0   | 77,8   | 42,9   | 103,0   | 210      |

## // R0A36W106F

6000 psi Flange

BSPP Female

AVP



| Item Code | Product Code    | F1    | T (mm) | H (mm) | V (mm) | L1 (mm) | WP (bar) |
|-----------|-----------------|-------|--------|--------|--------|---------|----------|
| 1220960   | R0A36W106F-0808 | 1/2   | 36,0   | 40,5   | 18,2   | 57,0    | 420      |
| 1220966   | R0A36W106F-1212 | 3/4   | 36,0   | 50,8   | 23,8   | 71,0    | 420      |
| 1220958   | R0A36W106F-1616 | 1     | 44,0   | 57,2   | 27,8   | 80,0    | 420      |
| 1220962   | R0A36W106F-2020 | 1 1/4 | 44,0   | 66,6   | 31,8   | 94,0    | 420      |
| 1220961   | R0A36W106F-2424 | 1 1/2 | 51,0   | 79,3   | 36,5   | 106,0   | 420      |
| 1220964   | R0A36W106F-3232 | 2     | 70,0   | 96,8   | 44,5   | 135,0   | 420      |

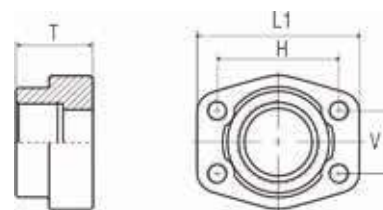
## // THREADED COUNTER FLANGES

## // R0A63W106F

3000 psi Counter Flange

BSPP Female

AVP



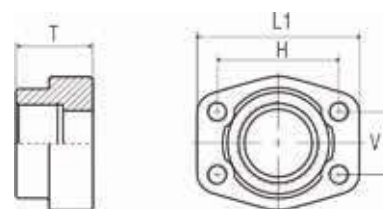
| Item Code | Product Code    | F1    | T (mm) | H (mm) | V (mm) | L1 (mm) | WP (bar) |
|-----------|-----------------|-------|--------|--------|--------|---------|----------|
| 1242580   | R0A63W106F-0808 | 1/2   | 36,0   | 38,1   | 17,5   | 57,0    | 345      |
| 1242581   | R0A63W106F-1212 | 3/4   | 36,0   | 47,6   | 22,3   | 66,0    | 345      |
| 1242582   | R0A63W106F-1616 | 1     | 38,0   | 52,4   | 26,2   | 71,0    | 345      |
| 1242583   | R0A63W106F-2020 | 1 1/4 | 41,0   | 58,7   | 30,2   | 80,0    | 275      |

## // R1A87W106F

6000 psi Counter Flange

BSPP Female

Zinc Plated

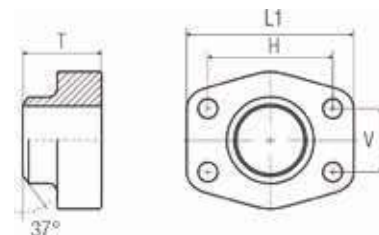


| Item Code | Product Code    | F1    | T (mm) | H (mm) | V (mm) | L1 (mm) | WP (bar) |
|-----------|-----------------|-------|--------|--------|--------|---------|----------|
| 1228800   | R1A87W106F-0808 | 1/2   | 36,0   | 40,5   | 18,2   | 57,0    | 420      |
| 1242585   | R1A87W106F-1616 | 1     | 44,0   | 57,2   | 27,8   | 80,0    | 420      |
| 1242586   | R1A87W106F-2020 | 1 1/4 | 44,0   | 66,6   | 31,8   | 94,0    | 420      |
| 1242587   | R1A87W106F-2424 | 1 1/2 | 51,0   | 79,3   | 36,5   | 106,0   | 420      |
| 1242588   | R1A87W106F-3232 | 2     | 70,0   | 96,8   | 44,5   | 135,0   | 420      |

## // BUTT WELD CONTROL FLANGE

## // R1A33W100S

Butt Weld Counter Flange 3000 psi

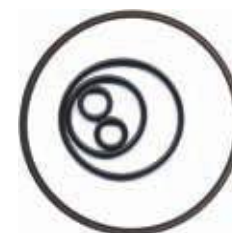


| Item Code | Product Code    | F1    | T (mm) | H (mm) | V (mm) | L1 (mm) | WP (bar) |
|-----------|-----------------|-------|--------|--------|--------|---------|----------|
| 1225809   | R1A33W100S-2000 | 1 1/4 | 41,0   | 58,7   | 30,2   | 80,0    | 210      |
| 1225808   | R1A33W100S-3200 | 2     | 45,0   | 77,8   | 42,9   | 103,0   | 210      |

## // O-RING

## // HN0J0900F

O-Ring for 3K-6K Flange  
NBR - 90SH



| Item Code | Product Code    | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|-----------------|-------------|---------|--------|------------------|
| 1221396   | HN0J0900-186353 | 1/2"        | 18,6    | 3,5    | -35 - 100        |
| 1221400   | HN0J0900-250353 | 3/4"        | 25,0    | 3,5    | -35 - 100        |
| 1221403   | HN0J0900-329353 | 1"          | 32,9    | 3,5    | -35 - 100        |
| 1221406   | HN0J0900-376353 | 1 1/4"      | 37,7    | 3,5    | -35 - 100        |
| 1221407   | HN0J0900-472353 | 1 1/2"      | 47,2    | 3,5    | -35 - 100        |
| 1221408   | HN0J0900-567353 | 2"          | 56,8    | 3,5    | -35 - 100        |
| 1224633   | HN0J0900-694353 | 2 1/2"      | 69,4    | 3,5    | -35 - 100        |
| 1223257   | HN0J0900-853353 | 3"          | 85,3    | 3,5    | -35 - 100        |
| 1225264   | HN0J0900-103353 | 4"          | 103,7   | 3,5    | -35 - 100        |

## // HN0J0800

O-Ring for 3K-6K Flange  
NBR - 90SH



| Item Code | Product Code    | Thread Type | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|-----------------|-------------|-------------|---------|--------|------------------|
| 1221396   | HN0J0900-186353 | SAE 3K-6K   | 1/2"        | 18,6    | 3,5    | -35 - 100        |
| 1221400   | HN0J0900-250353 | SAE 3K-6K   | 3/4"        | 25,0    | 3,5    | -35 - 100        |
| 1221403   | HN0J0900-329353 | SAE 3K-6K   | 1"          | 32,9    | 3,5    | -35 - 100        |
| 1221406   | HN0J0900-376353 | SAE 3K-6K   | 1 1/4"      | 37,7    | 3,5    | -35 - 100        |
| 1221407   | HN0J0900-472353 | SAE 3K-6K   | 1 1/2"      | 47,2    | 3,5    | -35 - 100        |
| 1221408   | HN0J0900-567353 | SAE 3K-6K   | 2"          | 56,8    | 3,5    | -35 - 100        |
| 1223257   | HN0J0900-853353 | SAE 3K-6K   | 3"          | 85,3    | 3,5    | -35 - 100        |

REV.2.1

## // HNOJ0900B

O-Ring for BSP Adapters

NBR - 90SH



| Item Code | Product Code    | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|-----------------|-------------|---------|--------|------------------|
| 1904311   | HNOJ0900-060100 | 1/4"        | 6,0     | 1,0    | -35 - 100        |
| 1903295   | HNOJ0900-081160 | 3/8"        | 8,1     | 1,6    | -35 - 100        |
| 1903280   | HNOJ0900-121160 | 1/2"        | 12,1    | 1,6    | -35 - 100        |
| 1903587   | HNOJ0900-131160 | 5/8"        | 13,1    | 1,6    | -35 - 100        |
| 1903580   | HNOJ0900-171160 | 3/4"        | 17,1    | 1,6    | -35 - 100        |
| 1903569   | HNOJ0900-221160 | 1"          | 22,1    | 1,6    | -35 - 100        |
| 1903252   | HNOJ0900-291160 | 1 1/4"      | 29,1    | 1,6    | -35 - 100        |
| 1903246   | HNOJ0900-351160 | 1 1/2"      | 35,1    | 1,6    | -35 - 100        |
| 1904310   | HNOJ0900-474180 | 2"          | 47,4    | 1,8    | -35 - 100        |

## // HNOJ09000

O-Ring for ORFS Adapters

NBR - 90SH

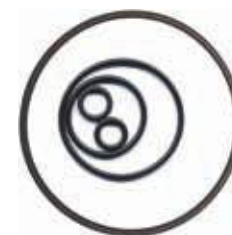


| Item Code | Product Code    | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|-----------------|-------------|---------|--------|------------------|
| 1903596   | HNOJ0900-076178 | 9/16"-18    | 7,7     | 1,8    | -35 - 100        |
| 1903594   | HNOJ0900-092178 | 11/16"-16   | 9,2     | 1,8    | -35 - 100        |
| 1903590   | HNOJ0900-124178 | 13/16"-16   | 12,4    | 1,8    | -35 - 100        |
| 1903583   | HNOJ0900-156178 | 1"-14       | 15,6    | 1,8    | -35 - 100        |
| 1903577   | HNOJ0900-187178 | 1 3/16"-12  | 18,8    | 1,8    | -35 - 100        |
| 1903566   | HNOJ0900-235178 | 1 7/16"-12  | 23,5    | 1,8    | -35 - 100        |
| 1903561   | HNOJ0900-298178 | 1 11/16"-12 | 29,9    | 1,8    | -35 - 100        |
| 1903557   | HNOJ0900-378178 | 2"-12       | 37,8    | 1,8    | -35 - 100        |

## // HNOJ0900D

O-Ring for DKO Adapters

NBR - 90SH



| Item Code | Product Code    | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|-----------------|-------------|---------|--------|------------------|
| 1903304   | HNOJ0900-040150 | 6 L/S       | 4,0     | 1,5    | -35 - 100        |
| 1903301   | HNOJ0900-060150 | 8 L/S       | 6,0     | 1,5    | -35 - 100        |
| 1903297   | HNOJ0900-075150 | 10 L/S      | 7,5     | 1,5    | -35 - 100        |
| 1903595   | HNOJ0900-090150 | 12 L/S      | 9,0     | 1,5    | -35 - 100        |
| 1903282   | HNOJ0900-120200 | 15L / 16S   | 12,0    | 2,0    | -35 - 100        |
| 1903275   | HNOJ0900-150200 | 18L         | 15,0    | 2,0    | -35 - 100        |
| 1903271   | HNOJ0900-163240 | 20S         | 16,3    | 2,4    | -35 - 100        |
| 1903574   | HNOJ0900-200200 | 22L         | 20,0    | 2,0    | -35 - 100        |
| 1903573   | HNOJ0900-203240 | 25S         | 20,3    | 2,4    | -35 - 100        |
| 1904308   | HNOJ0900-253240 | 30S         | 25,3    | 2,4    | -35 - 100        |
| 1903255   | HNOJ0900-260200 | 28L         | 26,0    | 2,0    | -35 - 100        |
| 1903249   | HNOJ0900-320250 | 35L         | 32,0    | 2,5    | -35 - 100        |
| 1904309   | HNOJ0900-332240 | 38S         | 33,2    | 2,4    | -35 - 100        |
| 1903556   | HNOJ0900-380250 | 42L         | 38,0    | 2,5    | -35 - 100        |

REV.2.1

## // PROFILED GASKET

## // HNOJ0800\_G

Profiled Gasket for Threaded Adapters  
NBR - 80SH



| Item Code | Product Code   | Thread Type | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|----------------|-------------|-------------|---------|--------|------------------|
| 1221438   | R1A-0905049900 | BSP         | 3/8"        | 14,7    | 2,2    | -35 - 100        |
| 1221439   | R1A-0905079900 | BSP         | 1/2"        | 18,5    | 2,2    | -35 - 100        |
| 1221433   | R1A-0905129900 | BSP         | 1 1/4"      | 38,8    | 2,9    | -35 - 100        |
| 1221437   | R1A-0905229900 | MET         | M10         | 8,4     | 1,6    | -35 - 100        |
| 1221435   | R1A-0905029900 | MET         | M14         | 11,6    | 2,2    | -35 - 100        |
| 1221436   | R1A-0905109900 | MET         | M26         | 23,9    | 2,9    | -35 - 100        |
| 1221434   | R1A-0905119900 | MET         | M33         | 29,7    | 2,9    | -35 - 100        |

## // BONDED SEAL

## // R1ADS06000

Self Centering Bonded Seal

BSP

Steel/NBR - 70SH



| Item Code | Product Code    | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|-----------------|-------------|---------|--------|------------------|
| 1221801   | R1ADS06000-0200 | 1/8"        | 13,7    | 2,0    | -30 - 100        |
| 1221809   | R1ADS06000-0400 | 1/4"        | 13,7    | 2,0    | -30 - 100        |
| 1221818   | R1ADS06000-0600 | 3/8"        | 17,3    | 2,0    | -30 - 100        |
| 1221807   | R1ADS06000-0800 | 1/2"        | 21,5    | 2,5    | -30 - 100        |
| 1221820   | R1ADS06000-1000 | 5/8"        | 23,5    | 2,5    | -30 - 100        |
| 1221816   | R1ADS06000-1200 | 3/4"        | 27,1    | 2,5    | -30 - 100        |
| 1221805   | R1ADS06000-1600 | 1"          | 33,9    | 3,2    | -30 - 100        |
| 1221803   | R1ADS06000-2000 | 1 1/4"      | 42,9    | 3,2    | -30 - 100        |
| 1221802   | R1ADS06000-2400 | 1 1/2"      | 48,4    | 3,2    | -30 - 100        |
| 1221814   | R1ADS06000-3200 | 2"          | 60,6    | 3,2    | -30 - 100        |

## // R1ADS0600M

Self Centering Bonded Seal

MET

Steel/NBR - 70SH



| Item Code | Product Code    | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|-----------------|-------------|---------|--------|------------------|
| 1221822   | R1ADS0600M-0400 | M4          | 4,5     | 1,0    | -30 - 100        |
| 1221823   | R1ADS0600M-0500 | M5          | 5,7     | 1,0    | -30 - 100        |
| 1221824   | R1ADS0600M-0600 | M6          | 6,7     | 1,0    | -30 - 100        |
| 1221825   | R1ADS0600M-0800 | M8          | 8,7     | 1,0    | -30 - 100        |
| 1221826   | R1ADS0600M-1000 | M10         | 10,7    | 1,5    | -30 - 100        |
| 1222404   | R1ADS0600M-1200 | M12         | 12,7    | 1,5    | -30 - 100        |
| 1221827   | R1ADS0600M-1400 | M14         | 14,7    | 1,5    | -30 - 100        |
| 1221828   | R1ADS0600M-1600 | M16         | 16,7    | 1,5    | -30 - 100        |
| 1221829   | R1ADS0600M-1800 | M18         | 18,7    | 1,5    | -30 - 100        |
| 1221830   | R1ADS0600M-2000 | M20         | 20,7    | 1,5    | -30 - 100        |
| 1221832   | R1ADS0600M-2200 | M22         | 22,7    | 2,0    | -30 - 100        |
| 1221833   | R1ADS0600M-2400 | M24         | 24,7    | 2,0    | -30 - 100        |
| 1222405   | R1ADS0600M-2600 | M26         | 26,7    | 2,0    | -30 - 100        |
| 1221837   | R1ADS0600M-2800 | M28         | 28,0    | 2,0    | -30 - 100        |
| 1221835   | R1ADS0600M-3000 | M30         | 31,0    | 2,0    | -30 - 100        |
| 1221836   | R1ADS0600M-3600 | M36         | 36,7    | 2,0    | -30 - 100        |
| 1222349   | R1ADS0600M-5200 | M52         | 56,4    | 3,0    | -30 - 100        |

REV.2.1

## // R3ADS06000

Self Centering Bonded Seal

BSP

Stainless Steel/NBR - 70SH



| Item Code | Product Code    | Thread Size | ID (mm) | T (mm) | Temp. Range (°C) |
|-----------|-----------------|-------------|---------|--------|------------------|
| 1221812   | R3ADS06000-0200 | 1/8"        | 10,4    | 2,0    | -30 - 100        |
| 1221811   | R3ADS06000-0400 | 1/4"        | 13,7    | 2,0    | -30 - 100        |
| 1221819   | R3ADS06000-0600 | 3/8"        | 17,3    | 2,0    | -30 - 100        |
| 1221808   | R3ADS06000-0800 | 1/2"        | 21,5    | 2,5    | -30 - 100        |
| 1221817   | R3ADS06000-1200 | 3/4"        | 27,1    | 2,5    | -30 - 100        |
| 1221806   | R3ADS06000-1600 | 1"          | 33,9    | 2,5    | -30 - 100        |
| 1224657   | R3ADS06000-3800 | 1 1/2"      | 38,0    | 3,0    | -30 - 100        |
| 1225060   | R3ADS06000-2000 | 1 1/4"      | 42,9    | 3,0    | -30 - 100        |
| 1225265   | R3ADS06000-3200 | 2"          | 60,6    | 3,0    | -30 - 100        |



## // MACHINES AND TOOLS

|                                         |     |                            |     |
|-----------------------------------------|-----|----------------------------|-----|
| // CRIMPING.....                        | 379 | // FOAM PROJECTILES.....   | 389 |
| // HOSE RACK.....                       | 384 | // LUNCHERS KITS.....      | 393 |
| // CUTTING.....                         | 385 | // BENDING.....            | 394 |
| // SKIVING.....                         | 387 | // PREASSEMBLY DIN 24..... | 395 |
| // HEAT-SHRINKABLE PROTECTION CAPS..... | 388 |                            |     |

REV.2.1

## // CRIMPING

## // CRS-16HP

Portable manual hose crimper with hand pump.



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7000084   | 331X401X271 | 1"               | 96               | By hand        | 10 - 45          |

Also available in pneumatic version (CRS-16AP)

## // CRS-16AP

Portable pneumatic hose service crimper.



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7000093   | 331X346X271 | 1"               | 96               | By hand        | 10 - 45          |

## // CRS-16HPZ

Manual hydraulic crimping machine for one-off production of hose assemblies (e.g. in repair shops).



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7002203   | 390X331X271 | 1                | 96               | By hand        | 10 - 45          |
| 7002302   | 390X331X271 | 1"               | 96               | By hand        | 10 - 45          |

## // CRS-20CS

Electric crimping machine specially designed for service van use. They are battery powered with 12V or 24V crimping head on left as standard. Right version available as option.



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7002812   | 583X533X387 | 1 1/2            | 137              | By hand        | 10 - 61          |

Also available as Z-model with separate hydraulic unit for better weight balancing and space usage in service van.

// CRS-20CSZ **NEW**

Electric crimping machine specially designed for service van use. They are battery powered with 12V or 24V crimping head separate from hydraulic power unit



| Item Code | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|------------------|------------------|----------------|------------------|
| 7002341   | 1 1/2            | 137              | By hand        | 10 - 61          |

## // CRW-20NMS

Electric crimping machine; strong, fast and reliable for any service crimping need. It turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7002445   | 650X510X620 | 1 1/2"           | 137              | By hand        | 10 - 61          |

Max hose size for Powerflexbio 4K,5K,6K 4-Spiral 1" or consult with PM

REV.2.1

// **CRW-32NMS**

**Electric crimping machine; strong, fast and reliable for any service crimping need. It turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle**



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7002446   | 675X520X620 | 2"               | 200              | By hand        | 10 - 87          |

Max hose size for Powerflexbio 4K,5K 4-Spiral 1 1/4" or consult with PM

// **CRW-51MS** **NEW**

**Multi-purpose table top crimping machine for hydraulic and industrial hoses.**



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7002684   | 706X473X758 | 2 1/2"           | 280              | By hand        | 10 - 124         |

Max hose size for Powerflexbio 4K&5K 4-6 Spiral 1 1/2"

// **CRW-20NMSC**

**Electric crimping Machine: package solution, with die set and tool rack**

**Notes:** P20NMS + 10pcs of P20 standard dies (from 20-14 to 20-54) and tool rack



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7002682   | 650X510X620 | 1 1/2"           | 137              | By hand        | 10 - 61          |

Max hose size for Powerflexbio 4K,5K,6K 4-Spiral 1" or consult with PM

## // CRW-32NMSC

**Electric crimping Machine: package solution, with die set and tool rack.**

**Notes:** P32NMS + 10pcs of P20 standard dies (from 20-14 to 20-54) and tool rack



| Item Code | Dimensions  | Max ID Hose (in) | Crimp. Force (t) | Actuation Type | Crimp Range (mm) |
|-----------|-------------|------------------|------------------|----------------|------------------|
| 7002683   | 675X520X620 | 2"               | 200              | By hand        | 10 - 87          |

Max hose size for Powerflexbio 4K,5K 4-Spiral 1 1/4" or consult with PM

// DS-P16 **NEW**

**Crimping Machine - Die Set for CRS-16HP, CRS-16HPZ and CRS-16AP**



| Item Code | L1 (mm) | Crimp Range (mm) |
|-----------|---------|------------------|
| 7000100   | 55,0    | 10 - 12          |
| 7000101   | 55,0    | 12 - 14          |
| 7000102   | 55,0    | 14 - 16          |
| 7000103   | 55,0    | 16 - 19          |
| 7000105   | 55,0    | 19 - 23          |
| 7000107   | 55,0    | 23 - 27          |
| 7000109   | 55,0    | 27 - 31          |
| 7000116   | 55,0    | 31 - 38          |

## // DS-P20

**Crimping Machine Die Set for CRS-20CS and CRS-20CSZ**



| Item Code | L1 (mm) | Crimp Range (mm) |
|-----------|---------|------------------|
| 7000471   | 55,0    | 7 - 10           |
| 7000468   | 55,0    | 10 - 12          |
| 7000469   | 55,0    | 12 - 14          |
| 7000104   | 55,0    | 16 - 19          |
| 7000106   | 55,0    | 19 - 23          |
| 7000108   | 55,0    | 23 - 27          |
| 7000110   | 70,0    | 27 - 31          |
| 7000117   | 70,0    | 31 - 36          |
| 7000118   | 75,0    | 36 - 41          |
| 7000120   | 85,0    | 47 - 54          |
| 7000119   | 75,0    | 41 - 47          |
| 7000121   | 85,0    | 54 - 61          |

REV.2.1

## // DS-P32

## Crimping Machine Die Set for CRW-32NMS and CRW-32NMSC



| Item Code | L1 (mm) | Crimp Range (mm) |
|-----------|---------|------------------|
| 7000474   | 55,0    | 19 - 22          |
| 7000473   | 55,0    | 16 - 19          |
| 7000475   | 70,0    | 22 - 26          |
| 7000476   | 70,0    | 26 - 30          |
| 7000477   | 70,0    | 30 - 34          |
| 7000479   | 75,0    | 39 - 45          |
| 7000478   | 75,0    | 34 - 39          |
| 7000481   | 90,0    | 51 - 57          |
| 7000480   | 90,0    | 45 - 51          |
| 7000482   | 100,0   | 57 - 63          |
| 7002290   | 110,0   | 51 - 57          |
| 7000483   | 110,0   | 63 - 69          |
| 7000484   | 110,0   | 69 - 75          |

## // DS-140

## Crimping Machine - Die Set



| Item Code | L1 (mm) | Crimp Range (mm) |
|-----------|---------|------------------|
| 7002340   | 150,0   | 78 - 80          |
| 7002339   | 150,0   | 74 - 80          |

## // HOSE RACK

## // HRACK-BDL

Hose Rack for Bundle



| Item Code | Notes         |
|-----------|---------------|
| 7002670   | 1130X940X1893 |

## // HRACK-ROL

Hose Rack for Rolls



| Item Code | Notes         |
|-----------|---------------|
| 7002865   | 1450X780X1670 |

REV.2.1

## // CUTTING

## // CUTS-30CS

Designed for service van use. Manually operated and easy to use, provided with a fume exhaust connection.



| Item Code | Motor Power (Kw) | Voltage (V) | Dimensions  | Actuation Type | Notes       |
|-----------|------------------|-------------|-------------|----------------|-------------|
| 7002338   | 3                | 12V DC      | 600X503X739 | By hand        | 300MM BLADE |

12 or 24V pack available upon request. Max hose size 1 1/4" 2 Wire Braid

## // CUTW-CM30

Designed for workshop use. Manually operated and easy to use, provided with a fume exhaust connection.



| Item Code | Motor Power (Kw) | Voltage (V) | Dimensions  | Actuation Type | Notes       |
|-----------|------------------|-------------|-------------|----------------|-------------|
| 7002304   | 3                | 400V AC     | 600X503X739 | By hand        | 300MM BLADE |

Max hose size 2 wire braid

## // CUTW-TF1EC

Inexpensive and compact cutting machine, ideal for cutting flexible hydraulic hoses up to 1" four spirals.



| Item Code | Motor Power (Kw) | Voltage (V) | Dimensions  | Actuation Type | Notes       |
|-----------|------------------|-------------|-------------|----------------|-------------|
| 7002306   | 0,75             | 400V AC     | 516X594X354 | By hand        | 250MM BLADE |

## // CUTW-TF1E

Inexpensive and compact cutting machine, ideal for cutting flexible hydraulic hoses up to 1" 1/4 four spirals and up to 1" six spirals.



| Item Code | Motor Power (Kw) | Voltage (V) | Dimensions  | Actuation Type | Notes       |
|-----------|------------------|-------------|-------------|----------------|-------------|
| 7002307   | 1,1              | 400V AC     | 525X660X445 | By hand        | 250MM BLADE |

12V power pack available upon request.

## // CUTW-TF2E

Ideal for cutting flexible hydraulic hoses up to 2" four spirals and 1" 1/2 six spirals



| Item Code | Motor Power (Kw) | Voltage (V) | Dimensions  | Actuation Type | Notes       |
|-----------|------------------|-------------|-------------|----------------|-------------|
| 7002308   | 3                | 400V AC     | 650X700X420 | By hand        | 250MM BLADE |

REV.2.1

## // SKIVING

## // SKIVE-S

Skiving Machine Service



| Item Code | Weight | Dimensions  | Actuation Type |
|-----------|--------|-------------|----------------|
| 7002342   | 7      | 480X240X100 | By hand        |

## // SKIVE-MND

Mandrel for external skiving



| Item Code | Max ID Hose (in) |
|-----------|------------------|
| 7002343   | 3/8"             |
| 7002344   | 1/2"             |
| 7002345   | 3/4"             |
| 7002346   | 3/4"             |

## // SKIVE-W

Skiving Machine Workshop



| Item Code | Weight | Motor Power (Kw) | Voltage (V) | Dimensions  | Actuation Type |
|-----------|--------|------------------|-------------|-------------|----------------|
| 7002833   | 34     | 0,75             | 400V AC     | 821X366X390 | By hand        |

// HEAT-SHRINKABLE PROTECTION CAPS

// HEAT-CAP

Heat-Shrinkable Protection Caps



| Item Code | Colour | Notes    |
|-----------|--------|----------|
| 1904867   | BLU    | 18-23MM  |
| 1904868   | BLU    | 24-29MM  |
| 1904865   | BLU    | 12-18 MM |
| 1904870   | BLU    | 41-50MM  |
| 1904869   | BLU    | 30-36MM  |
| 1904873   | BLU    | 64-78MM  |
| 1904872   | BLU    | 55-65MM  |
| 1904866   | BLU    | 16-21MM  |
| 1904871   | BLU    | 49-56MM  |

## // FOAM PROJECTILES

## // FOAM-P-MD

## Foam Projectiles - Medium Density



| Item Code | Size (mm) | Colour | Notes       |
|-----------|-----------|--------|-------------|
| 7000166   | 5         | WHT    | 100 PCS BAG |
| 7002448   | 6         | WHT    | 100 PCS BAG |
| 7000168   | 7         | WHT    | 100 PCS BAG |
| 7000169   | 8         | WHT    | 100 PCS BAG |
| 7000170   | 10        | WHT    | 100 PCS BAG |
| 7000172   | 12        | WHT    | 100 PCS BAG |
| 7000162   | 14        | WHT    | 100 PCS BAG |
| 7002449   | 16        | WHT    | 100 PCS BAG |
| 7000145   | 18        | WHT    | 100 PCS BAG |
| 7002450   | 20        | WHT    | 50 PCS BAG  |
| 7000167   | 22        | WHT    | 50 PCS BAG  |
| 7002451   | 24        | WHT    | 50 PCS BAG  |
| 7000161   | 26        | WHT    | 50 PCS BAG  |
| 7002452   | 28        | WHT    | 40 PCS BAG  |
| 7002453   | 30        | WHT    | 40 PCS BAG  |
| 7000142   | 33        | WHT    | 40 PCS BAG  |
| 7002454   | 36        | WHT    | 30 PCS BAG  |
| 7000144   | 40        | WHT    | 40 PCS BAG  |
| 7002455   | 45        | WHT    | 20 PCS BAG  |
| 7000143   | 50        | WHT    | 20 PCS BAG  |
| 7000164   | 55        | WHT    | 15 PCS BAG  |
| 7002456   | 60        | WHT    | 15 PCS BAG  |
| 7000155   | 65        | WHT    | 10 PCS BAG  |
| 7002457   | 70        | WHT    | 10 PCS BAG  |
| 7002458   | 75        | WHT    | 10 PCS BAG  |
| 7002459   | 80        | WHT    | 10 PCS BAG  |
| 7002460   | 85        | WHT    | 10 PCS BAG  |
| 7002461   | 90        | WHT    | 10 PCS BAG  |
| 7002462   | 95        | WHT    | 10 PCS BAG  |
| 7002463   | 100       | WHT    | 10 PCS BAG  |

## // FOAM-P-HD

## Foam Projectiles - High Density



| Item Code | Size (mm) | Colour | Notes       |
|-----------|-----------|--------|-------------|
| 7002464   | 6         | WHT    | 100 PCS BAG |
| 7002465   | 7         | WHT    | 100 PCS BAG |
| 7002466   | 8         | WHT    | 100 PCS BAG |
| 7002467   | 10        | WHT    | 100 PCS BAG |
| 7002468   | 12        | WHT    | 100 PCS BAG |
| 7002469   | 14        | WHT    | 100 PCS BAG |
| 7002470   | 16        | WHT    | 100 PCS BAG |
| 7002471   | 18        | WHT    | 100 PCS BAG |
| 7002472   | 20        | WHT    | 50 PCS BAG  |
| 7002473   | 22        | WHT    | 50 PCS BAG  |
| 7002474   | 24        | WHT    | 50 PCS BAG  |
| 7002475   | 26        | WHT    | 50 PCS BAG  |
| 7002476   | 28        | WHT    | 40 PCS BAG  |
| 7002477   | 30        | WHT    | 40 PCS BAG  |
| 7002478   | 33        | WHT    | 40 PCS BAG  |
| 7002479   | 36        | WHT    | 30 PCS BAG  |
| 7002480   | 40        | WHT    | 30 PCS BAG  |
| 7002481   | 45        | WHT    | 20 PCS BAG  |
| 7002482   | 50        | WHT    | 20 PCS BAG  |
| 7002483   | 55        | WHT    | 15 PCS BAG  |
| 7002484   | 60        | WHT    | 15 PCS BAG  |
| 7002485   | 65        | WHT    | 10 PCS BAG  |

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## // FOAM-P-A

## Foam Projectiles - Abrasive



| Item Code | Size (mm) | Colour  | Notes       |
|-----------|-----------|---------|-------------|
| 7002486   | 6         | WHT/BLU | 100 PCS BAG |
| 7002487   | 7         | WHT/BLU | 100 PCS BAG |
| 7002488   | 10        | WHT/BLU | 100 PCS BAG |
| 7002489   | 12        | WHT/BLU | 100 PCS BAG |
| 7002490   | 14        | WHT/BLU | 100 PCS BAG |
| 7002491   | 16        | WHT/BLU | 100 PCS BAG |
| 7002492   | 18        | WHT/BLU | 100 PCS BAG |
| 7002493   | 20        | WHT/BLU | 50 PCS BAG  |
| 7002494   | 22        | WHT/BLU | 50 PCS BAG  |
| 7002495   | 24        | WHT/BLU | 50 PCS BAG  |
| 7002496   | 26        | WHT/BLU | 50 PCS BAG  |
| 7002497   | 28        | WHT/BLU | 40 PCS BAG  |
| 7002498   | 30        | WHT/BLU | 40 PCS BAG  |
| 7002499   | 33        | WHT/BLU | 40 PCS BAG  |
| 7002500   | 36        | WHT/BLU | 30 PCS BAG  |
| 7002501   | 40        | WHT/BLU | 30 PCS BAG  |
| 7002502   | 45        | WHT/BLU | 20 PCS BAG  |
| 7002503   | 50        | WHT/BLU | 20 PCS BAG  |
| 7002504   | 55        | WHT/BLU | 15 PCS BAG  |
| 7002505   | 60        | WHT/BLU | 15 PCS BAG  |
| 7002506   | 65        | WHT/BLU | 10 PCS BAG  |
| 7002507   | 70        | WHT/BLU | 10 PCS BAG  |
| 7002508   | 75        | WHT/BLU | 10 PCS BAG  |
| 7002509   | 80        | WHT/BLU | 10 PCS BAG  |
| 7002510   | 85        | WHT/BLU | 10 PCS BAG  |
| 7002511   | 90        | WHT/BLU | 10 PCS BAG  |
| 7002512   | 95        | WHT/BLU | 10 PCS BAG  |
| 7002513   | 100       | WHT/BLU | 10 PCS BAG  |
| 7002514   | 110       | WHT/BLU | 10 PCS BAG  |

## // FOAM-P-US

## Foam Projectiles - Ultra Scrub



| Item Code | Size (mm) | Colour  | Notes       |
|-----------|-----------|---------|-------------|
| 7002515   | 6         | WHT/YEL | 100 PCS BAG |
| 7002516   | 7         | WHT/YEL | 100 PCS BAG |
| 7002517   | 8         | WHT/YEL | 100 PCS BAG |
| 7002518   | 10        | WHT/YEL | 100 PCS BAG |
| 7002519   | 12        | WHT/YEL | 100 PCS BAG |
| 7002520   | 14        | WHT/YEL | 100 PCS BAG |
| 7002521   | 16        | WHT/YEL | 100 PCS BAG |
| 7002522   | 18        | WHT/YEL | 100 PCS BAG |
| 7002523   | 20        | WHT/YEL | 50 PCS BAG  |
| 7002524   | 22        | WHT/YEL | 50 PCS BAG  |
| 7002525   | 24        | WHT/YEL | 50 PCS BAG  |
| 7002526   | 26        | WHT/YEL | 50 PCS BAG  |
| 7002527   | 28        | WHT/YEL | 40 PCS BAG  |
| 7002528   | 30        | WHT/YEL | 40 PCS BAG  |
| 7002529   | 33        | WHT/YEL | 40 PCS BAG  |
| 7002530   | 36        | WHT/YEL | 30 PCS BAG  |
| 7002531   | 40        | WHT/YEL | 30 PCS BAG  |
| 7002532   | 45        | WHT/YEL | 20 PCS BAG  |
| 7002533   | 50        | WHT/YEL | 20 PCS BAG  |
| 7002534   | 55        | WHT/YEL | 15 PCS BAG  |
| 7002535   | 60        | WHT/YEL | 15 PCS BAG  |

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// LUNCHERS KITS

// CLEAN-GUNA

Cleaning Gun Kit  
Launcher and 8 nozzles



| Item Code | Notes         |
|-----------|---------------|
| 7002284   | 1/4" - 1 1/4" |

// CLEAN-GUNB

Cleaning Gun Kit  
Launcher, Launcher Stand, 20 Nozzles 1/4" - 2" Air Clean Projectiles



| Item Code | Notes     |
|-----------|-----------|
| 7002285   | 1/4" - 2" |

## // BENDING

## // PIPEBEND-M

## Pipe Bending Manual

Tube: 6 to 18 mm



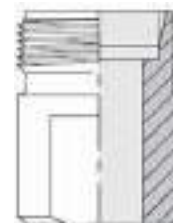
| Item Code | Weight | Notes      |
|-----------|--------|------------|
| 7000189   | 10     | 720X190X80 |

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## // PREASSEMBLY DIN 24

## // PRE-DINL-M

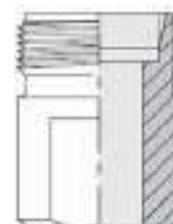
Pre-assembly DIN 24° Manual  
Light Series



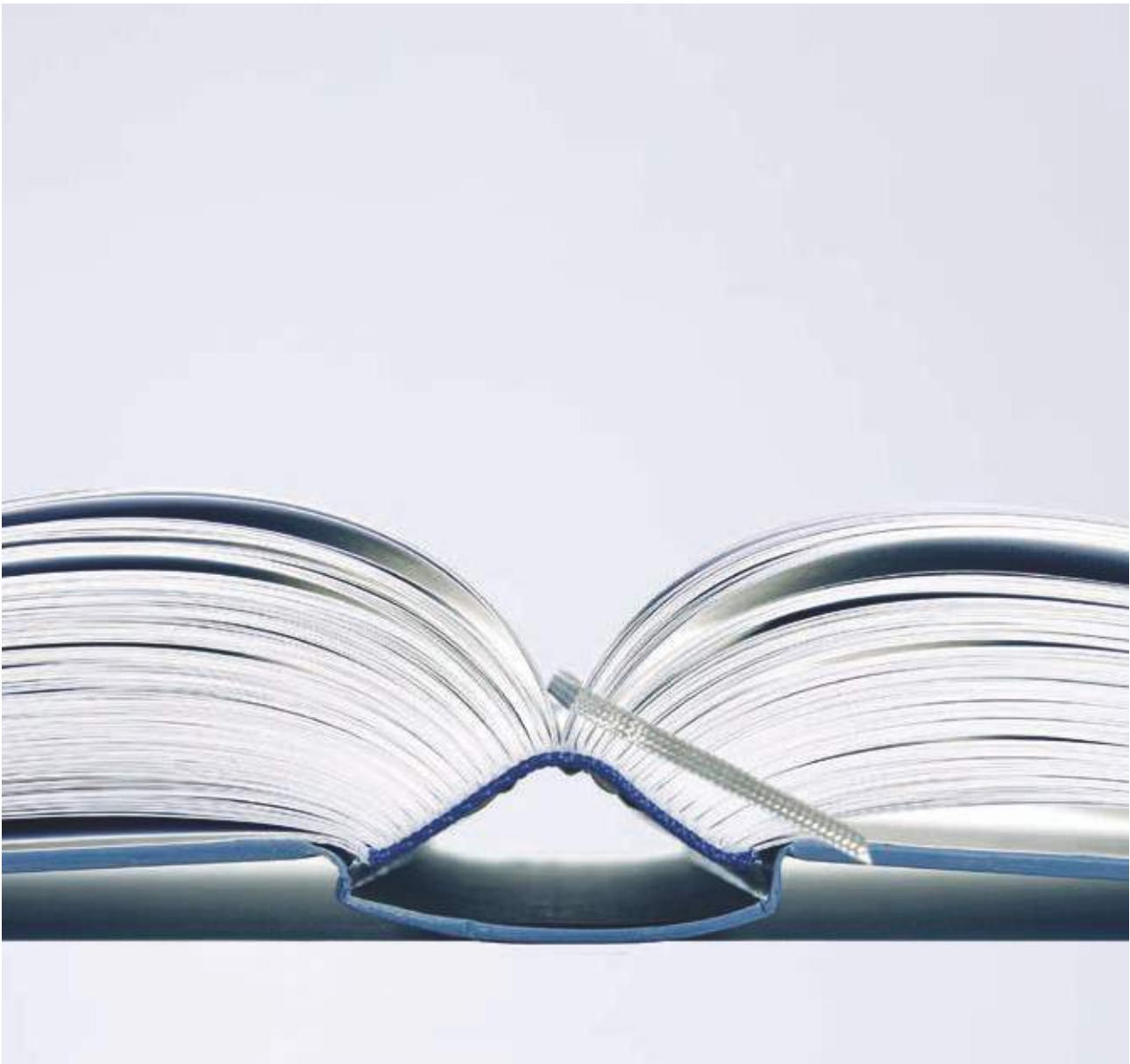
| Item Code | Notes |
|-----------|-------|
| 7000216   | 06L   |
| 7000507   | 08L   |
| 7000208   | 10L   |
| 7000209   | 12L   |
| 7000211   | 15L   |
| 7000508   | 18L   |
| 7000214   | 22L   |
| 7000509   | 28L   |
| 7000872   | 35L   |
| 7000215   | 42L   |

## // PRE-DINS-M

Pre-assembly DIN 24° Manual  
Heavy Series



| Item Code | Notes |
|-----------|-------|
| 7000217   | 06S   |
| 7000510   | 08S   |
| 7000549   | 10S   |
| 7000210   | 12S   |
| 7000511   | 14S   |
| 7000212   | 16S   |
| 7000213   | 20S   |
| 7000712   | 25S   |
| 7000876   | 30S   |
| 7000875   | 38S   |



## // APPENDIX

|                             |     |                             |     |
|-----------------------------|-----|-----------------------------|-----|
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| // FITTINGS GUIDELINES..... | 407 | // INDEX.....               | 426 |

## // HOSE GUIDELINE

### SETTING NEW STANDARD

Dunlop Hiflex cares for the environment and for your equipment among Dunlop Hiflex's newest products are Powerflexbio 3000, 4000, 5000, 5000 PLUS, 6000 spiral hose, low temperature, Temp Tech, MineTuff, SuperTuff hose and a complete coupling line.

They join the extensive range of Dunlop Hiflex hose, the high pressure hydraulic components that have set the standard for reliability and durability.

### DESIGN

Throughout the world, Dunlop Hiflex has built up a name synonymous with quality, a reputation based on first class product, a commitment to research and development and ongoing capital investment.

The development and product engineering staff in Dunlop Hiflex, continue to provide fluid conveying product innovations that assure better performance and cost saving to our customers.

Dunlop Hiflex hose and couplings are designed to work together as a system for problem free performance, no matter what machine you operate.

The performance of all our products exceeds SAE, DIN, JIS requirements and some hoses meet the MSHA and LOBA flame resistance requirements, as well.

### LEADERSHIP IN HYDRAULIC HOSE AND COUPLING COMPONENTS

Dunlop Hiflex has developed into a world leading manufacturer of fluid power and fluid system components. A positive attitude towards the demands of new equipment which is using the latest technology has seen Dunlop Hiflex introduce many outstanding new hydraulic hose types. These hoses have found acceptance in a wide range of industries, some examples are: Mining, Logging, Petroleum, Railroad, Construction, Earthmoving, Agriculture, Waste/Refuse, Manufacturing, Pulp and Plywood Mills, Moulding, Drilling, Crane

### GLOBAL COMPANY

Due to our world-wide organisation of subsidiaries and distributors you will always be near a source for Dunlop Hiflex products. Your Dunlop Hiflex dealer has trained personnel to consult with you on your hose and coupling requirements guaranteeing consistent quality and performance.

### OUR COMMITMENT

By remaining alert to customer's needs, Dunlop Hiflex is constantly engineering new products for tomorrow's markets as well as modifying them for even higher performances.

Dunlop Hiflex commitment to innovation and service makes our products known throughout the world for quality, reliability and leadership, when you need quality hose and couplings, use the best available.

Now you can count on Dunlop Hiflex for all your needs.

### TESTING

Dunlop Hiflex laboratories are fully equipped to carry out tests according to standards like SAE, ISO, DIN and JIS. New products are also subjected to laboratory simulation of actual service prior to being released on the market.

### WORLD CLASS QUALITY

Dunlop Hiflex is working to adhere to internationally recognised quality programmes requiring stringent standards.

Many of our customers are demanding ISO qualification or equivalent as a prerequisite for purchasing. This standard is an assurance of consistent quality. For Dunlop Hiflex this is just the start "do it right from the beginning".

### IMPORTANT NOTE FOR USERS

Hose assemblies require caution in use not only to provide long service life but also to guard against potentially dangerous failure.

Serious injury, death and destruction of property can result from the rupture or blowing-apart of a hydraulic hose assembly that is damaged, worn out, badly assembled or installed incorrectly.

Users should follow good maintenance practices. Avoid expensive downtime by establishing a program of inspection, testing and replacement of hose assemblies before failure occurs; taking into account factors including: severity of application, frequency of equipment use, past performance of hose assemblies. Document your maintenance, inspections and testing.

Only properly trained persons should inspect, test or service hose assemblies and this training should be updated regularly.

Users should carefully observe the precautions listed below under "be aware that" as well as follow closely our recommendations for the selection of hose and couplings. In addition, care should be taken not to exceed the minimum bend radius listed for each hose size and type.

Maximum operating pressure should not exceed the pressures listed. Instruction for assembling fittings to different hoses should be followed carefully to ensure the safe performance of the complete assembly.

By following the recommendations on hose assembly routing and installation, improved safety and longer service life of any hose installation will result.

Hydraulic fluid under pressure can be potentially dangerous!! An explosive burst or stream of escaping fluid can cause damage to equipment as well as serious injury to persons nearby.

**BE AWARE THAT...**

1. Highly pressurised fluid escaping from a small pinhole can be almost invisible and, yet, exert extreme force capable of penetrating the skin and other body tissues, causing possible severe injury.
2. Hot fluids or chemicals can cause severe burns.
3. Pressurised fluids, if released uncontrolled, can exert a tremendous explosive force.
4. All hydraulic hoses listed in this catalogue are electrically conductive.
5. Some hydraulic fluids are highly flammable.

**AND...**

6. Always position a shield between you and any pressurised hydraulic lines when working next to them... or shut the pressure off.
7. Wear safety glasses.
8. Do not use your hands to check for leaks. Do not touch a pressurised hydraulic hose assembly with any part of your body, if fluid punctures the skin, even if no pain is felt, a serious emergency exists. Obtain medical assistance immediately. Failure to do so can result in loss of the injured body part or death.
9. Stay out of hazardous areas while testing hose assemblies under pressure. Use proper safety protection.
10. If an injury or reaction occurs, get medical attention right away.
11. Use only non conductive thermoplastic hoses where electrical conductivity is not desired: for instance, equipment working on electric power lines.

Dunlop Hiflex hose and fitting are designed, engineered and tested to be used together in an assembly.

The use of Dunlop Hiflex fittings on other manufactures hose or the use of Dunlop Hiflex hose with other manufactures fittings may result in the production of unreliable or unsafe assemblies. It is neither recommended nor authorised by Dunlop Hiflex.

Dunlop Hiflex recommends only those hose and coupling combinations specified in the Dunlop Hiflex Hydraulic Products Catalogues.

Dunlop Hiflex disclaims any liability for any hose assemblies which have not been produced in conformance with Dunlop Hiflex assembly recommendations and current crimp data charts. Extensive impulse testing has been performed by Dunlop Hiflex to verify the recommendations contained in this catalogue. A simple burst or pressure test cannot determine a hose and coupling combination.

Any claim for defects must be made in writing on the appropriate ISO 9001 complaint form within 8 days from receipt of the product. Dunlop Hiflex will have a reasonable opportunity thereafter to examine and investigate the alleged defect.

The customer's exclusive remedy with respect to any claim of any kind whatsoever shall be refund of the purchase price or replacement of the product at the option of Dunlop Hiflex and in no event shall Dunlop Hiflex be liable for any incidental or consequential damages whatsoever.

## REFERENCE SPECIFICATIONS

|         |                                                          |
|---------|----------------------------------------------------------|
| SAE     | Society of Automotive Engineers                          |
| DNV-GL  | Det Norske Veritas - Germanischer Lloyd                  |
| EN      | European Norm                                            |
| DIN     | Deutsche Institute Normen                                |
| CERCHAR | Centre d'Etudes et Recherches des Charbonnages de France |
| MSHA    | U.S. Mine Safety and Health Administration               |

|      |                                                |
|------|------------------------------------------------|
| LOBA | Landesoberbergamt Nordrhein - Westfalen        |
| AS   | Australian Standard                            |
| BV   | Bureau Veritas                                 |
| ISO  | International organization for Standardization |
| KR   | Korean Register                                |
| MA   | Chinese Mining                                 |

The listings below are intended only as guides in identifying which Dunlop Hiflex hoses comply with requirements of various agencies.

| Hose                           | SAE J517   | EN                      | ISO                      | Dunlop Hiflex Proprietary Hose | DNV GL | ABS | BV | NKK | RINA | Lloyd's Register | MSHA <sup>2</sup> | USDOT <sup>3</sup> | KR | MA |
|--------------------------------|------------|-------------------------|--------------------------|--------------------------------|--------|-----|----|-----|------|------------------|-------------------|--------------------|----|----|
| Argus 1TE/R6 HF                | 100 R6     | EX 854 1TE (up to 3/4") |                          |                                |        |     |    |     |      |                  |                   |                    |    |    |
| Argus 2TE HF                   |            | 854 2TE                 |                          |                                |        |     |    |     |      |                  |                   |                    |    |    |
| Argus 3TE/R3 HF                | 100 R3     | 854 3TE                 |                          |                                |        |     |    |     |      |                  |                   |                    |    |    |
| Flexor 7                       | 100 R7     | 855 R7                  | 3949                     |                                |        |     |    |     |      |                  |                   |                    |    |    |
| Flexor 8                       | 100 R8     | 855 R8                  |                          |                                |        |     |    |     |      |                  |                   |                    |    |    |
| 2TE Railway                    |            | 854 2TE 45545-2         |                          |                                |        |     |    |     |      |                  |                   |                    |    |    |
| 2SC Railway                    |            | 854 2SC 45545-2         | 11237                    |                                |        |     |    |     |      |                  |                   |                    |    |    |
| 122T Greenline Plus - 1SN/R1AT | 100 R1AT   | 853 1SN                 | 1436-1                   |                                | ●      | ●   |    | ●*  |      | ●                |                   |                    | ●  |    |
| 222T Greenline Plus - 2SN/R2AT | 100 R2AT   | 853 2SN                 | 1436-1                   |                                | ●      | ●   |    | ●*  | ●    | ●                |                   |                    | ●  |    |
| 221T Slimline Plus             |            | 857 2SC                 | 11237                    |                                | ●      | ●   | ●  | ●*  |      |                  |                   |                    |    |    |
| 121T Slimline Plus - 1SC       |            | 857 1SC                 | 11237                    |                                | ●      |     | ●  |     |      |                  |                   |                    |    |    |
| 241T Superslimline             | 100 R16    | 857 2SC (up to 1")      | 11237                    |                                | ●      | ●   | ●  | ●   | ●    | ●                | ●                 |                    | ●  |    |
| AT7K - 490 Powertrak           |            |                         |                          | ●                              |        |     |    |     |      |                  | ●                 |                    |    |    |
| AT8K - 560 Powertrak           |            |                         |                          | ●                              |        |     |    |     |      |                  | ●                 |                    |    |    |
| Powerflexbio 3000              | EX SAE R12 |                         | 18752                    | ●                              | ●      | ●   | ●  | ●*  | ●    | ●                | ●                 |                    |    |    |
| Powerflexbio 4000              |            |                         | 18752                    | ●                              | ●      | ●   | ●  | ●*  | ●    | ●                | ●                 |                    |    |    |
| Powerflexbio 5000              |            |                         | 18752 (except for DN 76) | ●                              | ●      | ●   | ●  | ●*  | ●    | ●                | ●                 |                    |    |    |
| Powerflexbio 5000P             |            |                         | 18752                    | ●                              | ●      | ●   | ●  | ●*  | ●    | ●                | ●                 |                    |    |    |
| Powerflexbio 6000              | EX SAE R15 |                         | 18752                    | ●                              | ●      | ●   | ●  | ●*  | ●    | ●                | ●                 |                    |    |    |
| Firesafe 5000                  |            |                         |                          | ●                              | ●      |     |    |     |      | ●                | ●                 |                    |    |    |
| Commander 150 1SN PLUS         | 100 R1AT   | 853 1SN                 | 1436-1                   | ●                              |        |     |    |     |      |                  |                   |                    |    |    |
| SP33G - Superforest            |            |                         |                          | ●                              | ●      | ●   | ●  | ●   |      | ●                |                   |                    | ●  |    |
| 261E - Hypercold Superslimline |            |                         |                          |                                |        |     |    |     |      |                  |                   |                    |    |    |
| SP33E - Hypercold Superforest  |            |                         |                          |                                |        |     |    |     |      |                  |                   |                    |    |    |
| Flexor R4                      | 100 R4     |                         |                          |                                |        |     | ●  |     |      |                  |                   |                    |    |    |

\* Running

1. DNV approvals are with permanent (crimp) type fittings only
2. Hoses with MSHA approved cover are always branded "MSHA"
3. DOT Type all TYPE All FMVSS 106 approval up to 3/4"

Listing may vary by style and size, for current and complete information, contact Dunlop Hiflex for details.

## SAFETY GUIDE BASIC FACTORS FOR THE SELECTION, INSTALLATION AND MAINTENANCE OF HOSE AND HOSE ASSEMBLIES

Hydraulic hose (and hose assemblies) has a limited life dependent on service conditions to which is applied.

Subjecting hose (and hose assemblies) to conditions more severe than the recommended limits significantly reduce service life. Exposure to combinations of recommended limits (i.e., continuous use at maximum rated working pressure, maximum recommended operating temperature and minimum bend radius) will also reduce service life.

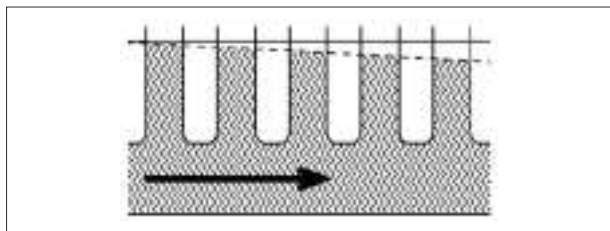
**WARNING: FAILURE TO FOLLOW PROPER SELECTION, INSTALLATION AND MAINTENANCE PROCEDURES MIGHT RESULT IN BODILY INJURY, AND DAMAGE TO PROPERTY.**

### 1. SELECTION

The following is a list of factors which must be considered before the selection of a hose can be made:

#### 1.1 Line size

In order to achieve maximum efficiency in a hydraulic system, it is necessary to keep pressure losses (resistance to the volumetric flow) to a minimum when a fluid is conveyed by the different types of flow lines. When a fluid flows through a flow line, heat is generated by friction. Thus part of the energy is lost as heat energy, which results in a pressure loss.



These pressure losses depend upon:

- flow velocity (for a given volumetric flow, the fluid flow velocity increases with a decrease in the cross sectional area of a flow line and vice versa)
- length of the flow line
- the viscosity of the fluid flowing
- the density of the fluid flowing
- the type of flow (laminar or turbulent)

**Types of flow** - The type of flow changes from laminar to turbulent at a certain flow velocity. This velocity is given by the Reynold's Number Re.

For cylindrical flow lines the following formula applies:

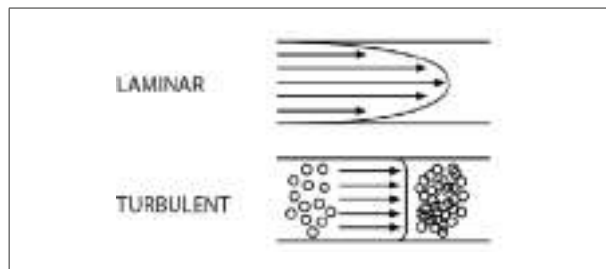
$$Re = \frac{v \times d}{\nu}$$

where:  $v$  = velocity (m/s)  
 $d$  = flow line internal dia (m)  
 $\nu$  = kinematic viscosity (m<sup>2</sup>/s)

As soon as the value for Re exceeds 2300, the laminar flow changes to turbulent flow.

**Laminar flow** - In laminar flow, the individual fluid particles move up to certain speeds in uniform layers alongside each other. They scarcely disturb or influence each other.

**Turbulent flow** - If the value for Re exceeds 2300, flow becomes whirling and turbulent. The individual particles no longer move in one direction in an orderly fashion, but influence and hinder each other.



Certain fluid flow velocities have proved to be most suitable for hydraulic flow lines.

Recommended flow velocities:

|                 |                 |                   |
|-----------------|-----------------|-------------------|
| Suction lines:  | 0.5 ... 1.2 m/s | 1.6 ... 4 feet/s  |
| Return lines:   | 2 ... 3 m/s     | 6.5 ... 10 feet/s |
| Pressure lines: | 4 ... 7.5 m/s   | 13 ... 25 feet/s  |

### FLOW CAPACITY NORMOGRAM

#### Flow Capacities of Hose at Recommended Flow Velocities

The chart below is provided as an aid in the determination of the correct hose size.

**Example** at 45 l/min, what is the proper hose size within the recommended velocity range for pressure lines?

Locate 45 l/min in the left-hand column and 7.5 m/s in the right-hand column (the maximum recommended velocity range for pressure lines).

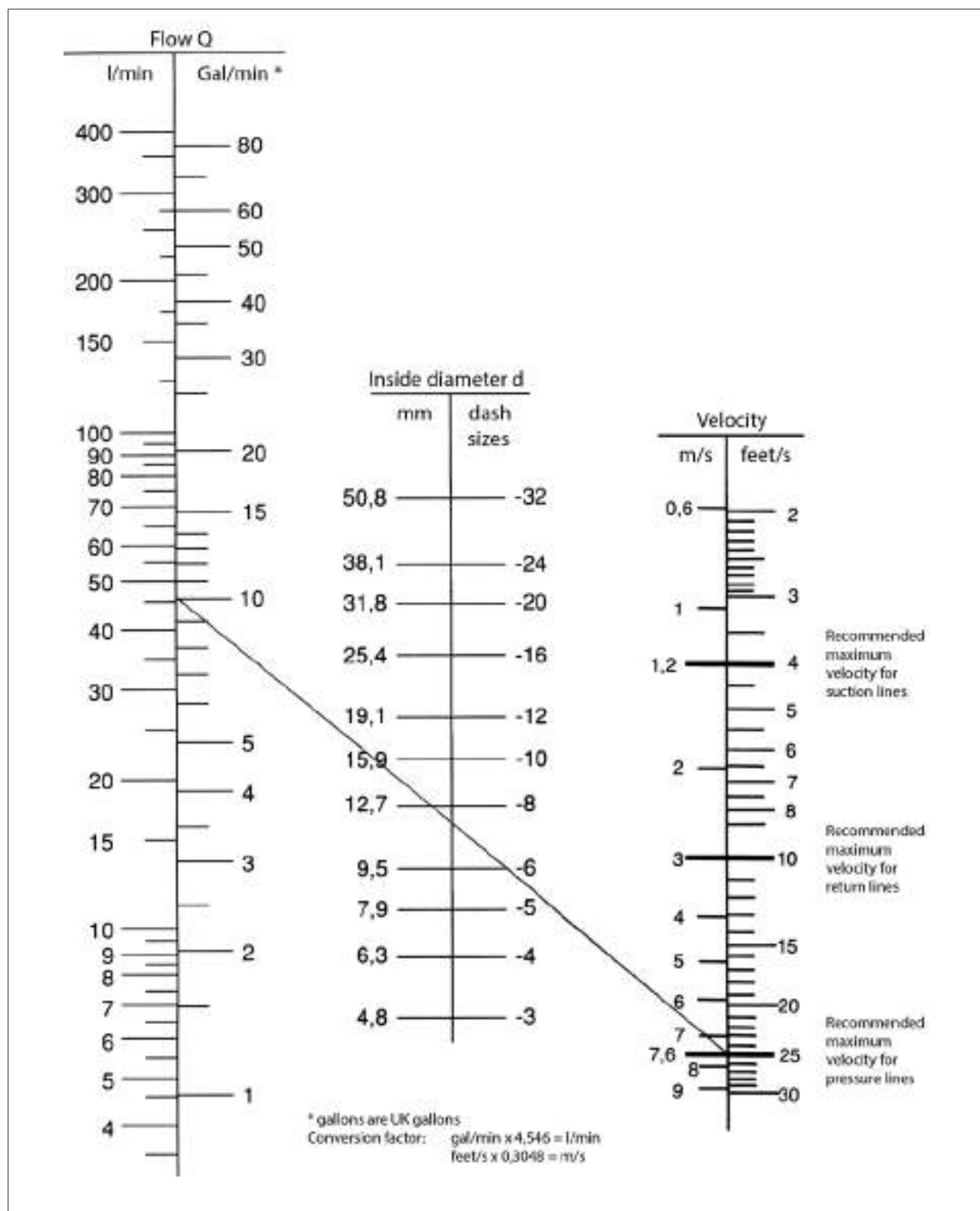
Lay a straight line across these two points. The inside diameters shown in the centre column is above 9.5 mm so we have to use 12.7 mm (1/2"). For suction hose, follow the same procedure except use recommended velocity range for intake lines in the righthand column.

where:  $Q$  = flow in liters per seconds (l/sec)  
 $V$  = velocity in meters per seconds (m/s)  
 $d$  = hose inside diameter (mm & dash size)

## TECHNICAL INFORMATION – NORMOGRAM OF THE FLOW

The normogram herewith is pivotal to help you find the hose diameter by knowing the liquid flow and speed.

In order to find the correct diameter you should trace a line between the flow value (l/min) and the suggested speed (m/sec) according to the kind of delivery (pressure or return). The value touched by the line in the central column will indicate the hose ID (mm/inches) that must be used.



It is therefore important to calculate correctly the required flow line sizes. Undersized pressure lines results in high fluid velocity causing an excessive pressure drop, and heat built up, which impair overall system performance.

Undersized suction lines can cause cavitation at the hydraulic pump inlet, affecting performance, shortening pump life, and creating excessive noise levels.

The flow capacity nomogram is an aid to determine the correct hose internal diameter size, desired flow rate and recommended velocity. By the use of any two known factors, the third can be determined.

## 1.2 Pressure

After determining the system pressure for a hydraulic system, hose selection must be made so that the recommended maximum operating pressure specified by a given hose, is equal or greater than the system pressure. Dynamic pressure is common for all hydraulic systems. Pressure surges which exceed the maximum working pressure (pressure relief valve setting) affect the service life of system components, including a hose assembly and therefore need to be taken into consideration. Hoses used for suction lines must be selected to ensure the hose will withstand the negative pressure of the system.

## 1.3 Temperature

Care must be taken to ensure that the operating temperature of the fluid being conveyed and ambient temperatures, do not exceed the limitations of the hose. Special care must be taken when routing near hot manifolds or molten metal.

## 1.4 Fluid Compatibility

Hose selection must assure compatibility of the hose tube, cover, reinforcement, and fittings with the fluid used.

Additional caution must be observed in hose selection for gaseous applications. Some fire resistant fluids require the same hose as petroleum oil. Some use a special hose, while a few fluids will not work with any hose at all.

For gas application, where compatible with Dunlop Hiflex Hoses, and at pressure above 10 bar, the hose cover shall be pin-pricked.

## 1.5 Permeation

Permeation (that is, seepage through the hose) will occur from inside the hose to outside when hose is used with gases, liquid and gas fuels, and refrigerants (including but not limited to such materials such as helium, fuel oil, natural gas or freon). This permeation may result in high concentrations of vapours which are potentially flammable, explosive, or toxic and in loss of fluid. Even though the fluid compatibility is acceptable, you must take into account the fact that permeation will occur and could be hazardous. Permeation of moisture from outside the hose to inside the hose will also occur. If this moisture permeation would have detrimental effects (particularly but not limited to refrigeration and air conditioning systems), incorporation of sufficient drying capacity in the system or other appropriate system safeguards should be selected and used.

## 1.6 Routing

Attention must be given to optimum routing to minimise inherent problems. Restrain, protect or guide hose with the use of clamps if necessary to minimise risk or damage due to excessive flexing, whipping or contact with other moving parts or corrosives. Determine hose lengths and configurations that will result in proper routing and protection from abrasion, snagging or kinking and provide leak resistant connections.

## 1.7 Environment

Care must be taken to ensure that the hose and fittings are either compatible with or protected from the environment to which they are exposed. Environmental conditions including

but not limited to ultraviolet light, heat, ozone, moisture, water, salt water, chemicals, and air pollutants can cause degradation and premature failure and, therefore, must be considered.

## 1.8 Mechanical Loads

External forces can significantly reduce hose life. Mechanical loads which must be considered include excessive flexing, twist, kinking, tensile or side loads, bend radius, and vibration. Use of swivel type fittings or adaptors may be required to ensure no twist is put into the hose. Unusual applications may require special testing prior to hose selection.

## 1.9 Abrasion

While a hose is designed with a reasonable level of abrasion resistance, care must be taken to protect the hose from excessive abrasion which can result in erosion, snagging, and cutting of the hose cover. Exposure of the reinforcement will significantly accelerate hose failure.

## 1.10 Proper End Fitting

Care must be taken to ensure proper compatibility exists between the hose and coupling selected based on the manufacturer's recommendations substantiated by testing to industry standards such as SAE J517, DIN 20024, JIS B 8360.

## 1.11 Length

When establishing proper hose length, motion absorption, hose length changes due to pressure, as well as hose and machine tolerances must be considered.

## 1.12 Specifications and Standards

When selecting hose and fittings, government, industry, and manufacturer's specifications and recommendations must be reviewed as applicable.

## 1.13 Hose Cleanliness

Hose components may vary in cleanliness levels. Care must be taken to ensure that the assemblies selected have an adequate level of cleanliness for the application.

## 1.14 Welding and Brazing

Heating of plated parts, including hose fittings and adaptors, above 232° C (450° F) such as during welding, brazing, or soldering may emit deadly gases.

## 1.15 Electrical Conductivity

Certain applications require that a hose be non-conductive to prevent electrical current flow. Other applications require the hose to be sufficiently conductive to drain off static electricity. Extreme care must be exercised when selecting hose and fittings for these or any other applications in which electrical conductivity or non-conductivity is a factor. For applications that require hose to be electrically non-conductive, including but not limited to applications near high voltage electric lines, only special non-conductive hose is to be used must be consulted to be certain that the hose and fittings that are selected are proper for the application.

Do not use any Dunlop Hiflex hose or fitting for any application requiring non-conductive hose, including but not limited to applications near high voltage electric lines, unless the application is expressly approved in the Dunlop Hiflex technical publication for the product, the SAFETY GUIDE hose is both orange in colour and marked "non-conductive", and the manufacturer of the equipment on which the hose is to be used specifically approves the particular Dunlop Hiflex hose and fitting for such use. Dunlop Hiflex does not supply any hose or fittings for conveying paint in airless paint spraying or similar applications and therefore should not be used. A special hose and fitting assembly is required for this application, to avoid static electricity buildup which could cause a spark that may

results in an explosion and/or fire. The electrical conductivity or non-conductivity of hose and fittings is dependant upon many factors and may be susceptible to change. These factors include but are not limited to the various materials used to make the hose and the fittings, manufacturing methods (including moisture control), how the fittings contact the hose, age and amount of deterioration or damage or other changes, moisture content of the hose at and particular time, and others factors.

## 2. INSTALLATION

After the selection of the correct hose, the following factors must be considered prior to hose and fitting assembly and installation.

### 2.1 Pre-Installation Inspection

Prior to installation, a careful examination of the hose must be performed. All components must be checked for correct style, size, and length. The hose must be examined for cleanliness, obstructions, blisters, cover looseness, or any other visible defects.

### 2.2 Hose and Fitting Assembly

Do not assemble an Dunlop Hiflex fitting on an Dunlop Hiflex hose that is not specified by Dunlop Hiflex for that hose. Do not assemble Dunlop Hiflex fittings on another manufacturer's hose or an Dunlop Hiflex hose on another manufacturer's fitting unless Dunlop Hiflex approves the assembly in writing, and the user verifies the assembly and the application through analysis and testing.

The Dunlop Hiflex published hose assembly instructions must be followed for assembling the fittings on the hose.

### 2.3 Related Accessories

Crimp or swage Dunlop Hiflex hose or fittings only with Dunlop Hiflex approved swage or crimp machines and in accordance with the Dunlop Hiflex published hose assembly instructions.

### 2.4 Parts

Do not use any Dunlop Hiflex hose fitting part (including but not limited to sockets, or inserts) except with the correct Dunlop Hiflex mating parts, in accordance with Dunlop Hiflex published hose assembly.

### 2.5 Reusable/Permanent

Do not reuse any reusable hose coupling that has blown or pulled off a hose. Do not reuse an Dunlop Hiflex permanent (that is, crimped or swaged) hose fitting or any part thereof.

### 2.6 Minimum Bend Radius

Installation of a hose at less than the minimum listed bend radius may significantly reduce the hose life. Particular attention must be given to avoid sharp bending at the hose/fitting juncture.

### 2.7 Twist Angle and Orientation

Hose installations must be such that relative motion of machine components does not produce twisting.

### 2.8 Securement

In many applications, it may be necessary to restrain, protect, or guide the hose to protect it from damage by unnecessary flexing, pressure surges, and contact with other mechanical components. Care must be taken to ensure such restraints do not introduce additional stress or wear points.

### 2.9 Proper Connection of Ports

Proper physical installation of the hose requires a correctly installed port connection while ensuring that no twist or torque is transferred to the hose.

### 2.10 External Damage

Proper installation is not complete without ensuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage, or damage to sealing surfaces are corrected or eliminated.

### 2.11 System Checkout

After completing the installation all air entrapment must be eliminated and the system pressurised to the maximum system pressure and checked for proper function without any leaks. Personnel must stay out of potential hazardous areas while testing.

## 3. HOSE AND FITTING MAINTENANCE INSTRUCTIONS

Even with proper selection and installation, hose life may be significantly reduced without a continuing maintenance program. Frequency should be determined by the severity of the application and risk potential. A maintenance program must be established and followed to include the following as a minimum:

### 3.1 Visual Inspection Hose/Fitting

Any of the following conditions require immediate shut down and replacement of the hose assembly:

- Fitting slippage on hose.
- Damaged, cut or abraded cover (any reinforcement exposed).
- Hard, stiff, heat cracked, or charred hose.
- Cracked, damaged, or badly corroded fittings.
- Leaks at fitting or in hose.
- Kinked, crushed, flattened or twisted hose.
- Blistered, soft, degraded, or loose cover.

### 3.2 External Damage

Proper installation is not complete without ensuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage, or damage to sealing surfaces are corrected or eliminated.

### 3.3 System Checkout

After completing the installation all air entrapment must be eliminated and the system pressurised to the maximum system pressure and checked for proper function without any leaks. Personnel must stay out of potential hazardous areas while testing.

### 3.4 Visual Inspection All Other

The following items must be tightened, repaired or replaced as required:

- Leaking port conditions
- Remove excess dirt build-up
- Clamp, guards, shields
- System fluid level, fluid type and any air entrapment

### 3.5 Functional Test

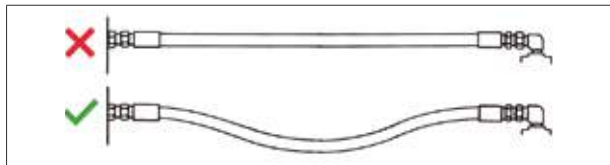
Operate the system at maximum operating pressure and check for possible malfunctions and freedom from leaks. Personnel must stay out of potential hazardous areas while testing.

### 3.6 Replacement Intervals

Specific replacement intervals must be considered based on previous service life, government or industry recommendations, or when failures could result in unacceptable downtime, damage, or injury risk.

**CORRECT ASSEMBLY INSTALLATION**

Satisfactory performance and appearance depend upon proper hose installation. Excessive length destroys the trim appearance of an installation and adds unnecessarily to the cost of the equipment. Hose assemblies of insufficient length to permit adequate flexing, expansion or contraction will cause poor power transmission and shorten the life of the hose. The diagrams below offer suggestions for proper hose installations to obtain the maximum in performance and economy.



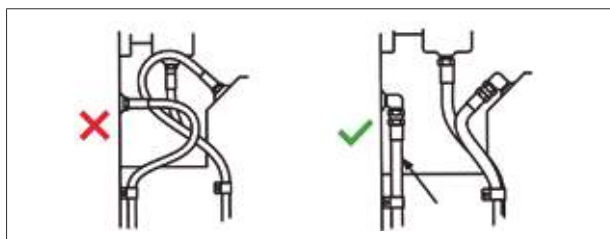
Since hose may change in length from +2% to -4% under the surge of high pressure, provide sufficient slack for expansion and contraction.



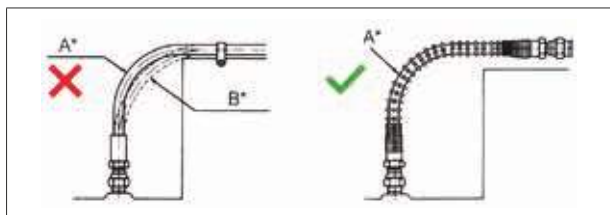
Avoid sharp twist or bend in hose by using proper angle adapters.



Where the radius falls below the required minimum, an angle adapter should be used as shown above to avoid sharp bends in hose.

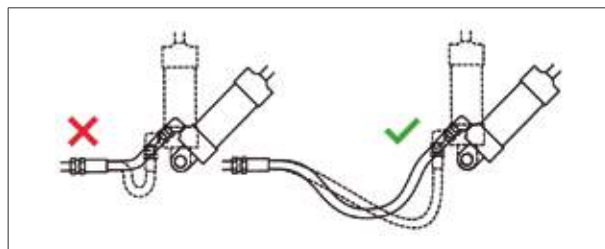


Obtain direct routing of hose through use of 45° and 90° adapters and fittings. Improve appearance by avoiding excessive hose length.

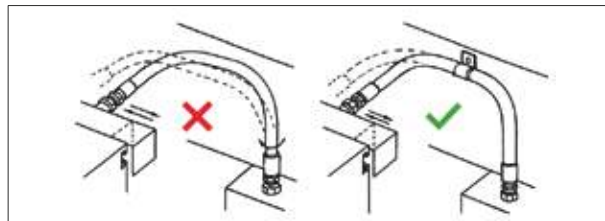


A: High Pressure - B: No Pressure

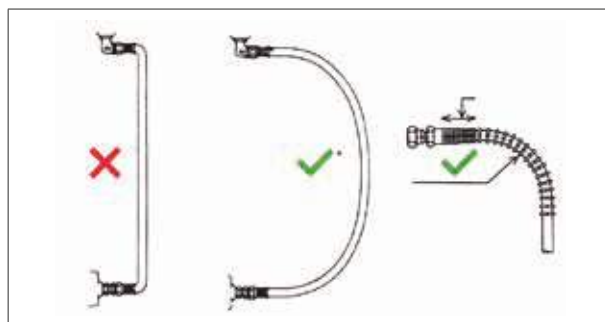
Due to changes in length when hose is pressurised, do not clamp at bends so curves absorb changes and protect the hose with a spring guard. Do not clamp high and low pressure lines together and protect the hose with a spring guard.



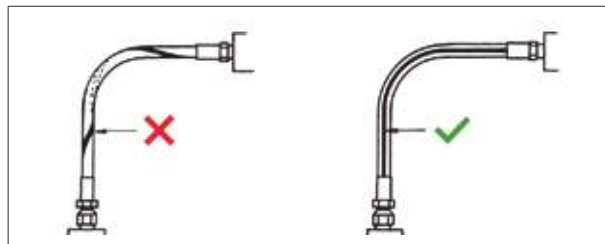
Adequate hose length is most important to distribute movement on flexing applications and to avoid abrasion.



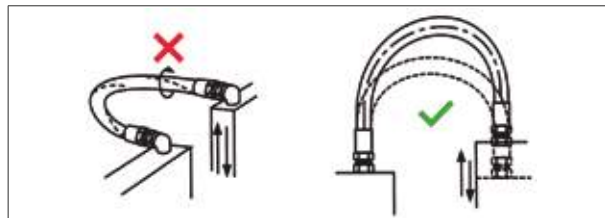
To avoid twisting in hose lines bent in two planes, clamp hose at change of plane, as shown.



\* Never use a bending radius less than the minimum amount shown in the table. To prevent twisting and distortion, hose should be bent in the same plane as the motion of the boss to which the hose is connected.



Hose should not be twisted. Hose is weakened when installed in twisted position. Also pressure in twisted hose tends to loosen fitting connections. Design so that machine motion produces bending rather than twisting.



Never use a bending radius less than the minimum shown in the hose specification tables. Avoid sharp bend in hose to reduce collapsing of line and restriction of flow by using proper spring guard. Exceeding minimum bend radius will greatly reduce hose assembly life.

## HOW TO DETERMINE CORRECT ASSEMBLY LENGTH

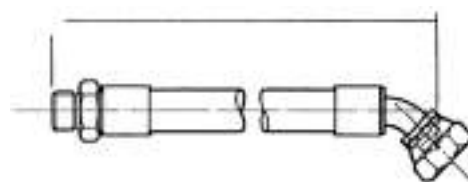
For most assemblies, the correct assembly length may be determined by direct measurement of the equipment or a drawing. Minimum bend radii as shown in the hose specification tables should be observed.

Assemblies are measured to the end of the seal.

To determine the length of hose needed in making assemblies with permanent or reusable couplings, subtract Dimension "C" (Cut off factor) for each coupling from the required overall assembly length. Dimension "C" may be found in the coupling specification tables.



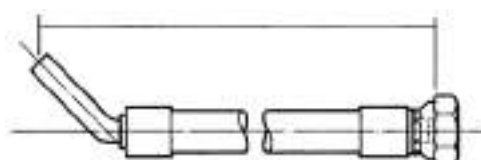
Length between male nipple and centre of female nipple



Male union

Swivel female 45° swept union

Length between centre lines of S.P. and end of nipple

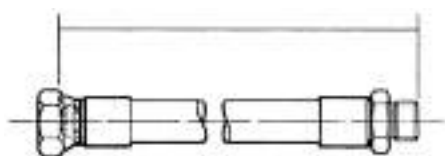


45° standpipe

Swivel female union

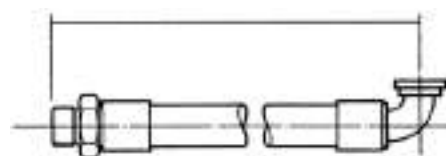
## HOW TO MEASURE ASSEMBLIES

Length over nipples



Swivel female and male union

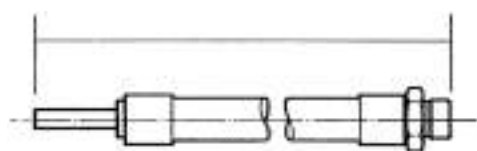
Length between centre of angle and nipple end



Male union

90° SAE flange

Length between S.P. and nipple ends



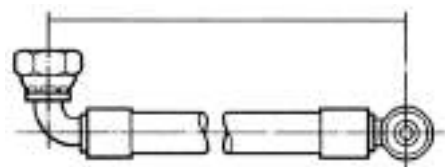
Straight standpipe

Male union



$$L \geq l(1 + 0,04)$$

Length between centre lines of angle and banjo

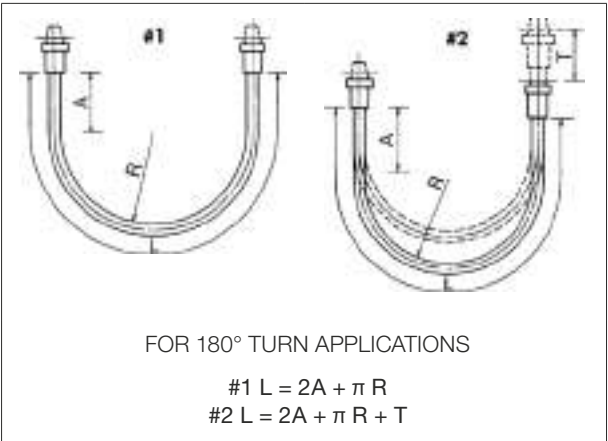


Swivel female 90° swept union

Banjo coupling

Remember that hydraulic hose under pressure will elongate up to 2% of its length or contract up to 4% depending on pressure, type and size. Sufficient allowance should be made to permit such changes in length.

Occasionally an assembly will be required similar to the sketches to the right. The following equations are helpful in determining the correct length:



where:

L = overall length of the hydraulic hose assembly, in mm or inches.

A = allowance for a minimum straight section of hydraulic hose at each end of the assembly, measured from the outer end of each coupling, in mm or inches. These two straight sections are necessary to prevent excessive stress concentrations directly back of the couplings. See table below.

R = bending radius of the hose, in mm or inches. See hose specifications tables.

T = amount of travel, in mm or inches.

Often right angle adapters provide a convenient means of avoiding too small a bend radius.

| Hose ID | in | mm | 1/4 | 5/16 | 3/8 | 1/2  | 5/8  | 3/4 | 1   | 1.1/4 | 1.1/2 | 2    |
|---------|----|----|-----|------|-----|------|------|-----|-----|-------|-------|------|
|         |    |    | 6,4 | 7,9  | 9,5 | 12,7 | 15,9 | 19  | 25  | 31,8  | 38,1  | 50,8 |
| Min "A" | in | mm | 5   | 5    | 5   | 6    | 6    | 7   | 8   | 9     | 10    | 11   |
|         |    |    | 127 | 127  | 127 | 152  | 152  | 178 | 203 | 229   | 254   | 279  |

Length Tolerance for Hydraulic Hose Assemblies and Specified Hose Lengths

For lengths from 0 up to and including 12" (305 mm)

Tolerance:  $\pm 1/8"$   $\pm 3$  mm

For lengths  $\geq 12"$  (305 mm) < 18" (457 mm)

Tolerance:  $\pm 3/16"$   $\pm 5$  mm

For lengths  $\geq 18"$  (457 mm) < 36" (914 mm)

Tolerance:  $\pm 1/4"$   $\pm 6$  mm

For lengths  $\geq 36"$  (914 mm) < 48" (1219 mm)

Tolerance:  $\pm 3/8"$   $\pm 10$  mm

For lengths  $\geq 48"$  (1219 mm) < 72" (1830 mm)

Tolerance:  $\pm 1/2"$   $\pm 13$  mm

For lengths  $\geq 72"$  (1830 mm)

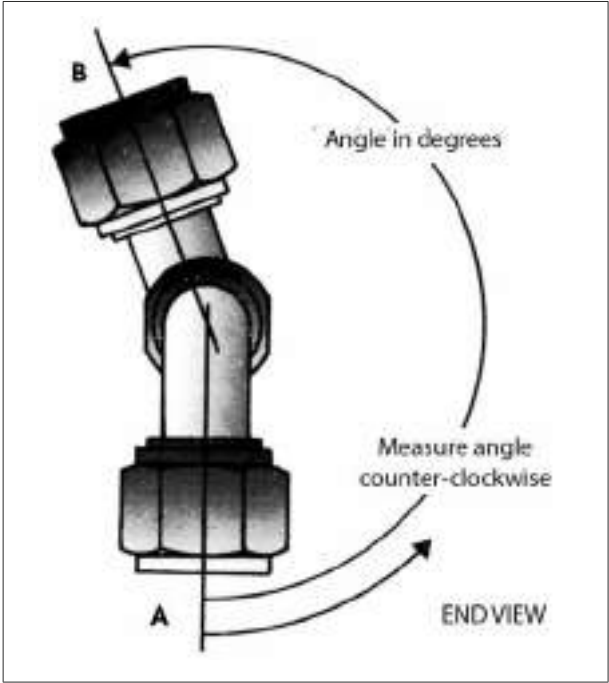
Tolerance:  $\pm 1\%$

Elbow angle and angle of orientation

Tolerance:  $\pm 3$

Angle Couplings

A - To measure angle of offset of a hose assembly, point one end of coupling "A" (the nearest) to a vertical position downward. The angle can then be measured from the centreline of this vertical coupling in an anticlockwise direction to the centreline of coupling "B" (the far coupling) (see illustration). Relationships can then be expressed from 0° to 360°. If angle not given elbows are positioned at 0°.



## // FITTINGS GUIDELINES

### FITTING IDENTIFICATION

#### Dash numbers

Most fluid piping system sizes are measured by dash numbers. These are universally used abbreviations for the size of component expressed as the numerator of the fraction with the denominator always being 16. For example, a -04 port is 4/16 or 1/4 inch. Dash numbers are usually nominal (in name only) and are abbreviations that make ordering of components easier.

There are many coupling systems used for hydraulic connections. They are identified as: **American, British, French, German, Japanese.**

This section lists the origin and coupling style. Descriptions and dimensional data follows each coupling style.

### AMERICAN THREAD TYPES

#### NPTF (National Pipe Tapered Fuel)

This is a dryseal thread, the National pipe tapered thread for fuels. This is used for both male and female ends. This connection is still widely used in fluid power systems, even though it is not recommended by the National Fluid Power Association (N.F.P.A.) for use in hydraulic applications.

The NPTF male will mate with the NPTF, NPSF or NPSM female. The NPTF male has tapered threads and a 30° inverted seat. The NPTF female has tapered threads and no seat.

The seal takes place by deformation of the threads. The NPSM female has straight threads and a 30° inverted seat. The seal takes place on the 30° seat.

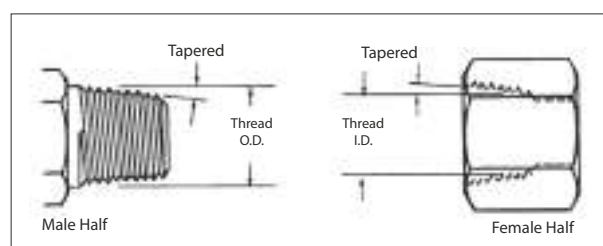
The NPTF connector is similar to, but not interchangeable with, the BSPT connector. The thread pitch is different in most sizes. Also, the thread angle is 60° instead of the 55° angle found on BSPT threads.

#### NPSF (National Pipe Straight Thread for Fuels)

The National pipe straight thread for fuels. This is sometimes used for female ends and properly mates with the NPTF male end. However, the SAE recommends the NPTF thread in preference to the NPSF for female ends.

#### NPSM (National Pipe Straight Mechanical)

National pipe straight thread for mechanical joint. This is used on the female swivel nut of iron pipe swivel adapters. The leak-resistant joint is not made by the sealing fit of threads, but by a tapered seat in the coupling end. This connection is sometimes used in fluid power systems.



#### Thread Identification Table

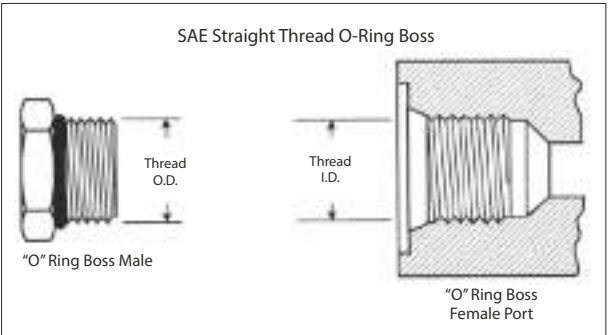
##### National Pipe Straight Mechanical (NPSM)

##### National Pipe Tapered for Fuels (NPTF)

| Tube Size | Tube Size | Thread Size  | Female Thread I.D. |      | Male Thread O.D. |      |
|-----------|-----------|--------------|--------------------|------|------------------|------|
| Dash      | (in)      | (in-TPI)     | (mm)               | (in) | (mm)             | (in) |
| -2        | 1/8       | 1/8-27       | 8.7                | 0.34 | 10.3             | 0.41 |
| -4        | 1/4       | 1/4-18       | 11.9               | 0.47 | 14.3             | 0.56 |
| -6        | 3/8       | 3/8-18       | 15.1               | 0.59 | 17.5             | 0.69 |
| -8        | 1/2       | 1/2-14       | 18.3               | 0.72 | 21.4             | 0.84 |
| -12       | 3/4       | 3/4-14       | 23.8               | 0.94 | 27.0             | 1.06 |
| -16       | 1         | 1-11.1/2     | 30.2               | 1.19 | 33.3             | 1.31 |
| -20       | 1.1/4     | 1 1/4-11.1/2 | 38.9               | 1.53 | 42.9             | 1.69 |
| -24       | 1.1/2     | 1 1/2-11.1/2 | 44.5               | 1.75 | 48.4             | 1.91 |
| -32       | 2         | 2 - 11.1/2   | 57.2               | 2.25 | 60.3             | 2.38 |

SAE J514 Straight Thread O-Ring Boss (ORB)

This port connection is recommended by the N.F.P.A. for optional leakage control in medium and high pressure hydraulic systems. The O’ring boss male will mate with an O’ring boss female only.



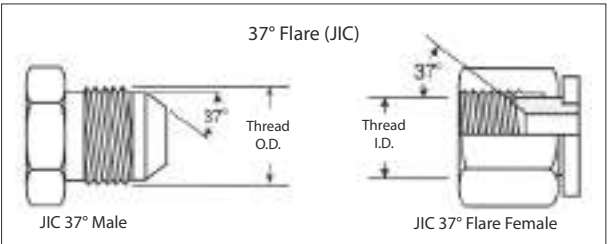
Thread Identification Table  
SAE J514 Straight Thread O-Ring Boss

| Tube Size | Tube Size | Thread Size | Female Thread I.D. |      | Male Thread O.D. |      |
|-----------|-----------|-------------|--------------------|------|------------------|------|
|           |           |             | (mm)               | (in) | (mm)             | (in) |
| -2        | 1/8       | 5/16-24     | 6.9                | 0.27 | 7.8              | 0.31 |
| -3        | 3/16      | 3/8-24      | 8.5                | 0.34 | 9.4              | 0.37 |
| -4        | 1/4       | 7/16-20     | 9.9                | 0.39 | 11.2             | 0.44 |
| -5        | 5/16      | 1/2-20      | 11.5               | 0.45 | 12.6             | 0.49 |
| -6        | 3/8       | 9/16-18     | 12.9               | 0.51 | 14.1             | 0.56 |
| -8        | 1/2       | 3/4-16      | 17.5               | 0.69 | 18.9             | 0.74 |
| -10       | 5/8       | 7/8-14      | 20.5               | 0.81 | 22.1             | 0.87 |
| -12       | 3/4       | 1.1/16-12   | 24.9               | 0.98 | 26.9             | 1.06 |
| -14       | 7/8       | 1.3/16-12   | 28.1               | 1.11 | 30.3             | 1.18 |
| -16       | 1         | 1.5/16-12   | 31.3               | 1.23 | 33.1             | 1.31 |
| -20       | 1.1/4     | 1.5/8-12    | 39.2               | 1.54 | 41.1             | 1.62 |
| -24       | 1.1/2     | 1.7/8-12    | 45.6               | 1.79 | 47.4             | 1.87 |
| -32       | 2         | 2.1/2-12    | 61.4               | 2.42 | 63.3             | 2.49 |

The male has straight threads and an O’ring. The female has straight threads and a sealing face. The seal is made at the O’ring on the male and the sealing face on the female. The threads hold the connection mechanically.

SAE J514 37° (JIC)

The Society of Automotive Engineers (SAE) specifies a 37° angle flare or seat be used with high pressure hydraulic tubing. These are commonly called JIC couplings. The JIC 37° flare male will mate with a JIC female only. The JIC male has straight threads and a 37° flare seat. The JIC female has straight threads and a 37° flare seat. The seal is made on the 37° flare seat by establishing a line contact between the male flare and the female cone seat. The threads hold the connection mechanically.



Thread Identification Table  
SAE J514 37° Flare (JIC)

| Tube Size | Tube Size | Thread Size | Female Thread I.D. |      | Male Thread O.D. |      |
|-----------|-----------|-------------|--------------------|------|------------------|------|
|           |           |             | (mm)               | (in) | (mm)             | (in) |
| -2        | 1/8       | 5/16-24     | 6.9                | 0.27 | 7.8              | 0.31 |
| -3        | 3/16      | 3/8-24      | 8.5                | 0.34 | 9.4              | 0.37 |
| -4        | 1/4       | 7/16-20     | 9.9                | 0.39 | 11.2             | 0.44 |
| -5        | 5/16      | 1/2-20      | 11.5               | 0.45 | 12.6             | 0.49 |
| -6        | 3/8       | 9/16-18     | 12.9               | 0.51 | 14.1             | 0.56 |
| -8        | 1/2       | 3/4-16      | 17.5               | 0.69 | 18.9             | 0.74 |
| -10       | 5/8       | 7/8-14      | 20.5               | 0.81 | 22.1             | 0.87 |
| -12       | 3/4       | 1.1/16-12   | 24.9               | 0.98 | 26.9             | 1.06 |
| -14       | 7/8       | 1.3/16-12   | 28.1               | 1.11 | 30.3             | 1.18 |
| -16       | 1         | 1.5/16-12   | 31.3               | 1.23 | 33.1             | 1.31 |
| -20       | 1.1/4     | 1.5/8-12    | 39.2               | 1.54 | 41.1             | 1.62 |
| -24       | 1.1/2     | 1.7/8-12    | 45.6               | 1.79 | 47.4             | 1.87 |
| -32       | 2         | 2.1/2-12    | 61.4               | 2.42 | 63.3             | 2.49 |

CAUTION: In the -02, -03, -04, -05, -08 and -10 sizes, the threads of the SAE 45° flare and the SAE 37° flare are the same. However, the sealing surface angles are not the same. Carefully measure the seat angle to differentiate.

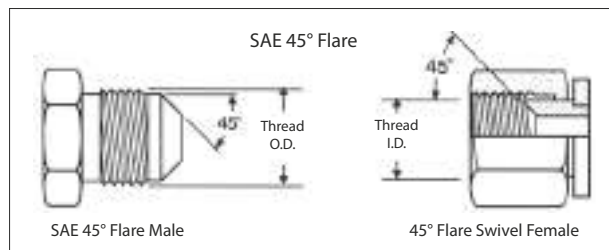
**SAE J512 45°**

A term usually applied to fittings having a 45° angle flare or seat. Soft copper tubing is generally used in such applications as it is easily flared to the 45° angle. These are for low pressure applications - commonly used in refrigeration, automotive and truck piping systems. The SAE 45° flare male will mate with an SAE 45° flare female only.

The SAE male has straight threads and a 45° flare seat.

The SAE female has straight threads and a 45° flare seat.

The seal is made on the 45° flare seat.

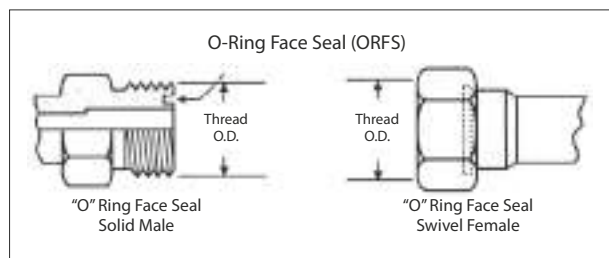
**Thread Identification Table****SAE J512 45°**

| Tube Size | Tube Size | Thread Size | Female Thread I.D. |      | Male Thread O.D. |      |
|-----------|-----------|-------------|--------------------|------|------------------|------|
| Dash      | (in)      | (in-TPI)    | (mm)               | (in) | (mm)             | (in) |
| -2        | 1/8       | 5/16-24     | 6.9                | 0.27 | 7.9              | 0.31 |
| -3        | 3/16      | 3/8-24      | 8.6                | 0.34 | 9.6              | 0.38 |
| -4        | 1/4       | 7/16-20     | 9.9                | 0.39 | 11.2             | 0.44 |
| -5        | 5/16      | 1/2-20      | 11.4               | 0.45 | 12.7             | 0.50 |
| -6        | 3/8       | 5/8-18      | 14.2               | 0.56 | 15.7             | 0.62 |
| -7        | 7/16      | 11/16-16    | 15.7               | 0.62 | 17.3             | 0.68 |
| -8        | 1/2       | 3/4-16      | 17.0               | 0.68 | 19.0             | 0.75 |
| -10       | 5/8       | 7/8-14      | 20.3               | 0.80 | 22.3             | 0.88 |
| -12       | 3/4       | 1.1/16-14   | 25.1               | 0.99 | 26.9             | 1.06 |
| -14       | 7/8       | 1.1/4-12    | 29.5               | 1.16 | 31.7             | 1.25 |
| -16       | 1         | 1.3/8-12    | 32.5               | 1.28 | 35.0             | 1.38 |

The threads hold the connection mechanically. CAUTION: In the -02, -03, -04, -05, -08 and -10 sizes, the threads of the SAE 45° flare and the SAE 37° flare are the same. However, the sealing surface angles are not the same. Carefully measure the seat angle to differentiate.

**SAE J1453 O-Ring Face Seal (ORFS)**

A seal is made when the O'ring in the male contacts the flat face on the female. Couplings are intended for hydraulic systems where elastomeric seals are acceptable to overcome leakage and leak resistance is crucial. This connection offers the very best leakage control available today.

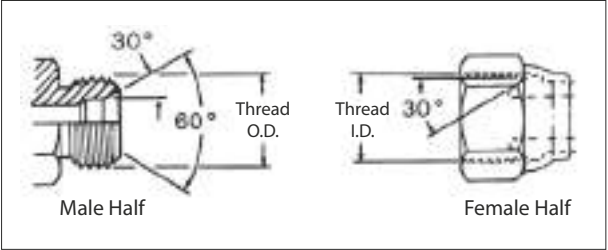
**Thread Identification Table****SAE J1453 O-Ring Face Seal (ORFS)**

| Tube Size | Tube Size | Thread Size | Female Thread I.D. |      | Male Thread O.D. |      |
|-----------|-----------|-------------|--------------------|------|------------------|------|
| Dash      | (in)      | (in-TPI)    | (mm)               | (in) | (mm)             | (in) |
| -4        | 1/4       | 9/16-18     | 12.9               | 0.51 | 14.1             | 0.56 |
| -6        | 3/8       | 11/16-16    | 15.9               | 0.63 | 17.3             | 0.68 |
| -8        | 1/2       | 13/16-16    | 19.1               | 0.75 | 20.5             | 0.81 |
| -10       | 5/8       | 1-14        | 23.6               | 0.93 | 25.2             | 0.99 |
| -12       | 3/4       | 1.3/16-12   | 28.1               | 1.11 | 30.0             | 1.18 |
| -16       | 1         | 1.7/16-12   | 34.4               | 1.36 | 36.3             | 1.43 |
| -20       | 1.1/4     | 1.11/16-12  | 40.8               | 1.61 | 42.7             | 1.68 |
| -24       | 1.1/2     | 2-12        | 48.7               | 1.92 | 50.6             | 1.99 |

The male connector has a straight thread and a machined flat face. The female has a straight thread and a machined flat face. The seal takes place by compressing the O-Ring onto the flat face of the female, similar to the split flange type fitting. The threads hold the connection mechanically.

SAE J512 Inverted Flare

This connection is frequently used in automotive systems. The male connector can either be a 45° flare in the tube fitting form or a 42° seat in the machined adapter form. The female has a straight thread with a 42° inverted flare. The seal takes place on the flared surface. The threads hold the connection mechanically

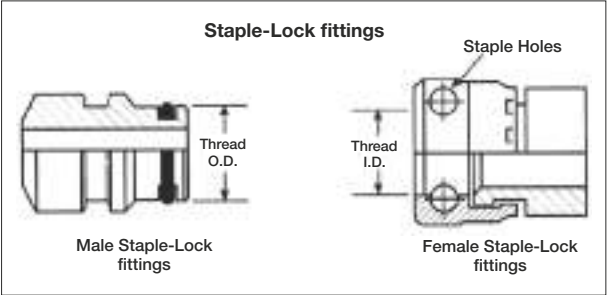


Thread Identification Table  
SAE J512 Inverted Flare

| Tube Size | Tube Size | Thread Size | Female Thread I.D. |      | Male Thread O.D. |      |
|-----------|-----------|-------------|--------------------|------|------------------|------|
|           |           |             | (mm)               | (in) | (mm)             | (in) |
| -2        | 1/8       | 5/16-28     | 6.9                | 0.27 | 7.9              | 0.31 |
| -3        | 3/16      | 3/8-24      | 8.6                | 0.34 | 9.6              | 0.38 |
| -4        | 1/4       | 7/16-24     | 9.9                | 0.39 | 11.2             | 0.44 |
| -5        | 5/16      | 1/2-20      | 11.4               | 0.45 | 12.7             | 0.50 |
| -6        | 3/8       | 5/8-18      | 14.2               | 0.56 | 15.7             | 0.62 |
| -7        | 7/16      | 11/16-18    | 15.7               | 0.62 | 17.3             | 0.68 |
| -8        | 1/2       | 3/4-18      | 17.0               | 0.68 | 19.0             | 0.75 |
| -10       | 5/8       | 7/8-18      | 20.3               | 0.80 | 22.3             | 0.88 |
| -12       | 3/4       | 1.1/16-16   | 25.1               | 0.99 | 26.9             | 1.06 |

SAE J1467 Clip Fastener

This is a radial O-Ring seal connection commonly used for hydraulic applications in underground mines. The male contains an exterior O-Ring and backup ring, plus a groove to accept the “staple”. The female has a smooth bore with two holes for the staple.



Thread Identification Table  
SAE J1467 Clip Fastener

| Dash Size | Inch Size | Female Staple-Lock I.D. |         | Male Staple-Lock O.D. |         |
|-----------|-----------|-------------------------|---------|-----------------------|---------|
|           |           | (mm)                    | (in)    | (mm)                  | (in)    |
| -4        | 1/4       | 14.9                    | 19/32   | 15.1                  | 19/32   |
| -6        | 3/8       | 19.9                    | 51/64   | 20.1                  | 51/64   |
| -8        | 1/2       | 23.9                    | 61/64   | 24.1                  | 61/64   |
| -12       | 3/4       | 28.9                    | 1.9/64  | 29.1                  | 1.9/64  |
| -16       | 1         | 38.9                    | 1.35/64 | 39.1                  | 1.35/64 |
| -20       | 1.1/4     | 45.9                    | 1.13/16 | 46.1                  | 1.13/16 |
| -24       | 1.1/2     | 54.9                    | 1.11/64 | 55.2                  | 2.11/64 |
| -32       | 2         | 63.9                    | 1.17/32 | 64.2                  | 2.17/32 |

A “U” shaped retaining clip or staple is inserted through the two holes, passing through the groove in the male to lock the connection together. The seal takes place by contact between the O-Ring in the male and the smooth bore of the female.

## SAE J518/ISO - DIS 6162/JIS B8363 O-Ring Flange

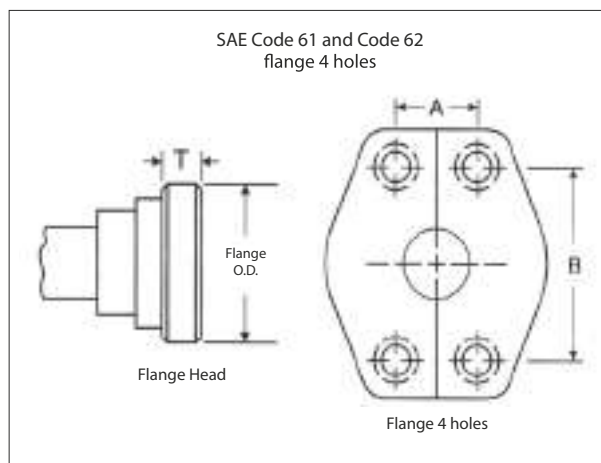
This connection is commonly used in fluid power system. There are two pressure ratings. Code 61 Form R, PN 35/350 bar, Type I, is referred to as the "standard" series and Code 62 Form S, PN 415 bar, Type II, is the "heavy duty" "6000 psi" series. The design concept for both series is the same, but the bolt hole spacing and flanged head diameters are larger for the higher pressure, Code 62 connection.

The female (port) is an unthreaded hole with four bolt holes in a rectangular pattern around the port.

The male consists of a flanged head, grooved for an O-Ring, and either a captive flange or split flange halves with bolt holes to match the port. The seal take place on the O-Ring, which is compressed between the flange head and the flat surface surrounding the port. The threaded bolts hold the connection together.

SAE J518, DIN 20066, ISO/DIS 6162 and JIS B 8363 are interchangeable, except for bolt sizes.

\*All Code 61 flange head hose couplings meet or exceed SAE J518 Code 61 requirements for hydraulic split flange connections. The Code 61 flange head design can withstand a maximum operating pressure of 3000 to 5000 psi depending on size.



| Flange Dash | SAE Cod 61 FORM R - PN 35/350 - TYPE I |      |               |      |      |      |      |      | SAE Cod 62 FORM S - PN 415 - TYPE II |      |               |      |      |      |      |      | CATERPILLAR      |      |               |      |      |      |      |      |
|-------------|----------------------------------------|------|---------------|------|------|------|------|------|--------------------------------------|------|---------------|------|------|------|------|------|------------------|------|---------------|------|------|------|------|------|
|             | Flange Head Size                       |      | Flange Head T |      | A    |      | B    |      | Flange Head Size                     |      | Flange Head T |      | A    |      | B    |      | Flange Head Size |      | Flange Head T |      | A    |      | B    |      |
| Size        | (in)                                   | (mm) | (in)          | (mm) | (in) | (mm) | (in) | (mm) | (in)                                 | (mm) | (in)          | (mm) | (in) | (mm) | (in) | (mm) | (in)             | (mm) | (in)          | (mm) | (in) | (mm) | (in) | (mm) |
| -8          | 1.19                                   | 30.2 | .265          | 6.7  | .69  | 17.5 | 1.50 | 38.1 | 1.25                                 | 31.8 | .305          |      | .71  | 18.2 | 1.59 | 40.5 |                  |      |               |      |      |      |      |      |
| -10*        | 1.34                                   | 34.0 | .265          | 6.7  | .78  | 19.8 | 1.69 | 42.9 |                                      |      |               |      |      |      |      |      |                  |      |               |      |      |      |      |      |
| -12         | 1.50                                   | 38.1 | .265          | 6.7  | .87  | 22.2 | 1.89 | 47.6 | 1.63                                 | 41.3 | .345          | 8.7  | .94  | 23.8 | 2.00 | 50.8 | 1.63             | 41.3 | .56           | 14.2 | .94  | 23.8 | 2.00 | 50.8 |
| -16         | 1.75                                   | 44.5 | .315          | 8.0  | 1.03 | 26.2 | 2.05 | 52.4 | 1.88                                 | 47.6 | .375          | 9.5  | 1.10 | 27.8 | 2.25 | 57.2 | 1.88             | 47.6 | .56           | 14.2 | 1.10 | 27.8 | 2.25 | 57.2 |
| -20         | 2.00                                   | 50.8 | .315          | 8.0  | 1.19 | 30.2 | 2.31 | 58.7 | 2.13                                 | 54.0 | .405          | 10.3 | 1.26 | 31.8 | 2.63 | 66.7 | 2.13             | 54.0 | .56           | 14.2 | 1.26 | 31.8 | 2.63 | 66.7 |
| -24         | 2.38                                   | 60.3 | .315          | 8.0  | 1.41 | 35.7 | 2.75 | 69.9 | 2.50                                 | 63.5 | .495          | 12.6 | 1.44 | 36.6 | 3.13 | 79.4 | 2.50             | 63.5 | .56           | 14.2 | 1.44 | 36.6 | 3.13 | 79.4 |
| -32         | 2.81                                   | 71.4 | .375          | 9.5  | 1.69 | 42.9 | 3.06 | 77.8 | 3.13                                 | 79.4 | .495          | 12.6 | 1.73 | 44.4 | 3.81 | 96.8 | 3.13             | 79.4 | .56           | 14.2 | 1.73 | 44.4 | 3.81 | 96.8 |
| -40         | 3.31                                   | 84.1 | .375          | 9.5  | 2.00 | 50.8 | 3.50 | 88.9 |                                      |      |               |      |      |      |      |      |                  |      |               |      |      |      |      |      |

T = Thickness

-10 is a non SAE size flange

### How to measure

Four Bolt Flange - First measure the port hole diameter using the caliper.

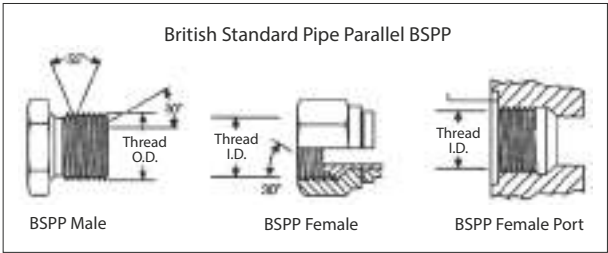
Next, measure the longest bolt hole spacing from centre-to-centre (Dimension "A") or measure the flanged head diameter. O.D.

1. The size -10, which is common outside of North America is not an SAE Standard size.
2. Caterpillar flanges, which are the same flange O.D. as SAE Code 62, have a thicker flange head.
3. Poclain flanges, which are completely different from SAE flanges.

BRITISH CONNECTIONS

British Standard Pipe Parallel (BSPP)

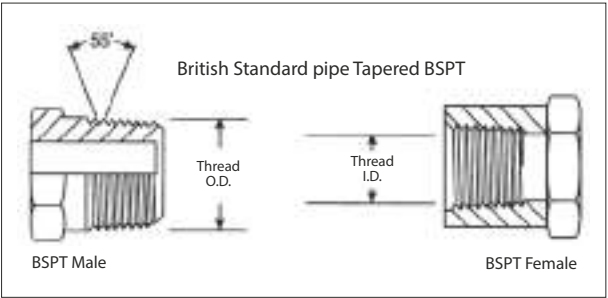
This connection is frequently used in automotive systems. The male connector can either be a 45° flare in the tube fitting form or a 42° seat in the machined adapter form. The female has a straight thread with a 42° inverted flare. The seal takes place on the flared surface. The threads hold the connection mechanically.



British Standard Pipe Tapered (BSPT)

The BSPT (tapered) male will mate with a BSPT (tapered) female, or a BSPP (parallel) female. The BSPT male has tapered threads. When mating with either the BSPT (tapered) female or the BSPP (parallel) female port, the seal is made on the threads accomplished by thread distortion. A thread sealant is recommended.

The BSPT connector is similar to, but not interchangeable with, the NPTF connector. The thread pitch is different in most cases, and the thread angle is 55° instead of the 60° angle found on NPTF threads.



Thread Identification Table

BSPP - (British Standard Pipe Parallel)

BSPT - (British Standard Pipe Tapered)

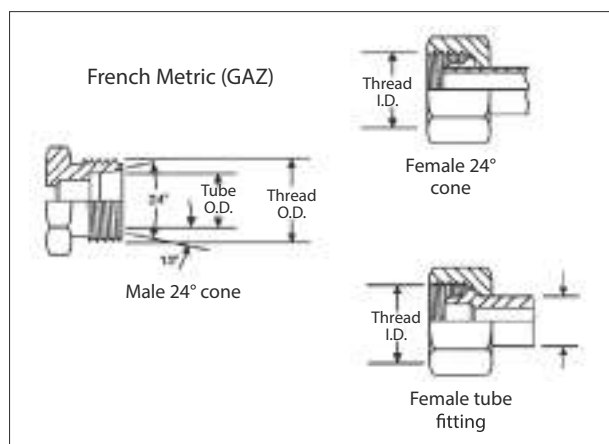
| Dash Size | Inch Size | Thread Size | Female Thread I.D. |      | Male Thread O.D. |      |
|-----------|-----------|-------------|--------------------|------|------------------|------|
|           | (in)      |             | (mm)               | (in) | (mm)             | (in) |
| -2        | 1/8       | 1/8-27      | 8.7                | 0.34 | 9.5              | 0.38 |
| -4        | 1/4       | 1/4-18      | 11.1               | 0.44 | 13.5             | 0.56 |
| -6        | 3/8       | 3/8-18      | 15.1               | 0.59 | 16.7             | 0.66 |
| -8        | 1/2       | 1/2-14      | 18.3               | 0.72 | 20.6             | 0.81 |
| -10       | 5/8       | 5/8-14      | 20.6               | 0.81 | 23.0             | 0.91 |
| -12       | 3/4       | 3/4-14      | 23.8               | 0.94 | 26.2             | 1.03 |
| -16       | 1         | 1-11        | 30.2               | 1.19 | 33.3             | 1.31 |
| -20       | 1-1/4     | 1.1/4-11    | 38.9               | 1.53 | 41.1             | 1.66 |
| -24       | 1-1/2     | 1.1/2-11    | 45.2               | 1.78 | 47.6             | 1.88 |
| -32       | 2         | 2-11        | 56.4               | 2.22 | 59.5             | 2.34 |

## FRENCH CONNECTIONS

French GAZ have a 24° seat and metric threads. These are similar to German DIN couplings, but the threads are different in some sizes, the French use fine threads in all sizes. French flanges are different than SAE, they have a lip that protrudes from the flange face. These are Poclain style flanges.

### Millimetrique and GAZ 24°

This connection consists of a common male and two different females. The French Metric (GAZ) male will mate with the female 24° cone or the female tube fitting. The male has a 24° seat and straight metric threads. The female has a 24° seat or a tubing sleeve and straight metric threads. The Millimetrique Series is used with whole number metric O.D. tubing and the GAZ Series is used with fractional number metric O.D. pipe size tubing.



### Thread Identification Table

#### French Metric Millimetrique

| Metric Thread<br>(dia x pitch) | Female Thread I.D. |      | Male Thread O.D. |      | Tube O.D. |      |
|--------------------------------|--------------------|------|------------------|------|-----------|------|
|                                | (mm)               | (in) | (mm)             | (in) | (mm)      | (in) |
| M12 X 1.0                      | 11.0               | 0.43 | 12.0             | 0.47 | 6         | 0.24 |
| M14 X 1.5                      | 12.5               | 0.49 | 14.0             | 0.55 | 8         | 0.31 |
| M16 X 1.5                      | 14.5               | 0.57 | 16.0             | 0.63 | 10        | 0.39 |
| M18 X 1.5                      | 16.5               | 0.65 | 18.0             | 0.71 | 12        | 0.47 |
| M20 X 1.5                      | 18.5               | 0.73 | 20.0             | 0.79 | 14        | 0.55 |
| M22 X 1.5                      | 20.5               | 0.81 | 22.0             | 0.87 | 15        | 0.59 |
| M24 X 1.5                      | 22.5               | 0.89 | 24.0             | 0.94 | 16        | 0.63 |
| M27 X 1.5                      | 25.5               | 1.00 | 27.0             | 1.06 | 18        | 0.71 |
| M30 X 1.5                      | 28.5               | 1.12 | 30.0             | 1.18 | 22        | 0.87 |
| M33 X 1.5                      | 31.5               | 1.24 | 33.0             | 1.30 | 25        | 0.98 |
| M36 X 1.5                      | 34.5               | 1.36 | 36.0             | 1.42 | 28        | 1.10 |
| M39 X 1.5                      | 37.5               | 1.48 | 39.0             | 1.54 | 30        | 1.18 |
| M42 X 1.5                      | 40.5               | 1.59 | 42.0             | 1.65 | 32        | 1.26 |
| M45 X 1.5                      | 43.5               | 1.71 | 45.0             | 1.77 | 35        | 1.38 |
| M48 X 1.5                      | 46.5               | 1.83 | 48.0             | 1.89 | 38        | 1.50 |
| M52 X 1.5                      | 50.5               | 1.99 | 52.0             | 2.05 | 40        | 1.57 |
| M54 X 2.0                      | 51.9               | 2.04 | 54.0             | 2.13 | 45        | 1.77 |

### Thread Identification Table

#### French Metric GAZ 24° Cone

| Dash Size<br>(dash) | Metric Thread<br>(dia x pitch) | Female Thread I.D. |      | Male Thread O.D. |      | Tube O.D. |      |
|---------------------|--------------------------------|--------------------|------|------------------|------|-----------|------|
|                     |                                | (mm)               | (in) | (mm)             | (in) | (mm)      | (in) |
| -6                  | M20 X 1.5                      | 18.5               | 0.73 | 20.0             | 0.78 | 13.25     | 0.52 |
| -8                  | M24 X 1.5                      | 22.5               | 0.89 | 24.0             | 0.94 | 16.75     | 0.66 |
| -10                 | M30 X 1.5                      | 28.5               | 1.12 | 30.0             | 1.18 | 21.25     | 0.83 |
| -12                 | M36 X 1.5                      | 34.5               | 1.36 | 36.0             | 1.41 | 26.75     | 1.05 |
| -16                 | M45 X 1.5                      | 43.5               | 1.71 | 45.0             | 1.77 | 33.50     | 1.32 |
| -20                 | M52 X 1.5                      | 50.5               | 1.99 | 52.0             | 2.04 | 42.25     | 1.66 |

### GAZ Poclain 24° Flange

The Poclain (French GAZ) 24° high pressure flange is usually found on Poclain equipment. The male flange will mate with a female flange or a port. The seal is made on the 24° seat.

| Nominal<br>Size (in) | A    |      | B    |      | E    |      |
|----------------------|------|------|------|------|------|------|
|                      | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| 1/2                  | 39.9 | 1.57 | 18.3 | .72  | 14   | .55  |
| 5/8                  | 39.9 | 1.57 | 18.3 | .72  | 14   | .55  |
| 3/4                  | 50.8 | 2    | 23.9 | .94  | 18   | .71  |

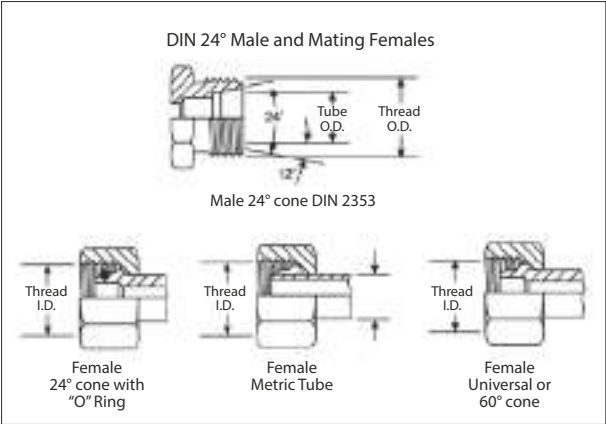
# GERMAN DIN CONNECTIONS

A coupling referred to as metric, usually means a DIN coupling. Flanges are standard Code 61 or Code 62.

## DIN 2353 24° Cone

The DIN 24° cone male will mate with any of the three females shown below.

The male has a 24° seat, straight metric threads, and a recessed counterbore which matches the tube O.D. used with it. The mating female may be a 24° cone with O'ring, (DKO type) a metric tube fitting or a universal 24° or 60° cone.



## Thread Identification Table

### DIN 24° Cone

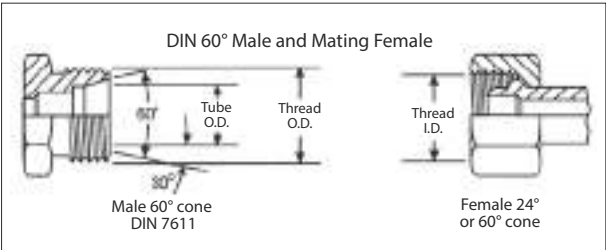
| Metric Thread<br>(dia x pitch) | Female Thread I.D. |      | Male Thread O.D. |      | Tube O.D.    |      |              |      |
|--------------------------------|--------------------|------|------------------|------|--------------|------|--------------|------|
|                                | (mm)               | (in) | (mm)             | (in) | Light Series |      | Heavy Series |      |
| M12 X 1.5                      | 10.5               | 0.41 | 12               | 0.47 | 6            | 0.24 |              |      |
| M14 X 1.5                      | 12.5               | 0.49 | 14               | 0.55 | 8            | 0.31 | 6            | 0.24 |
| M16 X 1.5                      | 14.5               | 0.57 | 16               | 0.63 | 10           | 0.39 | 8            | 0.31 |
| M18 X 1.5                      | 16.5               | 0.65 | 18               | 0.71 | 12           | 0.47 | 10           | 0.39 |
| M20 X 1.5                      | 18.5               | 0.73 | 20               | 0.79 |              |      | 12           | 0.47 |
| M22 X 1.5                      | 20.5               | 0.81 | 22               | 0.87 | 15           | 0.59 | 14           | 0.55 |
| M24 X 1.5                      | 22.5               | 0.89 | 24               | 0.94 |              |      | 16           | 0.63 |
| M26 X 1.5                      | 24.5               | 0.96 | 26               | 1.02 | 18           | 0.71 |              |      |
| M30 X 2.0                      | 27.9               | 1.10 | 30               | 1.18 | 22           | 0.87 | 20           | 0.79 |
| M36 X 2.0                      | 33.9               | 1.33 | 36               | 1.42 | 28           | 1.10 | 25           | 0.98 |
| M42 X 2.0                      | 39.9               | 1.57 | 42               | 1.65 |              |      | 30           | 1.18 |
| M45 X 2.0                      | 42.9               | 1.69 | 45               | 1.77 | 35           | 1.38 |              |      |
| M52 X 2.0                      | 49.9               | 1.96 | 52               | 2.05 | 42           | 1.65 | 38           | 1.50 |

There is a light and heavy series DIN coupling. Proper identification is made by measuring both the thread size and the tube O.D. (The heavy series has a smaller tube O.D. than the light, but has a thicker wall section).

## DIN 3863 60° Cone

This connection is frequently used in hydraulic systems. The DIN 60° cone male will mate with the female universal 24° or 60° cone only.

The male has a 60° seat and straight metric threads. The female has a 24° and 60° universal seat and straight metric threads. The seal takes place by contact between the cone of the male and the nose of the flareless swivel. The threads hold the connection mechanically.



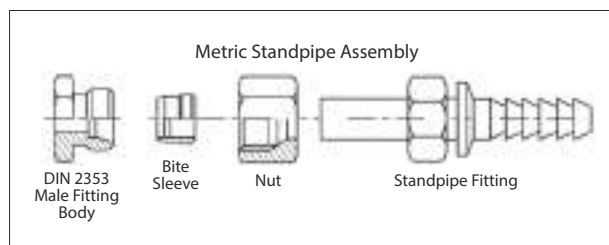
## Thread Identification Table

### DIN 60°

| Metric Thread<br>(dia x pitch) | Female Thread I.D. |      | Male Thread O.D. |      | Tube O.D. |      |
|--------------------------------|--------------------|------|------------------|------|-----------|------|
|                                | (mm)               | (in) | (mm)             | (in) | (mm)      | (in) |
| M12 X 1.5                      | 10.5               | 0.41 | 12               | 0.47 | 6         | 0.24 |
| M14 X 1.5                      | 12.5               | 0.49 | 14               | 0.55 | 8         | 0.31 |
| M16 X 1.5                      | 14.5               | 0.57 | 16               | 0.63 | 10        | 0.39 |
| M18 X 1.5                      | 16.5               | 0.65 | 18               | 0.71 | 12        | 0.47 |
| M22 X 1.5                      | 20.5               | 0.81 | 22               | 0.87 | 15        | 0.59 |
| M26 X 1.5                      | 24.5               | 0.96 | 26               | 1.02 | 18        | 0.71 |
| M30 X 1.5                      | 28.5               | 1.12 | 30               | 1.18 | 22        | 0.87 |
| M38 X 1.5                      | 36.5               | 1.44 | 38               | 1.50 | 28        | 1.10 |
| M45 X 1.5                      | 43.5               | 1.71 | 45               | 1.77 | 35        | 1.38 |
| M52 X 1.5                      | 50.5               | 1.99 | 52               | 2.05 | 42        | 1.65 |

## Metric Standpipe

A metric standpipe is comprised of three components attached to a male fitting. The components are a Standpipe, Bite Sleeve and Metric Nut. The nut is placed over the Standpipe, followed by the Bite Sleeve (see illustration below). For DIN light assemblies, a DIN light metric nut is used. For DIN heavy assemblies, a DIN heavy metric nut is used. Bite Sleeve and Standpipe are selected on the basis of tube O.D.



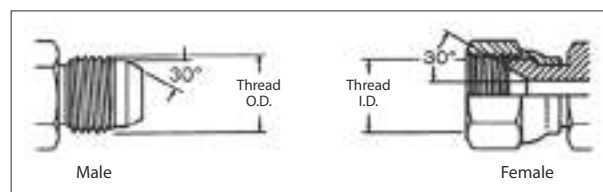
| Tube O.D.<br>(mm) | Metric Nut Thread |           |
|-------------------|-------------------|-----------|
|                   | Light             | Heavy     |
| 6                 | M12 x 1.5         |           |
| 8                 | M14 x 1.5         | M16 x 1.5 |
| 10                | M16 x 1.5         | M18 x 1.5 |
| 12                | M18 x 1.5         | M20 x 1.5 |
| 15                | M22 x 1.5         |           |
| 16                |                   | M24 x 1.5 |
| 18                | M26 x 1.5         |           |
| 20                |                   | M30 x 2.0 |
| 22                | M30 x 1.5         |           |
| 25                |                   | M36 x 2.0 |
| 28                | M36 x 2.0         |           |
| 30                |                   | M42 x 2.0 |
| 35                | M45 x 2.0         |           |
| 38                |                   | M52 x 2.0 |
| 42                | M52 x 2.0         |           |

## JAPANESE CONNECTIONS

Japanese equipment uses JIS (Japanese Industrial Standard) couplings with a 30° seat and British Standard Pipe Parallel threads. All flanges are Code 61 or Code 62 (except -10).

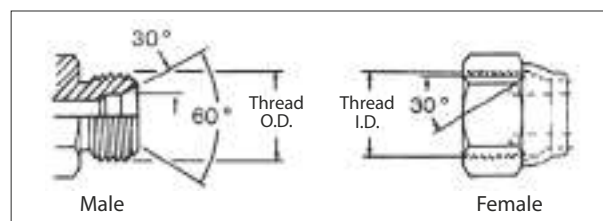
### JIS 30° Flare Parallel Pipe Threads - JIS B 0202

These Japanese 30° flare male coupling will mate with a Japanese 30° flare female only. The male and female have straight threads and a 30° seat. The seal is made on the 30° seat. The threads on the Japanese 30° flare connector conform to JIS B 0202, the same as the BSPP threads. Both the British and Japanese connectors have a 30° seat, but they are not interchangeable, because the British seat is inverted.



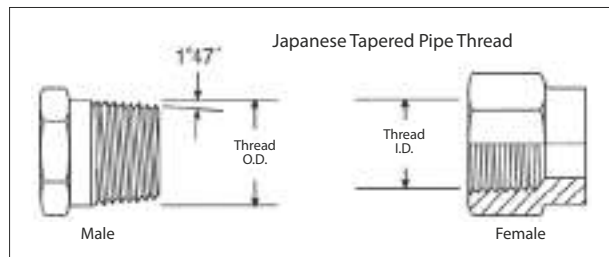
### JIS 30° Inverted Seat, Parallel Pipe Threads - JIS B 0202

The JIS parallel is similar to the BSPP connection. The JIS parallel thread and the BSPP connection are interchangeable.



**JIS Tapered Pipe Thread (PT) - JIS B 0203**

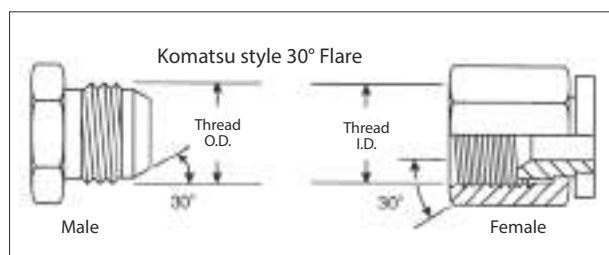
The JIS tapered pipe thread connection is similar to the BSPT connection and fully interchangeable. The Japanese connection does not have a 30° Flare, and will not mate with the BSPP female. The thread conforms to JIS B 0203, same as BSPT threads. The seal on the JIS tapered pipe thread connection is made on the threads.

**Thread Identification Table**

| Dash Size | Inch Size | Thread Size | Female Thread I.D. |      | Male Thread O.D. |      |
|-----------|-----------|-------------|--------------------|------|------------------|------|
|           |           |             | (in-TPI)           | (mm) | (mm)             | (in) |
| -2        | 1/8       | 1/8-27      |                    | 8.7  | 9.5              | 0.38 |
| -4        | 1/4       | 1/4-18      |                    | 11.1 | 13.5             | 0.56 |
| -6        | 3/8       | 3/8-18      |                    | 15.1 | 16.7             | 0.66 |
| -8        | 1/2       | 1/2-14      |                    | 18.3 | 20.6             | 0.81 |
| -10       | 5/8       | 5/8-14      |                    | 20.6 | 23.0             | 0.91 |
| -12       | 3/4       | 3/4-14      |                    | 23.8 | 26.2             | 1.03 |
| -16       | 1         | 1-11        |                    | 30.2 | 33.3             | 1.31 |
| -20       | 1-1/4     | 1-1/4-11    |                    | 38.9 | 41.1             | 1.66 |
| -24       | 1-1/2     | 1-1/2-11    |                    | 45.2 | 47.6             | 1.88 |
| -32       | 2         | 2-11        |                    | 56.4 | 59.5             | 2.34 |

**Komatsu Style 30° Flare Parallel Threads**

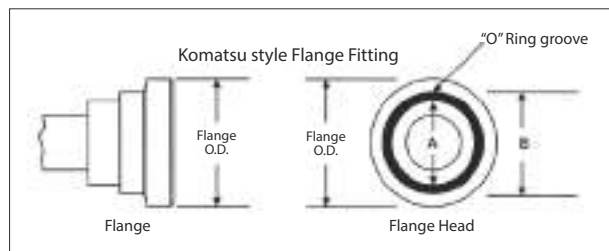
The Komatsu style 30° Flare Parallel thread coupling is identical to the Japanese 30° Flare parallel except for the threads. The Komatsu uses Metric fine threads which conform to JIS B 0207. The Komatsu connector seals on the 30° Flare.



| Dash Size | Inch Size | Metric Thread Size | Male Thread O.D. | B Thread I.D. |
|-----------|-----------|--------------------|------------------|---------------|
|           |           |                    | (mm)             | (mm)          |
| -6        | 3/8       | M18x1.5            | 18               | 16.4          |
| -8        | 1/2       | M22x1.5            | 22               | 20.4          |
| -10       | 5/8       | M24x1.5            | 24               | 22.4          |
| -12       | 3/4       | M30x1.5            | 30               | 28.4          |
| -16       | 1         | M33x1.5            | 33               | 31.4          |
| -20       | 1-1/4     | M36x1.5            | 36               | 34.4          |
| -24       | 1-1/2     | M42x1.5            | 42               | 40.4          |

**Komatsu Flange Fitting**

The Komatsu Flange fitting is nearly identical to and fully interchangeable with the SAE Code 61 flange fitting. In all sizes the O-ring dimensions are different. When replacing a Komatsu flange with an SAE style flange, an SAE style O-ring must be used.



| Flange Dash Size | Flange Size (in) | A    | B    |
|------------------|------------------|------|------|
| -8               | 1.19             | .73  | .98  |
| -10*             | 1.34             | .73  | 1.10 |
| -12              | 1.50             | .85  | 1.22 |
| -16              | 1.75             | 1.12 | 1.50 |
| -20              | 2.00             | 1.36 | 1.73 |
| -24              | 2.38             | 1.75 | 2.12 |
| -32              | 2.81             | 2.22 | 2.56 |

\*is a non SAE size flange

## RACOMMENDED FITTING AND ADAPTER INSTALLATION TORQUE

### SAE J514 37° CONE (JIC)

| Dash | Thread    | Lb.ft |     | N.m |     |
|------|-----------|-------|-----|-----|-----|
|      |           | Min   | Max | Min | Max |
| -4   | 7/16-20   | 11    | 12  | 15  | 16  |
| -5   | 1/2-20    | 14    | 15  | 19  | 21  |
| -6   | 9/16-18   | 18    | 20  | 24  | 28  |
| -8   | 3/4-16    | 36    | 39  | 49  | 53  |
| -10  | 7/8-14    | 57    | 63  | 77  | 85  |
| -12  | 1 1/16-12 | 79    | 88  | 107 | 119 |
| -14  | 1 3/16-12 | 94    | 103 | 127 | 140 |
| -16  | 1 5/8-12  | 108   | 113 | 147 | 154 |
| -20  | 1 5/8-12  | 127   | 133 | 172 | 181 |
| -24  | 1 7/8-12  | 158   | 167 | 215 | 226 |
| -32  | 2 1/2-12  | 245   | 258 | 332 | 350 |

### BSPP without O-Ring

| Dash | Thread   | Lb.ft | N.m |
|------|----------|-------|-----|
| -2   | 1/8-28   | 7     | 10  |
| -4   | 1/4-19   | 15    | 20  |
| -6   | 3/8-19   | 26    | 35  |
| -8   | 1/2-14   | 44    | 60  |
| -10  | 5/8-14   | 52    | 70  |
| -12  | 3/4-14   | 85    | 115 |
| -16  | 1-11     | 103   | 140 |
| -20  | 1 1/4-11 | 155   | 210 |
| -24  | 1 1/2-11 | 214   | 290 |
| -32  | 2-11     | 295   | 400 |

### SAE J1453 O-Ring Face Seal (ORFS)

| Dash | Thread     | Lb.ft |     | N.m |     |
|------|------------|-------|-----|-----|-----|
|      |            | Min   | Max | Min | Max |
| -4   | 9/16-18    | 18    | 21  | 25  | 28  |
| -6   | 11/16-16   | 30    | 32  | 40  | 44  |
| -8   | 13/16-16   | 41    | 44  | 55  | 60  |
| -10  | 1-14       | 46    | 50  | 60  | 68  |
| -12  | 1 3/16-12  | 65    | 70  | 90  | 95  |
| -16  | 1 7/16-12  | 92    | 100 | 125 | 135 |
| -20  | 1 11/16-12 | 125   | 140 | 170 | 190 |
| -24  | 2-12       | 150   | 165 | 200 | 225 |

### BSPP with O-Ring

| Dash | Thread   | Lb.ft | N.m |
|------|----------|-------|-----|
| -2   | 1/8-28   | N/A   | N/A |
| -4   | 1/4-19   | 15    | 20  |
| -6   | 3/8-19   | 26    | 35  |
| -8   | 1/2-14   | 37    | 50  |
| -10  | 5/8-14   | 44    | 60  |
| -12  | 3/4-14   | 63    | 85  |
| -16  | 1-11     | 85    | 115 |
| -20  | 1 1/4-11 | 140   | 190 |
| -24  | 1 1/2-11 | 177   | 240 |
| -32  | 2-11     | 221   | 300 |

### SAE Flange J518 Code 61

| Dash | Thread | Lb.ft |     | N.m |     |
|------|--------|-------|-----|-----|-----|
|      |        | Min   | Max | Min | Max |
| -8   | 1/2    | 15    | 19  | 20  | 25  |
| -12  | 3/4    | 21    | 29  | 28  | 40  |
| -16  | 1      | 27    | 35  | 37  | 48  |
| -20  | 1 1/4  | 35    | 46  | 48  | 62  |
| -24  | 1 1/2  | 46    | 58  | 62  | 79  |
| -32  | 2      | 54    | 66  | 73  | 90  |
| -40  | 2 1/2  | 79    | 91  | 107 | 124 |
| -48  | 3      | 137   | 149 | 186 | 203 |

### JIS (B8363)

| Dash | Thread   | Lb.ft | N.m |
|------|----------|-------|-----|
| -4   | 1/4-19   | 19    | 25  |
| -6   | 3/8-19   | 25    | 34  |
| -8   | 1/2-14   | 49    | 64  |
| -10  | 5/8-14   | 100   | 132 |
| -12  | 3/4-14   | 100   | 132 |
| -16  | 1-11     | 149   | 196 |
| -20  | 1 1/4-11 | 171   | 225 |
| -24  | 1 1/2-11 | 194   | 255 |
| -32  | 2-11     | 240   | 316 |

### SAE J518 Code 62

| Dash  | Thread | Lb.ft |     | N.m |     |
|-------|--------|-------|-----|-----|-----|
|       |        | Min   | Max | Min | Max |
| -8    | 1/2    | 15    | 19  | 20  | 25  |
| -12   | 3/4    | 25    | 33  | 34  | 45  |
| -16   | 1      | 42    | 50  | 56  | 68  |
| -20   | 1 1/4  | 63    | 75  | 85  | 102 |
| -24   | 1 1/2  | 117   | 133 | 158 | 181 |
| -32** | 2      | 200   | 217 | 271 | 294 |

### Metric

| Thread  | Lb.ft |     | N.m |     |
|---------|-------|-----|-----|-----|
|         | Min   | Max | Min | Max |
| M12x1,5 | 8     | 11  | 15  | 20  |
| M14x1,5 | 13    | 18  | 25  | 30  |
| M16x1,5 | 19    | 26  | 35  | 40  |
| M18x1,5 | 22    | 30  | 40  | 45  |
| M20x1,5 | 24    | 33  | 45  | 50  |
| M22x1,5 | 32    | 44  | 60  | 70  |
| M24x1,5 | 41    | 55  | 75  | 85  |
| M26x1,5 | 46    | 63  | 85  | 95  |
| M30x2   | 57    | 77  | 105 | 120 |
| M36x2   | 74    | 100 | 135 | 150 |
| M42x2   | 111   | 151 | 205 | 230 |
| M45x2   | 136   | 184 | 250 | 280 |
| M52x2   | 147   | 199 | 270 | 300 |

JIC FFFT TORQUE METHOD

The FFFT (Flats From Finger Tight) method allows to assemble fittings and adapters at the correct torque value without a dynamometric wrench. The rotation applied according the value shown in tab.1 ensures a good sealing, avoid unscrewing and over torque that can cause nut or cone crack.

Assembling instruction:

- hand tighten the joint
- make a longitudinal mark on one of the flats of hex and continue it on the body hex as shown in Fig.1
- tighten the joint further by the number of flat as shown in Tab.1

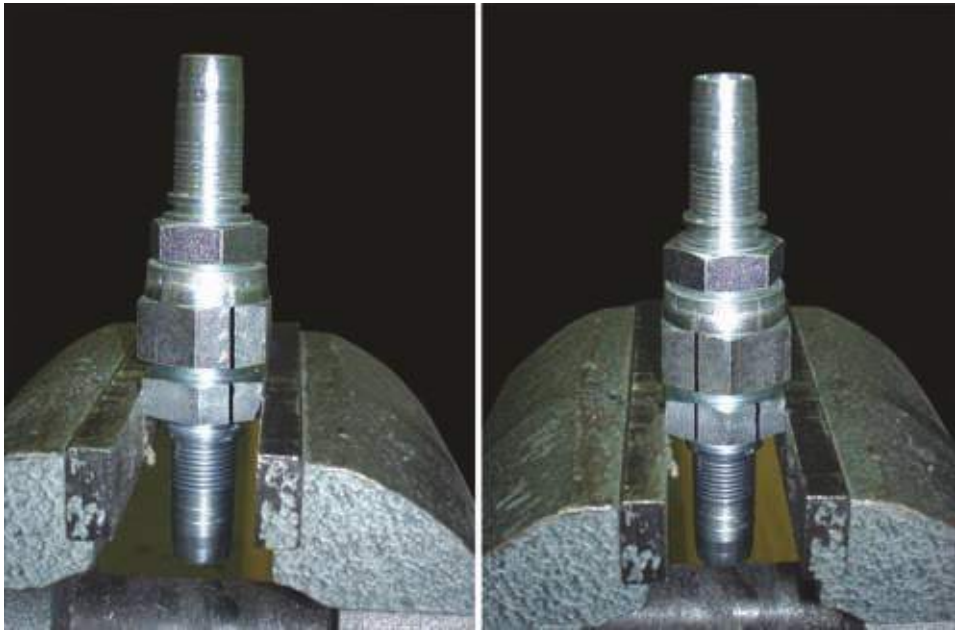


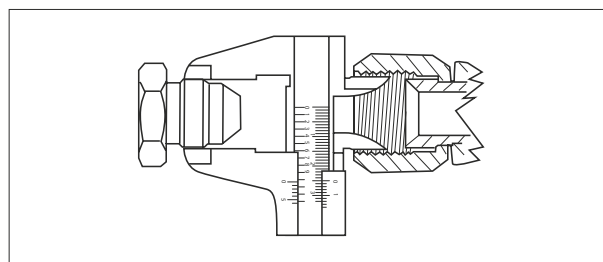
Fig. 1

| Assembling value - carbon steel material - SAE J514 JIC 37° flare |           |       |     |     |     |      |
|-------------------------------------------------------------------|-----------|-------|-----|-----|-----|------|
| Dash size                                                         | Thread    | Lb*ft |     | N*m |     | FFFT |
|                                                                   |           | min   | max | min | max |      |
| -4                                                                | 7/16-20   | 11    | 12  | 15  | 16  | 2    |
| -5                                                                | 1/2-20    | 14    | 15  | 19  | 21  | 2    |
| -6                                                                | 9/16-18   | 18    | 20  | 24  | 28  | 2    |
| -8                                                                | 3/4-16    | 36    | 39  | 49  | 53  | 1.5  |
| -10                                                               | 7/8-14    | 57    | 63  | 77  | 85  | 1.5  |
| -12                                                               | 1 1/16-12 | 79    | 88  | 107 | 119 | 1    |
| -14                                                               | 1 3/16-12 | 94    | 103 | 127 | 140 | 1    |
| -16                                                               | 1 5/16-12 | 108   | 113 | 147 | 154 | 1    |
| -20                                                               | 1 5/8-12  | 127   | 133 | 172 | 181 | 1    |
| -24                                                               | 1 7/8-12  | 158   | 167 | 215 | 226 | 1    |
| -32                                                               | 2 1/2-12  | 245   | 258 | 332 | 350 | 1    |

Tab. 1

## HOW TO DETERMINE THE THREAD TYPE USING CALLIPERS

By measuring with a caliper the outside diameter of the thread of a male or the inside diameter of the thread of a female you will get a measure in mm. By finding this value in mm on the below table, you'll be able to find the relevant thread type.



| Male OD          | mm   | Female ID        |
|------------------|------|------------------|
|                  | 8,7  | G1/8" BSP        |
| 1/8" – 27 NPTF   | 9,5  |                  |
| G1/8" BSP        | 9,6  |                  |
| M 10 x 1         | 9,8  |                  |
|                  | 9,9  | 7/16" – 20 JIC   |
|                  | 10,5 | M 12 x 1,5       |
| 7/16" – 20 JIC   | 11,0 |                  |
|                  | 11,4 | 1/2" – 20 SAE    |
|                  | 11,6 | G1/4" BSP        |
| M 12 x 1,5       | 11,9 |                  |
| 1/4" – 18 NPTF   | 12,5 |                  |
|                  | 12,5 | M 14 x 1,5       |
| 1/2" – 20 SAE    | 12,6 |                  |
|                  | 12,9 | 9/16" – 18 JIC   |
| G1/4" BSP        | 13,0 |                  |
| M 14 x 1,5       | 13,9 |                  |
| 9/16" – 18 JIC   | 14,2 |                  |
|                  | 14,5 | M16 x 1,5        |
|                  | 15,1 | G3/8" BSP        |
| M 16 x 1,5       | 15,8 |                  |
| 3/8" – 18 NPTF   | 15,9 |                  |
|                  | 16,5 | M18 x 1,5        |
| G3/8" BSP        | 16,6 |                  |
|                  | 17,5 | 3/4" – 16 JIC    |
| M 18 x 1,5       | 17,9 |                  |
|                  | 18,4 | 20 x 1,5 DKF     |
| 3/4" – 16 JIC    | 18,8 |                  |
|                  | 18,8 | G1/2" BSP        |
| 1/2" – 14 NPT    | 19,8 |                  |
| 20 x 1,5 CEF     | 19,9 |                  |
|                  | 20,4 | 7/8" – 14 SAE    |
|                  | 20,5 | M 22 x 1,5       |
| G1/2" BSP        | 20,8 |                  |
|                  | 20,9 | G5/8" BSP        |
| M 22 x 1,5       | 21,9 |                  |
| 7/8" – 14 SAE    | 22,1 |                  |
|                  | 22,5 | 24 x 1,5 DKF     |
| G5/8" BSP        | 22,8 |                  |
| 24 x 1,5 CEF     | 23,9 |                  |
|                  | 24,5 | G3/4" BSP        |
|                  | 24,8 | 1 1/16" – 12 JIC |
| 3/4" – 14 NPTF   | 25,1 |                  |
|                  | 25,5 | M26 x 1,5        |
| M 26 x 1,5       | 25,9 |                  |
| G3/4" BSP        | 26,3 |                  |
| 1 1/16" – 12 JIC | 26,8 |                  |

| Male OD            | mm   | Female ID        |
|--------------------|------|------------------|
|                    | 27,9 | 1 3/16" – 12 JIC |
|                    | 28,0 | M 30 x 2         |
|                    | 28,5 | 30 x 1,5 DKF     |
| M 30 x2            | 29,8 |                  |
| 30 x 1,5 CEF       | 29,9 |                  |
| 1 3/16" – 12 JIC   | 30,1 |                  |
|                    | 30,7 | G1" BSP          |
|                    | 31,2 | 1 5/16" – 12 JIC |
| 1" – 11 1/2 NPTF   | 31,4 |                  |
|                    | 31,5 | M 33 x 1,5       |
| G1" BSP            | 33,1 |                  |
| 1 5/16" – 12 JIC   | 33,2 |                  |
|                    | 34,0 | M 36 x 2         |
|                    | 34,5 | 36 x 1,5 DKF     |
| M 36 x 2           | 35,8 |                  |
| 36 x 1,5 CEF       | 35,9 |                  |
|                    | 36,5 | M 36 x 1,5       |
| M 38 x 1,5         | 37,9 |                  |
|                    | 38,8 | 1 5/8" – 12 JIC  |
|                    | 39,4 | G1 1/4" BSP      |
|                    | 39,8 | M 42 x 1,5       |
| 1 1/4"–11 1/2 NPTF | 40,2 |                  |
|                    | 40,5 | M 42 x 1,5       |
| 1 5/8" – 12 JIC    | 41,1 |                  |
| 1 1/4" – 11 BSP    | 41,7 |                  |
| M 42 x2            | 41,8 |                  |
|                    | 42,4 | M 45 x 2         |
|                    | 43,3 | 45 x 1,5 DKF     |
| M 45 x2            | 44,8 |                  |
| 45 x 1,5 CEF       | 44,9 |                  |
|                    | 45,1 | 1 7/8" – 12 JIC  |
|                    | 45,2 | G1 1/2" BSP      |
| 1 1/2"–11 1/2 NPTF | 46,3 |                  |
| 1 7/8" – 12 JIC    | 47,5 |                  |
| G1 1/2" BSP        | 47,7 |                  |
|                    | 49,6 | M 52 x 2         |
|                    | 50,3 | 52 x 1,5 DKF     |
| M 52 x2            | 51,8 |                  |
| 52 x 1,5 CEF       | 51,9 |                  |
|                    | 57,4 | G2" BSP          |
| 2" – 11 1/2 NPTF   | 58,3 |                  |
| G2" BSP            | 59,4 |                  |
|                    | 61,1 | 2 1/2" – 12 JIC  |
|                    | 62,5 | M 65 x 2         |
| 2 1/2" – 12 JIC    | 63,3 |                  |

PRESSURE CONVERSION TABLES

Metric to psi (1 KPa = .145 psi)

| Kilo<br>Pascal<br>(KPa) | Mega<br>Pascal<br>(KPa) | Bar<br>(Bar) | Pounds per<br>Square Inch<br>(psi) |
|-------------------------|-------------------------|--------------|------------------------------------|
| 100                     | 0,1                     | 1            | 14,5                               |
| 200                     | 0,2                     | 2            | 29,0                               |
| 300                     | 0,3                     | 3            | 43,5                               |
| 400                     | 0,4                     | 4            | 58,0                               |
| 500                     | 0,5                     | 5            | 72,5                               |
| 600                     | 0,6                     | 6            | 87,0                               |
| 700                     | 0,7                     | 7            | 101,5                              |
| 800                     | 0,8                     | 8            | 116,0                              |
| 900                     | 0,9                     | 9            | 130,5                              |
| 1000                    | 1                       | 10           | 145,0                              |
| 2000                    | 2                       | 20           | 290,1                              |
| 3000                    | 3                       | 30           | 435,1                              |
| 4000                    | 4                       | 40           | 580,2                              |
| 5000                    | 5                       | 50           | 725,5                              |
| 6000                    | 6                       | 60           | 870,2                              |
| 7000                    | 7                       | 70           | 1015                               |
| 8000                    | 8                       | 80           | 1160                               |
| 9000                    | 9                       | 90           | 1305                               |
| 10000                   | 10                      | 100          | 1450                               |
| 20000                   | 20                      | 200          | 2901                               |
| 30000                   | 30                      | 300          | 4351                               |
| 40000                   | 40                      | 400          | 5802                               |
| 50000                   | 50                      | 500          | 7252                               |
| 60000                   | 60                      | 600          | 8702                               |
| 70000                   | 70                      | 700          | 10153                              |
| 80000                   | 80                      | 800          | 11603                              |
| 90000                   | 90                      | 900          | 13053                              |
| 100000                  | 100                     | 1000         | 14504                              |
| 200000                  | 200                     | 2000         | 29008                              |
| 300000                  | 300                     | 3000         | 43511                              |

psi to metric (1 psi = 6,89 KPa)

| Pounds per<br>Square Inch<br>(psi) | Kilo<br>Pascal<br>(KPa) | Mega<br>Pascal<br>(MPa) | Bar<br>(Bar) |
|------------------------------------|-------------------------|-------------------------|--------------|
| 10                                 | 68,9                    | 0,07                    | 0,7          |
| 20                                 | 137,9                   | 0,14                    | 1,4          |
| 30                                 | 206,8                   | 0,21                    | 2,1          |
| 40                                 | 275,8                   | 0,28                    | 2,8          |
| 50                                 | 344,7                   | 0,34                    | 3,4          |
| 60                                 | 413,7                   | 0,41                    | 4,1          |
| 70                                 | 482,6                   | 0,48                    | 4,8          |
| 80                                 | 551,6                   | 0,55                    | 5,5          |
| 90                                 | 620,5                   | 0,62                    | 6,2          |
| 100                                | 689                     | 0,70                    | 6,9          |
| 200                                | 1379                    | 1,4                     | 13,8         |
| 300                                | 2068                    | 2,1                     | 20,7         |
| 400                                | 2758                    | 2,8                     | 27,6         |
| 500                                | 3447                    | 3,4                     | 34,5         |
| 600                                | 4137                    | 4,1                     | 41,4         |
| 700                                | 4826                    | 4,8                     | 48,3         |
| 800                                | 5516                    | 5,5                     | 55,2         |
| 900                                | 6205                    | 6,2                     | 62,1         |
| 1000                               | 6895                    | 6,9                     | 68,9         |
| 2000                               | 13790                   | 13,8                    | 147,9        |
| 3000                               | 20684                   | 20,7                    | 206,8        |
| 4000                               | 27579                   | 27,6                    | 275,8        |
| 5000                               | 34474                   | 34,5                    | 344,7        |
| 6000                               | 41369                   | 41,4                    | 413,7        |
| 7000                               | 48263                   | 48,3                    | 482,6        |
| 8000                               | 55158                   | 55,2                    | 551,6        |
| 9000                               | 62053                   | 62,1                    | 620,5        |
| 10000                              | 68948                   | 68,9                    | 689          |
| 20000                              | 137895                  | 147,9                   | 1379         |
| 30000                              | 206843                  | 206,8                   | 2068         |
| 40000                              | 275790                  | 275,8                   | 2758         |

CONVERSION TABLES FROM IMPERIAL SYSTEM TO METRIC SYSTEM

| Inches | mm          |
|--------|-------------|
| 1/64   | .0156 .397  |
| 1/32   | .0312 .794  |
| 3/64   | .0468 1.191 |
| 1/16   | .0625 1.588 |
| 5/64   | .0781 2.381 |
| 3/32   | .0937 2.381 |
| 7/64   | .1093 2.778 |
| 1/8    | .1250 3.175 |
| 9/64   | .1406 3.572 |
| 5/32   | .1562 3.969 |
| 11/64  | .1718 4.366 |
| 3/16   | .1875 4.763 |
| 13/64  | .2087 5.159 |
| 7/32   | .2187 5.556 |
| 15/64  | .2343 5.963 |
| 1/4    | .2500 6.350 |

| Inches | mm           |
|--------|--------------|
| 17/64  | .2656 6.747  |
| 9/32   | .2812 7.144  |
| 19/64  | .2968 7.541  |
| 15/16  | .3125 7.938  |
| 21/64  | .3281 8.334  |
| 11/32  | .3437 8.731  |
| 23/64  | .3593 9.128  |
| 3/8    | .3750 9.525  |
| 25/64  | .3906 9.922  |
| 13/32  | .4062 10.319 |
| 27/64  | .4218 10.716 |
| 7/16   | .4375 11.113 |
| 29/64  | .4531 11.509 |
| 15/32  | .4687 11.906 |
| 31/64  | .4843 12.303 |
| 1/2    | .5000 12.700 |

| Inches | mm           |
|--------|--------------|
| 33/64  | .5156 13.097 |
| 17/32  | .5312 13.494 |
| 35/64  | .5468 13.891 |
| 9/16   | .5625 14.288 |
| 37/64  | .5781 14.684 |
| 19/32  | .5937 15.081 |
| 39/64  | .6093 15.478 |
| 5/8    | .6250 15.875 |
| 41/64  | .6406 16.272 |
| 21/32  | .6562 16.669 |
| 43/64  | .6718 17.066 |
| 11/16  | .6875 17.463 |
| 45/64  | .7031 17.859 |
| 23/32  | .7187 18.256 |
| 47/64  | .7343 18.653 |
| 3/4    | .7500 19.050 |

| Inches | mm           |
|--------|--------------|
| 49/64  | .7656 19.447 |
| 25/32  | .7812 19.844 |
| 51/64  | .7968 20.241 |
| 13/16  | .8125 20.638 |
| 53/64  | .8281 21.034 |
| 27/32  | .8437 21.431 |
| 55/64  | .8593 21.828 |
| 7/8    | .8750 22.225 |
| 57/64  | .8906 22.622 |
| 29/32  | .9062 23.019 |
| 59/64  | .9218 23.416 |
| 15/16  | .9375 23.813 |
| 61/64  | .9531 24.209 |
| 31/32  | .9687 24.606 |
| 63/64  | .9843 25.003 |
| 1      | 1000 25.400  |

## // ADAPTERS GUIDELINES

### ADAPTER SELECTION

Selection of an appropriate Dunlop Hiflex adapter for a given application depends on the fluid system operating parameters listed below and the tube material and wall thickness they require:

1. Type of fluid
2. Operating temperature range
3. Type of line - pressure, return or suction
4. Maximum flow rate through the line
5. Maximum operating / service pressure
6. Severity of service
7. Environment

Then, based on the tube selected and appropriate fluid system operating parameters, determine adapter type(s) and material(s) using the features comparison table below.

| FEATURES COMPARISON OF TUBE FITTINGS              |                                       |                                                                                                       |                                                                                                |                                                                                                |
|---------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Feature                                           |                                       | ORFS                                                                                                  | JIC 37°                                                                                        | BSP                                                                                            |
| Performance                                       | Pressure capability*                  | Very High                                                                                             | Medium to High                                                                                 | Medium to High                                                                                 |
|                                                   | Seal Reliability                      | Excellent                                                                                             | Good                                                                                           | Very Good                                                                                      |
|                                                   |                                       | Elastomeric Seal                                                                                      | Metal to Metal Seal                                                                            | Elastomeric Seal                                                                               |
|                                                   |                                       | High tolerance to minor surface imperfections and damage. High tolerance to assembly variations.      | Low tolerance to minor surface imperfections and damage. Low tolerance to assembly variations. | Low tolerance to minor surface imperfections and damage. Low tolerance to assembly variations. |
| Tube Compatibility                                | Vibration Resistance in Rigid Systems | Excellent                                                                                             | Good                                                                                           | Very Good                                                                                      |
|                                                   | Wall Thickness                        | All                                                                                                   | Medium                                                                                         | Medium                                                                                         |
|                                                   | Critical Features                     | OD tolerance and hardness for flat tube, OD tolerance only for brazed tube                            | ID finish, wall thickness uniformity (concentricity) and hardness                              | OD tolerance and hardness                                                                      |
| Assembly                                          | Tube Preparation                      | Easy and quick (slower for sleeve brazing)                                                            | Easy and quick                                                                                 | Easy and quick (slower for welded nipple)                                                      |
|                                                   | Inspection                            | Easy and quick                                                                                        | Easy and quick                                                                                 | Critical, need experience                                                                      |
|                                                   | Ease of Installation                  | Excellent, Minimum skill and training are necessary because of high tolerances to assembly variations | Good. Low tolerance to assembly variations. Requires skilled and trained personnel             |                                                                                                |
|                                                   | Ease of Maintenance                   | Excellent, no tube entry                                                                              | Very Good, Small tube entry                                                                    | Good, Large tube entry                                                                         |
| Temperature Capability<br>Adapters without O-Ring | Steel                                 | To be used only with O-ring                                                                           | -65° F to 500° F                                                                               | -65° F to 500° F                                                                               |
|                                                   | Stainless Steel                       |                                                                                                       | -425° F to 1200° F                                                                             | ==                                                                                             |
|                                                   | Brass                                 |                                                                                                       | -40° F to 400° F                                                                               | ==                                                                                             |
| Temperature Capability<br>Adapters with O-Ring**  | All Style of Adapter                  | -30 F to 250° F                                                                                       | -30 F to 250° F                                                                                | -30 F to 250° F                                                                                |

\* For details see Working Pressure Charts in the individual adapters section

\*\* For details concerning O-ring see section "O-ring selection" and "Fluid Resistance Table"

**JIC 37° ADAPTER (ISO 8434-2, SAE J514)****Main Features**

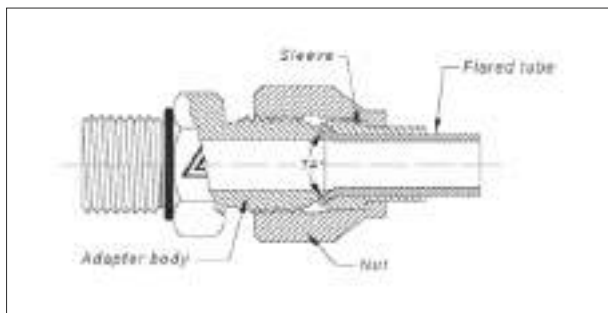
SAE J514 and ISO 8434-2, and commonly called 37° JIC adapters.

37° JIC adapter performs extremely well in all high pressure applications.

The seal is made by connecting a 37° flared tube surface to a 37° flare male and tightening by means of a nut and a sleeve. The flared tube avoids welded connection, so high performances are guaranteed even in case of severe vibrations, mechanic/hydraulic shocks and multiple assembly/disassembly operations.

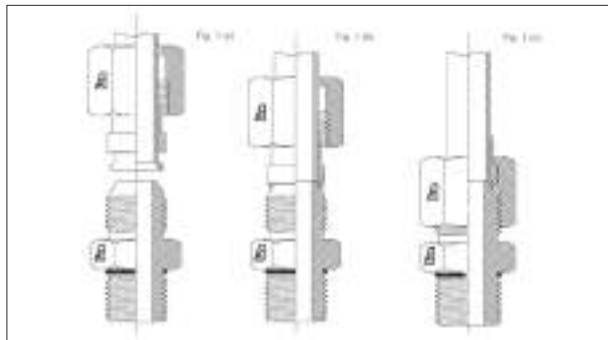
When tightened, sleeve provides tube and adapter self alignment and helps to reduce the vibrations on the tube during application.

An appropriate choice of sleeve gives the possibility of assembling adapters with both metric and inch-tubes.

**Flaring Operations**

Perfect sealing is guaranteed with tubes having physical and mechanical characteristics obtained by cold-drawing and a ductility expressed as 21% of minimum elongation.

- Cut end of tube must be perpendicular to its axis. Note: cutting operation reduces the whole length of tube (almost 0,5±1mm for each end).
- Dimensions of the end of the tube shall allow the correct placing on the flaring machine.
- Flared surface must be inspected to avoid excessive roughness and defects such as cracks or exfoliation.
- Length of flared zone shall be enough to allow a sufficient sealing surface and avoid the blowing off of the tube, but not excessive to prevent the contact with thread of the nut.
- A well followed flaring procedure assures no leakage even after frequent assembling and disassembling operations.

**ORFS ADAPTER (ISO 8434-3, SAE J1453)****Main Features**

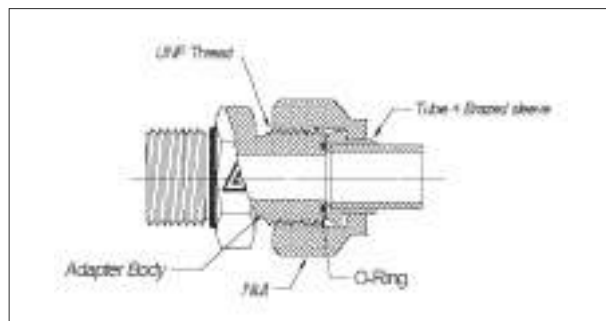
Adapters are designed and manufactured according to standard SAE J1453 and commonly called ORFS adapters.

O-Ring Face Seal adapters performs extremely well in all high pressure applications where elastomeric seals are needed to overcome leakage and leak resistance is crucial.

A seal is made when the O-Ring in the male contacts the 180° flat face of the tube. The male connector has a straight thread and a machined flat face. The seal takes place by compressing the O-Ring onto the flat face of the female.

ORFS system is composed by:

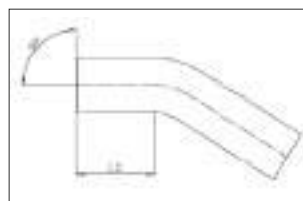
- Nut.
- Sleeve for flat tube and a shouldered sleeve for brazing. An appropriate choice of sleeve gives the possibility of assembling adapters with both metric and inch-tubes.
- Various kind and size of adapter body.
- O-Ring material is NBR, Shore "A": 90, suitable for a temperature range of: - 30°/+130° C ( -22°/+266° F).

**Flaring Tube Operations**

Perfect sealing is guaranteed with tubes having physical and mechanical characteristics obtained by cold-drawing and a ductility expressed as 21% of minimum elongation.

- Cut end of tube must be perpendicular to its axis.
- Cutting operation reduces the whole length of tube.
- Dimensions of the end of the tube shall allow the correct placing on the flaring machine.
- Flared surface must be inspected to avoid excessive roughness and defects such as cracks or exfoliation.
- Brazing sleeve guarantees the same performances as the flared tube, and shall be used in the following cases:
- Tube is not in accordance with the above mechanical characteristics.
- The straight part of the tube is not of a sufficient length (see quote L2 and values listed in table of figure O-3 ).
- Tube thickness is lower than values listed in table (O-1).
- For cutting length consider shoulder of the sleeve (quote L1 of table O-1).

A well followed flaring procedure assures no leakage even after frequent assembling and disassembling operations.



| Hose mm     | L2 Min mm |
|-------------|-----------|
| Ø 6 - Ø 12  | 73        |
| Ø 14 - Ø 18 | 100       |
| Ø 20 - Ø 22 | 120       |
| Ø 25 - Ø 42 | 130       |

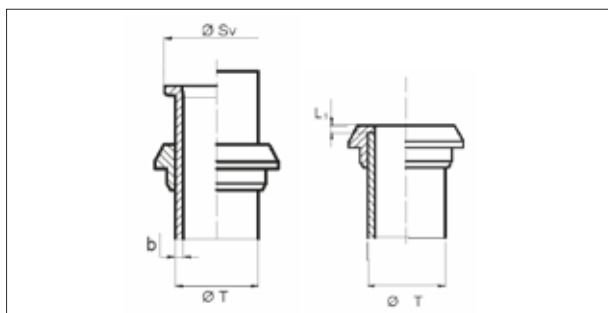
**Only a few simple operations are required for assembling ORFS tube/adapter.**

**Sleeve and Tube Flared:**

- 1a) Place nut and sleeve on the tube with the appropriate orientation.
- 2a) Flare the tube (see procedure)
- 3a) Place the tube near seal surface of the adapter and screw by hand.
- 4a) Lock the adapter and tighten with a torque wrench

**Brazed sleeve**

- 1b) Cut the tube considering quote L1 of the sleeve (See Figure O-5);
- 2b) Clean and degrease accurately the end of the tube and the sleeve;
- 3b) Put the brazing ring into the sleeve
- 4b) Apply flux at the end of the tube and in the sleeve, then assemble the sleeve on the tube;
- 5b) Start brazing and be aware of not overheating flux material;
- 6b) Clean the connecting part and verify the good quality of weld around the external diameter of the hose;
- 7b) Complete the assembly procedure as described in points 3a) and 4a). See the correct installation torque in the attached table (O-2).



| Hose |       | SV   |      |
|------|-------|------|------|
| mm   | In    | mm   | In   |
| 6    | 1/4   | 12,0 | 12,7 |
| 8    | 5/16  | 14,7 | 15,7 |
| 10   | 3/8   | 14,7 | 15,7 |
| 12   | 1/2   | 17,9 | 18,9 |
| 15   |       | 22,1 | 23,4 |
| 16   | 5/8   | 22,1 | 23,4 |
| 18   |       | 26,3 | 27,8 |
| 20   | 3/4   | 26,3 | 27,8 |
| 22   |       | 32,4 | 34,2 |
| 25   | 1     | 32,4 | 34,2 |
| 28   |       | 39,0 | 40,5 |
| 30   |       | 39,0 | 40,5 |
| 32   | 1.1/4 | 39,0 | 40,5 |
| 35   |       | 46,0 | 48,5 |
| 38   | 1.1/2 | 46,0 | 48,5 |

**BSP ADAPTER (ISO 8434-6, BS 5200)**

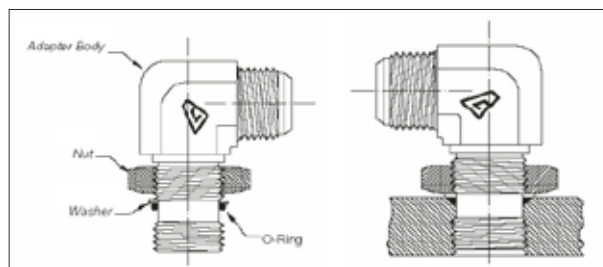
**Main Features**

Adapters are designed and manufactured according to standard BS 5200, ISO 8434-6 and ISO 228-1 and they are commonly called BSP adapters (British Standard Pipe) BSP adapter is widely employed, it performs extremely well in all high pressure applications with oil and gas. The seal is made by connecting a 60° coned seat to the 60° male surface and tightening the nut assembly. The O-Ring placed in the tube groove improves the sealing. There are not welded part in the locking area and performances are good even after multiple assembly and disassembly operations, severe vibrations and mechanic/hydraulic shocks.

**Assembling Procedure**

Only a few simple operations are required for assembling BSP tube/adapter:

1. Carefully align tube and adapter. Otherwise sealing is not guaranteed.
  2. Lubricate accurately sealing surfaces with mineral oil or suitable lubricant.
  3. Place the tube near seal surface of the adapter and tight by hand.
  4. Lock the adapter and tighten with a torque wrench.
- See the correct installation torque in the attached table B-1.



**Assembly Instruction For Adjustable Adapter Thread: SAE, UNF, BSPP, Metric**

Lubricate the O-Ring with mineral oil. Back off locknut as for as possible.

Make sure that washer is pushed-up as much as possible. Screw by hand the adapter into the port until the ORing enter the port.

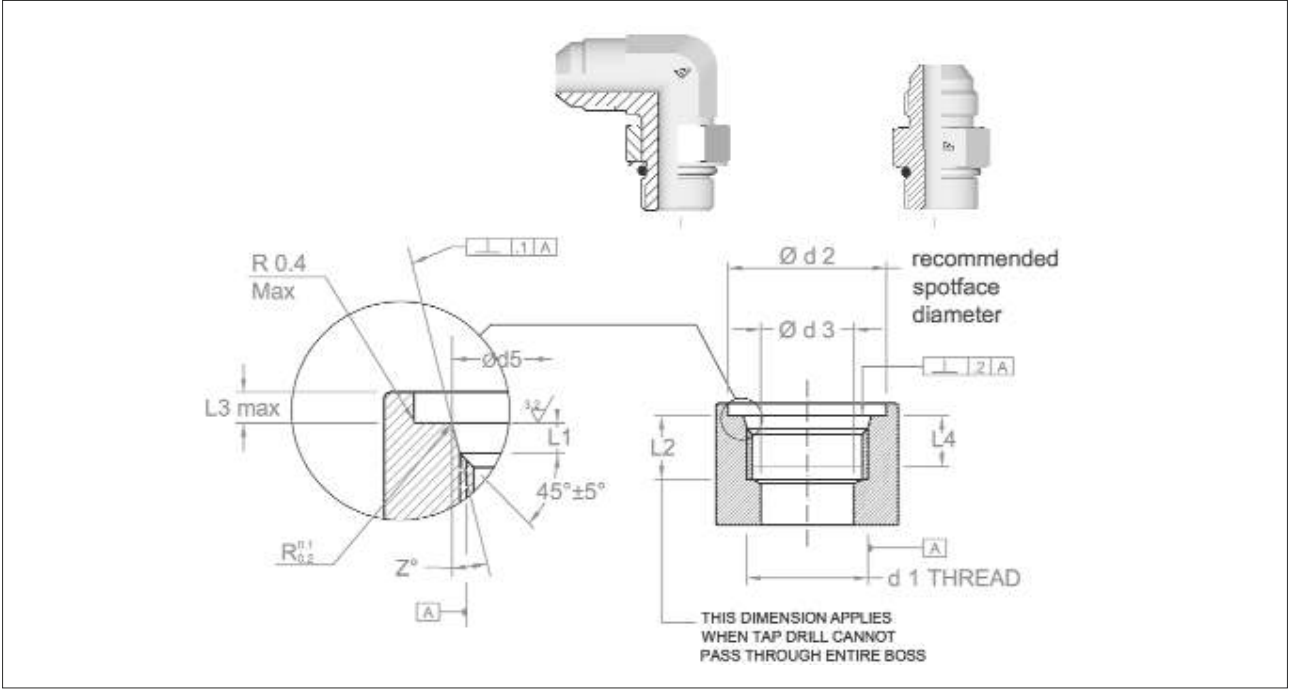
To align adaptor orientation to tube end or hose assembly, unscrew the adaptor by the required amount, but not more than one full turn.

Hold the adapter in desired position by mean of a wrench and tighten locknut to the suggested torque value by means of a dynamometric wrench.

METRIC PORT - ISO 6149 - SAE 2244-1

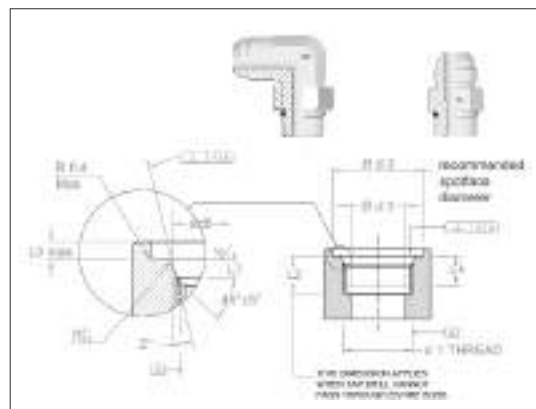
| Metric Thread         | D2 <sup>2)</sup> min | D3 <sup>3)</sup> min | D5 +0,10 | D6 +0,50 | L1 +0,40 | L2 min | L3 max | L4   | Z° ±1° | Assembly Torque +10% |
|-----------------------|----------------------|----------------------|----------|----------|----------|--------|--------|------|--------|----------------------|
| D1                    | mm                   | mm                   | mm       | mm       | mm       | mm     | mm     | mm   |        | Nm                   |
| M8x1                  | 17                   | 14                   | 9,1      | 14       | 1,6      | 11,5   | 1      | 10   | 12°    | 10                   |
| M10x1                 | 20                   | 16                   | 11,1     | 16       | 1,6      | 11,5   | 1      | 10   | 12°    | 20                   |
| M12x1,5               | 23                   | 19                   | 13,8     | 19       | 2,4      | 14     | 1,5    | 11,5 | 15°    | 35                   |
| M14x1,5 <sup>1)</sup> | 25                   | 21                   | 15,8     | 21       | 2,4      | 14     | 1,5    | 11,5 | 15°    | 45                   |
| M16x1,5               | 28                   | 24                   | 17,8     | 24       | 2,4      | 15,5   | 1,5    | 13   | 15°    | 55                   |
| M18x1,5               | 30                   | 28                   | 19,8     | 26       | 2,4      | 17     | 2      | 14,5 | 15°    | 70                   |
| M22x1,5               | 34                   | 29                   | 23,8     | 29       | 2,4      | 18     | 2      | 15,5 | 15°    | 100                  |
| M27x3                 | 40                   | 34                   | 29,4     | 34       | 3,1      | 22     | 2      | 19   | 15°    | 170                  |
| M33x2                 | 49                   | 43                   | 35,4     | 43       | 3,1      | 22     | 2,5    | 19   | 15°    | 310                  |
| M42x2                 | 60                   | 52                   | 44,4     | 52       | 3,1      | 22,5   | 2,5    | 19,5 | 15°    | 330                  |
| M48x2                 | 66                   | 57                   | 50,4     | 57       | 3,1      | 25     | 2,5    | 22   | 15°    | 420                  |
| M60x2                 | 76                   | 67                   | 52,4     | 67       | 3,1      | 27,5   | 2,5    | 24,5 | 15°    | 500                  |

- 1) Preferred for diagnostic port application  
2) Spotface diameter with identification ridge  
3) Spotface diameter without identification ridge

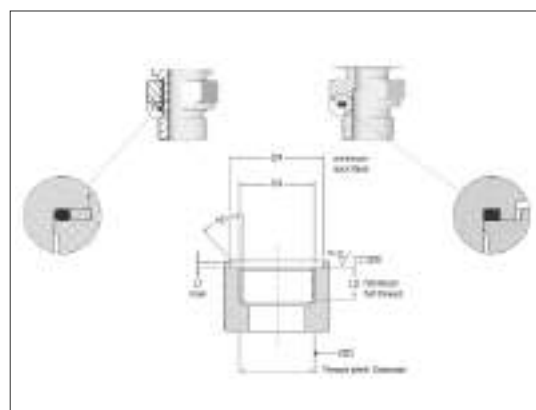


**SAE UNF PORT - SAE J1926-1 - ISO 11926**

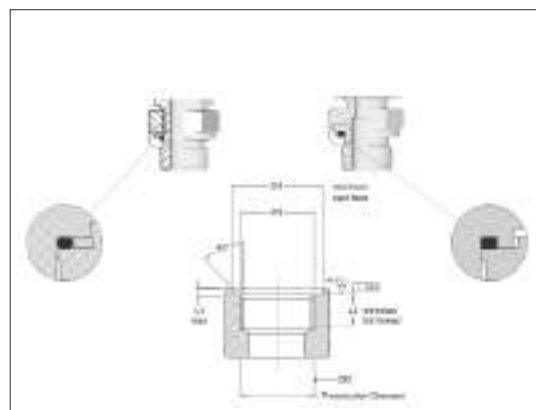
| ANSI B1.1  | D2 | D3 min | D3 +0,13 | L1 +0,40 | L2 min | L3 max | L4 min | Z° ±1° | Assembly Torque +10% |
|------------|----|--------|----------|----------|--------|--------|--------|--------|----------------------|
| D1         | mm | mm     | mm       | mm       | mm     | mm     | mm     |        | Nm                   |
| 7/16"-20   | 21 | 4,4    | 12,4     | 2,4      | 14     | 1,6    | 11,5   | 12°    | 20                   |
| 1/2"-20    | 23 | 6      | 14       | 2,4      | 14     | 1,6    | 11,5   | 12°    | 25                   |
| 9/16"-18   | 25 | 7,5    | 15,6     | 2,5      | 15,5   | 1,6    | 12,7   | 12°    | 35                   |
| 3/4"-16    | 30 | 10     | 20,6     | 2,5      | 17,5   | 2,4    | 14,3   | 15°    | 70                   |
| 7/8"-14    | 34 | 12,5   | 23,9     | 3,3      | 20     | 2,4    | 16,7   | 15°    | 100                  |
| 1" 1/16-12 | 41 | 16     | 29,2     | 3,3      | 23     | 2,4    | 19     | 15°    | 170                  |

**BSPP PORT - ISO 9974 - DIN 3852-1**

| ANSI B1.1 Thread | D3 +0.20 | D4 | L1 max | L2 min | Assembly Torque +10% |
|------------------|----------|----|--------|--------|----------------------|
| D1               | mm       | mm | mm     | mm     | Nm                   |
| 1/8"-28          | 9,8      | 15 | 1      | 8      | 20                   |
| 1/4"-19          | 13,2     | 20 | 1,5    | 12     | 50                   |
| 3/8"-19          | 16,7     | 23 | 2      | 12     | 80                   |
| 1/2"-14          | 21       | 28 | 2,5    | 14     | 100                  |
| 3/4"-14          | 26,5     | 33 | 2,5    | 16     | 200                  |
| 1"-11            | 33,3     | 41 | 2,5    | 18     | 380                  |
| 1" 1/4-11        | 42       | 51 | 2,5    | 20     | 500                  |
| 1" 1/2-11        | 47,9     | 56 | 2,5    | 22     | 600                  |

**METRIC PORT - ISO 9974 - DIN 3852-1**

| Metric Thread | D3 +0.20 | D4 min | L1 max | L2 min | Assembly Torque +10% |
|---------------|----------|--------|--------|--------|----------------------|
| D1            | mm       | mm     | mm     | mm     | Nm                   |
| M12x1,5       | 12       | 18     | 1,5    | 12     | 35                   |
| M14x1,5       | 14       | 20     | 1,5    | 12     | 45                   |
| M16x1,5       | 16       | 23     | 1,5    | 12     | 55                   |
| M18x1,5       | 18       | 25     | 2      | 12     | 68                   |
| M20x1,5       | 20       | 27     | 2      | 14     | 80                   |
| M22x1,5       | 22       | 28     | 2,5    | 14     | 98                   |
| M27x2         | 27       | 33     | 2,5    | 16     | 180                  |
| M33x2         | 33       | 41     | 2,5    | 18     | 310                  |
| M42x2         | 42       | 51     | 2,5    | 20     | 330                  |
| M48x2         | 48       | 56     | 2,5    | 22     | 400                  |



## // HOSE

## // TEXTILE BRAID

|                   |   |
|-------------------|---|
| ARGUS 2TE .....   | 8 |
| 2TE RAILWAY ..... | 8 |

## // WIRE BRAID

|                                      |    |
|--------------------------------------|----|
| 121T SLIMLINE PLUS - 1SC .....       | 9  |
| 141T SUPERSLIMLINE .....             | 9  |
| 122T GREENLINE PLUS - 1SN/R1AT ..... | 10 |
| 221T SLIMLINE PLUS - 2SC .....       | 10 |
| 241T SUPERSLIMLINE - HI-TUFF .....   | 11 |
| 241T-R SUPERSLIMLINE - HI-TUFF ..... | 11 |
| 222T GREENLINE PLUS - 2SN/R2AT ..... | 12 |
| SP33G SUPERFOREST .....              | 12 |

## // WIRE SPIRAL - POWERFLEXBIO

|                                        |    |
|----------------------------------------|----|
| POWERFLEXBIO 4000 - HI-TUFF .....      | 15 |
| POWERFLEXBIO 5000 - HI-TUFF .....      | 15 |
| POWERFLEXBIO 5000 PLUS - HI-TUFF ..... | 16 |
| POWERFLEXBIO 6000 - HI-TUFF .....      | 16 |

## // TUFLEX

|                                   |    |
|-----------------------------------|----|
| 241X SUPERSLIMLINE - TUFLEX ..... | 17 |
| POWERFLEXBIO 4000 - TUFLEX .....  | 17 |

## // HIGH TEMPERATURE

|                              |    |
|------------------------------|----|
| COMMANDER 150 1SN PLUS ..... | 18 |
|------------------------------|----|

## // LOW TEMPERATURE

|                                    |    |
|------------------------------------|----|
| 261E HYPERCOLD SUPERSLIMLINE ..... | 19 |
| SP33E HYPERCOLD SUPERFOREST .....  | 19 |

## // OIL RETURN LINES

|                                                          |    |
|----------------------------------------------------------|----|
| 605AA Fuel-oil S&D 10 bar (150 psi) .....                | 20 |
| FLEXOR R4 634 Extra flexible .....                       | 20 |
| FLEXOR R4 644 HT Extra flexible - High temperature ..... | 21 |

## // PRESSURE WASH

|                          |    |
|--------------------------|----|
| ALFAJET 210 .....        | 22 |
| ALFAJET 400 .....        | 22 |
| ALFAJET 640 .....        | 23 |
| WATERBLAST - WB10L ..... | 23 |
| WATERBLAST - WB15L ..... | 23 |
| WATERBLAST - WB20L ..... | 24 |

## // THERMOPLASTIC

|                                   |    |
|-----------------------------------|----|
| MINIMESS - TPMM .....             | 25 |
| FLEXOR 7 .....                    | 25 |
| FLEXOR 7 - TWIN .....             | 26 |
| FLEXOR 8 .....                    | 26 |
| FLEXOR 8 - TWIN .....             | 26 |
| FLEXOR HR8 - TWIN .....           | 27 |
| FLEXOR TWB1 .....                 | 27 |
| FLEXOR TWB1-CO <sub>2</sub> ..... | 27 |
| FLEXOR TWB1 - TWIN .....          | 28 |
| FLEXOR TWB1 - TRIPLE .....        | 28 |
| FLEXOR MTKH - TWINy .....         | 29 |
| OFF-SHORE - ROV OPERATION .....   | 29 |
| FLEXOR VHP700 .....               | 30 |
| FLEXOR 7 - PAINT .....            | 30 |
| FLEXOR TWB1 - PAINT .....         | 30 |
| FLEXOR TWB2 - PAINT .....         | 31 |

## // PTFE

|                                                                |    |
|----------------------------------------------------------------|----|
| 9TS OM Smooth PTFE Stainless Steel braid - Standard duty ..... | 32 |
| 9TC OM Convoluted PTFE Stainless Steel braid .....             | 33 |

## // STANDARD FITTINGS

## // FERRULES

|          |                                                                                              |    |
|----------|----------------------------------------------------------------------------------------------|----|
| H1200TX2 | No-Skive Ferrule for 3TE, R5 and Flexopak 2 Minetuff 2 1/2" - 241T Hi-tuff hoses             | 39 |
| H1200TX4 | No-Skive Ferrule for R4 Hoses (604, 634, 644)                                                | 39 |
| H1200103 | No-Skive Ferrule for PLT                                                                     | 40 |
| H1200AD1 | No-Skive Ferrule for 1 Wire Braid and 2 Wire Braid Compact Hoses                             | 40 |
| H1200AD2 | No-Skive Ferrule for 2SN                                                                     | 41 |
| H1200204 | No-Skive Ferrule for Alfabiotech/Powerflexbio Hoses                                          | 41 |
| H1200TP0 | No-Skive Ferrule for Thermoplastic and 1 Wire Braid Compact Hoses                            | 42 |
| H2200TF0 | No-Skive Ferrule for PTFE Hoses                                                              | 42 |
| H1100104 | Skive Ferrule for 1SN                                                                        | 42 |
| H1100404 | Skive Ferrule for 2/3 Wire Braid and Wire Spiral Hoses                                       | 43 |
| H1100SK1 | Skive Ferrule for 1 Wire Braid and 2 Wire Braid Compact Hoses - No-Skive for 1TE, 2TE and R6 | 43 |

## // HOSE MENDER

|          |             |    |
|----------|-------------|----|
| H12C5610 | Hose Mender | 44 |
|----------|-------------|----|

## // BSP INSERTS

|          |                                                                  |    |
|----------|------------------------------------------------------------------|----|
| H1210510 | BSPP Male 60° Flare - AGR                                        | 45 |
| H1210610 | BSPP Male Flat Seat - AGR FD                                     | 45 |
| H1210710 | BSPT Male - AGR K                                                | 46 |
| H1220813 | BSPP Female 60° Cone with O-Ring - DKOR                          | 47 |
| H1220843 | 45° BSPP Female 60° Cone with O-Ring - DKOR 45 - Solid one piece | 48 |
| H1220893 | 90° BSPP Female 60° Cone with O-Ring - DKOR 90 - Solid one piece | 49 |
| H1220581 | 90° Compact BSPP Female 60° Cone - DKR 90                        | 49 |
| H1220613 | BSPP Female Flat Seat - DKR FD                                   | 50 |
| H1230310 | BSPP Banjo - RNR                                                 | 50 |
| H10V0210 | BSPP Bolt                                                        | 51 |

## // DIN METRIC INSERTS

|          |                                                                                              |    |
|----------|----------------------------------------------------------------------------------------------|----|
| H1211110 | Metric Male 24° Seat - DIN 3853 - Light Series - CEL                                         | 52 |
| H1221513 | Metric Female 24° Cone with O-Ring - DIN 3865 - Light Series - DKOL                          | 53 |
| H1221543 | 45° Metric Female 24° Cone with O-Ring - DIN 3865 - Light Series - DKOL 45 - Solid one piece | 54 |
| H1221593 | 90° Metric Female 24° Cone with O-Ring - DIN 3865 - Light Series - DKOL 90 - Solid one piece | 55 |
| H1211210 | Metric Male 24° Seat - DIN 3853 - Heavy Series - CES                                         | 56 |
| H1221613 | Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS                          | 57 |
| H1221643 | 45° Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS 45 - Solid one piece | 58 |
| H1221693 | 90° Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS 90 - Solid one piece | 58 |
| H1221313 | Universal Metric Female                                                                      | 59 |
| H1221343 | 45° Universal Metric Female                                                                  | 59 |
| H1221393 | 90° Universal Metric Female                                                                  | 59 |
| H1221013 | Metric Female 60° Cone - DIN 3863                                                            | 60 |
| H1221093 | 90° Metric Female 60° Cone - DIN 3863 - Solid one piece                                      | 60 |
| H1252010 | Metric Straight Standpipe - DIN 2353 - RSL/RSS                                               | 61 |
| H1252040 | 45° Metric Standpipe - DIN 2353 - RSL45/RSS 45 - Solid one piece                             | 62 |
| H1252090 | 90° Metric Standpipe - DIN 2353 - RSL 90/RSS90 - Solid one piece                             | 62 |
| H1230910 | Metric Banjo - RNM                                                                           | 63 |
| H10V0810 | Metric Bolt                                                                                  | 63 |

## // PRESSURE WASHER

|          |                                      |    |
|----------|--------------------------------------|----|
| H1224914 | Universal Female for Pressure Washer | 64 |
|----------|--------------------------------------|----|

## // SAE INSERTS

|          |                                           |    |
|----------|-------------------------------------------|----|
| H1226611 | SAE Female Swivel 45° Seat                | 65 |
| H1213010 | SAE Male Solid - O-Ring Boss              | 65 |
| H1213011 | SAE Male Swivel - O-Ring Boss             | 66 |
| H1213081 | 90° Compact SAE Male Swivel - O-Ring Boss | 66 |

## // JIC 37° INSERTS

|            |                                                                                        |    |
|------------|----------------------------------------------------------------------------------------|----|
| H1212510   | JIC Male 37° Cone - AGJ                                                                | 67 |
| H1222511   | JIC Female 37° Seat - DKJ                                                              | 68 |
| H1226511   | JIC Female 37° Seat with Stem Hexagon - DKJ                                            | 69 |
| H1226514   | JIC Female 37° Seat with double Hexagon - DKJ and solid nut                            | 70 |
| H1222541-M | 45° JIC Female 37° Seat - Medium Drop - DKJ 45M - Solid one piece                      | 70 |
| H1226544-M | 45° JIC Female 37° Seat - Medium Drop - DKJ 45M - Solid nut and double Hexagon crimped | 71 |
| H1222591-S | 90° JIC Female 37° Seat - Short Drop - DKJ 90S - Solid one piece                       | 71 |
| H1226594-S | 90° JIC Female 37° Seat - Short Drop - Solid Nut and double Hexagon crimped            | 72 |
| H1222591-M | 90° JIC Female 37° Seat - Medium Drop - DKJ 90M - Solid one piece                      | 72 |
| H1226594-M | 90° JIC Female 37° Seat - Medium Drop - Solid Nut and double Hexagon crimped           | 73 |
| H1222591-L | 90° JIC Female 37° Seat - Long Drop - DKJ 90L - Solid one piece                        | 73 |
| H1226594-L | 90° JIC Female 37° Seat - Long Drop - Solid Nut and double Hexagon crimped             | 74 |

## // NPTF INSERTS

|          |                                            |    |
|----------|--------------------------------------------|----|
| H1212810 | NPTF Male 60° Seat - AGN.....              | 75 |
| H1222810 | NPTF Female Solid.....                     | 75 |
| H1212811 | NPTF Male Swivel 60° Seat.....             | 76 |
| H1212881 | 90° Compact NPTF Male Swivel 60° Seat..... | 76 |

## // NPSM INSERTS

|          |                  |    |
|----------|------------------|----|
| H1227311 | NPSM Female..... | 77 |
|----------|------------------|----|

## // ORFS INSERTS

|            |                                                                    |    |
|------------|--------------------------------------------------------------------|----|
| H1212410   | ORFS Male.....                                                     | 78 |
| H1222414   | ORFS Female with support Hexagon knurled.....                      | 78 |
| H1222443-M | 45° ORFS Female - Medium Drop - DK ORFS 45M - Solid one piece..... | 79 |
| H1222493-S | 90° ORFS Female - Short Drop - DK ORFS 90S - Solid one piece.....  | 79 |
| H1222493-M | 90° ORFS Female - Medium Drop - DK ORFS 90M - Solid one piece..... | 80 |
| H1222493-L | 90° ORFS Female - Long Drop - DK ORFS 90L - Solid one piece.....   | 80 |

## // FRENCH INSERTS

|          |                                      |    |
|----------|--------------------------------------|----|
| H1211810 | Metric Male - French Type.....       | 81 |
| H1221813 | Metric Female - French Type.....     | 81 |
| H1221893 | 90° Metric Female - French Type..... | 81 |

## // JIS INSERTS

|          |                                                      |    |
|----------|------------------------------------------------------|----|
| H1223711 | JIS Female 60° Cone - B 8363 (Type C).....           | 82 |
| H1223741 | 45° JIS Female 60° Cone - B 8363 (Type C).....       | 82 |
| H1223791 | 90° JIS Female 60° Cone - B 8363 (Type C).....       | 82 |
| H122381Z | JIS Female 60° Seat Flare - B 8363 (Type F).....     | 83 |
| H122384Z | 45° JIS Female 60° Seat Flare - B 8363 (Type F)..... | 83 |
| H122389Z | 90° JIS Female 60° Seat Flare - B 8363 (Type F)..... | 83 |

## // KOMATSU INSERTS

|          |                                           |    |
|----------|-------------------------------------------|----|
| H1224011 | Komatsu Female.....                       | 84 |
| H1244110 | Komatsu Flange.....                       | 84 |
| H1244140 | 45° Komatsu Flange - Solid one piece..... | 84 |
| H1244190 | 90° Komatsu Flange - Solid one piece..... | 85 |

## // SAE FLANGES

|          |                                                                      |    |
|----------|----------------------------------------------------------------------|----|
| H1243310 | Flange SAE 3000 psi J518 Code 61 - SFL.....                          | 86 |
| H1243320 | 22° Flange SAE 3000 psi J518 Code 61 - SFL 22 - Solid one piece..... | 86 |
| H1243330 | 30° Flange SAE 3000 psi J518 Code 61 - SFL 30 - Solid one piece..... | 87 |
| H1243340 | 45° Flange SAE 3000 psi J518 Code 61 - SFL 45 - Solid one piece..... | 87 |
| H1243360 | 60° Flange SAE 3000 psi J518 Code 61 - SFL 60 - Solid one piece..... | 88 |
| H1243390 | 90° Flange SAE 3000 psi J518 Code 61 - SFL 90 - Solid one piece..... | 88 |
| H1243610 | Flange SAE 6000 psi J518 Code 62 - SFS.....                          | 89 |
| H1243640 | 45° Flange SAE 6000 psi J518 Code 62 - SFS 45 - Solid one piece..... | 89 |
| H1243690 | 90° Flange SAE 6000 psi J518 Code 62 - SFS 90 - Solid one piece..... | 90 |
| H10W3320 | Split Flange Clamp 3000 psi J518 Code 61 - FHL.....                  | 90 |
| H10W3620 | Split Flange Clamp 6000 psi J518 Code 62 - FHS.....                  | 91 |
| H10W3310 | 4 Hole Flange Clamp 3000 psi J518 Code 61 - VHL.....                 | 91 |
| H10W3610 | 4 Hole Flange Clamp 6000 psi J518 Code 62 - VHS.....                 | 91 |

## // NEW POWERTRAK FITTINGS

## // BSP INSERTS

|          |                                                                       |    |
|----------|-----------------------------------------------------------------------|----|
| H1310510 | BSPP Male 60° Flare - AGR.....                                        | 93 |
| H1320812 | BSPP Female 60° Cone with O-Ring - DKOR.....                          | 93 |
| H1320842 | 45° BSPP Female 60° Cone with O-Ring - DKOR 45 - Solid one piece..... | 93 |
| H1320892 | 90° BSPP Female 60° Cone with O-Ring - DKOR 90 - Solid one piece..... | 94 |

## // DIN METRIC INSERTS

|          |                                                                                                   |    |
|----------|---------------------------------------------------------------------------------------------------|----|
| H1311210 | Metric Male 24° Seat - DIN 3853 - Heavy Series - CES.....                                         | 95 |
| H1321613 | Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS.....                          | 95 |
| H1321643 | 45° Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS 45 - Solid one piece..... | 96 |
| H1321693 | 90° Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS 90 - Solid one piece..... | 96 |

## // JIC 37° INSERTS

|          |                                                                        |    |
|----------|------------------------------------------------------------------------|----|
| H1312510 | JIC Male 37° Cone - AGJ.....                                           | 97 |
| H1322512 | JIC Female 37° Seat - DKJ.....                                         | 97 |
| H1322542 | 45° JIC Female 37° Seat - Medium Drop - DKJ 45M - Solid one piece..... | 97 |
| H1322592 | 90° JIC Female 37° Seat - Medium Drop - DKJ 90M - Solid one piece..... | 98 |

**// NPTF INSERTS**

|          |                          |    |
|----------|--------------------------|----|
| H1312810 | NPTF Male 60° Seat - AGN | 99 |
|----------|--------------------------|----|

**// ORFS INSERTS**

|          |                                                               |     |
|----------|---------------------------------------------------------------|-----|
| H1312410 | ORFS Male                                                     | 100 |
| H1322411 | ORFS Female with Stem Hexagon                                 | 100 |
| H1322441 | 45° ORFS Female - Medium Drop - DK ORFS 45M - Solid one piece | 100 |
| H1322491 | 90° ORFS Female - Medium Drop - DK ORFS 90M - Solid one piece | 101 |

**// SAE FLANGES**

|          |                                                                 |     |
|----------|-----------------------------------------------------------------|-----|
| H1343310 | Flange SAE 3000 psi J518 Code 61 - SFL                          | 102 |
| H1343340 | 45° Flange SAE 3000 psi J518 Code 61 - SFL 45 - Solid one piece | 102 |
| H1343390 | 90° Flange SAE 3000 psi J518 Code 61 - SFL 90 - Solid one piece | 103 |
| H1343610 | Flange SAE 6000 psi J518 Code 62 - SFS                          | 103 |
| H1343640 | 45° Flange SAE 6000 psi J518 Code 62 - SFS 45 - Solid one piece | 104 |
| H1343690 | 90° Flange SAE 6000 psi J518 Code 62 - SFS 90 - Solid one piece | 104 |

**// SUPERCAT FLANGES**

|          |                                       |     |
|----------|---------------------------------------|-----|
| H1343910 | Flange SUPERCAT                       | 105 |
| H1343940 | 45° Flange SUPERCAT - Solid one piece | 105 |
| H1343990 | 90° Flange SUPERCAT - Solid one piece | 105 |

**// FERRULES**

|          |                                                 |     |
|----------|-------------------------------------------------|-----|
| H1300NS4 | Multispiral No-Skive Ferrule for 4 Spiral Hoses | 106 |
| H1300NS6 | Multispiral No-Skive Ferrule for 6 Spiral Hoses | 106 |

**// WATERBLAST FITTINGS****// FERRULES**

|         |              |     |
|---------|--------------|-----|
| D990000 | - Waterblast | 108 |
| D980000 | - Waterblast | 108 |

**// INSERTS**

|           |                                                                                                      |     |
|-----------|------------------------------------------------------------------------------------------------------|-----|
| D99001-WB | BSP Female 60° with O-Ring                                                                           | 109 |
| D99010-WB | BSP Female 60° without O-Ring                                                                        | 109 |
| D99061-WB | UNF Type "M Swivel"                                                                                  | 109 |
| D99179-WB | Metric Female 24° Cone with O-Ring - Heavy Series - DIN 3865 - DKOS - - Slip on Nut with Relief Bore | 110 |
| D99170-WB | NPTF Male 60° Seat - AGN                                                                             | 110 |

**// INTERLOCK FITTINGS****// FERRULES**

|          |                                                                       |     |
|----------|-----------------------------------------------------------------------|-----|
| H1400200 | Interlock Dual Skive Ferrule for 4 Spiral Hoses                       | 112 |
| H1400301 | Interlock Dual Skive Ferrule for 4-6 Spiral Hoses                     | 112 |
| H1T00600 | Interlock Dual Skive Ferrule for Alfabiotech/Powerflexbio 3K and AT8K | 112 |

**// HOSE MENDER**

|          |             |     |
|----------|-------------|-----|
| H14C5610 | Hose Mender | 113 |
|----------|-------------|-----|

**// BSP INSERTS**

|          |                                                                  |     |
|----------|------------------------------------------------------------------|-----|
| H1410510 | BSPP Male 60° Flare - AGR                                        | 114 |
| H1410710 | BSPT Male - AGR K                                                | 114 |
| H1420812 | BSPP Female 60° Cone with O-Ring - DKOR                          | 114 |
| H1420842 | 45° BSPP Female 60° Cone with O-Ring - DKOR 45 - Solid one piece | 115 |
| H1420892 | 90° BSPP Female 60° Cone with O-Ring - DKOR 90 - Solid one piece | 115 |

**// DIN METRIC INSERTS**

|          |                                                                                              |     |
|----------|----------------------------------------------------------------------------------------------|-----|
| H1411210 | Metric Male 24° Seat - DIN 3853 - Heavy Series - CES                                         | 116 |
| H1421613 | Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS                          | 116 |
| H1421643 | 45° Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS - Solid one piece    | 117 |
| H1421693 | 90° Metric Female 24° Cone with O-Ring - DIN 3865 - Heavy Series - DKOS 90 - Solid one piece | 117 |

**// JIC 37° INSERTS**

|          |                                                    |     |
|----------|----------------------------------------------------|-----|
| H1412510 | JIC Male 37° Cone - AGJ                            | 118 |
| H1422512 | JIC Female 37° Seat - DKJ                          | 118 |
| H1422542 | 45° JIC Female 37° Seat - DKJ 45 - Solid one piece | 119 |
| H1422592 | 90° JIC Female 37° Seat - DKJ 90 - Solid one piece | 119 |

**// NPTF INSERTS**

|          |                          |     |
|----------|--------------------------|-----|
| H1412810 | NPTF Male 60° Seat - AGN | 120 |
|----------|--------------------------|-----|

## // ORFS INSERTS

|          |                                                     |     |
|----------|-----------------------------------------------------|-----|
| H1412410 | ORFS Male.....                                      | 121 |
| H1422411 | ORFS Female with Stem Hexagon.....                  | 121 |
| H1422441 | 45° ORFS Female - DK ORFS 45 - Solid one piece..... | 121 |
| H1422491 | 90° ORFS Female - DK ORFS 90 - Solid one piece..... | 122 |

## // SAE FLANGES

|          |                                                                                        |     |
|----------|----------------------------------------------------------------------------------------|-----|
| H1443310 | Flange SAE 3000 psi J518 Code 61 - SFL.....                                            | 123 |
| H1443340 | 45° Flange SAE 3000 psi J518 Code 61 - SFL 45 - Solid one piece.....                   | 123 |
| H1443390 | 90° Flange SAE 3000 psi J518 Code 61 - SFL 90 - Solid one piece.....                   | 123 |
| H1443610 | Flange SAE 6000 psi J518 Code 62 - SFS.....                                            | 124 |
| H1443640 | 45° Flange SAE 6000 psi J518 Code 62 - SFS 45 - Solid one piece.....                   | 124 |
| H1443690 | 90° Flange SAE 6000 psi J518 Code 62 - SFS 90 - Solid one piece.....                   | 125 |
| H1T43610 | Flange SAE 6000 psi J518 Code 62 - SFS - Special version.....                          | 125 |
| H1T43640 | 45° Flange SAE 6000 psi J518 Code 62 - SFS 45 - Solid one piece - Special version..... | 125 |
| H1T43690 | 90° Flange SAE 6000 psi J518 Code 62 - SFS 90 - Solid one piece - Special version..... | 126 |

## // SUPERCAT FLANGES

|          |                                            |     |
|----------|--------------------------------------------|-----|
| H1443910 | Flange SUPERCAT.....                       | 127 |
| H1443940 | 45° Flange SUPERCAT - Solid one piece..... | 127 |
| H1443990 | 90° Flange SUPERCAT - Solid one piece..... | 127 |

## // HAMMER UNION

|          |                                                                                        |     |
|----------|----------------------------------------------------------------------------------------|-----|
| H1T13F13 | Male Hammer Union Fig. 1502 Integral Fitting with Lug Nut - Special version.....       | 128 |
| H1T23F10 | Female Hammer Union Fig. 1502 Integral Fitting with Rubber Ring - Special version..... | 128 |

## // BSP ADAPTERS

## // MALE UNION

|            |                                    |     |
|------------|------------------------------------|-----|
| R1A05M105M | Straight union BSP 60° Male.....   | 130 |
| R1A05M905M | 90° union BSP 60° Male.....        | 131 |
| R1A05MT05M | Branch Tee union BSP 60° Male..... | 131 |
| R1A05MX05M | Cross union BSP 60° Male.....      | 132 |

## // MALE/FEMALE UNION

|            |                                                   |     |
|------------|---------------------------------------------------|-----|
| R1A05M1051 | Straight union BSP 60° Male - Female.....         | 133 |
| R1A05M4051 | 45° union BSP 60° Male - Female.....              | 133 |
| R1A05M9051 | 90° union BSP 60° Male - Female.....              | 134 |
| R1A05M90WB | 90° union BSP 60° Male - Female Tube.....         | 134 |
| R1A05MT051 | Branch Tee union BSP 60° Male - Female.....       | 135 |
| R1A05ML051 | Run Tee union BSP 60° Male - Female.....          | 135 |
| R1A05M106A | Straight union - BSP 60° Male - Solid Female..... | 135 |

## // FEMALE UNION

|            |                                        |     |
|------------|----------------------------------------|-----|
| R1A0511051 | Straight union BSP 60° Female.....     | 137 |
| R1A0519051 | 90° union BSP 60° Female.....          | 137 |
| R1A051T051 | Branch Tee union BSP 60° Female.....   | 137 |
| R1A06A106A | Straight union BSP Fixed Female.....   | 138 |
| R1A06A906A | 90° union BSP 60° Solid Female.....    | 138 |
| R1A06AT06A | Branch Tee union BSP Fixed Female..... | 139 |

## // BULKHEAD

|            |                                           |     |
|------------|-------------------------------------------|-----|
| R1A05M105T | Straight union BSP 60° Bulkhead.....      | 140 |
| R1A05M905T | 90° elbow connector BSP 60° Bulkhead..... | 140 |
| R1A05MT05T | Branch Tee union BSP 60° Bulkhead.....    | 141 |
| R1A05ML05T | Run Tee union BSP 60° Bulkhead.....       | 141 |

## // BSPP-BSPT

|            |                                                                                                                |     |
|------------|----------------------------------------------------------------------------------------------------------------|-----|
| R1A05M106N | Straight connector - BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....                    | 142 |
| R1A05M406N | 45° adjustable elbow connector - BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....        | 143 |
| R1A05M906N | 90° adjustable elbow connector - BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....        | 143 |
| R1A05MT06N | Branch Tee adjustable elbow connector - BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring..... | 144 |
| R1A05ML06N | Run Tee adjustable elbow connector - BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....    | 144 |
| R1A05M107M | Straight connector - BSP 60° Male - BSPT Male.....                                                             | 145 |

## // METRIC

|            |                                                      |     |
|------------|------------------------------------------------------|-----|
| R1A05M152Q | Straight connector - BSP 60° Male - Metric Male..... | 146 |
|------------|------------------------------------------------------|-----|

## // NPTF

|            |                                                   |     |
|------------|---------------------------------------------------|-----|
| R1A05M128M | Straight connector - BSP 60° Male - NPT Male..... | 147 |
|------------|---------------------------------------------------|-----|

**// FLANGES**

|            |                                                              |     |
|------------|--------------------------------------------------------------|-----|
| R1A05M133W | Straight flange SAE J518 code 61 - BSP - Low pressure        | 148 |
| R1A05M136W | Straight flange SAE J518 code 62 - BSP - High pressure       | 148 |
| R1A05M933W | 90° flange SAE J518 code 61 - BSP - Low pressure             | 149 |
| R1A05M936W | 90° flange SAE J518 code 62 - BSP - High pressure            | 149 |
| R1A05M9334 | 90° adjustable flange SAE J518 code 61 - BSP - Low pressure  | 150 |
| R1A05M9364 | 90° adjustable flange SAE J518 code 62 - BSP - High pressure | 150 |

**// PLUG**

|            |                    |     |
|------------|--------------------|-----|
| R1A0531000 | Cap BSP 60° Female | 151 |
| R1A05M1000 | Plug BSP 60° Male  | 151 |

**// JIC 37° ADAPTERS****// MALE UNION**

|            |                           |     |
|------------|---------------------------|-----|
| R1A25M125M | Straight union JIC Male   | 153 |
| R1A25M925M | 90° union JIC Male        | 153 |
| R1A25MT25M | Branch Tee union JIC Male | 154 |
| R1A25MX25M | Cross union JIC Male      | 154 |

**// MALE/FEMALE UNION**

|            |                                     |     |
|------------|-------------------------------------|-----|
| R1A253125M | Straight reducing JIC Female - Male | 155 |
| R1A25M4251 | 45° union JIC Male - Female         | 155 |
| R1A25M9251 | 90° union JIC Male - Female         | 156 |
| R1A25MT251 | Branch Tee union JIC Male - Female  | 156 |
| R1A25ML251 | Run Tee union JIC Male - Female     | 157 |

**// BULKHEAD**

|            |                               |     |
|------------|-------------------------------|-----|
| R1A25M125T | Straight union JIC Bulkhead   | 158 |
| R1A25M425T | 45° union JIC Bulkhead        | 158 |
| R1A25M925T | 90° union JIC Bulkhead        | 159 |
| R1A25MT25T | Branch Tee union JIC Bulkhead | 159 |
| R1A25ML25T | Run Tee union JIC Bulkhead    | 160 |

**// BSPP-BSPT**

|            |                                                                                                       |     |
|------------|-------------------------------------------------------------------------------------------------------|-----|
| R1A25M105M | Straight connector - JIC Male - BSP 60° Male                                                          | 161 |
| R1A25M106I | Straight connector - JIC Male - BSPP cylindric Male with elastomer                                    | 162 |
| R1A25M106H | Long connector - JIC Male - BSPP cylindric Male with elastomer                                        | 163 |
| R1A25M406N | 45° adjustable elbow connector - JIC Male - BSPP cylindric Male with O-Ring and retaining ring        | 164 |
| R1A25M906N | 90° adjustable elbow connector - JIC Male - BSPP cylindric Male with O-Ring and retaining ring        | 165 |
| R1A25M906Y | 90° adjustable long elbow connector - JIC Male - BSPP cylindric Male with O-Ring and retaining ring   | 166 |
| R1A25MT06N | Branch Tee adjustable elbow connector - JIC Male - BSPP cylindric Male with O-Ring and retaining ring | 167 |
| R1A25ML06N | Run Tee adjustable elbow connector - JIC Male - BSPP cylindric Male with O-Ring and retaining ring    | 168 |
| R1A25M107M | Straight connector - JIC Male - BSPT Male                                                             | 169 |
| R1A25M907M | 90° elbow connector - JIC Male - BSPT Male                                                            | 170 |

**// METRIC**

|            |                                                                                               |     |
|------------|-----------------------------------------------------------------------------------------------|-----|
| R1A2511525 | Straight connector - JIC Female - Metric Male with O-Ring                                     | 171 |
| R1A25M1525 | Straight connector - JIC Male - Metric Male with O-Ring                                       | 171 |
| R1A25M152I | Straight connector - JIC Male - Metric Male with elastomer                                    | 172 |
| R1A25M152H | Long connector - JIC Male - Metric Male with elastomer                                        | 172 |
| R1A25M952Q | 90° adjustable elbow connector - JIC Male - Metric Male with O-Ring and retaining ring        | 173 |
| R1A25M952Y | 90° adjustable long elbow connector - JIC Male - Metric Male with O-Ring and retaining ring   | 173 |
| R1A25MT52Q | Branch Tee adjustable elbow connector - JIC Male - Metric Male with O-Ring and retaining ring | 174 |
| R1A25ML52Q | Run Tee adjustable elbow connector - JIC Male - Metric Male with O-Ring and retaining ring    | 174 |

**// SAE UNF**

|            |                                                                                |     |
|------------|--------------------------------------------------------------------------------|-----|
| R1A25M1305 | Straight connector - JIC Male - SAE UNF/UN Male with O-Ring                    | 175 |
| R1A25M130J | Long connector - JIC Male - SAE UNF/UN Male with O-Ring                        | 176 |
| R1A2511305 | Straight connector - JIC Female - SAE UNF/UN Male with O-Ring                  | 176 |
| R1A25M4305 | 45° adjustable elbow connector - JIC Male - SAE UNF/UN Male with O-Ring        | 177 |
| R1A25M9305 | 90° adjustable elbow connector - JIC Male - SAE UNF/UN Male with O-Ring        | 178 |
| R1A25M930J | 90° adjustable long elbow connector - JIC Male - SAE UNF/UN Male with O-Ring   | 179 |
| R1A25MT305 | Branch Tee adjustable elbow connector - JIC Male - SAE UNF/UN Male with O-Ring | 180 |
| R1A25ML305 | Run Tee adjustable elbow connector - JIC Male - SAE UNF/UN Male with O-Ring    | 181 |

**// NPTF**

|            |                                             |     |
|------------|---------------------------------------------|-----|
| R1A25M128M | Straight connector - JIC - NPTF Male        | 182 |
| R1A251128M | Straight connector - JIC Female - NPTF Male | 183 |
| R1A25M428M | 45° elbow connector - JIC - NPTF Male       | 183 |
| R1A25M928M | 90° elbow connector - JIC - NPTF Male       | 184 |

## // FLANGES

|            |                                                                         |     |
|------------|-------------------------------------------------------------------------|-----|
| R1A25M133W | Straight flange SAE J518 code 61 - JIC - Low pressure.....              | 185 |
| R1A25M136W | Straight flange SAE J518 code 62 - JIC - High pressure.....             | 185 |
| R1A25M933W | 90° flange SAE J518 code 61 - JIC - Low pressure.....                   | 186 |
| R1A25M936W | 90° flange SAE J518 code 62 - JIC - High pressure.....                  | 186 |
| R1A25M9334 | 90° adjustable split flange SAE J518 code 61 - JIC - Low pressure.....  | 187 |
| R1A25M9364 | 90° adjustable split flange SAE J518 code 62 - JIC - High pressure..... | 187 |

## // ACCESSORIES

|            |                 |     |
|------------|-----------------|-----|
| RXA25D0000 | Nut JIC.....    | 188 |
| R1A25R0000 | Sleeve JIC..... | 188 |

## // PLUG

|            |                     |     |
|------------|---------------------|-----|
| R1A2531000 | Cap JIC Female..... | 189 |
| R1A25M1000 | Plug JIC Male.....  | 189 |

## // ORFS ADAPTERS

## // MALE UNION

|            |                                 |     |
|------------|---------------------------------|-----|
| R1A2451245 | Straight union ORFS Male.....   | 191 |
| R1A2459245 | 90° union ORFS Male.....        | 191 |
| R1A245T245 | Branch Tee union ORFS Male..... | 192 |
| R1A245X245 | Cross union ORFS Male.....      | 192 |

## // MALE/FEMALE UNION

|            |                                          |     |
|------------|------------------------------------------|-----|
| R1A2431245 | Straight union ORFS Female - Male.....   | 193 |
| R1A2454241 | 45° union ORFS Male - Female.....        | 193 |
| R1A2459241 | 90° union ORFS Male - Female.....        | 194 |
| R1A245T241 | Branch Tee union ORFS Male - Female..... | 194 |
| R1A245L241 | Run Tee union ORFS Male - Female.....    | 195 |

## // BULKHEAD

|            |                                     |     |
|------------|-------------------------------------|-----|
| R1A245124T | Straight union ORFS Bulkhead.....   | 196 |
| R1A245424T | 45° union ORFS Bulkhead.....        | 196 |
| R1A245924T | 90° union ORFS Bulkhead.....        | 197 |
| R1A245T24T | Branch Tee union ORFS Bulkhead..... | 197 |
| R1A245L24T | Run Tee union ORFS Bulkhead.....    | 198 |

## // BSPP-BSPT

|            |                                                                                                             |     |
|------------|-------------------------------------------------------------------------------------------------------------|-----|
| R1A241106I | Straight connector - ORFS Female - BSPP Male with elastomer.....                                            | 199 |
| R1A245106I | Straight connector - ORFS Male - BSPP cylindric Male with elastomer.....                                    | 200 |
| R1A245406N | 45° adjustable elbow connector - ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....        | 200 |
| R1A245906N | 90° adjustable elbow connector - ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....        | 201 |
| R1A245906Y | 90° adjustable long elbow connector - ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....   | 201 |
| R1A245T06N | Branch Tee adjustable elbow connector - ORFS Male - BSPP cylindric Male with O-Ring and retaining ring..... | 202 |
| R1A245L06N | Run Tee adjustable elbow connector - ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....    | 202 |

## // METRIC

|            |                                                                                                     |     |
|------------|-----------------------------------------------------------------------------------------------------|-----|
| R1A2451525 | Straight connector - ORFS Male - Metric Male with O-Ring.....                                       | 203 |
| R1A245152I | Straight connector - ORFS Male - Metric Male with elastomer.....                                    | 204 |
| R1A245452Q | 45° adjustable elbow connector - ORFS Male - Metric Male with O-Ring and retaining ring.....        | 204 |
| R1A245952Q | 90° adjustable elbow connector - ORFS Male - Metric Male with O-Ring and retaining ring.....        | 205 |
| R1A245952Y | 90° adjustable long elbow connector - ORFS Male - Metric Male with O-Ring and retaining ring.....   | 205 |
| R1A245T52Q | Branch Tee adjustable elbow connector - ORFS Male - Metric Male with O-Ring and retaining ring..... | 206 |
| R1A245L52Q | Run Tee adjustable elbow connector - ORFS Male - Metric Male with O-Ring and retaining ring.....    | 206 |

## // SAE UNF

|            |                                                                                      |     |
|------------|--------------------------------------------------------------------------------------|-----|
| R1A2451305 | Straight connector - ORFS Male - SAE UNF/UN Male with O-Ring.....                    | 207 |
| R1A245130J | Long connector - ORFS Male - SAE UNF/UN Male with O-Ring.....                        | 207 |
| R1A2411305 | Straight connector - ORFS Female - SAE UNF/UN Male with O-Ring.....                  | 208 |
| R1A2454305 | 45° adjustable elbow connector - ORFS Male - SAE UNF/UN Male with O-Ring.....        | 208 |
| R1A2459305 | 90° adjustable elbow connector - ORFS Male - SAE UNF/UN Male with O-Ring.....        | 209 |
| R1A245930J | 90° adjustable long elbow connector - ORFS Male - SAE UNF/UN Male with O-Ring.....   | 209 |
| R1A245T305 | Branch Tee adjustable elbow connector - ORFS Male - SAE UNF/UN Male with O-Ring..... | 210 |
| R1A245L305 | Run Tee adjustable elbow connector - ORFS Male - SAE UNF/UN Male with O-Ring.....    | 210 |

## // FLANGES

|            |                                                                   |     |
|------------|-------------------------------------------------------------------|-----|
| R1A245133W | Straight flange SAE J518 code 61 - ORFS Male - Low pressure.....  | 211 |
| R1A245136W | Straight flange SAE J518 code 62 - ORFS Male - High pressure..... | 211 |
| R1A245933W | 90° flange SAE J518 code 61 - ORFS Male - Low pressure.....       | 212 |
| R1A245936W | 90° flange SAE J518 code 62 - ORFS Male - High pressure.....      | 212 |

|            |                                                                         |     |
|------------|-------------------------------------------------------------------------|-----|
| R1A2459334 | 90° adjustable flange SAE J518 code 61 - ORFS Male - Low pressure.....  | 213 |
| R1A2459364 | 90° adjustable flange SAE J518 code 62 - ORFS Male - High pressure..... | 213 |

**// ACCESSORIES**

|          |               |     |
|----------|---------------|-----|
| HX0D2403 | Nut ORFS..... | 214 |
|----------|---------------|-----|

**// PLUG**

|            |                      |     |
|------------|----------------------|-----|
| R1A2431000 | Cap ORFS Female..... | 215 |
| R1A2451000 | Plug ORFS Male.....  | 215 |

**// DIN 24° ADAPTERS****// GE-R-ED**

|            |                                                                                                      |     |
|------------|------------------------------------------------------------------------------------------------------|-----|
| V1A11M106I | Straight connector - DIN 24° Male - BSPP cylindric Male with elastomer - Light Series - GE-R-ED..... | 218 |
| V1A12M106I | Straight connector - DIN 24° Male - BSPP cylindric Male with elastomer - Heavy Series - GE-R-ED..... | 219 |

**// GE-R**

|            |                                                                                         |     |
|------------|-----------------------------------------------------------------------------------------|-----|
| V1A11M106M | Straight connector - DIN 24° Male - BSPP cylindric flat Male - Light Series - GE-R..... | 220 |
| V1A12M106M | Straight connector - DIN 24° Male - BSPP cylindric flat Male - Heavy Series - GE-R..... | 221 |

**// GE-R 60°**

|            |                                                                                        |     |
|------------|----------------------------------------------------------------------------------------|-----|
| V1A11M105M | Straight connector - DIN 24° Male - BSPP cylindric Male 60° - Light Series - GE-R..... | 222 |
| V1A12M105M | Straight connector - DIN 24° Male - BSPP cylindric Male 60° - Heavy Series - GE-R..... | 222 |

**// GE-KR**

|            |                                                                                                |     |
|------------|------------------------------------------------------------------------------------------------|-----|
| V1A32M107M | Straight connector - DIN 24° Male - BSPT cylindric flat Male - Extra Light Series - GE-RK..... | 223 |
| V1A11M107M | Straight connector - DIN 24° Male - BSPT cylindric flat Male - Light Series - GE-RK.....       | 223 |
| V1A12M107M | Straight connector - DIN 24° Male - BSPT cylindric flat Male - Heavy Series - GE-RK.....       | 224 |

**// GE-NPT**

|            |                                                                                  |     |
|------------|----------------------------------------------------------------------------------|-----|
| V1A32M128M | Straight connector - DIN 24° Male - NPTF Male - Extra Light Series - GE-NPT..... | 225 |
| V1A11M128M | Straight connector - DIN 24° Male - NPTF Male - Light Series - GE-NPT.....       | 225 |
| V1A12M128M | Straight connector - DIN 24° Male - NPTF Male - Heavy Series - GE-NPT.....       | 226 |

**// GE-M-ED**

|            |                                                                                                        |     |
|------------|--------------------------------------------------------------------------------------------------------|-----|
| V1A11M152I | Straight connector - DIN 24° Male - Metric cylindric Male with elastomer - Light Series - GE-M-ED..... | 227 |
| V1A12M152I | Straight connector - DIN 24° Male - Metric cylindric Male with elastomer - Heavy Series - GE-M-ED..... | 228 |

**// GE-M-OR**

|            |                                                                                                   |     |
|------------|---------------------------------------------------------------------------------------------------|-----|
| V1A11M152S | Straight connector - DIN 24° Male Metric cylindric Male with O-ring - Light Series - GE-M-OR..... | 229 |
|------------|---------------------------------------------------------------------------------------------------|-----|

**// GE-M**

|            |                                                                                      |     |
|------------|--------------------------------------------------------------------------------------|-----|
| V1A11M150M | Straight connector - DIN 24° Male - Metric cylindric Male - Light Series - GE-M..... | 230 |
| V1A12M150M | Straight connector - DIN 24° Male - Metric cylindric Male - Heavy Series - GE-M..... | 230 |

**// GE-MK**

|            |                                                                                         |     |
|------------|-----------------------------------------------------------------------------------------|-----|
| V1A32M162M | Straight connector - DIN 24° Male - Metric conic Male - Extra Light Series - GE-MK..... | 231 |
| V1A11M162M | Straight connector - DIN 24° Male - Metric conic Male - Light Series - GE-MK.....       | 231 |

**// GE-UNF**

|            |                                                                                              |     |
|------------|----------------------------------------------------------------------------------------------|-----|
| V1A11M130S | Straight connector - DIN 24° Male - SAE UNF/UN Male with O-Ring - Light Series - GE-UNF..... | 232 |
| V1A12M130S | Straight connector - DIN 24° Male - SAE UNF/UN Male with O-Ring - Heavy Series - GE-UNF..... | 232 |

**// WE-RK**

|            |                                                                            |     |
|------------|----------------------------------------------------------------------------|-----|
| V1A32M907M | 90° connector - DIN 24° Male - BSPT Male - Extra Light Series - WE-RK..... | 233 |
| V1A11M907M | 90° connector - DIN 24° Male - BSPT Male - Light Series - WE-RK.....       | 233 |
| V1A12M907M | 90° connector - DIN 24° Male - BSPT Male - Heavy Series - WE-RK.....       | 234 |

**// WE-NPT**

|            |                                                                             |     |
|------------|-----------------------------------------------------------------------------|-----|
| V1A32M928M | 90° connector - DIN 24° Male - NPTF Male - Extra Light Series - WE-NPT..... | 235 |
| V1A11M928M | 90° connector - DIN 24° Male - NPTF Male - Light Series - WE-NPT.....       | 235 |

**// WE-MK**

|            |                                                                                          |     |
|------------|------------------------------------------------------------------------------------------|-----|
| V1A32M962M | 90° elbow connector - DIN 24° Male - Metric conic Male - Extra Light Series - WE-MK..... | 236 |
| V1A11M962M | 90° elbow connector - DIN 24° Male - Metric conic Male - Light Series - WE-MK.....       | 236 |

**// TE-RK**

|            |                                                                                   |     |
|------------|-----------------------------------------------------------------------------------|-----|
| V1A32MT07M | Branch Tee connector - DIN 24° Male - BSPT Male - Extra Light Series - TE-RK..... | 237 |
| V1A11MT07M | Branch Tee connector - DIN 24° Male - BSPT Male - Light Series - TE-RK.....       | 237 |
| V1A12MT07M | Branch Tee connector - DIN 24° Male - BSPT Male - Heavy Series - TE-RK.....       | 237 |

**// TE-MK**

|            |                                                                                           |     |
|------------|-------------------------------------------------------------------------------------------|-----|
| V1A12MT62M | Branch Tee connector - DIN 24° Male - Metric conic Male - Extra Light Series - TE-MK..... | 238 |
|------------|-------------------------------------------------------------------------------------------|-----|

## // LE-RK

|            |                                                                     |     |
|------------|---------------------------------------------------------------------|-----|
| V1A11ML07M | Run Tee connector - DIN 24° Male - BSPT Male - Light Series - LE-RK | 239 |
|------------|---------------------------------------------------------------------|-----|

## // G-GR

|            |                                                      |     |
|------------|------------------------------------------------------|-----|
| V1A32M132M | Straight union DIN 24° Male - Extra Light Series - G | 240 |
| V1A11M111M | Straight union DIN 24° Male - Light Series - G & GR  | 240 |
| V1A12M112M | Straight union DIN 24° Male - Heavy Series - GR      | 241 |

## // W - 90°

|            |                                                 |     |
|------------|-------------------------------------------------|-----|
| V1A32M932M | 90° union DIN 24° Male - Extra Light Series - W | 242 |
| V1A11M911M | 90° union DIN 24° Male - Light Series - W       | 242 |
| V1A12M912M | 90° union DIN 24° Male - Heavy Series - W       | 243 |

## // T - BRANCH TEE

|            |                                                        |     |
|------------|--------------------------------------------------------|-----|
| V1A32MT32M | Branch Tee union DIN 24° Male - Extra Light Series - T | 244 |
| V1A11MT11M | Branch Tee union DIN 24° Male - Light Series - T       | 244 |
| V1A12MT12M | Branch Tee union DIN 24° Male - Heavy Series - T       | 245 |

## // K - CROSS

|            |                                             |     |
|------------|---------------------------------------------|-----|
| V1A11MX11M | Cross union DIN 24° Male - Light Series - K | 246 |
| V1A12MX12M | Cross union DIN 24° Male - Heavy Series - K | 246 |

## // WSV

|            |                                                 |     |
|------------|-------------------------------------------------|-----|
| V1A11T911M | 90° union DIN 24° Bulkhead - Light Series - WSV | 247 |
| V1A12T912M | 90° union DIN 24° Bulkhead - Heavy Series - WSV | 247 |

## // DKO/DKO

|            |                                                        |     |
|------------|--------------------------------------------------------|-----|
| V1A1521152 | Straight union DIN 24° Female - Light Series - DKO/DKO | 248 |
| V1A1621162 | Straight union DIN 24° Female - Heavy Series - DKO/DKO | 248 |

## // EVW-DKO

|            |                                                                                             |     |
|------------|---------------------------------------------------------------------------------------------|-----|
| V1A11M9152 | 90° adjustable elbow connector - DIN 24° Male - Female with O-Ring - Light series - EVW/DKO | 249 |
|------------|---------------------------------------------------------------------------------------------|-----|

## // EVW

|            |                                                                                            |     |
|------------|--------------------------------------------------------------------------------------------|-----|
| V1A11M4152 | 45° adjustable elbow connector - DIN 24° Male - Female with O-Ring - Light Series - EV/DKO | 250 |
| V1A12M4162 | 45° adjustable elbow connector - DIN 24° Male - Female with O-Ring - Heavy Series - EV/DKO | 250 |

## // EVT-DKO

|            |                                                                                                    |     |
|------------|----------------------------------------------------------------------------------------------------|-----|
| V1A11MT152 | Branch Tee adjustable elbow connector - DIN 24° Male - Female with O-Ring - Light Series - EVT/DKO | 251 |
| V1A12MT162 | Branch Tee adjustable elbow connector - DIN 24° Male - Female with O-Ring - Heavy Series - EVT/DKO | 251 |

## // ELV-DKO

|            |                                                                                                 |     |
|------------|-------------------------------------------------------------------------------------------------|-----|
| V1A11ML152 | Run Tee adjustable elbow connector - DIN 24° Male - Female with O-Ring - Light Series - EVL/DKO | 252 |
| V1A12ML162 | Run Tee adjustable elbow connector - DIN 24° Male - Female with O-Ring - Heavy Series - EVL/DKO | 252 |

## // EVGE-R-ED-DKO

|            |                                                                                                                     |     |
|------------|---------------------------------------------------------------------------------------------------------------------|-----|
| V1A152106I | Straight connector - DIN 24° Female with O-Ring - BSPP cylindric Male with elastomer - Light Series - EVGE-R-ED/DKO | 253 |
| V1A162106I | Straight connector - DIN 24° Female with O-Ring - BSPP cylindric Male with elastomer - Heavy Series - EVGE-R-ED/DKO | 253 |

## // KOR-DKO

|            |                                                                      |     |
|------------|----------------------------------------------------------------------|-----|
| V1A11M1152 | Reducers DIN 24° with O-Ring - Light Series - KOR/DKO                | 254 |
| V1A11M1162 | Reducers DIN 24° with O-Ring - Light Series - Heavy Series - KOR/DKO | 255 |
| V1A12M1162 | Reducers DIN 24° with O-Ring - Heavy Series - KOR/DKO                | 255 |

## // WEE-R

|            |                                                                                                                           |     |
|------------|---------------------------------------------------------------------------------------------------------------------------|-----|
| V1A11M906N | 90° adjustable elbow connector - DIN 24° Male - BSPP cylindric Male with O-Ring and retaining ring - Light Series - WEE-R | 256 |
| V1A12M906N | 90° adjustable elbow connector - DIN 24° Male - BSPP cylindric Male with O-Ring and retaining ring - Heavy Series - WEE-R | 256 |

## // AS

|            |                                                         |     |
|------------|---------------------------------------------------------|-----|
| V1A11M100S | Butt Weld straight coupling DIN 24° - Light Series - AS | 257 |
| V1A12M100S | Butt Weld straight coupling DIN 24° - Heavy Series - AS | 257 |

## // ESV

|            |                                                               |     |
|------------|---------------------------------------------------------------|-----|
| V1A11M111S | Butt Weld long straight coupling DIN 24° - Light Series - ESV | 258 |
| V1A12M112S | Butt Weld long straight coupling DIN 24° - Heavy Series - ESV | 258 |

## // SV

|            |                                                     |     |
|------------|-----------------------------------------------------|-----|
| V1A11T111M | Straight union DIN 24° Bulkhead - Light Series - SV | 259 |
|------------|-----------------------------------------------------|-----|

## // SKO

|            |                                                       |     |
|------------|-------------------------------------------------------|-----|
| V1A16F100S | Welding Plug with O-Ring DIN 24° - Heavy Series - SKO | 260 |
|------------|-------------------------------------------------------|-----|

## // GAI-R

|            |                                                                                  |     |
|------------|----------------------------------------------------------------------------------|-----|
| V1A11M106F | Straight connector - DIN 24° Male - BSPP cylindric Female - Light Series - GAI-R | 261 |
| V1A12M106F | Straight connector - DIN 24° Male - BSPP cylindric Female - Heavy Series - GAI-R | 261 |

**// GAI-M**

|            |                                                                          |     |
|------------|--------------------------------------------------------------------------|-----|
| V1A11M150F | Straight connector - DIN 24° Male - Metric Female - Light Series - GAI-M | 262 |
| V1A12M150F | Straight connector - DIN 24° Male - Metric Female - Heavy Series - GAI-M | 262 |

**// MAV-R**

|            |                                                      |     |
|------------|------------------------------------------------------|-----|
| V1A11M106C | Gauge Coupling - DIN 24° Male - Light Series - MAV-R | 263 |
| V1A12M106C | Gauge Coupling - DIN 24° Male - Heavy Series - MAV-R | 263 |

**// MAVE-R**

|            |                                                                     |     |
|------------|---------------------------------------------------------------------|-----|
| V1A152106C | Gauge Coupling - DIN 24° Female with O-Ring - Light Series - MAVE-R | 264 |
| V1A162106C | Gauge Coupling - DIN 24° Female with O-Ring - Heavy Series - MAVE-R | 264 |

**// RI-ED**

|            |                                                                |     |
|------------|----------------------------------------------------------------|-----|
| V1A06F106I | Straight connector - BSPP Female - Male with elastomer - RI-ED | 265 |
|------------|----------------------------------------------------------------|-----|

**// RI**

|            |                                              |     |
|------------|----------------------------------------------|-----|
| V1A06F106M | Straight connector - BSPP Female - Male - RI | 266 |
|------------|----------------------------------------------|-----|

**// VSTI-R-ED**

|            |                                                       |     |
|------------|-------------------------------------------------------|-----|
| V1A06I000Z | Blanking Screw - BSPP Male with elastomer - VSTI-R-ED | 267 |
|------------|-------------------------------------------------------|-----|

**// VSTI-M**

|            |                                                           |     |
|------------|-----------------------------------------------------------|-----|
| V1A50I0000 | Socket head plug Metric cylindric with elastomer - VSTI-M | 268 |
|------------|-----------------------------------------------------------|-----|

**// PL-DKO**

|            |                                                       |     |
|------------|-------------------------------------------------------|-----|
| V1A15F0000 | Plug with O-Ring 24° DIN 2353 - Light Series - PL/DKO | 269 |
| V1A16F0000 | Plug with O-Ring 24° DIN 2353 - Heavy Series - PL/DKO | 269 |

**// PL**

|            |                                      |     |
|------------|--------------------------------------|-----|
| V1A11M000Z | Blanking Plug DIN 24° - Light Series | 270 |
| V1A12M000Z | Blanking Plug DIN 24° - Heavy Series | 270 |

**// ROV**

|            |                                                  |     |
|------------|--------------------------------------------------|-----|
| V1A11M0000 | Tube blanking screw DIN 24° - Light Series - ROV | 271 |
| V1A12M0000 | Tube blanking screw DIN 24° - Heavy Series - ROV | 271 |

**// D2S**

|            |                                                        |     |
|------------|--------------------------------------------------------|-----|
| V1A32R0000 | Double cutting ring DIN 24° - Extra Light Series - D2S | 272 |
| V1A11R0000 | Double cutting ring DIN 24° - Light Series - D2S       | 272 |
| V1A12R0000 | Double cutting ring DIN 24° - Heavy Series - D2S       | 273 |

**// ES4**

|            |                                                                     |     |
|------------|---------------------------------------------------------------------|-----|
| V1A11R000B | Double cutting ring with tight sealing DIN 24° - Light Series - ES4 | 274 |
| V1A12R000B | Double cutting ring with tight sealing DIN 24° - Heavy Series - ES4 | 274 |

**// M - NUT**

|            |                                  |     |
|------------|----------------------------------|-----|
| VXA32D0000 | Nut DIN 24° - Extra Light Series | 275 |
| VXA11D0000 | Nut DIN 24° - Light Series       | 275 |
| VXA12D0000 | Nut DIN 24° - Heavy Series       | 276 |

**// M SQR**

|            |                                                                   |     |
|------------|-------------------------------------------------------------------|-----|
| VXA11D000V | Nut DIN 24° with clamping ring and seal - Light Series - VOSSForm | 277 |
| VXA12D000V | Nut DIN 24° with clamping ring and seal - Heavy Series - VOSSForm | 277 |

**// M BV10**

|            |                                   |     |
|------------|-----------------------------------|-----|
| VXA11D00BV | Nut DIN 24° - Light Series - BV10 | 278 |
| VXA12D00BV | Nut DIN 24° - Heavy Series - BV10 | 278 |

**// BV10 RING**

|            |                                             |     |
|------------|---------------------------------------------|-----|
| V1A11R000Z | Clamping Ring DIN 24° - Light Series - BV10 | 279 |
| V1A12R000Z | Clamping Ring DIN 24° - Light Series - BV10 | 279 |

**// BV10 CONE**

|            |                                           |     |
|------------|-------------------------------------------|-----|
| V1ABV10CZK | ZAKO Flare Coupling with O-ring - Push In | 280 |
|------------|-------------------------------------------|-----|

**// SWVE-R-ED**

|            |                                                                                  |     |
|------------|----------------------------------------------------------------------------------|-----|
| V1A11ME03I | Banjo adjustable - DIN 24° - BSPP Male with soft seal - Light Series - SWVE-R-ED | 281 |
| V1A12ME03I | Banjo adjustable - DIN 24° - BSPP Male with soft seal - Heavy Series - SWVE-R-ED | 281 |

**// SWVE-R**

|            |                                                                                                   |     |
|------------|---------------------------------------------------------------------------------------------------|-----|
| V1A32ME06M | Banjo adjustable - DIN 24° - BSPP Male with metal sealing-edge ring - Extra Light Series - SWVE-R | 282 |
| V1A11ME06M | Banjo adjustable - DIN 24° - BSPP Male with metal sealing-edge ring - Light Series - SWVE-R       | 282 |
| V1A12ME06M | Banjo adjustable - DIN 24° - BSPP Male with metal sealing-edge ring - Heavy Series - SWVE-R       | 282 |
| V1A11ME035 | Banjo adjustable - DIN 24° - BSPP Male with sealing-edge ring - Light Series - SWVE-R             | 283 |
| V1A12ME035 | Banjo adjustable - DIN 24° - BSPP Male with sealing-edge ring - Heavy Series - SWVE-R             | 283 |

## // SWVE-M

|            |                                                                                               |     |
|------------|-----------------------------------------------------------------------------------------------|-----|
| V1A11ME50M | Banjo adjustable - DIN 24° - Metric Male with metal sealing-edge ring - Light Series - SWVE-M | 284 |
| V1A12ME50M | Banjo adjustable - DIN 24° - Metric Male with metal sealing-edge ring - Heavy Series - SWVE-M | 284 |

## // SWVE-M-ED

|            |                                                                                    |     |
|------------|------------------------------------------------------------------------------------|-----|
| V1A11ME50I | Banjo adjustable - DIN 24° - Metric Male with soft seal - Light Series - SWVE-M-ED | 285 |
|------------|------------------------------------------------------------------------------------|-----|

## // DSVW-M

|            |                                                                                         |     |
|------------|-----------------------------------------------------------------------------------------|-----|
| V1A11ME505 | Banjo adjustable - DIN 24° - Metric Male with sealing-edge ring - Light Series - DSVW-M | 286 |
| V1A12ME505 | Banjo adjustable - DIN 24° - Metric Male with sealing-edge ring - Heavy Series - DSVW-M | 286 |

## // PRESSURE WASH ADAPTERS

## // PRESSURE WASH

|           |                                                                       |     |
|-----------|-----------------------------------------------------------------------|-----|
| PWA50M    | Pressure Wash Straight union - Metric Male                            | 288 |
| PWA50M06M | Pressure Wash Straight Connector - Metric Male - BSPP Male            | 288 |
| PWA06M50F | Pressure Wash Straight Connector - BSPP Male - Metric Swivel Female   | 288 |
| PWA06F50F | Pressure Wash Straight Connector - BSPP Female - Metric Swivel Female | 289 |

## // HYDRAULIC QUICK COUPLINGS

## // SVK ISO A

|                                        |                                 |     |
|----------------------------------------|---------------------------------|-----|
| STANDARD ISO 7241 A - POPPET SVK-ISO-A | Female coupling - Female thread | 291 |
| STANDARD ISO 7241 A - POPPET SVK-ISO-A | Male coupling - Female thread   | 292 |

## // SVK ISO B

|                                        |                                 |     |
|----------------------------------------|---------------------------------|-----|
| STANDARD ISO 7241 B - POPPET SVK-ISO-B | Female coupling - Female thread | 293 |
| STANDARD ISO 7241 B - POPPET SVK-ISO-B | Male coupling - Female thread   | 293 |

## // TEMA

|                                                             |                                           |     |
|-------------------------------------------------------------|-------------------------------------------|-----|
| LOCKABLE TYPE - POPPET T-SERIES                             | Tema T-Series without pressure eliminator | 294 |
| LOCKABLE TYPE PRESSURE ELIMINATION SYSTEM - T-SERIES        | Tema T-Series with pressure elimination   | 295 |
| LOCKABLE TYPE PRESSURE ELIMINATION SYSTEM - POPPET T-SERIES | Tema T-Series with pressure elimination   | 295 |

## // PUSH PULL

|                                                     |                                 |     |
|-----------------------------------------------------|---------------------------------|-----|
| STANDARD ISO 7241 A PUSH PULL - POPPET SVK-1H-ISO-A | Female coupling - Female thread | 296 |
| STANDARD ISO 5675 - POPPET SRK-1H                   | Female coupling - Male thread   | 296 |
| STANDARD ISO 5675 - POPPET SRK-1H                   | Female coupling - Female thread | 297 |

## // FLAT FACE

|                                    |                                 |     |
|------------------------------------|---------------------------------|-----|
| STANDARD ISO 16028 - FLAT FACE FPK | Female coupling - Female thread | 298 |
| STANDARD ISO 16028 - FLAT FACE FPK | Male coupling - Female thread   | 299 |

## // BRAKE

|                                       |                                                        |     |
|---------------------------------------|--------------------------------------------------------|-----|
| STANDARD ISO 5676 - BRAKE VALVE BK    | Female coupling - Female thread                        | 300 |
| STANDARD ISO 5676 - BRAKE COUPLING BK | Male coupling - Male thread                            | 300 |
| STANDARD ISO 5676 - BRAKE COUPLING BK | Male coupling - Metric 24° light/heavy series bulkhead | 301 |

## // DIAGNOSTIC

|                                      |                                 |     |
|--------------------------------------|---------------------------------|-----|
| STANDARD ISO 15171-1 - DIAGNOSTIC DK | Female coupling - Female thread | 302 |
| STANDARD ISO 15171-1 - DIAGNOSTIC DK | Male coupling - Female thread   | 302 |

## // SCREW TYPE

|                               |                                                                               |     |
|-------------------------------|-------------------------------------------------------------------------------|-----|
| SCREW COUPLING - POPPET HDK   | Female coupling (fixed part) - Female thread                                  | 303 |
| SCREW COUPLING - POPPET HDK   | Male coupling (loose part) - Female thread                                    | 303 |
| SCREW COUPLING - FLAT FACE RK | Female coupling (fixed part with hexagon nut) - Metric 24° light/heavy series | 304 |
| SCREW COUPLING - FLAT FACE RK | Male coupling (loose part) - Metric 24° light/heavy series                    | 305 |
| SCREW COUPLING - FLAT FACE RK | Female coupling (fixed part with hexagon nut) - Female thread                 | 305 |
| SCREW COUPLING - FLAT FACE RK | Male coupling (loose part) - Female thread                                    | 306 |

## // MULTI COUPLING

|                                               |                                                        |     |
|-----------------------------------------------|--------------------------------------------------------|-----|
| MULTI-K 2x3/8" and MULTI-K 2x1/2"             | Mobile male - Female thread                            | 307 |
| MULTI-K 2x3/8" and MULTI-K 2x1/2"             | Fixed female - Female thread                           | 308 |
| MULTI-K 4x3/8"Q and MULTI-K 4x1/2"Q - 250 BAR | 309                                                    |     |
| MULTI-K 4x3/8"Q and MULTI-K 4x1/2"Q - 250 BAR | Fixed female - Female thread                           | 310 |
| MULTI-K 4x3/8"Q and MULTI-K 4x1/2"Q - 350 BAR | Mobile male - Female thread                            | 311 |
| MULTI-K 4x3/8"Q and MULTI-K 4x1/2"Q - 350 BAR | Fixed female - Female thread                           | 312 |
| MULTI-K 4x3/8" and MULTI-K 4x1/2"             | Mobile male - Female thread                            | 313 |
| MULTI-K 4x3/8" and MULTI-K 4x1/2"             | Fixed female - Female thread                           | 314 |
| MULTI-K CPR 4x3/8" AND MULTI-K CPR 4x1/2"     | Mobile male connectable under pressure - Female thread | 315 |
| MULTI-K 3x3/8" and MULTI-K 2x1/2"             | Mobile male - Female thread                            | 315 |

|                                   |                              |     |
|-----------------------------------|------------------------------|-----|
| MULTI-K 3x3/8" and MULTI-K 2x1/2" | Fixed female - Female thread | 316 |
| MULTI-K 6x3/8" and MULTI-K 6x1/2" | Mobile male - Female thread  | 317 |
| MULTI-K 6x3/8" and MULTI-K 6x1/2" | Fixed female - Female thread | 318 |

**// SVK ISO B - CAP & PLUG**

|                                        |                               |     |
|----------------------------------------|-------------------------------|-----|
| STANDARD ISO 7241 B - POPPET SVK-ISO-B | Dust plug for female coupling | 319 |
| STANDARD ISO 7241 B - POPPET SVK-ISO-B | Dust cap for male coupling    | 319 |

**// FLAT FACE - CAP**

|                                    |                              |     |
|------------------------------------|------------------------------|-----|
| STANDARD ISO 16028 - FLAT FACE FPK | Dust cap for female coupling | 320 |
| STANDARD ISO 16028 - FLAT FACE FPK | Dust cap for male coupling   | 320 |

**// SCREW TYPE - SOCKET & PROTECTION**

|                               |                                           |     |
|-------------------------------|-------------------------------------------|-----|
| SCREW COUPLING - POPPET HDK   | Dust cap for female coupling (fixed part) | 321 |
| SCREW COUPLING - POPPET HDK   | Dust plug for male coupling (loose part)  | 321 |
| SCREW COUPLING - FLAT FACE RK | Dust protection D                         | 321 |
| SCREW COUPLING - FLAT FACE RK | Blind socket E                            | 322 |

**// CLAMPS****// LIGHT SERIES DIN 3015 PART 1**

|            |                                                        |     |
|------------|--------------------------------------------------------|-----|
| RPYCHA     | Clamp - Smooth - Light Series - Polypropylene - Green  | 324 |
| RPYCHA_A   | Clamp - Smooth - Light Series - Polypropylene - Black  | 325 |
| RRYCBA     | Clamp - Profiled - Light Series - Polyamide, Black     | 325 |
| RGYCBA     | Clamp - Profiled - Light Series - Rubber, Black        | 326 |
| R5YCBA     | Clamp - Smooth - Light Series - Aluminium              | 326 |
| R1YCIA     | Weldplate - Light Series - Phosphated Steel            | 327 |
| R3YCIA     | Weldplate - Light Series - Stainless Steel 316         | 327 |
| R1YCIA-L   | Weldplate Wide - Light Series - Phosphated Steel       | 327 |
| R1YCIA     | Weldplate - Light Series - Phosphated Steel            | 328 |
| R3YCHA-DB  | Weldplate - Multi - Light Series - Phosphated Steel    | 328 |
| R1YCSA     | Top Plate - Light Series - Cr-VI-free                  | 328 |
| R3YCSA     | Top Plate - Light Series - Stainless Steel 316         | 329 |
| R3YCV A    | Hexagon Bolt - Light Series - Stainless Steel 316      | 329 |
| R1YCEA     | Rail Nut - Cr-VI-free                                  | 329 |
| R1YCV A-TW | Hexagon Bolt - Twin Series - Cr-VI-free                | 330 |
| R1YCV A-C  | Unbraco Bolt - Light Series - Cr-VI-free               | 330 |
| R3YCV A-C  | Unbraco Bolt - Light Series - Stainless Steel 316      | 330 |
| R1YCRA     | Rail Mount - Cr-VI-free                                | 331 |
| R1YCEA     | Rail Nut - Cr-VI-free                                  | 331 |
| R3YCEA     | Rail Nut - Stainless Steel 316                         | 331 |
| R3YCRA     | Rail Mount - Stainless Steel 316                       | 331 |
| R3YCV A-H  | Construction Bolt - Light Series - Stainless Steel 316 | 332 |

**// HEAVY SERIES DIN 3015 PART 2**

|           |                                                        |     |
|-----------|--------------------------------------------------------|-----|
| RPYCB B   | Clamp - Profiled - Heavy Series - Polypropylene, Green | 333 |
| R5YCB B   | Clamp - Smooth - Heavy Series - Aluminium              | 334 |
| R1YCI B   | Weldplate - Heavy Series - Phosphated Steel            | 334 |
| R3YCI B   | Weldplate - Heavy Series - Stainless Steel 316         | 335 |
| R1YCS B   | Top Plate - Heavy Series - Cr-VI-free                  | 335 |
| R3YCS B   | Top Plate - Heavy Series - Stainless Steel 316         | 335 |
| R1YCI D   | Locking Plate - Heavy Series - Cr-VI-free              | 336 |
| R1YCV B   | Hexagon Bolt - Heavy Series - Cr-VI-free               | 336 |
| R3YCV B   | Hexagon Bolt - Heavy Series - Stainless Steel 316      | 336 |
| R1YCV B-H | Construction Bolt - Heavy Series - Cr-VI-free          | 337 |
| R3YCV B-H | Construction Bolt - Heavy Series - Stainless Steel 316 | 337 |

**// TWIN SERIES B DIN 3015 PART 3**

|            |                                                    |     |
|------------|----------------------------------------------------|-----|
| RPYCG A    | Twin Clamp - Smooth - Light Series - Polypropylene | 338 |
| R1YCH A    | Weldplate - Twin Series - Phosphated Steel         | 339 |
| R1YCT A    | Top Plate - Twin Series - Cr-VI-free               | 339 |
| R1YCV A-TW | Hexagon Bolt - Twin Series - Cr-VI-free            | 339 |
| R3YCV A-TW | Hexagon Bolt - Twin Series - Stainless Steel 316   | 340 |

**// PIPES****// CARBON STEEL**

|        |                                     |     |
|--------|-------------------------------------|-----|
| R0B810 | Seamless Carbon Steel Raw - E235    | 342 |
| R0B710 | Seamless Carbon Steel Raw - E355    | 344 |
| R1B810 | Seamless Carbon Steel Plated - E235 | 344 |
| R1B710 | Seamless Carbon Steel Plated - E355 | 346 |

## // STAINLESS STEEL

|        |                                                     |     |
|--------|-----------------------------------------------------|-----|
| R3BS10 | Seamless Stainless Steel AISI 316L - EN 10216-5     | 347 |
| R3BT10 | Seamless Stainless Steel - AISI 316 TI - EN 10216-5 | 347 |

## // ACCESSORIES

## // SAFE-WRAP

|            |                                   |     |
|------------|-----------------------------------|-----|
| RTY1G0P_VC | Black Textile Sleeve with Velcro® | 349 |
|------------|-----------------------------------|-----|

## // WIPCHECK

|         |                                                              |     |
|---------|--------------------------------------------------------------|-----|
| R1YCCD1 | Retention System for DIN 24° Adapter - Complete Whip Chain   | 350 |
| R1YCCF1 | Retention System for SAE 3K-6K Flanges - Complete Whip Chain | 350 |
| R1YCCJ1 | Retention System for JIC 37° Adapter - Complete Whip Chain   | 351 |
| R1YCCH1 | Retention System - Bolt Clamp                                | 351 |
| R1YCCV1 | Retention System - Plate for Various systems                 | 352 |

## // PLASTIC

|         |                                            |     |
|---------|--------------------------------------------|-----|
| RJS1AG0 | Black Plastic Protective Flat Coil Sleeve  | 353 |
| RJS1KG0 | Yellow Plastic Protective Flat Coil Sleeve | 354 |
| RJS1HG0 | Red Plastic Protective Flat Coil Sleeve    | 354 |

## // TEXTILE

|         |                      |     |
|---------|----------------------|-----|
| RTY0G0A | Black Textile Sleeve | 355 |
|---------|----------------------|-----|

## // HIGH TEMPERATURE &amp; FIRE PROTECTION

|            |                                                               |     |
|------------|---------------------------------------------------------------|-----|
| RLYGAS0_ST | Fire Protection Sleeve - Industrial Grade                     | 356 |
| RLYGAS0    | Fire Protection Sleeve - UL 1441 and VW1 Flame Test Certified | 357 |
| ROY0T00    | Red Smooth Silicone Tape - High Temperature                   | 357 |

## // PRESSURE WASH

|        |                              |     |
|--------|------------------------------|-----|
| RGYGM0 | Bend Restrictor - Smooth     | 358 |
| Rgygm1 | Bend Restrictor - Corrugated | 358 |

## // NON-RETURN VALVES

|                         |                     |     |
|-------------------------|---------------------|-----|
| NON RETURN VALVE - RV   | Female thread       | 359 |
| NON RETURN VALVE - RV   | Male thread         | 360 |
| Non-return valves RHD   | Male thread 1,0 BAR | 360 |
| Non-return valves RHV-R | Male thread 1,0 bar | 361 |
| Non-return valves RHZ-R | Male thread 1,0 BAR | 362 |

## // BALL VALVES 2-WAY

|            |                                          |     |
|------------|------------------------------------------|-----|
| 2W-BKH-BMK | Series BKH-MKH DIN-ISO 1219 - BSP Female | 363 |
|------------|------------------------------------------|-----|

## // BALL VALVES 3-WAY

|         |                                    |     |
|---------|------------------------------------|-----|
| 3W-VBK3 | Series BK3 - DIN 2429 - BSP Female | 364 |
|---------|------------------------------------|-----|

## // SWIVEL CONNECTOR

|            |                                                     |     |
|------------|-----------------------------------------------------|-----|
| SWCDH-BSPP | SWIVEL CONNECTOR BSP - Solid Female - Solid Male    | 365 |
| SWCDT-BSPP | SWIVEL CONNECTOR BSP - Swivel Female - Solid Female | 365 |

## // LOWER MOUNT

|         |                                                         |     |
|---------|---------------------------------------------------------|-----|
| R2YM63R | Stainless Steel 304 Glycerine Gauge DN63 - Lower Mount  | 366 |
| R2YM10R | Stainless Steel 304 Glycerine Gauge DN100 - Lower Mount | 366 |

## // BACK MOUNT

|         |                                                        |     |
|---------|--------------------------------------------------------|-----|
| R2YM63A | Stainless Steel 304 Glycerine Gauge DN63 - Back Mount  | 367 |
| R2YM10A | Stainless Steel 304 Glycerine Gauge DN100 - Back Mount | 367 |

## // ACCESSORY

|            |               |     |
|------------|---------------|-----|
| RGYMA00_BR | Gauge Bracket | 368 |
|------------|---------------|-----|

## // THREADED FLANGES

|            |                                     |     |
|------------|-------------------------------------|-----|
| R0A33W106F | 3000 psi Flange - BSPP Female - AVP | 369 |
| R0A36W106F | 6000 psi Flange - BSPP Female - AVP | 369 |

## // THREADED COUNTER FLANGES

|            |                                                     |     |
|------------|-----------------------------------------------------|-----|
| R0A63W106F | 3000 psi Counter Flange - BSPP Female - AVP         | 370 |
| R1A87W106F | 6000 psi Counter Flange - BSPP Female - Zinc Plated | 370 |

## // BUTT WELD CONTROL FLANGE

|            |                                   |     |
|------------|-----------------------------------|-----|
| R1A33W100S | Butt Weld Counter Flange 3000 psi | 371 |
|------------|-----------------------------------|-----|

**// O-RING**

|           |                                       |     |
|-----------|---------------------------------------|-----|
| Hn0J0900F | O-Ring for 3K-6K Flange - NBR - 90SH  | 372 |
| Hn0J0800  | O-Ring for 3K-6K Flange - NBR - 90SH  | 372 |
| Hn0J0900B | O-Ring for BSP Adapters - NBR - 90SH  | 373 |
| Hn0J09000 | O-Ring for ORFS Adapters - NBR - 90SH | 373 |
| Hn0J0900D | O-Ring for DKO Adapters - NBR - 90SH  | 374 |

**// PROFILED GASKET**

|            |                                                    |     |
|------------|----------------------------------------------------|-----|
| Hn0J0800_G | Profiled Gasket for Threaded Adapters - NBR - 80SH | 375 |
|------------|----------------------------------------------------|-----|

**// BONDED SEAL**

|            |                                                               |     |
|------------|---------------------------------------------------------------|-----|
| R1ADS06000 | Self Centering Bonded Seal - BSP - Steel/NBR - 70SH           | 376 |
| R1ADS0600M | Self Centering Bonded Seal - MET - Steel/NBR - 70SH           | 376 |
| R3ADS06000 | Self Centering Bonded Seal - BSP - Stainless Steel/NBR - 70SH | 377 |

**// MACHINES AND TOOLS****// CRIMPING**

|            |                                                                                                                                                                                                   |     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| CRS-16HP   | Portable manual hose crimper with hand pump                                                                                                                                                       | 379 |
| CRS-16AP   | Portable pneumatic hose service crimper                                                                                                                                                           | 379 |
| CRS-16HPZ  | Manual hydraulic crimping machine for one-off production of hose assemblies (e.g. in repair shops)                                                                                                | 379 |
| CRS-20CS   | Electric crimping machine specially designed for service van use. They are battery powered with 12V or 24V crimping head on left as standard                                                      | 380 |
| CRS-20CSZ  | Electric crimping machine specially designed for service van use. They are battery powered with 12V or 24V crimping head separate from hydraulic power unit                                       | 380 |
| CRW-20NMS  | Electric crimping machine; strong, fast and reliable for any service crimping need. It turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle | 380 |
| CRW-32NMS  | Electric crimping machine; strong, fast and reliable for any service crimping need. It turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle | 381 |
| CRW-51MS   | Multi-purpose table top crimping machine for hydraulic and industrial hoses                                                                                                                       | 381 |
| CRW-20NMSC | Electric crimping Machine: package solution, with die set and tool rack                                                                                                                           | 381 |
| CRW-32NMSC | Electric crimping Machine: package solution, with die set and tool rack                                                                                                                           | 382 |
| DS-P16     | Crimping Machine - Die Set for CRS-16HP, CRS-16HPZ and CRS-16AP                                                                                                                                   | 382 |
| DS-P20     | Crimping Machine Die Set for CRS-20CS and CRS-20CSZ                                                                                                                                               | 382 |
| DS-P32     | Crimping Machine Die Set for CRW-32NMS and CRW-32NMSC                                                                                                                                             | 383 |
| DS-140     | Crimping Machine - Die Set                                                                                                                                                                        | 383 |

**// HOSE RACK**

|           |                      |     |
|-----------|----------------------|-----|
| HRACK-BDL | Hose Rack for Bundle | 384 |
| HRACK-ROL | Hose Rack for Rolls  | 384 |

**// CUTTING**

|            |                                                                                                                                        |     |
|------------|----------------------------------------------------------------------------------------------------------------------------------------|-----|
| CUTS-30CS  | Designed for service van use. Manually operated and easy to use, provided with a fume exhaust connection                               | 385 |
| CUTW-CM30  | Designed for workshop use. Manually operated and easy to use, provided with a fume exhaust connection                                  | 385 |
| CUTW-TF1EC | Inexpensive and compact cutting machine, ideal for cutting flexible hydraulic hoses up to 1" four spirals                              | 385 |
| CUTW-TF1E  | Inexpensive and compact cutting machine, ideal for cutting flexible hydraulic hoses up to 1" 1/4 four spirals and up to 1" six spirals | 386 |
| CUTW-TF2E  | Ideal for cutting flexible hydraulic hoses up to 2" four spirals and 1" 1/2 six spirals                                                | 386 |

**// SKIVING**

|           |                              |     |
|-----------|------------------------------|-----|
| SKIVE-S   | Skiving Machine Service      | 387 |
| SKIVE-MND | Mandrel for external skiving | 387 |
| SKIVE-W   | Skiving Machine Workshop     | 387 |

**// HEAT-SHRINKABLE PROTECTION CAPS**

|          |                                 |     |
|----------|---------------------------------|-----|
| HEAT-CAP | Heat-Shrinkable Protection Caps | 388 |
|----------|---------------------------------|-----|

**// FOAM PROJECTILES**

|           |                                   |     |
|-----------|-----------------------------------|-----|
| FOAM-P-MD | Foam Projectiles - Medium Density | 389 |
| FOAM-P-HD | Foam Projectiles - High Density   | 390 |
| FOAM-P-A  | Foam Projectiles - Abrasive       | 391 |
| FOAM-P-US | Foam Projectiles - Ultra Scrub    | 392 |

**// LUNCHERS KITS**

|            |                                                                                         |     |
|------------|-----------------------------------------------------------------------------------------|-----|
| CLEAN-GUNA | Cleaning Gun Kit - Launcher and 8 nozzles                                               | 393 |
| CLEAN-GUNB | Cleaning Gun Kit - Launcher, Launcher Stand, 20 Nozzles 1/4" - 2" Air Clean Projectiles | 393 |

**// BENDING**

|            |                     |     |
|------------|---------------------|-----|
| PIPEBEND-M | Pipe Bending Manual | 394 |
|------------|---------------------|-----|

**// PREASSEMBLY DIN 24**

|            |                                            |     |
|------------|--------------------------------------------|-----|
| PRE-DINL-M | Pre-assembly DIN 24° Manual - Light Series | 395 |
| Pre-DinS-M | Pre-assembly DIN 24° Manual - Heavy Series | 395 |

// NOTES

Handwriting practice lines consisting of 20 horizontal dotted lines.



