ENGINEERING
TOMORROW

APAC

# Winner® by Danfoss
# **hose and fittings**



Winner by Danfoss

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# Important safety and ordering information

⚠ WARNING

Danfoss fitting tolerances are engineered to match approved Danfoss hose tolerances. The use of Danfoss fittings on hose supplied by other manufacturers and/or the use of Danfoss hoses with fittings supplied by other manufactures may result in the production of unreliable and unsafe hose assemblies and is neither recommended nor authorized by Danfoss or any of its affiliates or subsidiaries.

⚠ WARNING

Application considerations must be observed in selecting appropriate components for the application of these products contained herein. The failure to follow the recommendations set forth in this catalog may result in an unstable application which may result in serious personal injury or property damage.

DANFOSS OR ANY OF ITS AFFILIATES OR SUBSIDIARIES SHALL NOT BE SUBJECT TO AND DISCLAIMS ANY OBLIGATIONS OR LIABILITIES (INCLUDING BUT NOT LIMITED TO ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES) ARISING FROM TORT CLAIMS (INCLUDING WITHOUT LIMITATION NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORIES OF LAW WITH RESPECT TO ANY HOSE ASSEMBLIES NOT PRODUCED FROM GENUINE DANFOSS HOSE FITTINGS, HOSE AND DANFOSS APPROVED EQUIPMENT, AND IN CONFORMANCE WITH DANFOSS' SYNFLEX PROCESS AND PRODUCT INSTRUCTIONS FOR EACH SPECIFIC HOSE ASSEMBLY.

Failure to follow these processes and product instructions and limitations could lead to premature hose assembly failures resulting in property damage, serious injury or death.

**Warranty**
Current warranty information can be found at:
**www.Danfoss.com**

## Hose Fitting Part Number Nomenclature

26711 D-04-04 SM W Z

**Fitting Series**

**Material Stock Code**
A = Large hex stock
D = Hex stock female nipple
If material is round stock position collapses

**Terminal End Size**

**Hose Size**

**Special Suffix Code**
SM = Backup hex smaller than swivel hex
SP = BSPT with 60° cone
HXX = Special drop length, XX is the drop length in mm
If no special design is required, position collapses

**Nut Design**
T = Captive nut
W = Wire nut
If crimp nut is used or if nut is not required, position collapses

**Plating Type Code**
Z = Zinc Trivalent Chromate (Cr3)
ZD = Dura-Kote

## Hose Installation

Proper installation of the hose is essential to the proper operation and safe use of the hose and related equipment. Improper installation of the hose can result in serious injury or property damage caused by spraying fluids or flying projectiles.
In order to avoid serious bodily injury or property damage resulting from improper installation of the hose, you should carefully review the information in this catalog regarding hose installation.
Some of the factors you must consider in installing the hose properly are:

- Changes in length
- Proper bend radius
- Protection from high temperature sources
- Elbows and adapters to relieve strain
- Rubbing or abrasion
- Twisting
- Improper hose movement

These factors and the other information in this catalog regarding hose installation should be considered by you before installing the hose. If you have any questions regarding proper hose installation, please contact Danfoss Technical Support.

## Hose Maintenance

Proper maintenance of the hose is essential to the safe use of the hose and related equipment. Hose should be stored in a dry place. Hose should also be visually inspected. Any hose that has a cut or gouge in the cover that exposes the reinforcement should be retired from service. Hoses should also be inspected for kinking or broken reinforcement. If the outside diameter of the hose is reduced by 20% at the spot where it is bent then the hose should be retired from service. Inadequate attention to maintenance of the hose can result in hose leakage, bursting, or other failure which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances.

## Braided Hose Fittings

**Premium**

### 1A(TTC)-Series



**Features:**

- New **DURA-KOTE™** plating technology for up to 1,000 hours of corrosion resistance
- Bite the wire technology for best in class connection and sealing
- Class zero leakage SAE J1176 on approved hose styles
- Over 550 1A(TTC)-Series part numbers available
- Danfoss's **MatchMate™** program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly

Refer to master catalog for more information.

**Standard**

### Two-piece Winner



**Features:**

- Non-skive, two-piece crimp fitting
- One nipple part number for EC115, EC215, EC110, EC210, EC118, EC082, WH004, WH005, WH006, WH007 standard hoses
- Meets industry specifications when used with the EC115, EC215, EC110, EC210, EC118, EC082, WH004, WH005, WH006, WH007 standard hoses
- Clear silver hexavalent chromium-free plating
- Carbon steel material

## Spiral Hose Fittings

**Premium**

### 4S/6S Spiral Series



**Features:**

- New **DURA-KOTE™** plating technology for up to 1,000 hours of corrosion resistance
- New patent pending **DURA-SEAL™** technology to eliminate hose assembly cool-down leakage
- Class zero leakage SAE J1176 on approved hose styles
- Danfoss's **MatchMate™** spiral-hose/fitting identification system program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly
- Refer to master catalog for more information.

### DURA-KOTE™ Plating Technology

Hose fittings that will now offer 3x the corrosion protection on carbon steel fittings as compared to competitive hose fittings. Danfoss's DURA-KOTE fittings provide up to 1000 hours of corrosion protection. This is a huge step forward in metal fitting corrosion protection. (Only on 4S/6S fittings)

**3X** Carbon Steel Corrosion Protection



### DURA-SEAL™ Technology

This patent-pending innovation from Danfoss eliminates hose assembly cool-down leakage, while extending hose assembly life, reducing equipment down-time. (Only on 4S/6S fittings)

**Class 0** Cool-Down Leakage Protection



4S/6S Fitting



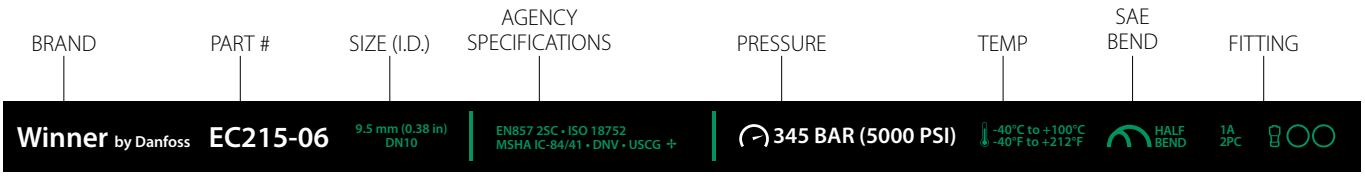

Danfoss **Intelligent** Layline

# Our laylines provide **vital hose data** instantly.

Engineering is complex. We just made it easier.
Critical data at a glance.

When it comes to building the platforms and systems that drive the machines of the future, complex engineering makes it all possible. In hydraulics, specific hose capabilities and certifications must be tailored to the unique requirements of each application to optimize performance, maximize uptime and protect user safety. Danfoss' new laylines distill this complex engineering down into its essential parts for easy identification and simple assembly. Every key piece of information is located in one place, ensuring the right hose—with the right capabilities for the job—is easy to identify every time.

**Enhanced readability:** Danfoss' new laylines take the guesswork out of system assembly. Each layline is easy to read, including important information about the hose—such as the brand, part number, size, abrasion resistance, key specifications, pressure, temp and qualified fitting series.



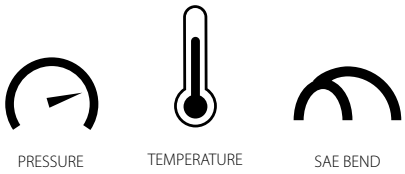

## Agency specifications

Hose agency specifications are clearly defined on each hose. SAE, ISO, MSHA, DNV, USCG designation are displayed clearly on each hose, taking the guess work out of hose qualifications.

In addition, many of Danfoss' premium hydraulic hoses exceed SAE and EN specifications to offer superior performance. We will now consistently note this and other specification-related terms on the layline.

## Global comprehension

The new layline design also introduces easy-to-identify icons and pictograms, which allow more users around the world to intuitively identify performance characteristics associated with each of Danfoss' rubber hydraulic hoses. Icons include temperature, bend radius, pressure, correct fitting type and more.



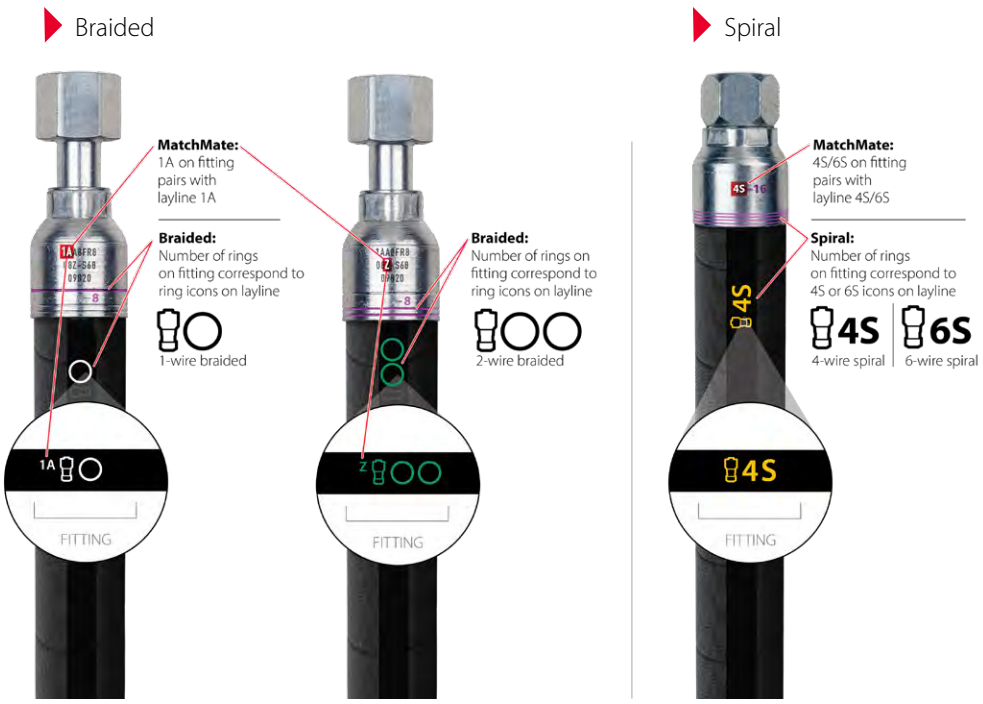

## EN standards

Each hose standard specifies the minimum bend radius of a hose. This is defined as the smallest diameter the hose can be bent without kinking. However, Danfoss recognizes that merely meeting a standard is often not good enough for the tight routing needs of your applications. Many of our core hoses have long been engineered to perform at half or even one-third of the bend radius required by different standards.

For the first time, our laylines will now indicate when a hose exceeds the standard bend radius requirement. This improvement in bend means easier routing, better performance and reduced hose length requirements.

## Fitting info

As part of this layline refresh, all of Danfoss' rubber hydraulic hoses will now utilize the simple, intuitive MatchMate hose & fitting system.






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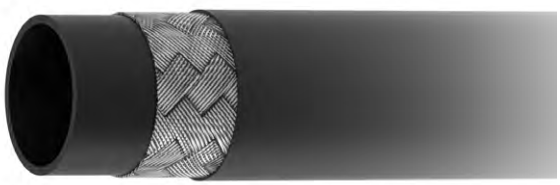
# The choice when **every job** matters.

Reliability and performance are essential, every day, for every project. Winner™ by Danfoss hose is the go-to everyday hose when every job matters. Designed specifically for less extreme applications that still need critical hose certifications, Winner hose fills the gap for more moderate applications.



# EC110 Hydraulic hose

Meets: SAE 100R1 • EN 853 1SN



**Layline example:**

**Winner** by Danfoss **EC110-04** | 6.4 MM (0.25 IN) DN6 | SAE 100R1 • EN 853 1SN MSHA IC-84/41 • DNV | 225 BAR (3250 PSI) | -40°C to +100°C -40°F to +212°F | 1A 2pc

**Construction:** Inner Tube: Synthetic rubber Reinforcement: One steel braid Cover: Synthetic rubber

| PART # | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC110-04L** | 6.4 | 0.25 | 14.1 | 0.56 | 225 | 3,250 | 900 | 13,000 | 100 | 3.94 | 0.22 | 0.15 |
| **EC110-05L** | 7.9 | 0.31 | 15.7 | 0.62 | 215 | 3,125 | 860 | 12,500 | 115 | 4.53 | 0.26 | 0.17 |
| **EC110-06L** | 9.5 | 0.38 | 18.1 | 0.71 | 180 | 2,600 | 720 | 10,400 | 130 | 5.12 | 0.33 | 0.22 |
| **EC110-08L** | 12.7 | 0.50 | 21.4 | 0.84 | 160 | 2,300 | 640 | 9,200 | 180 | 7.09 | 0.41 | 0.28 |
| **EC110-10L** | 15.9 | 0.62 | 24.5 | 0.96 | 130 | 1,900 | 520 | 7,600 | 200 | 7.87 | 0.47 | 0.32 |
| **EC110-12L** | 19.0 | 0.75 | 28.5 | 1.12 | 105 | 1,525 | 420 | 6,100 | 240 | 9.45 | 0.59 | 0.40 |
| **EC110-16L** | 25.4 | 1.00 | 36.6 | 1.44 | 88 | 1,275 | 352 | 5,100 | 300 | 11.81 | 0.87 | 0.58 |
| **EC110-20L** | 31.8 | 1.25 | 44.8 | 1.76 | 63 | 925 | 252 | 3,700 | 420 | 16.54 | 1.20 | 0.81 |
| **EC110-24L** | 38.1 | 1.50 | 52.1 | 2.05 | 50 | 725 | 200 | 2,900 | 500 | 19.69 | 1.40 | 0.94 |
| **EC110-32L** | 50.8 | 2.00 | 65.5 | 2.58 | 40 | 580 | 160 | 2,320 | 630 | 24.80 | 1.91 | 1.28 |
| **EC110-40L*** | 63.5 | 2.50 | 78.0 | 3.07 | 40 | 580 | 200 | 2,900 | 762 | 30.00 | 2.52 | 1.69 |
| **EC110-48L*** | 76.2 | 3.00 | 90.5 | 3.56 | 35 | 508 | 160 | 2,320 | 900 | 35.43 | 2.70 | 1.81 |

** Only bulk hose*

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

**Fittings:** 1A-Series, Two-piece Winner

**Typical Application:**
Hydraulic system service with petroleum and water based fluids, for general industrial service.

**Agency Specifications:**
MSHA
DNV

# EC115 Hydraulic hose

Meets: EN857 1SC



**Layline Example:**

**Winner** by Danfoss **EC115-08** | 12.7 MM (0.50 IN) DN12 | EN857 1SC • MSHA IC-84/41 DNV • USCG | 160 BAR (2300 PSI) | -40°C to +100°C -40°F to +212°F | 1A 2PC

**Construction:** Inner Tube: Synthetic rubber Reinforcement: 1 steel braid Cover: Synthetic rubber

| PART # | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC115-04L** | 6.4 | 0.25 | 12.6 | 0.50 | 225 | 3,250 | 900 | 13,000 | 50 | 1.97 | 0.18 | 0.12 |
| **EC115-06L** | 9.5 | 0.38 | 16.0 | 0.63 | 180 | 2,600 | 720 | 10,400 | 63 | 2.48 | 0.26 | 0.17 |
| **EC115-08L** | 12.7 | 0.50 | 19.4 | 0.77 | 160 | 2,300 | 640 | 9,200 | 90 | 3.54 | 0.34 | 0.23 |
| **EC115-10L** | 15.9 | 0.62 | 22.4 | 0.88 | 130 | 1,900 | 520 | 7,600 | 100 | 3.94 | 0.42 | 0.28 |
| **EC115-12L** | 19.0 | 0.75 | 26.0 | 1.02 | 105 | 1,525 | 420 | 6,100 | 120 | 4.72 | 0.50 | 0.34 |
| **EC115-16L** | 25.4 | 1.00 | 33.8 | 1.33 | 88 | 1,275 | 352 | 5,100 | 160 | 6.30 | 0.74 | 0.50 |
| **EC115-20L** | 31.8 | 1.25 | 41.2 | 1.62 | 63 | 925 | 252 | 3,700 | 210 | 8.27 | 0.99 | 0.67 |
| **EC115-24L** | 38.1 | 1.50 | 48.0 | 1.89 | 50 | 725 | 200 | 2,900 | 300 | 11.81 | 1.20 | 0.81 |
| **EC115-32L** | 50.8 | 2.00 | 61.0 | 2.41 | 40 | 580 | 160 | 2,320 | 400 | 15.75 | 1.50 | 1.01 |

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

**Fittings:** 1A-Series | Two-piece Winner

**Typical Application:**
Hydraulic system service with petroleum and water based fluids, for general industrial service.

**Agency Specifications:**
MSHA
DNV
USCG

# EC210 Hydraulic hose

Meets: SAE 100R2 • EN 853 2SN



**Layline example:**

**Winner** by Danfoss **EC210-16** | 25.4 MM (1.00 IN) DN25 | SAE 100R2 • EN 853 2SN MSHA IC-84/41 • DNV | 165 BAR (2400 PSI) | -40°C to +100°C -40°F to +212°F | 1A 2pc

**Construction:** Inner Tube: Synthetic rubber Reinforcement: Two steel braids Cover: Synthetic rubber

| PART | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC210-04L** | 6.4 | 0.25 | 15.7 | 0.62 | 400 | 5,800 | 1,600 | 23,200 | 100 | 3.94 | 0.38 | 0.26 |
| **EC210-05L** | 7.9 | 0.31 | 17.3 | 0.68 | 350 | 5,100 | 1,400 | 20,400 | 115 | 4.53 | 0.43 | 0.29 |
| **EC210-06L** | 9.5 | 0.38 | 19.7 | 0.78 | 330 | 4,800 | 1,320 | 19,200 | 130 | 5.12 | 0.54 | 0.36 |
| **EC210-08L** | 12.7 | 0.50 | 23.0 | 0.91 | 275 | 4,000 | 1,100 | 16,000 | 180 | 7.09 | 0.64 | 0.43 |
| **EC210-10L** | 15.9 | 0.62 | 26.2 | 1.03 | 250 | 3,650 | 1,000 | 14,600 | 200 | 7.87 | 0.75 | 0.50 |
| **EC210-12L** | 19.0 | 0.75 | 30.1 | 1.19 | 215 | 3,125 | 860 | 12,500 | 240 | 9.45 | 0.93 | 0.62 |
| **EC210-16L** | 25.4 | 1.00 | 38.9 | 1.53 | 165 | 2,400 | 660 | 9,600 | 300 | 11.81 | 1.29 | 0.87 |
| **EC210-20L** | 31.8 | 1.25 | 49.5 | 1.95 | 125 | 1,800 | 500 | 7,200 | 420 | 16.54 | 1.89 | 1.27 |
| **EC210-24L** | 38.1 | 1.50 | 55.9 | 2.20 | 90 | 1,300 | 360 | 5,200 | 500 | 19.69 | 2.10 | 1.41 |
| **EC210-32L** | 50.8 | 2.00 | 68.6 | 2.70 | 80 | 1,150 | 320 | 4,600 | 630 | 24.80 | 2.76 | 1.85 |
| **EC210-40L*** | 63.5 | 2.50 | 81.0 | 3.19 | 69 | 1,000 | 300 | 4,350 | 760 | 29.92 | 3.80 | 2.55 |
| **EC210-48L*** | 76.2 | 3.00 | 93.0 | 3.66 | 50 | 725 | 240 | 3,500 | 900 | 35.43 | 4.03 | 2.71 |

**Only bulk hose*

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

**Fittings:** 1A-Series, Two-piece Winner

**Typical Application:**
Hydraulic system service with petroleum and water based fluids, for general industrial service.

**Agency Specifications:**
MSHA
DNV

# EC215 Hydraulic hose

Meets: EN857 2SC • ISO 18752



**Layline Example:**

**Winner** by Danfoss **EC215-06** | 9.5 mm (0.38 in) DN10 | EN857 2SC • ISO 18752 MSHA IC-84/41 • DNV • USCG + | 345 BAR (5000 PSI) | -40°C to +100°C -40°F to +212°F | HALF BEND | 1A 2PC

**Construction:** Inner Tube: Synthetic rubber Reinforcement: 2 steel braid Cover: Synthetic rubber

| PART | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC215-04L** | 6.4 | 0.25 | 13.5 | 0.53 | 400 | 5,800 | 1,600 | 23,200 | 50 | 1.97 | 0.28 | 0.19 |
| **EC215-06L** | 9.5 | 0.38 | 17.5 | 0.69 | 345 | 5,000 | 1,380 | 20,000 | 65 | 2.56 | 0.41 | 0.28 |
| **EC215-08L** | 12.7 | 0.50 | 20.8 | 0.82 | 275 | 4,000 | 1,100 | 16,000 | 90 | 3.54 | 0.57 | 0.38 |
| **EC215-10L** | 15.9 | 0.62 | 24.0 | 0.94 | 250 | 3,650 | 1,000 | 14,600 | 100 | 3.94 | 0.68 | 0.46 |
| **EC215-12L** | 19.0 | 0.75 | 27.9 | 1.10 | 215 | 3,125 | 860 | 12,500 | 120 | 4.72 | 0.81 | 0.54 |
| **EC215-16L** | 25.4 | 1.00 | 35.7 | 1.40 | 165 | 2,400 | 660 | 9,600 | 160 | 6.30 | 1.17 | 0.79 |
| **EC215-20L** | 31.8 | 1.25 | 43.9 | 1.73 | 125 | 1,800 | 500 | 7,200 | 250 | 9.84 | 1.56 | 1.05 |
| **EC215-24L** | 38.1 | 1.50 | 51.0 | 2.01 | 100 | 1,450 | 400 | 5,800 | 300 | 11.81 | 1.81 | 1.22 |
| **EC215-32L** | 50.8 | 2.00 | 63.4 | 2.50 | 90 | 1,300 | 360 | 5,200 | 400 | 15.75 | 2.36 | 1.59 |

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

**Fittings:** 1A-Series | Two-piece Winner

**Typical Application:**
Hydraulic system service with petroleum and water based fluids, for general industrial service.

**Agency Specifications:**
MSHA
DNV
USCG

# EC118 Hydraulic hose

Meets: SAE 100R17 • ISO 18752



**Layline Example:**

**Winner** by Danfoss **EC118-08** | 12.7 mm (0.50 in) DN12 | SAE 100R17 • ISO 18752 MSHA IC-84/41 • USCG | 210 BAR (3050 PSI) | -40°C to +100°C -40°F to +212°F | 1A 2PC

**Construction:** Inner Tube: Synthetic rubber Reinforcement: 1 wire braid: -04, -06, -08; 2 wire braid: -10, -12, -16 Cover: Synthetic rubber

| PART | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC118-04L** | 6,4 | 0.25 | 12,2 | 0.48 | 210,0 | 3050 | 840,0 | 12200 | 50,8 | 2.00 | 0,18 | 0.12 |
| **EC118-06L** | 9,5 | 0.38 | 15,5 | 0.61 | 210,0 | 3050 | 840,0 | 12200 | 63,5 | 2.50 | 0,27 | 0.18 |
| **EC118-08L** | 12,7 | 0.50 | 19,0 | 0.75 | 210,0 | 3050 | 840,0 | 12200 | 88,9 | 3.50 | 0,36 | 0.24 |
| **EC118-10L** | 15,9 | 0.62 | 23,8 | 0.94 | 210,0 | 3050 | 840,0 | 12200 | 101,6 | 4.00 | 0,69 | 0.46 |
| **EC118-12L** | 19,0 | 0.75 | 27,7 | 1.09 | 210,0 | 3050 | 840,0 | 12200 | 120,7 | 4.75 | 0,81 | 0.54 |
| **EC118-16L** | 25,4 | 1.00 | 36,0 | 1.42 | 210,0 | 3050 | 840,0 | 12200 | 152,4 | 6.00 | 1,21 | 0.81 |

**Operating Temperature:** -40°C to +100°C (-40°F to +212°F)
**Fittings:** 1A-Series | Two-piece Winner

**Typical Application:**
Low and medium pressure hydraulic systems with petroleum and water-based fluids
Construction equipment and agriculture equipment

**Agency Specifications:**
MSHA
USCG

# EC082 Pilot line hydraulic hose

Meets: MSHA IC-84/41



**Layline example:**

**Winner** by Danfoss **EC082-04** | 6.4 MM (0.25 IN) DN6 | 150 BAR (2175 PSI) | -40°C to +100°C -40°F to +212°F | 2pc

**Construction:** Inner Tube: Synthetic rubber Reinforcement: One steel braid Cover: Synthetic rubber

| PART | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC082-04** | 6,4 | 0,25 | 11,5 | 0,45 | 150 | 2175 | 600 | 8700 | 25 | 0,98 | 0,15 | 0,10 |
| **EC082-06** | 9,5 | 0,38 | 14,8 | 0,58 | 120 | 1750 | 480 | 7000 | 40 | 1,57 | 0,20 | 0,13 |

**Operating Temperature:** -40°C to +100°C (-40°F to +212°F)
**Fittings:** Two-piece Winner (00110-04FEWZD, 00110-06EEWZD)

**Typical Application:**
Hydraulic system service with petroleum and water based fluids, for general industrial service.

**Agency Specifications:**
MSHA

# EC420 Hydraulic hose

Meets: SAE 100R13 • ISO 18752



**Layline Example:**

**Winner** by Danfoss **EC420-16** | 25.4 MM (1.00 IN) DN25 | SAE 100R13 • EN 856 R13 • ISO 18752 MSHA IC-84/41 • DNV • USCG | 350 BAR (5100 PSI) | -40°C to +121°C -40°F to +250°F | Half Bend | 4S

**Construction:** Inner Tube: Synthetic rubber Reinforcement: 4 wire spiral: -12, -16; 6 wire spiral: -20 to -32 Cover: Synthetic rubber

| PART | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC420-12** | 19.0 | 0.75 | 32.1 | 1.27 | 350 | 5,100 | 1,400 | 20,400 | 120 | 4.72 | 1.54 | 1.03 |
| **EC420-16** | 25.4 | 1.00 | 38.7 | 1.53 | 350 | 5,100 | 1,400 | 20,400 | 150 | 5.91 | 2.01 | 1.35 |
| **EC420-20** | 31.8 | 1.25 | 49.8 | 1.96 | 350 | 5,100 | 1,400 | 20,400 | 210 | 8.27 | 3.78 | 2.54 |
| **EC420-24** | 38.1 | 1.50 | 57.3 | 2.26 | 350 | 5,100 | 1,400 | 20,400 | 250 | 9.84 | 4.73 | 3.18 |
| **EC420-32** | 50.8 | 2.00 | 71.6 | 2.82 | 350 | 5,100 | 1,400 | 20,400 | 320 | 12.60 | 6.26 | 4.21 |

**Operating Temperature:** -40°C to +121°C (-40°F to +250°F)
**Fittings:** 4S series (-12, -16), 6S series (-20, -24, -32)

**Typical Application:**
Suitable for use in hydraulic systems with high peak pressures and arduous operating conditions.

**Agency Specifications:**
MSHA
USCG
DNV

# EC426 Hydraulic hose

Meets: EN856 4SP



**Layline example:**

**Winner** by Danfoss **EC426-12** | 19 mm (0.75 in) DN19 | EN856 4SP MSHA IC-84/41 | 350 BAR (5100 PSI) | -40°C to +100°C -40°F to +212°F | 4S

**Construction:** Inner Tube: Synthetic rubber Reinforcement: Four wire spiral Cover: Synthetic rubber

| PART | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC426-06** | 10 | 9.5 | 0.37 | 20.9 | 0.82 | 445 | 6,450 | 1,780 | 25,800 | 180 | 7.09 | 0.74 | 0.50 |
| **EC426-08** | 12 | 12.7 | 0.50 | 25.4 | 1.00 | 415 | 6,000 | 1,660 | 24,000 | 230 | 9.06 | 0.88 | 0.59 |
| **EC426-10** | 16 | 15.9 | 0.62 | 29.0 | 1.14 | 350 | 5,100 | 1,400 | 20,400 | 250 | 9.84 | 1.04 | 0.70 |
| **EC426-12** | 19 | 19.0 | 0.75 | 33.0 | 1.30 | 350 | 5,100 | 1,400 | 20,400 | 300 | 11.81 | 1.47 | 0.99 |
| **EC426-16** | 25 | 25.4 | 1.00 | 40.9 | 1.61 | 280 | 4,050 | 1,120 | 16,200 | 340 | 13.39 | 1.90 | 1.28 |
| **EC426-20*** | 31 | 31.8 | 1.25 | 48.6 | 1.91 | 210 | 3,050 | 840 | 12,200 | 460 | 18.11 | 2.46 | 1.65 |

**Only bulk hose*

**Operating Temperature:** -40°C to +100°C (-40°F to +212°F)
**Fittings:** 1T series (-6,-8,-10) 4S series (-12,-16)

**Typical Application:**
Hydraulic systems service with petroleum and water based fluids, for general use.

**Agency Specifications:**
MSHA

# EC512 Hydraulic hose

Meets: EN856 4SH



**Layline example:**

**Winner** by Danfoss **EC512-16** | 25.4 MM (1.00 IN) DN25 | EN856 4SH MSHA IC-84/41 • DNV | 380 BAR (5500 PSI) | -40°C to +100°C -40°F to +212°F | 4S

**Construction:** Inner Tube: Synthetic rubber Reinforcement: Four wire spiral Cover: Synthetic rubber

| PART # | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC512-12** | 19 | 19 | 0.75 | 33.0 | 1.30 | 420 | 6,100 | 1,680 | 24,400 | 280 | 11.02 | 1.47 | 0.99 |
| **EC512-16** | 25 | 25.4 | 1.00 | 39.9 | 1.57 | 380 | 5,500 | 1,520 | 22,000 | 340 | 13.39 | 2.04 | 1.37 |
| **EC512-20** | 31 | 31.8 | 1.25 | 47.1 | 1.85 | 350 | 5,100 | 1,400 | 20,400 | 460 | 18.11 | 2.39 | 1.61 |
| **EC512-24** | 38 | 38.1 | 1.05 | 55.1 | 2.17 | 290 | 4,200 | 1,160 | 16,800 | 560 | 22.05 | 3.19 | 2.14 |
| **EC512-32** | 51 | 50.8 | 2.00 | 69.7 | 2.74 | 250 | 3,650 | 1,000 | 14,600 | 700 | 27.56 | 4.37 | 2.94 |

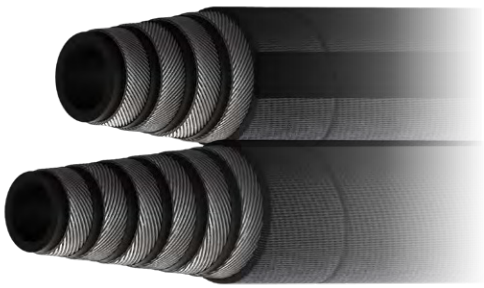
**Operating Temperature:** -40°C to +100°C (-40°F to +212°F)
**Fittings:** 4S Series (-12, -16, -20, -24, -32)

**Typical Application:**
Hydraulic systems service with petroleum and water based fluids, for general use.

**Agency Specifications:**
MSHA
DNV

# EC615 Hydraulic hose

Meets: ISO 18752 • SAE 100R15 • EN 856 R13



**Layline example:**

**Winner** by Danfoss **EC615-16** | 25.4 MM (1.00 IN) DN25 | SAE 100R15 • EN 856 R13 ISO 18752 • MSHA IC-84/41 • DNV | 420 BAR (6100 PSI) | -40°C to +121°C -40°F to +250°F | 4S

**Construction:** Inner Tube: Synthetic rubber Reinforcement: Four & six wire spiral reinforcement Cover: Synthetic rubber

| PART # | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC615-16** | 25.4 | 1.00 | 39.9 | 1.57 | 420 | 6,100 | 1,680 | 24,400 | 330 | 12.99 | 2.00 | 1.35 |
| **EC615-20** | 31.8 | 1.25 | 51.3 | 2.02 | 420 | 6,100 | 1,680 | 24,400 | 445 | 17.52 | 3.77 | 2.53 |
| **EC615-24** | 38.1 | 1.50 | 58.8 | 2.31 | 420 | 6,100 | 1,680 | 24,400 | 530 | 20.87 | 5.17 | 3.47 |
| **EC615-32*** | 50.8 | 2.00 | 72.8 | 2.87 | 420 | 6,100 | 1,680 | 24,400 | 600 | 23.62 | 7.26 | 4.88 |

** Only bulk hose*

**Operating Temperature:** -40°C to +121°C (-40°F to +250°F)
**Fittings:** 4S series (-16) 6S series (-20, -24)

**Typical Application:**
Suitable for use in hydraulic and oil systems.

**Agency Specifications:**
MSHA
DNV

# EC640 Core Standard Winner

Meets: Exceeds ISO 18752-CC, SAE100 R15



**Layline example:**

**Winner** by Danfoss **EC640-12** | 19.0 MM (0.75 IN) DN19 | SAE 100R15 • ISO 18752 MSHA IC-84/43 | 420 BAR (6100 PSI) | -40°C to +120°C -40°F to +248°F | Half Bend

**Construction:** Inner Tube: Synthetic rubber Reinforcement: 4-wire spiral (-6 to -16) 6-wire spiral (-20, -24, -32) Cover: Synthetic rubber

| PART | SIZE | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **EC640-06** | 9.5 | 0.37 | 20.9 | 0.82 | 420 | 6100 | 1680 | 24360 | 65 | 2.56 | 0.70 | 0.47 |
| **EC640-08** | 12.7 | 0.50 | 24.0 | 0.94 | 420 | 6100 | 1680 | 24360 | 90 | 3.54 | 0.92 | 0.62 |
| **EC640-10** | 15.9 | 0.63 | 27.7 | 1.09 | 420 | 6100 | 1680 | 24360 | 100 | 3.94 | 1.13 | 0.76 |
| **EC640-12** | 19.0 | 0.75 | 30.7 | 1.21 | 420 | 6100 | 1680 | 24360 | 150 | 5.91 | 1.25 | 0.84 |
| **EC640-16** | 25.4 | 1.00 | 37.9 | 1.49 | 420 | 6100 | 1680 | 24360 | 210 | 8.27 | 1.83 | 1.23 |
| **EC640-20** | 31.8 | 1.25 | 49.6 | 1.95 | 420 | 6100 | 1680 | 24360 | 260 | 10.24 | 3.17 | 2.13 |
| **EC640-24** | 38.1 | 1.50 | 56.9 | 2.24 | 420 | 6100 | 1680 | 24360 | 310 | 12.20 | 4.40 | 2.95 |
| **EC640-32** | 50.8 | 2.00 | 71.4 | 2.81 | 420 | 6100 | 1680 | 24360 | 350 | 13.78 | 6.28 | 4.22 |

**Operating Temperature:** -40˚C to +120˚C (-40˚F to +248˚F)
**Fittings:** 4S Series, 6S Series, 1W Series

**Typical Application:**
For hydraulic systems with high peak pressure and arduous operating conditions such as high pressure hydraulic circuits (for example on booms) on mobile construction equipment, mining equipment, and agricultural machines.

**Agency Specifications:**
MSHA, ABS, USCG

# WH004 Suction & Return hose

Meets: SAE 100R4



**Layline Example:**

**Winner** by Danfoss **WH004-12** | 19 mm (0.75 in) DN19 | SAE 100R4 MSHA IC-261/5 | 21 BAR (305 PSI) | -40°C to +100°C -40°F to +212°F | 1A 1G • 2 pc

**Construction:** Inner Tube: Oil resistant NBR Reinforcement: Textile with helical and anti-static wire Cover: Abrasion Resistant Synthetic rubber

| PART | SIZE DIMENSIONS | | | | PRESSURE | | | | BEND | | VACUUM | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Vacuum | | Weight | |
| | mm | in | mm | in | bar | psi | bar | psi | mm | in | kPa | in/Hg | kg/m | lbs/ft |
| **WH004-12** | 19.0 | 0.75 | 30.0 | 1.18 | 21 | 305 | 84 | 1220 | 40 | 1.57 | 94.8 | 28 | 0,54 | 0.36 |
| **WH004-16** | 25.4 | 1.00 | 36.2 | 1.43 | 17 | 245 | 68 | 980 | 45 | 1.77 | 94.8 | 28 | 0,68 | 0.46 |
| **WH004-20** | 31.8 | 1.25 | 43.0 | 1.69 | 14 | 205 | 56 | 820 | 60 | 2.36 | 94.8 | 28 | 0,85 | 0.57 |
| **WH004-24** | 38.1 | 1.50 | 50.2 | 1.98 | 10.5 | 150 | 42 | 600 | 65 | 2.56 | 94.8 | 28 | 1,20 | 0.81 |
| **WH004-32** | 50.8 | 2.00 | 63.2 | 2.49 | 7 | 100 | 28 | 400 | 100 | 3.94 | 94.8 | 28 | 1,53 | 1.03 |
| **WH004-40*** | 53.5 | 2.50 | 76.7 | 3.02 | 4 | 60 | 16 | 240 | 140 | 5.51 | 94.8 | 28 | 2,05 | 1.38 |
| **WH004-48*** | 76.2 | 3.00 | 89.4 | 3.52 | 4 | 60 | 16 | 240 | 180 | 7.09 | 94.8 | 28 | 2,62 | 1.76 |

**Only bulk hose*

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

**Fittings:** 1A and 1G and 2 pieces: (-12, 16, -20, -24, -32)

**Typical Application:**

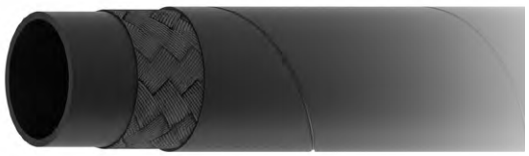
Suitable for use in suction applications for hydraulics, crude fuel, lubricating oils, gasoline, air, water and chemical transfer

**Agency Specifications:**

MSHA

# WH005 Textile hose

Meets: EN854 1TE • SAE 100R6



**Layline example:**

**Winner** by Danfoss **WH005-12** | 19 mm (0.75 in) DN19 | Meets SAE 100R6 | 21 BAR (305 PSI) | -40°C to +100°C -40°F to +212°F | 2 pc

**Construction:** Inner Tube: Synthetic rubber Reinforcement: One Synthetic Textile Braid Cover: Synthetic rubber

| PART | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **WH005-03** | 5 | 4.8 | 0.19 | 10.7 | 0.42 | 35 | 508 | 140 | 2030 | 35 | 1.38 | 0.09 | 0.06 |
| **WH005-04** | 6 | 6.4 | 0.25 | 12.3 | 0.48 | 28 | 406 | 112 | 1624 | 45 | 1.77 | 0.11 | 0.07 |
| **WH005-05** | 8 | 7.9 | 0.31 | 13.9 | 0.55 | 28 | 406 | 112 | 1624 | 65 | 2.56 | 0.13 | 0.08 |
| **WH005-06** | 10 | 9.5 | 0.37 | 15.5 | 0.61 | 28 | 406 | 112 | 1624 | 75 | 2.95 | 0.15 | 0.10 |
| **WH005-08** | 12 | 12.7 | 0.50 | 19.7 | 0.77 | 28 | 406 | 112 | 1624 | 90 | 3.54 | 0.23 | 0.15 |
| **WH005-10** | 16 | 16.2 | 0.64 | 22.6 | 0.89 | 24 | 348 | 94 | 1392 | 115 | 4.53 | 0.26 | 0.17 |
| **WH005-12** | 19 | 19.2 | 0.76 | 25.8 | 1.02 | 21 | 305 | 84 | 1218 | 140 | 5.51 | 0.32 | 0.21 |
| **WH005-16** | 25 | 25.4 | 1.00 | 33.2 | 1.31 | 20 | 290 | 80 | 1160 | 150 | 5.91 | 0.47 | 0.32 |

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

**Fittings:** Two-piece Winner

**Typical Application:**

For Hydraulic Control Lines; Hydraulic systems service with Petroleum and water based fluids for low pressure industrial service

# WH006 Textile hose

Meets: SAE 100R6 • EN 854 2TE



**Layline example:**

**Winner** by Danfoss **WH006-12** | 19.0 MM (0.75 IN) DN19 | SAE 100R6 / EN 854 2TE | 45 BAR (655 PSI) | -40°C to +100°C -40°F to +212°F | 2pc

**Construction:** Inner Tube: Synthetic rubber Reinforcement: One Synthetic Textile Braid Cover: Synthetic rubber cover

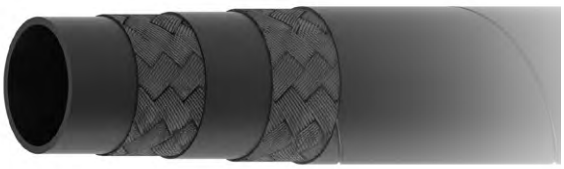
| PART | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **WH006-03** | 5 | 4.8 | 0.19 | 11.8 | 0.46 | 80 | 1160 | 320 | 4640 | 35 | 1.38 | 0.12 | 0.08 |
| **WH006-04** | 6 | 6.4 | 0.25 | 13.4 | 0.53 | 75 | 1088 | 300 | 4350 | 40 | 1.57 | 0.15 | 0.10 |
| **WH006-05** | 8 | 7.9 | 0.31 | 14.9 | 0.59 | 68 | 986 | 272 | 3944 | 50 | 1.97 | 0.17 | 0.11 |
| **WH006-06** | 10 | 9.5 | 0.37 | 16.5 | 0.65 | 63 | 914 | 252 | 3654 | 60 | 2.36 | 0.20 | 0.13 |
| **WH006-08** | 12 | 12.7 | 0.50 | 19.7 | 0.78 | 58 | 841 | 232 | 3364 | 70 | 2.67 | 0.24 | 0.16 |
| **WH006-10** | 16 | 15.9 | 0.63 | 23.9 | 0.94 | 50 | 725 | 200 | 2900 | 90 | 3.54 | 0.33 | 0.22 |
| **WH006-12** | 19 | 19.0 | 0.75 | 27.0 | 1.06 | 45 | 653 | 180 | 2610 | 110 | 4.33 | 0.38 | 0.26 |
| **WH006-16** | 25 | 25.4 | 1.00 | 34.4 | 1.35 | 40 | 580 | 160 | 2320 | 150 | 5.91 | 0.55 | 0.37 |

**Typical Application:**
For Hydraulic Control Lines; Hydraulic systems service with Petroleum and water based fluids for low pressure industrial service

**Operating Temperature:** -40°C to +100°C (-40°F to +212°F)
**Fittings:** Two-piece Winner

# WH007 Textile hose

Meets: EN 854 3TE



**Layline example:**

**Winner** by Danfoss **WH007-12** | 19.0 MM (0.75 IN) DN19 | EN 854 3TE MSHA IC-84/55 | 70 BAR (1000 PSI) | -40°C to +100°C -40°F to +212°F | 2pc

**Construction:** Inner Tube: Synthetic rubber Reinforcement: Two Synthetic Textile Braid Cover: Synthetic rubber

| PART | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **WH007-04** | 6 | 6.4 | 0.25 | 13.4 | 0.53 | 145 | 2103 | 580 | 8410 | 45 | 1.77 | 0.15 | 0.10 |
| **WH007-05** | 8 | 7.9 | 0.31 | 14.9 | 0.59 | 130 | 1885 | 520 | 7540 | 55 | 2.17 | 0.17 | 0.11 |
| **WH007-06** | 10 | 9.5 | 0.37 | 16.5 | 0.65 | 110 | 1595 | 440 | 6380 | 70 | 2.76 | 0.20 | 0.13 |
| **WH007-08** | 12 | 12.7 | 0.50 | 19.7 | 0.78 | 93 | 1349 | 372 | 5394 | 85 | 3.35 | 0.24 | 0.16 |
| **WH007-10** | 16 | 15.9 | 0.63 | 23.9 | 0.94 | 80 | 1160 | 320 | 4640 | 105 | 4.13 | 0.33 | 0.22 |
| **WH007-12** | 19 | 19.0 | 0.75 | 27.0 | 1.06 | 70 | 1015 | 280 | 4060 | 130 | 5.12 | 0.38 | 0.26 |
| **WH007-16** | 25 | 25.4 | 1.00 | 34.4 | 1.35 | 55 | 798 | 220 | 3190 | 150 | 5.91 | 0.55 | 0.37 |
| **WH007-20*** | 31 | 31.8 | 1.25 | 35.4 | 1.39 | 45 | 653 | 180 | 2610 | 190 | 7.48 | 1.55 | 1.04 |

** Only bulk hose*

**Typical Application:**
For Hydraulic Control Lines; Hydraulic systems service with Petroleum and water based fluids for low pressure industrial service

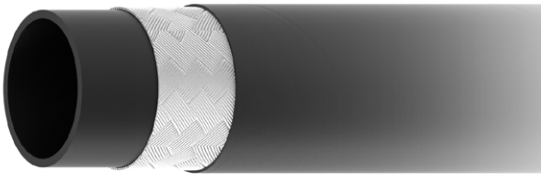
**Agency Specifications:**
MSHA

**Operating Temperature:** -40°C to +100°C (-40°F to +212°F)
**Fittings:** Two-piece Winner

# WHR7

## Thermoplastic hydraulic hose

Meets: SAE100 R7



**Layline Example:**

**Winner** by Danfoss **WHR7-12** | 19.2 mm (0.76 in) DN19 | SAE100 R7 | 88 BAR (1276 PSI) | -40°C to +100°C -40°F to +212°F | 2 pc

**Construction:** Inner Tube: Nylon Reinforcement: 1-textile Braid Cover: Perforated Polyurethane

| PART | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **WHR7-02** | 3 | 3.5 | 0.14 | 8.4 | 0.33 | 210 | 3045 | 840 | 12180 | 13 | 0.51 | 0.05 | 0.03 |
| **WHR7-03** | 5 | 4.8 | 0.19 | 9.9 | 0.39 | 210 | 3045 | 840 | 12180 | 35 | 1.38 | 0.06 | 0.04 |
| **WHR7-04** | 6 | 6.4 | 0.25 | 12.7 | 0.50 | 210 | 3045 | 840 | 12180 | 45 | 1.77 | 0.10 | 0.07 |
| **WHR7-05** | 8 | 7.9 | 0.31 | 14.4 | 0.57 | 175 | 2538 | 700 | 10150 | 60 | 2.36 | 0.13 | 0.09 |
| **WHR7-06** | 10 | 9.5 | 0.37 | 15.5 | 0.61 | 157 | 2277 | 628 | 9106 | 70 | 2.76 | 0.13 | 0.09 |
| **WHR7-08** | 12 | 12.7 | 0.50 | 19.9 | 0.78 | 140 | 2030 | 560 | 8120 | 90 | 3.54 | 0.20 | 0.13 |
| **WHR7-10** | 16 | 16.2 | 0.64 | 24.7 | 0.97 | 105 | 1523 | 420 | 6090 | 115 | 4.53 | 0.27 | 0.18 |
| **WHR7-12** | 19 | 19.2 | 0.76 | 28.0 | 1.10 | 88 | 1276 | 350 | 5104 | 127 | 5.00 | 0.31 | 0.21 |
| **WHR7-16** | 25 | 25.4 | 1.00 | 35.7 | 1.41 | 70 | 1015 | 280 | 4060 | 203 | 7.99 | 0.48 | 0.32 |

**Operating Temperature:** -40°C to +100°C (-40°F to +212°F)
**Fittings:** Two-piece Winner

**Typical Application:**

- Material handling
- Access platforms
- Agriculture
- Chemical transfer
- Foam systems
- Food processing
- General construction
- General hydraulic systems
- Lubrication systems

# WHR8

## Thermoplastic hydraulic hose

Meets: SAE100 R8



**Layline example:**

**Winner** by Danfoss **WHR8-12** | 25.4 mm (1.00 in) DN25 | SAE100 R8 | 140 BAR (2030 PSI) | -40°C to +100°C -40°F to +212°F | 2 pc

**Construction:** Inner Tube: Nylon Reinforcement: 2 or 3-textile Braids Cover: Perforated Polyurethane

| PART | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **WHR8-04** | 6 | 6.4 | 0.25 | 15.9 | 0.63 | 350 | 5075 | 1400 | 20300 | 51 | 2.00 | 0.18 | 0.12 |
| **WHR8-06** | 10 | 9.5 | 0.37 | 19.4 | 0.76 | 280 | 4060 | 1120 | 16240 | 64 | 2.50 | 0.22 | 0.15 |
| **WHR8-08** | 12 | 12.7 | 0.50 | 22.7 | 0.89 | 245 | 3553 | 980 | 14210 | 102 | 4.00 | 0.28 | 0.19 |
| **WHR8-12** | 19 | 19.0 | 0.75 | 28.9 | 1.14 | 157 | 2277 | 628 | 9106 | 165 | 6.50 | 0.38 | 0.26 |
| **WHR8-16** | 25 | 25.4 | 1.00 | 37.3 | 1.47 | 140 | 2030 | 560 | 8120 | 254 | 10.00 | 0.57 | 0.38 |

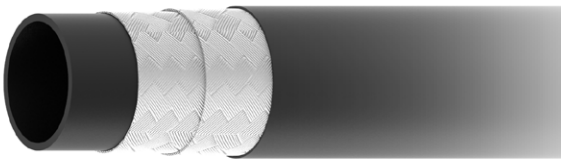
**Operating Temperature:** -40°C to +100°C (-40°F to +212°F)
**Fittings:** Two-piece Winner

**Typical Application:**

- General hydraulic systems
- Hydraulic tools
- Mobile equipment
- High pressure pneumatic systems
- High pressure chemical transfer

# WHR18 Thermoplastic hydraulic hose

Meets: SAE100 R18



**Layline example:**

**Winner** by Danfoss **WHR18-06** | 9.5 mm (0.37 in) DN10 | SAE100 R18 | 210 BAR (3045 PSI) | -40°C to +100°C -40°F to +212°F | 2 pc

**Construction:** Inner Tube: Polimeric core tube Reinforcement: 2 or 3-textile Braids Cover: Perforated Polyurethane

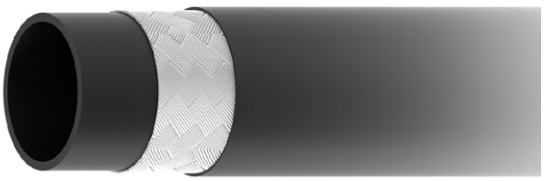
| PART | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **WHR18-03** | 5 | 4.8 | 0.19 | 10.7 | 0.42 | 210 | 3045 | 840 | 12180 | 25 | 1.00 | 0.08 | 0.05 |
| **WHR18-04** | 6 | 6.4 | 0.25 | 12.1 | 0.48 | 210 | 3045 | 840 | 12180 | 32 | 1.25 | 0.09 | 0.06 |
| **WHR18-05** | 8 | 7.9 | 0.31 | 15.5 | 0.61 | 210 | 3045 | 840 | 12180 | 38 | 1.50 | 0.15 | 0.10 |
| **WHR18-06** | 10 | 9.5 | 0.37 | 16.8 | 0.66 | 210 | 3045 | 840 | 12180 | 51 | 2.00 | 0.18 | 0.12 |
| **WHR18-08** | 12 | 12.7 | 0.50 | 21.6 | 0.85 | 210 | 3045 | 840 | 12180 | 89 | 3.50 | 0.25 | 0.17 |
| **WHR18-10** | 16 | 15.9 | 0.63 | 27.0 | 1.06 | 210 | 3045 | 840 | 12180 | 102 | 4.00 | 0.41 | 0.28 |

**Typical Application:**
- General hydraulics systems
- Forklifts
- Construction
- Agricultural equipment
- Lubrication equipment
- Material handling

**Operating Temperature:** -40°C to +93°C (-40°F to +200°F)
**Fittings:** Two-piece Winner

# WHR7L Low temperature thermoplastic hydraulic hose

Meets: SAE 100R7



**Layline example:**

**Winner** by Danfoss **WHR7L-06** | 9.5 mm (0.37 in) DN10 | SAE 100R7 | 158 BAR (2300 PSI) | -40°C to +100°C -40°F to +212°F | 2 pc

**Construction:** Inner Tube: Polyurethane Reinforcement: 1-textile Braid Cover: Polyester

| PART | SIZE DIMENSIONS | | | | | PRESSURE | | | | BEND | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Hose I.D. | | | Hose O.D. (nominal) | | Working Pressure | | Min. Burst Pressure | | Min. Bend Radius | | Weight | |
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft |
| **WHR7L-03** | 5 | 4.8 | 0.19 | 10.8 | 0.43 | 210 | 3050 | 840 | 12200 | 20 | 0.79 | 0.10 | 0.07 |
| **WHR7L-04** | 6 | 6.4 | 0.25 | 13.1 | 0.52 | 193 | 2800 | 770 | 11168 | 32 | 1.26 | 0.14 | 0.10 |
| **WHR7L-05** | 8 | 7.9 | 0.31 | 14.9 | 0.59 | 175 | 2550 | 700 | 10200 | 45 | 1.77 | 0.14 | 0.10 |
| **WHR7L-06** | 10 | 9.5 | 0.37 | 16.6 | 0.65 | 158 | 2300 | 630 | 9137 | 51 | 2.01 | 0.17 | 0.11 |

**Typical Application:**
- Access platforms
- Forklift
- General construction
- General hydraulic systems

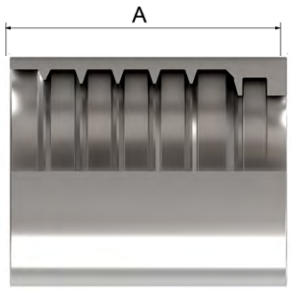
**Operating Temperature:** -54°C to +100°C (-65°F to +212°F)
**Fittings:** Two-piece Winner

# Standard and premium fittings - the **right** product for every **application**

Braided or spiral, premium or standard, there is a Danfoss fitting for each of your application.

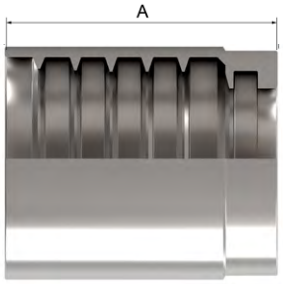


# EC110-EC115 Socket



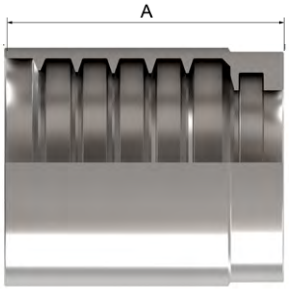

| PART | HOSE SIZE INFO | | DIMENSIONS | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|
| # | DN | Dash Size | A | | OD | | Weight | |
| | | | mm | in | mm | in | kg | lb |
| **00110-04AEWZD** | 6 | -04 | 27,5 | 1.08 | 21,0 | 0.83 | 0,03 | 0.07 |
| **00110-05AEWZD** | 8 | -05 | 28,0 | 1.10 | 21,5 | 0.85 | 0,03 | 0.06 |
| **00110-06AEWZD** | 10 | -06 | 30,0 | 1.18 | 24,3 | 0.96 | 0,04 | 0.08 |
| **00110-08AEWZD** | 12 | -08 | 34,0 | 1.34 | 28,0 | 1.10 | 0,05 | 0.10 |
| **00110-10AEWZD** | 16 | -10 | 37,0 | 1.46 | 31,3 | 1.23 | 0,06 | 0.13 |
| **00110-12AEWZD** | 20 | -12 | 42,0 | 1.65 | 28,7 | 1.13 | 0,08 | 0.17 |
| **00110-16AEWZD** | 25 | -16 | 51,0 | 2.01 | 43,5 | 1.71 | 0,13 | 0.28 |
| **00110-20EWZD** | 32 | -20 | 59,0 | 2.32 | 52,0 | 2.05 | 0,21 | 0.46 |
| **00110-24EWZD** | 40 | -24 | 74,0 | 2.91 | 58,0 | 2.28 | 0,27 | 0.58 |
| **00110-32EWZD** | 50 | -32 | 78,0 | 3.07 | 72,0 | 2.83 | 0,39 | 0.86 |

# EC210-EC215-WH004 Socket



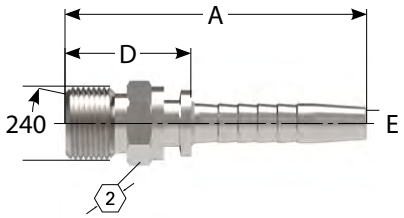

| PART | HOSE SIZE INFO | | DIMENSIONS | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|
| # | DN | Dash Size | A | | OD | | Weight | |
| | | | mm | in | mm | in | kg | lb |
| **03310-04EWZD** | 6 | -04 | 30,5 | 1.20 | 23,0 | 0.91 | 0,04 | 0.09 |
| **03310-05EWZD** | 8 | -05 | 30,0 | 1.18 | 24,0 | 0.94 | 0,04 | 0.08 |
| **03310-06EWZD** | 10 | -06 | 32,0 | 1.26 | 26,0 | 1.02 | 0,04 | 0.09 |
| **03310-08EWZD** | 12 | -08 | 34,0 | 1.34 | 29,0 | 1.14 | 0,05 | 0.10 |
| **03310-10AEWZD** | 16 | -10 | 35,0 | 1.38 | 34,5 | 1.36 | 0,06 | 0.14 |
| **03310-12EWZD** | 20 | -12 | 42,0 | 1.65 | 37,0 | 1.46 | 0,08 | 0.18 |
| **03310-16EWZD** | 25 | -16 | 52,0 | 2.05 | 46,7 | 1.84 | 0,15 | 0.33 |
| **03310-20AEWZD** | 32 | -20 | 59,0 | 2.32 | 59,0 | 2.32 | 0,26 | 0.57 |
| **03310-24AEWZD** | 40 | -24 | 67,0 | 2.64 | 67,0 | 2.64 | 0,43 | 0.94 |
| **03310-32AEWZD** | 50 | -32 | 72,0 | 2.83 | 80,0 | 3.15 | 0,61 | 1.34 |

# WHR7-WHR8-WHR18-WH005-WH006-WH007 Socket



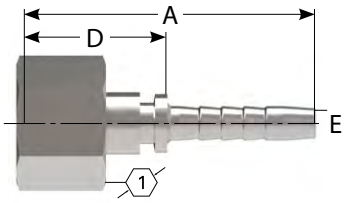

| PART | HOSE SIZE INFO | | DIMENSIONS | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|
| # | DN | Dash Size | A | | OD | | Weight | |
| | | | mm | in | mm | in | kg | lb |
| **000T8-02EWZD** | 3 | -02 | 20.5 | 0.81 | 12.05 | 0.47 | 0.02 | 0.05 |
| **000T8-03EWZD** | 5 | -03 | 23.0 | 0.91 | 17.15 | 0.68 | 0.02 | 0.06 |
| **000T8-04EWZD** | 6 | -04 | 30.5 | 1.20 | 20.98 | 0.83 | 0.03 | 0.06 |
| **000T8-05EWZD** | 8 | -05 | 30.0 | 1.18 | 22.00 | 0.87 | 0.03 | 0.07 |
| **000T8-06EWZD** | 10 | -06 | 32.0 | 1.26 | 24.43 | 0.96 | 0.04 | 0.08 |
| **000T8-08EWZD** | 12 | -08 | 34.0 | 1.34 | 27.76 | 1.09 | 0.05 | 0.10 |
| **000T8-10EWZD** | 16 | -10 | 37.0 | 1.46 | 34.62 | 1.36 | 0.06 | 0.13 |
| **000T8-12EWZD** | 19 | -12 | 42.0 | 1.65 | 33.32 | 1.31 | 0.08 | 0.17 |
| **000T8-16EWZD** | 25 | -16 | 51.0 | 2.01 | 44.75 | 1.76 | 0.13 | 0.28 |

# DIN 24° LIGHT DUTY

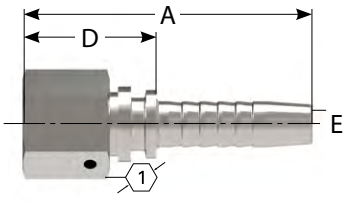



## **DIN 24° Male Rigid** (DKO Light)

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **10411-12-04Z** | -12 | M12x1.5 | 6 | -04 | 48,5 | 1.91 | 20,5 | 0.81 | 4,0 | 0.16 | -- | 12 | 0,015 | 0.033 |
| **10411-14-04Z** | -14 | M14x1.5 | 6 | -04 | 48,5 | 1.91 | 20,5 | 0.81 | 4,0 | 0.16 | -- | 14 | 0,020 | 0.044 |
| **10411-14-05Z** | -14 | M14x1.5 | 8 | -05 | 49,5 | 1.95 | 21,5 | 0.85 | 5,5 | 0.22 | -- | 14 | 0,020 | 0.044 |
| **10411-16-04Z** | -16 | M16x1.5 | 6 | -04 | 50,5 | 1.99 | 22,5 | 0.89 | 4,0 | 0.16 | -- | 17 | 0,025 | 0.055 |
| **10411-16-05Z** | -16 | M16x1.5 | 8 | -05 | 50,5 | 1.99 | 22,5 | 0.89 | 5,5 | 0.22 | -- | 17 | 0,025 | 0.055 |
| **10411-16-06Z** | -16 | M16x1.5 | 10 | -06 | 52,5 | 2.07 | 22,5 | 0.89 | 7,0 | 0.28 | -- | 17 | 0,034 | 0.075 |
| **10411-18-04Z** | -18 | M18x1.5 | 6 | -04 | 51,5 | 2.03 | 23,5 | 0.93 | 4,0 | 0.16 | -- | 19 | 0,030 | 0.066 |
| **10411-18-05Z** | -18 | M18x1.5 | 8 | -05 | 51,5 | 2.03 | 23,5 | 0.93 | 5,5 | 0.22 | -- | 19 | 0,030 | 0.066 |
| **10411-18-06Z** | -18 | M18x1.5 | 10 | -06 | 52,5 | 2.07 | 22,5 | 0.89 | 7,0 | 0.28 | -- | 19 | 0,035 | 0.077 |
| **10411-18-08Z** | -18 | M18x1.5 | 12 | -08 | 55,5 | 2.19 | 24,0 | 0.95 | 10,0 | 0.39 | -- | 19 | 0,045 | 0.099 |
| **10411-22-06Z** | -22 | M22x1.5 | 10 | -06 | 54,5 | 2.15 | 24,5 | 0.96 | 7,0 | 0.28 | -- | 24 | 0,050 | 0.110 |
| **10411-22-08Z** | -22 | M22x1.5 | 12 | -08 | 57,5 | 2.26 | 26,0 | 1.02 | 10,0 | 0.39 | -- | 24 | 0,060 | 0.132 |
| **10411-26-08Z** | -26 | M26x1.5 | 12 | -08 | 58,0 | 2.28 | 26,5 | 1.04 | 10,0 | 0.39 | -- | 27 | 0,076 | 0.167 |
| **10411-26-10Z** | -26 | M26x1.5 | 16 | -10 | 60,5 | 2.38 | 26,5 | 1.04 | 12,0 | 0.47 | -- | 27 | 0,080 | 0.176 |
| **10411-30-12Z** | -30 | M30x2 | 20 | -12 | 68,5 | 2.70 | 30,0 | 1.18 | 15,0 | 0.59 | -- | 32 | 0,122 | 0.268 |
| **10411-36-12Z** | -36 | M36x2 | 20 | -12 | 69,5 | 2.75 | 31,0 | 1.22 | 15,0 | 0.59 | -- | 38 | 0,164 | 0.361 |
| **10411-36-16Z** | -36 | M36x2 | 25 | -16 | 78,5 | 3.09 | 31,5 | 1.24 | 21,0 | 0.83 | -- | 38 | 0,178 | 0.392 |
| **10411-45-20Z** | -45 | M45x2 | 32 | -20 | 91,0 | 3.58 | 37,0 | 1.46 | 27,0 | 1.06 | -- | 46 | 0,310 | 0.682 |
| **10411-52-24Z** | -52 | M52x2 | 40 | -24 | 106,0 | 4.17 | 38,0 | 1.50 | 32,0 | 1.26 | -- | 55 | 0,460 | 1.012 |




Style 1

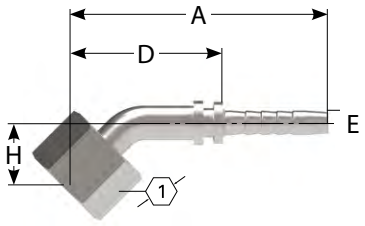



Style 2

# **DIN 24° Female Swivel** (DKO Light)

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **20411-12-04WZ**** | -12 | M12X1.5 | 6 | -04 | 50,0 | 1.97 | 22,5 | 0.89 | 4,0 | 0.16 | 17 | -- | 0,032 | 0.071 |
| **20411-14-04TZ**** | -14 | M14X1.5 | 6 | -04 | 50,5 | 1.99 | 22,5 | 0.89 | 4,0 | 0.16 | 17 | -- | 0,030 | 0.066 |
| **20411-14-05WZ**** | -14 | M14X1.5 | 8 | -05 | 50,5 | 1.99 | 22,5 | 0.89 | 5,5 | 0.22 | 17 | -- | 0,032 | 0.071 |
| **20411-14-06WZ**** | -14 | M14X1.5 | 10 | -06 | 53,0 | 2.09 | 23,0 | 0.91 | 7,0 | 0.28 | 17 | -- | 0,035 | 0.077 |
| **20411-16-04TZ*** | -16 | M16X1.5 | 6 | -04 | 48,5 | 1.91 | 20,5 | 0.81 | 4,0 | 0.16 | 19 | -- | 0,032 | 0.071 |
| **20411-16-05TZ**** | -16 | M16X1.5 | 8 | -05 | 50,0 | 1.97 | 22,0 | 0.87 | 5,5 | 0.22 | 19 | -- | 0,038 | 0.084 |
| **20411-16-06WZ**** | -16 | M16X1.5 | 10 | -06 | 53,5 | 2.11 | 23,5 | 0.93 | 7,0 | 0.28 | 19 | -- | 0,044 | 0.097 |
| **20411-18-04TZ*** | -18 | M18X1.5 | 6 | -04 | 52,5 | 2.07 | 24,5 | 0.96 | 4,0 | 0.16 | 22 | -- | 0,047 | 0.104 |
| **20411-18-05TZ*** | -18 | M18X1.5 | 8 | -05 | 52,5 | 2.07 | 24,5 | 0.96 | 5,5 | 0.22 | 22 | -- | 0,055 | 0.121 |
| **20411-18-06TZ*** | -18 | M18X1.5 | 10 | -06 | 57,5 | 2.26 | 27,5 | 1.08 | 7,0 | 0.28 | 22 | -- | 0,055 | 0.121 |
| **20411-18-08WZ**** | -18 | M18X1.5 | 12 | -08 | 56,0 | 2.2 | 24,5 | 0.96 | 10,0 | 0.39 | 22 | -- | 0,064 | 0.141 |
| **20411-22-10WZ**** | -22 | M22X1.5 | 16 | -10 | 60,0 | 2.36 | 26,0 | 1.02 | 12,0 | 0.47 | 27 | -- | 0,105 | 0.231 |
| **20411-22-04TZ*** | -22 | M22X1.5 | 6 | -04 | 54,5 | 2.15 | 26,5 | 1.04 | 4,0 | 0.16 | 27 | -- | 0,075 | 0.165 |
| **20411-22-05TZ*** | -22 | M22X1.5 | 8 | -05 | 54,5 | 2.15 | 26,5 | 1.04 | 5,5 | 0.22 | 27 | -- | 0,078 | 0.172 |
| **20411-22-06TZ*** | -22 | M22X1.5 | 10 | -06 | 56,5 | 2.22 | 26,5 | 1.04 | 7,0 | 0.28 | 27 | -- | 0,084 | 0.185 |
| **20411-22-08TZ*** | -22 | M22X1.5 | 12 | -08 | 60,5 | 2.38 | 29,0 | 1.14 | 10,0 | 0.39 | 27 | -- | 0,076 | 0.168 |
| **20411-26-10TZ*** | -26 | M26X1.5 | 16 | -10 | 64,0 | 2.52 | 30,0 | 1.18 | 12,0 | 0.47 | 32 | -- | 0,120 | 0.265 |
| **20411-26-12WZ**** | -26 | M26X1.5 | 20 | -12 | 67,0 | 2.64 | 27,5 | 1.08 | 15,0 | 0.59 | 32 | -- | 0,145 | 0.32 |
| **20411-26-08TZ*** | -26 | M26X1.5 | 12 | -08 | 59,0 | 2.32 | 27,5 | 1.08 | 10,0 | 0.39 | 32 | -- | 0,118 | 0.26 |
| **20411-30-10TZ*** | -30 | M30X2 | 16 | -10 | 65,0 | 2.56 | 31,0 | 1.22 | 12,0 | 0.47 | 36 | -- | 0,150 | 0.331 |
| **20411-30-12TZ*** | -30 | M30X2 | 20 | -12 | 72,5 | 2.85 | 34,0 | 1.34 | 15,0 | 0.59 | 36 | -- | 0,185 | 0.408 |
| **20411-30-16WZ**** | -30 | M30X2 | 25 | -16 | 77,5 | 3.05 | 30,5 | 1.2 | 21,0 | 0.83 | 36 | -- | 0,212 | 0.467 |
| **20411-36-12TZ*** | -36 | M36X2 | 20 | -12 | 71,5 | 2.81 | 33,0 | 1.3 | 15,0 | 0.59 | 41 | -- | 0,205 | 0.452 |
| **20411-36-16WZ**** | -36 | M36X2 | 25 | -16 | 77,0 | 3.03 | 30,0 | 1.18 | 21,0 | 0.83 | 41 | -- | 0,235 | 0.518 |
| **20411-45-16TZ*** | -45 | M45X2 | 25 | -16 | 84,0 | 3.31 | 37,0 | 1.46 | 21,0 | 0.83 | 50 | -- | 0,433 | 0.955 |
| **20411-45-20TZ*** | -45 | M45X2 | 32 | -20 | 91,5 | 3.6 | 37,5 | 1.48 | 27,0 | 1.06 | 50 | -- | 0,485 | 1.069 |
| **20411-52-20TZ*** | -52 | M52X2 | 32 | -20 | 92,5 | 3.64 | 38,5 | 1.52 | 27,0 | 1.06 | 60 | -- | 0,500 | 1.102 |
| **20411-52-24TZ*** | -52 | M52X2 | 40 | -24 | 106,5 | 4.19 | 38,5 | 1.52 | 32,0 | 1.26 | 60 | -- | 0,620 | 1.367 |

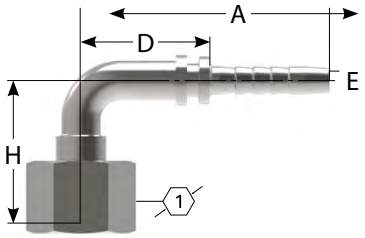
** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*




## **DIN 24° Female** 45° Elbow (DKO Light)

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | | | **mm** | **mm** | **kg** | **lb** |
| **20441-12-04WZ**** | -12 | M12X1.5 | 6 | -04 | 6 | 64, | 2.52 | 36,0 | 1.42 | 4,0 | 0.16 | 15,1 | 17 | -- | 0.040 | 0.088 |
| **20441-14-04TZ**** | -14 | M14X1.5 | 6 | -04 | 8 | 66,1 | 2.60 | 38,1 | 1.50 | 4,0 | 0.16 | 16,0 | 17 | -- | 0.040 | 0.088 |
| **20441-16-04TZ*** | -16 | M16X1.5 | 6 | -04 | 10 | 66,1 | 2.60 | 38,1 | 1.50 | 4,0 | 0.16 | 16,0 | 19 | -- | 0.050 | 0.088 |
| **20441-16-05TZ**** | -16 | M16X1.5 | 8 | -05 | 10 | 68,3 | 2.69 | 40,3 | 1.59 | 5,5 | 0.22 | 17,0 | 19 | -- | 0.054 | 0.119 |
| **20441-16-06WZ**** | -16 | M16X1.5 | 10 | -06 | 10 | 70,3 | 2.77 | 40,3 | 1.59 | 7,0 | 0.28 | 17,0 | 19 | -- | 0.058 | 0.128 |
| **20441-18-05TZ*** | -18 | M18X1.5 | 8 | -05 | 12 | 68,3 | 2.69 | 40,3 | 1.59 | 5,5 | 0.22 | 17,0 | 22 | -- | 0.070 | 0.154 |
| **20441-18-06TZ*** | -18 | M18X1.5 | 10 | -06 | 12 | 75, | 2.95 | 45,0 | 1.77 | 7,0 | 0.28 | 18,5 | 22 | -- | 0.070 | 0.154 |
| **20441-18-08WZ**** | -18 | M18X1.5 | 12 | -08 | 12 | 75,7 | 2.98 | 44,2 | 1.74 | 10,0 | 0.39 | 18,7 | 22 | -- | 0.086 | 0.190 |
| **20441-22-10WZ**** | -22 | M22X1.5 | 16 | -10 | 15 | 83, | 3.27 | 49,0 | 1.93 | 12,0 | 0.47 | 22,2 | 27 | -- | 0.125 | 0.276 |
| **20441-22-06TZ*** | -22 | M22X1.5 | 10 | -06 | 15 | 72, | 2.83 | 42,0 | 1.65 | 7,0 | 0.28 | 18,0 | 27 | -- | 0.096 | 0.212 |
| **20441-22-08TZ*** | -22 | M22X1.5 | 12 | -08 | 15 | 80,3 | 3.16 | 48,8 | 1.92 | 10,0 | 0.39 | 20,0 | 27 | -- | 0.105 | 0.231 |
| **20441-26-10TZ*** | -26 | M26X1.5 | 16 | -10 | 18 | 73,5 | 2.89 | 58,0 | 2.28 | 12,0 | 0.47 | 23,5 | 32 | -- | 0.178 | 0.392 |
| **20441-26-12WZ**** | -26 | M26X1.5 | 20 | -12 | 18 | 99,9 | 3.93 | 61,4 | 2.42 | 15,0 | 0.59 | 24,6 | 32 | -- | 0.210 | 0.463 |
| **20441-26-08TZ*** | -26 | M26X1.5 | 12 | -08 | 18 | 78,8 | 3.10 | 47,3 | 1.86 | 10,0 | 0.39 | 21,0 | 32 | -- | 0.154 | 0.340 |
| **20441-30-10TZ*** | -30 | M30X2 | 16 | -10 | 22 | 90,4 | 3.56 | 56,4 | 2.22 | 12,0 | 0.47 | 24,1 | 36 | -- | 0.196 | 0.432 |
| **20441-30-12TZ*** | -30 | M30X2 | 20 | -12 | 22 | 101,7 | 4.00 | 63,2 | 2.49 | 15,0 | 0.59 | 25,6 | 36 | -- | 0.240 | 0.529 |
| **20441-36-12TZ*** | -36 | M36X2 | 20 | -12 | 28 | 100,0 | 3.94 | 61,5 | 2.42 | 15,0 | 0.59 | 25,6 | 41 | -- | 0.360 | 0.794 |
| **20441-36-16WZ**** | -36 | M36X2 | 25 | -16 | 28 | 124,6 | 4.91 | 77,6 | 3.06 | 21,0 | 0.83 | 32,0 | 41 | -- | 0.388 | 0.855 |
| **20441-45-16TZ*** | -45 | M45X2 | 25 | -16 | 35 | 124,2 | 4.90 | 77,5 | 3.05 | 21,0 | 0.83 | 32,0 | 50 | -- | 0.590 | 1.301 |
| **20441-45-20TZ*** | -45 | M45X2 | 32 | -20 | 35 | 145,7 | 5.62 | 88,7 | 3.49 | 27,0 | 1.06 | 38,0 | 50 | -- | 0.716 | 1.579 |
| **20441-52-20TZ*** | -52 | M52X2 | 32 | -20 | 42 | 144,3 | 5.68 | 90,3 | 3.56 | 27,0 | 1.06 | 38,0 | 60 | -- | 0.813 | 1.792 |
| **20441-52-24TZ*** | -52 | M52X2 | 40 | -24 | 42 | 185,5 | 7.19 | 114,5 | 4.51 | 32,0 | 1.26 | 43,7 | 60 | -- | 1.100 | 2.425 |

** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*

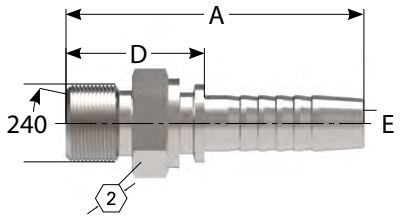



## **DIN 24° Female** 90° Elbow (DKO Light)

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | | | **mm** | **mm** | **kg** | **lb** |
| **20491-12-04WZ**** | -12 | M12X1.5 | 6 | -04 | 55,0 | 2.17 | 27,0 | 1.06 | 4,0 | 0.16 | 30,0 | 1.18 | 17 | -- | 0,040 | 0.088 |
| **20491-14-04Z**** | -14 | M14X1.5 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 30,5 | 1.20 | 17 | -- | 0,042 | 0.093 |
| **20491-14-05WZ**** | -14 | M14X1.5 | 8 | -05 | 58,0 | 2.28 | 30,0 | 1.18 | 5,5 | 0.22 | 30,5 | 1.20 | 17 | -- | 0,046 | 0.101 |
| **20491-14-06WZ**** | -14 | M14X1.5 | 10 | -06 | 60,0 | 2.36 | 30,0 | 1.18 | 7,0 | 0.28 | 30,5 | 1.20 | 17 | -- | 0,050 | 0.110 |
| **20491-16-04TZ*** | -16 | M16X1.5 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 30,5 | 1.20 | 19 | -- | 0,050 | 0.110 |
| **20491-16-05TZ**** | -16 | M16X1.5 | 8 | -05 | 61,0 | 2.40 | 33,0 | 1.30 | 5,5 | 0.22 | 33,0 | 1.30 | 19 | -- | 0,070 | 0.154 |
| **20491-16-06WZ**** | -16 | M16X1.5 | 10 | -06 | 65,0 | 2.56 | 35,0 | 1.38 | 7,0 | 0.28 | 33,0 | 1.30 | 19 | -- | 0,064 | 0.141 |
| **20491-18-04TZ*** | -18 | M18X1.5 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 30,5 | 1.20 | 22 | -- | 0,074 | 0.163 |
| **20491-18-05TZ*** | -18 | M18X1.5 | 8 | -05 | 61,0 | 2.40 | 33,0 | 1.30 | 5,5 | 0.22 | 33,5 | 1.32 | 22 | -- | 0,077 | 0.170 |
| **20491-18-06TZ*** | -18 | M18X1.5 | 10 | -06 | 67,0 | 2.64 | 37,0 | 1.46 | 7,0 | 0.28 | 36,0 | 1.42 | 22 | -- | 0,075 | 0.165 |
| **20491-18-08WZ**** | -18 | M18X1.5 | 12 | -08 | 70,5 | 2.78 | 39,0 | 1.54 | 10,0 | 0.39 | 37,0 | 1.46 | 22 | -- | 0,090 | 0.198 |
| **20491-22-10WZ**** | -22 | M22X1.5 | 16 | -10 | 79,0 | 3.11 | 45,0 | 1.77 | 12,0 | 0.47 | 44,5 | 1.75 | 27 | -- | 0,145 | 0.320 |
| **20491-22-05TZ*** | -22 | M22X1.5 | 8 | -05 | 61,0 | 2.40 | 33,0 | 1.30 | 5,5 | 0.22 | 34,5 | 1.36 | 27 | -- | 0,092 | 0.203 |
| **20491-22-06TZ*** | -22 | M22X1.5 | 10 | -06 | 64,5 | 2.54 | 34,5 | 1.36 | 7,0 | 0.28 | 36,0 | 1.42 | 27 | -- | 0,110 | 0.243 |
| **20491-22-08TZ*** | -22 | M22X1.5 | 12 | -08 | 73,5 | 2.89 | 42,0 | 1.65 | 10,0 | 0.39 | 41,5 | 1.63 | 27 | -- | 0,126 | 0.278 |
| **20491-26-10TZ*** | -26 | M26X1.5 | 16 | -10 | 85,2 | 3.35 | 51,2 | 2.02 | 12,0 | 0.47 | 51,5 | 2.03 | 32 | -- | 0,210 | 0.463 |
| **20491-26-12WZ**** | -26 | M26X1.5 | 20 | -12 | 94,0 | 3.70 | 55,5 | 2.19 | 15,0 | 0.59 | 51,5 | 2.03 | 32 | -- | 0,242 | 0.534 |
| **20491-26-08TZ*** | -26 | M26X1.5 | 12 | -08 | 71,0 | 2.80 | 39,5 | 1.56 | 10,0 | 0.39 | 42,9 | 1.69 | 32 | -- | 0,160 | 0.353 |
| **20491-30-10TZ*** | -30 | M30X2 | 16 | -10 | 83,0 | 3.27 | 49,0 | 1.93 | 12,0 | 0.47 | 51,5 | 2.03 | 36 | -- | 0,255 | 0.562 |
| **20491-30-12TZ*** | -30 | M30X2 | 20 | -12 | 95,5 | 3.76 | 57,0 | 2.24 | 15,0 | 0.59 | 56,0 | 2.20 | 36 | -- | 0,293 | 0.646 |
| **20491-30-16WZ*** | -30 | M30x2 | 25 | -16 | 11,25 | 0.44 | 65,5 | 2.58 | 21,0 | 0.83 | 61,5 | 2.42 | 36,0 | -- | 0,380 | 0.838 |
| **20491-36-10TZ*** | -36 | M36X2 | 16 | -10 | 83,0 | 3.27 | 49,0 | 1.93 | 12,0 | 0.47 | 56,5 | 2.22 | 41 | -- | 0,290 | 0.639 |
| **20491-36-12TZ*** | -36 | M36X2 | 20 | -12 | 93,8 | 3.69 | 55,3 | 2.18 | 15,0 | 0.59 | 56,0 | 2.20 | 41 | -- | 0,422 | 0.930 |
| **20491-36-16WZ**** | -36 | M36X2 | 25 | -16 | 118,0 | 4.65 | 71,0 | 2.80 | 21,0 | 0.83 | 68,5 | 2.70 | 41 | -- | 0,450 | 0.992 |
| **20491-45-16TZ*** | -45 | M45X2 | 25 | -16 | 118,0 | 4.65 | 71,0 | 2.80 | 21,0 | 0.83 | 69,5 | 2.74 | 50 | -- | 0,660 | 1.455 |
| **20491-45-24WZ**** | -45 | M45X2 | 40 | -24 | 169,5 | 6.67 | 101,5 | 4.00 | 32,0 | 1.26 | 91,5 | 3.60 | 50 | -- | 0,900 | 1.984 |
| **20491-45-20TZ*** | -45 | M45X2 | 32 | -20 | 135,5 | 5.33 | 81,5 | 3.21 | 27,0 | 1.06 | 78,5 | 3.09 | 50 | -- | 0,850 | 1.874 |
| **20491-52-20TZ*** | -52 | M52X2 | 32 | -20 | 137,0 | 5.39 | 83,0 | 3.27 | 27,0 | 1.06 | 81,0 | 3.19 | 60 | -- | 0,913 | 2.013 |
| **20491-52-24TZ*** | -52 | M52X2 | 40 | -24 | 177,5 | 6.99 | 109,4 | 4.31 | 32,0 | 1.26 | 100,5 | 3.96 | 60 | -- | 1,470 | 3.241 |

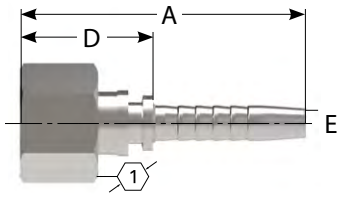
** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*

# DIN 24° HEAVY DUTY




## DIN 24° Male Rigid (DKO Heavy)

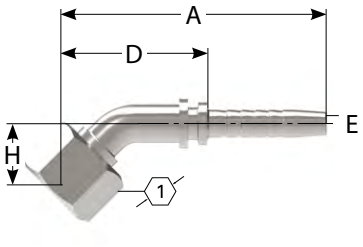
| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **10511-14-04Z** | -14 | M14x1.5 | 6 | -04 | 52,5 | 2.07 | 24,5 | 0.96 | 4,0 | 0.16 | - - | 14 | 0,025 | 0.055 |
| **10511-16-04Z** | -16 | M16x1.5 | 6 | -04 | 54,5 | 2.15 | 26,5 | 1.04 | 4,0 | 0.16 | - - | 17 | 0,036 | 0.079 |
| **10511-18-04Z** | -18 | M18x1.5 | 6 | -04 | 54,5 | 2.15 | 26,5 | 1.04 | 4,0 | 0.16 | - - | 19 | 0,040 | 0.088 |
| **10511-18-06Z** | -18 | M18x1.5 | 10 | -06 | 56,5 | 2.22 | 26,5 | 1.04 | 7,0 | 0.28 | - - | 19 | 0,045 | 0.099 |
| **10511-20-05Z** | -20 | M20x1.5 | 8 | -05 | 55,0 | 2.17 | 27,0 | 1.06 | 5,5 | 0.22 | - - | 22 | 0,052 | 0.114 |
| **10511-20-06Z** | -20 | M20x1.5 | 10 | -06 | 56,5 | 2.22 | 26,5 | 1.04 | 7,0 | 0.28 | - - | 22 | 0,060 | 0.132 |
| **10511-22-06Z** | -22 | M22x1.5 | 10 | -06 | 60,5 | 2.38 | 30,5 | 1.20 | 7,0 | 0.28 | - - | 24 | 0,070 | 0.154 |
| **10511-22-08Z** | -22 | M22x1.5 | 12 | -08 | 62,5 | 2.46 | 31,0 | 1.22 | 10,0 | 0.39 | - - | 24 | 0,080 | 0.176 |
| **10511-24-08Z** | -24 | M24x1.5 | 12 | -08 | 63,0 | 2.48 | 31,5 | 1.24 | 10,0 | 0.39 | - - | 27 | 0,090 | 0.198 |
| **10511-30-10Z** | -30 | M30x2 | 16 | -10 | 68,5 | 2.70 | 34,5 | 1.36 | 12,0 | 0.47 | - - | 32 | 0,140 | 0.308 |
| **10511-30-12Z** | -30 | M30x2 | 20 | -12 | 74,5 | 2.93 | 36,0 | 1.42 | 15,0 | 0.59 | - - | 32 | 0,150 | 0.330 |
| **10511-36-12Z** | -36 | M36x2 | 20 | -12 | 79,0 | 3.11 | 40,5 | 1.59 | 15,0 | 0.59 | - - | 41 | 0,255 | 0.561 |
| **10511-36-16Z** | -36 | M36x2 | 25 | -16 | 88,6 | 3.49 | 41,5 | 1.63 | 21,0 | 0.83 | - - | 38 | 0,245 | 0.539 |
| **10511-42-16Z** | -42 | M42x2 | 25 | -16 | 91,0 | 3.58 | 44,0 | 1.73 | 21,0 | 0.83 | - - | 46 | 0,336 | 0.739 |




## **DIN 24° Female Swivel** (DKO Heavy)

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **20511-14-04WZ**** | -14 | M14X1.5 | 6 | -04 | 51,0 | 2.01 | 23,0 | 0.91 | 4,0 | 0.16 | 17 | -- | 0,030 | 0.066 |
| **20511-16-04TZ*** | -16 | M16X1.5 | 6 | -04 | 48,5 | 1.91 | 20,5 | 0.81 | 4,0 | 0.16 | 19 | -- | 0,026 | 0.057 |
| **20511-16-05WZ**** | -16 | M16X1.5 | 8 | -05 | 51,0 | 2.01 | 23,0 | 0.91 | 5,5 | 0.22 | 19 | -- | 0,047 | 0.104 |
| **20511-16-06WZ**** | -16 | M16X1.5 | 10 | -06 | 53,0 | 2.09 | 23,0 | 0.91 | 7,0 | 0.28 | 19 | -- | 0,045 | 0.099 |
| **20511-18-04TZ*** | -18 | M18X1.5 | 6 | -04 | 53,5 | 2.11 | 25,5 | 1.00 | 4,0 | 0.16 | 22 | -- | 0,053 | 0.117 |
| **20511-18-05TZ*** | -18 | M18X1.5 | 8 | -05 | 53,5 | 2.11 | 25,5 | 1.00 | 5,5 | 0.22 | 22 | -- | 0,051 | 0.112 |
| **20511-18-06TZ*** | -18 | M18X1.5 | 10 | -06 | 56,0 | 2.20 | 26,0 | 1.02 | 7,0 | 0.28 | 22 | -- | 0,054 | 0.119 |
| **20511-20-04TZ*** | -20 | M20X1.5 | 6 | -04 | 54,5 | 2.15 | 26,5 | 1.04 | 4,0 | 0.16 | 24 | -- | 0,060 | 0.132 |
| **20511-20-05TZ*** | -20 | M20X1.5 | 8 | -05 | 54,5 | 2.15 | 26,5 | 1.04 | 5,5 | 0.22 | 24 | -- | 0,065 | 0.143 |
| **20511-20-06TZ*** | -20 | M20X1.5 | 10 | -06 | 56,5 | 2.22 | 26,5 | 1.04 | 7,0 | 0.28 | 24 | -- | 0,065 | 0.143 |
| **20511-20-08WZ**** | -20 | M20X1.5 | 12 | -08 | 57,0 | 2.24 | 25,5 | 1.00 | 10,0 | 0.39 | 24 | -- | 0,076 | 0.168 |
| **20511-22-06TZ*** | -22 | M22X1.5 | 10 | -06 | 56,5 | 2.22 | 26,5 | 1.04 | 7,0 | 0.28 | 27 | -- | 0,090 | 0.198 |
| **20511-22-08TZ*** | -22 | M22X1.5 | 12 | -08 | 59,0 | 2.32 | 27,5 | 1.08 | 10,0 | 0.39 | 27 | -- | 0,088 | 0.194 |
| **20511-24-10WZ**** | -24 | M24X1.5 | 16 | -10 | 60,5 | 2.38 | 26,5 | 1.04 | 12,0 | 0.47 | 30 | -- | 0,126 | 0.278 |
| **20511-24-06TZ*** | -24 | M24X1.5 | 10 | -06 | 57,0 | 2.24 | 27,0 | 1.06 | 7,0 | 0.28 | 30 | -- | 0,100 | 0.220 |
| **20511-24-08TZ*** | -24 | M24X1.5 | 12 | -08 | 59,0 | 2.32 | 27,5 | 1.08 | 10,0 | 0.39 | 30 | -- | 0,106 | 0.234 |
| **20511-30-10TZ*** | -30 | M30X2 | 16 | -10 | 67,0 | 2.64 | 33,0 | 1.30 | 12,0 | 0.47 | 36 | -- | 0,180 | 0.397 |
| **20511-30-12TZ*** | -30 | M30X2 | 20 | -12 | 73,5 | 2.89 | 35,0 | 1.38 | 15,0 | 0.59 | 36 | -- | 0,195 | 0.430 |
| **20511-30-08TZ*** | -30 | M30X2 | 12 | -08 | 64,0 | 2.52 | 32,5 | 1.28 | 10,0 | 0.39 | 36 | -- | 0,170 | 0.375 |
| **20511-36-12TZ*** | -36 | M36X2 | 20 | -12 | 73,5 | 2.89 | 35,0 | 1.38 | 15,0 | 0.59 | 46 | -- | 0,300 | 0.661 |
| **20511-36-16WZ**** | -36 | M36X2 | 25 | -16 | 78,5 | 3.09 | 31,5 | 1.24 | 21,0 | 0.83 | 46 | -- | 0,330 | 0.728 |
| **20511-42-12TZ*** | -42 | M42X2 | 20 | -12 | 76,0 | 2.99 | 37,5 | 1.48 | 15,0 | 0.59 | 50 | -- | 0,362 | 0.798 |
| **20511-42-16TZ*** | -42 | M42X2 | 25 | -16 | 85,5 | 3.37 | 38,5 | 1.52 | 21,0 | 0.83 | 50 | -- | 0,370 | 0.816 |
| **20511-42-20WZ**** | -42 | M42X2 | 32 | -20 | 85,5 | 3.37 | 31,5 | 1.24 | 27,0 | 1.06 | 50 | -- | 0,404 | 0.891 |
| **20511-52-20TZ*** | -52 | M52X2 | 32 | -20 | 95,5 | 3.76 | 41,5 | 1.63 | 27,0 | 1.06 | 60 | -- | 0,626 | 1.380 |
| **20511-52-24TZ*** | -52 | M52X2 | 40 | -24 | 109,5 | 4.31 | 41,5 | 1.63 | 32,0 | 1.26 | 60 | -- | 0,700 | 1.543 |

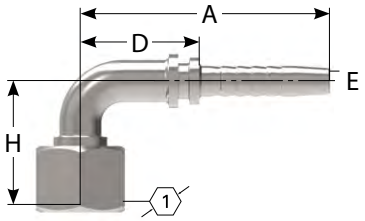
** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*




## **DIN 24° Female** 45° Elbow (DKO Heavy)

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | | | **mm** | **mm** | **kg** | **lb** |
| **20541-16-04TZ*** | -16 | M16X1.5 | 6 | -04 | 66,4 | 2.61 | 38,4 | 1.51 | 4,0 | 0.16 | 16,3 | 0.64 | 19 | -- | 0,045 | 0.099 |
| **20541-18-04TZ*** | -18 | M18X1.5 | 6 | -04 | 67,1 | 2.64 | 39,1 | 1.54 | 4,0 | 0.16 | 17,0 | 0.67 | 22 | -- | 0,058 | 0.128 |
| **20541-18-06TZ*** | -18 | M18X1.5 | 10 | -06 | 73,8 | 2.91 | 43,8 | 1.72 | 7,0 | 0.28 | 17,3 | 0.68 | 22 | -- | 0,062 | 0.137 |
| **20541-20-06TZ*** | -20 | M20X1.5 | 10 | -06 | 72,5 | 2.85 | 42,5 | 1.67 | 7,0 | 0.28 | 18,5 | 0.73 | 24 | -- | 0,085 | 0.187 |
| **20541-22-08TZ*** | -22 | M22X1.5 | 12 | -08 | 81,1 | 3.19 | 49,6 | 1.95 | 10,0 | 0.39 | 20,7 | 0.81 | 27 | -- | 0,118 | 0.260 |
| **20541-22-06TZ** | -22 | M22x1.5 | 10 | -06 | 72,0 | 2.84 | 42,0 | 1.65 | 7,0 | 0.28 | 18,0 | 0.71 | 27 | -- | 0,105 | 0.231 |
| **20541-24-06TZ*** | -24 | M24X1.5 | 10 | -06 | 72,3 | 2.85 | 42,3 | 1.67 | 7,0 | 0.28 | 18,4 | 0.72 | 30 | -- | 0,114 | 0.251 |
| **20541-24-08TZ*** | -24 | M24X1.5 | 12 | -08 | 78,8 | 3.10 | 47,3 | 1.86 | 10,0 | 0.39 | 21,0 | 0.83 | 30 | -- | 0,142 | 0.313 |
| **20541-30-10TZ*** | -30 | M30X2 | 16 | -10 | 91,3 | 3.59 | 57,3 | 2.26 | 12,0 | 0.47 | 25,0 | 0.98 | 36 | -- | 0,250 | 0.551 |
| **20541-30-12TZ*** | -30 | M30X2 | 20 | -12 | 104,3 | 4.11 | 65,8 | 2.59 | 15,0 | 0.59 | 26,7 | 1.05 | 36 | -- | 0,248 | 0.547 |
| **20541-36-12TZ*** | -36 | M36X2 | 20 | -12 | 105,6 | 4.16 | 67,1 | 2.64 | 15,0 | 0.59 | 30,5 | 1.20 | 46 | -- | 0,400 | 0.882 |
| **20541-36-16WZ**** | -36 | M36X2 | 25 | -16 | 124,4 | 4.90 | 77,4 | 3.05 | 21,0 | 0.83 | 31,2 | 1.23 | 46 | -- | 0,450 | 0.992 |
| **20541-42-16TZ*** | -42 | M42X2 | 25 | -16 | 128,0 | 5.04 | 81,0 | 3.19 | 21,0 | 0.83 | 35,5 | 1.40 | 50 | -- | 0,540 | 1.190 |
| **20541-52-20TZ*** | -52 | M52X2 | 32 | -20 | 155,7 | 6.13 | 94,2 | 3.71 | 27,0 | 1.06 | 42,0 | 1.65 | 60 | -- | 0,813 | 1.792 |
| **20541-52-24TZ*** | -52 | M52X2 | 40 | -24 | 182,1 | 7.17 | 114,1 | 4.49 | 32,0 | 1.26 | 43,4 | 1.71 | 60 | -- | 1,284 | 2.831 |

** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*

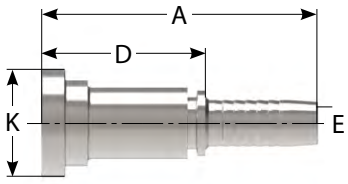



## **DIN 24° Female** 90° Elbow (DKO Heavy)

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | | | **mm** | **mm** | **kg** | **lb** |
| **20591-14-04WZ**** | -14 | M14X1.5 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 30,5 | 1.20 | 17 | -- | 0,045 | 0.099 |
| **20591-16-04TZ*** | -16 | M16X1.5 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 31,0 | 1.22 | 19 | -- | 0,040 | 0.088 |
| **20591-16-05WZ**** | -16 | M16X1.5 | 8 | -05 | 58,0 | 2.28 | 30,0 | 1.18 | 5,5 | 0.22 | 31,0 | 1.22 | 19 | -- | 0,050 | 0.110 |
| **20591-16-06WZ**** | -16 | M16X1.5 | 10 | -06 | 60,0 | 2.36 | 30,0 | 1.18 | 7,0 | 0.28 | 31,0 | 1.22 | 19 | -- | 0,059 | 0.130 |
| **20591-18-04TZ*** | -18 | M18X1.5 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 32,0 | 1.26 | 22 | -- | 0,065 | 0.144 |
| **20591-18-05TZ*** | -18 | M18X1.5 | 8 | -05 | 61,0 | 2.40 | 33,0 | 1.30 | 5,5 | 0.22 | 33,5 | 1.32 | 22 | -- | 0,050 | 0.110 |
| **20591-18-06TZ*** | -18 | M18X1.5 | 10 | -06 | 67,0 | 2.64 | 37,0 | 1.46 | 7,0 | 0.28 | 35,0 | 1.38 | 22 | -- | 0,078 | 0.172 |
| **20591-20-05TZ*** | -20 | M20X1.5 | 8 | -05 | 61,0 | 2.40 | 33,0 | 1.30 | 5,5 | 0.22 | 34,0 | 1.34 | 24 | -- | 0,080 | 0.176 |
| **20591-20-06TZ*** | -20 | M20X1.5 | 10 | -06 | 64,5 | 2.54 | 34,5 | 1.36 | 7,0 | 0.28 | 35,5 | 1.40 | 24 | -- | 0,094 | 0.207 |
| **20591-20-08WZ**** | -20 | M20X1.5 | 12 | -08 | 69,5 | 2.74 | 38,0 | 1.50 | 10,0 | 0.39 | 38,0 | 1.50 | 24 | -- | 0,098 | 0.216 |
| **20591-22-06TZ*** | -22 | M22X1.5 | 10 | -06 | 64,5 | 2.54 | 34,5 | 1.36 | 7,0 | 0.28 | 36,0 | 1.42 | 27 | -- | 0,114 | 0.251 |
| **20591-22-08TZ*** | -22 | M22X1.5 | 12 | -08 | 73,5 | 2.89 | 42,0 | 1.65 | 10,0 | 0.39 | 42,5 | 1.67 | 27 | -- | 0,136 | 0.300 |
| **20591-24-06TZ*** | -24 | M24X1.5 | 10 | -06 | 64,5 | 2.54 | 34,5 | 1.36 | 7,0 | 0.28 | 36,5 | 1.44 | 30 | -- | 0,125 | 0.276 |
| **20591-24-08TZ*** | -24 | M24X1.5 | 12 | -08 | 71,0 | 2.80 | 39,5 | 1.56 | 10,0 | 0.39 | 43,0 | 1.69 | 30 | -- | 0,136 | 0.300 |
| **20591-30-08TZ*** | -30 | M30X2 | 12 | -08 | 76,0 | 2.99 | 44,5 | 1.75 | 10,0 | 0.39 | 46,0 | 1.81 | 36 | -- | 0,196 | 0.432 |
| **20591-30-10TZ*** | -30 | M30X2 | 16 | -10 | 83,0 | 3.27 | 49,0 | 1.93 | 12,0 | 0.47 | 49,5 | 1.95 | 36 | -- | 0,265 | 0.584 |
| **20591-30-12TZ*** | -30 | M30X2 | 20 | -12 | 94,3 | 3.71 | 55,8 | 2.20 | 15,0 | 0.59 | 54,5 | 2.15 | 36 | -- | 0,265 | 0.584 |
| **20591-36-12TZ*** | -36 | M36X2 | 20 | -12 | 94,5 | 3.72 | 56,0 | 2.20 | 15,0 | 0.59 | 59,0 | 2.32 | 46 | -- | 0,482 | 1.063 |
| **20591-36-16WZ**** | -36 | M36X2 | 25 | -16 | 112,5 | 4.43 | 65,5 | 2.58 | 21,0 | 0.83 | 63,5 | 2.50 | 46 | -- | 0,500 | 1.102 |
| **20591-42-16TZ*** | -42 | M42X2 | 25 | -16 | 118,0 | 4.65 | 71,0 | 2.80 | 21,0 | 0.83 | 70,0 | 2.76 | 50 | -- | 0,610 | 1.345 |
| **20591-52-20TZ*** | -52 | M52X2 | 32 | -20 | 147,0 | 5.79 | 93,0 | 3.66 | 27,0 | 1.06 | 86,5 | 3.41 | 60 | -- | 0,945 | 2.083 |
| **20591-52-24TZ*** | -52 | M52X2 | 40 | -24 | 168,0 | 6.61 | 100,0 | 3.94 | 32,0 | 1.26 | 109,4 | 4.31 | 60 | -- | 1,630 | 3.594 |

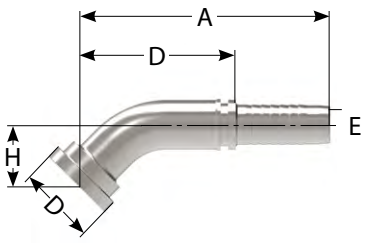
** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*

# Code 61



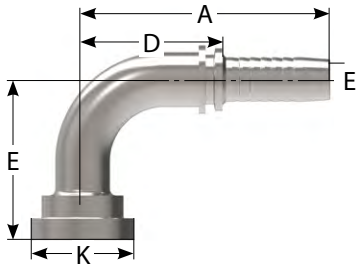

## **Code 61 Flange** Straight

| PART | HOSE SIZE INFO | | | | | DIMENSIONS | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | K | | Hose Size | | A | | D Cut Off Factor | | E Ø | | Weight | |
| | **Dash Size** | **mm** | **in** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **kg** | **lb** |
| **87311-08-08Z** | -08 | 30.2 | 1.19 | 12 | -08 | 77,5 | 3.05 | 46,0 | 1.81 | 10,0 | 0.39 | 0,11 | 0.24 |
| **87311-12-08Z** | -12 | 38,1 | 1.50 | 12 | -08 | 78,5 | 3.09 | 47,0 | 1.85 | 10,0 | 0.39 | 0,165 | 0.364 |
| **87311-12-10Z** | -12 | 38.1 | 1.50 | 16 | -10 | 81,5 | 3.21 | 47,5 | 1.87 | 12,0 | 0.47 | 0,20 | 0.44 |
| **87311-12-12Z** | -12 | 38.1 | 1.50 | 20 | -12 | 86,5 | 3.41 | 48,0 | 1.89 | 15,0 | 0.59 | 0,21 | 0.46 |
| **87311-12-16Z** | -12 | 38.1 | 1.50 | 25 | -16 | 96,0 | 3.78 | 49,0 | 1.93 | 21,0 | 0.83 | 0,26 | 0.58 |
| **87311-16-12Z** | -16 | 44.4 | 1.75 | 20 | -12 | 89,5 | 3.52 | 51,0 | 2.01 | 15,0 | 0.59 | 0,24 | 0.52 |
| **87311-16-16Z** | -16 | 44.4 | 1.75 | 25 | -16 | 99,0 | 3.90 | 52,0 | 2.05 | 21,0 | 0.83 | 0,30 | 0.65 |
| **87311-16-20Z** | -16 | 44.4 | 1.75 | 32 | -20 | 107,0 | 4.21 | 53,0 | 2.09 | 27,0 | 1.06 | 0,37 | 0.81 |
| **87311-20-16Z** | -20 | 50.8 | 2.00 | 25 | -16 | 104,0 | 4.09 | 57,0 | 2.24 | 21,0 | 0.83 | 0,35 | 0.78 |
| **87311-20-20Z** | -20 | 50.8 | 2.00 | 32 | -20 | 112,0 | 4.41 | 58,0 | 2.28 | 27,0 | 1.06 | 0,44 | 0.97 |
| **87311-20-24Z** | -20 | 50.8 | 2.00 | 40 | -24 | 129,0 | 5.08 | 61,0 | 2.40 | 32,0 | 1.26 | 0,51 | 1.11 |
| **87311-24-20Z** | -24 | 60.3 | 2.37 | 32 | -20 | 122,0 | 4.80 | 68,0 | 2.68 | 27,0 | 1.06 | 0,60 | 1.32 |
| **87311-24-24Z** | -24 | 60.3 | 2.37 | 40 | -24 | 136,0 | 5.35 | 68,0 | 2.68 | 32,0 | 1.26 | 0,68 | 1.50 |
| **87311-32-20Z** | -32 | 71.4 | 2.81 | 32 | -20 | 124,0 | 4.88 | 70,0 | 2.76 | 27,0 | 1.06 | 0,65 | 1.43 |
| **87311-32-24Z** | -32 | 71.4 | 2.81 | 40 | -24 | 138,0 | 5.43 | 70,0 | 2.76 | 32,0 | 1.26 | 0,81 | 1.78 |
| **87311-32-32Z** | -32 | 71.4 | 2.81 | 50 | -32 | 142,0 | 5.59 | 70,0 | 2.76 | 43,0 | 1.69 | 1,04 | 2.29 |




## **Code 61 Flange** 45° Elbow

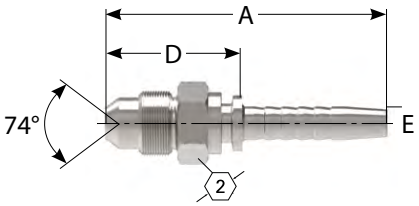
| PART | HOSE SIZE INFO | | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | K | | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | Weight | |
| | **Dash Size** | **mm** | **in** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **kg** | **lb** |
| **87341-08-08Z** | -08 | 30.2 | 1.19 | 12 | -08 | 83,4 | 3.28 | 58,2 | 2.29 | 10,0 | 0.39 | 23,3 | 0.92 | 0,11 | 0.24 |
| **87341-12-08Z** | -12 | 38,1 | 1.50 | 12 | -08 | 90,4 | 3.56 | 58,9 | 2.32 | 10,0 | 0.39 | 24,0 | 0.94 | 0,152 | 0.0335 |
| **87341-12-12Z** | -12 | 38.1 | 1.50 | 20 | -12 | 108,4 | 4.27 | 76,3 | 3.00 | 15,0 | 0.59 | 28,9 | 1.14 | 0,27 | 0.58 |
| **87341-12-16Z** | -12 | 38.1 | 1.50 | 25 | -16 | 115,8 | 4.56 | 84,7 | 3.33 | 21,0 | 0.83 | 29,7 | 1.17 | 0,33 | 0.73 |
| **87341-16-12Z** | -16 | 44.4 | 1.75 | 20 | -12 | 114,7 | 4.52 | 76,3 | 3.00 | 15,0 | 0.59 | 28,9 | 1.14 | 0,30 | 0.65 |
| **87341-16-16Z** | -16 | 44.4 | 1.75 | 25 | -16 | 121,3 | 4.78 | 83,9 | 3.30 | 21,0 | 0.83 | 29,7 | 1.17 | 0,36 | 0.79 |
| **87341-16-20Z** | -16 | 44.4 | 1.75 | 32 | -20 | 130,9 | 5.15 | 94,5 | 3.72 | 27,0 | 1.06 | 33,8 | 1.33 | 0,47 | 1.03 |
| **87341-20-16Z** | -20 | 50.8 | 2.00 | 25 | -16 | 129,0 | 5.08 | 85,2 | 3.35 | 21,0 | 0.83 | 29,7 | 1.17 | 0,40 | 0.87 |
| **87341-20-20Z** | -20 | 50.8 | 2.00 | 32 | -20 | 137,3 | 5.41 | 94,5 | 3.72 | 27,0 | 1.06 | 33,8 | 1.33 | 0,51 | 1.12 |
| **87341-20-24Z** | -20 | 50.8 | 2.00 | 38 | -24 | 145,8 | 5.74 | 103,0 | 4.06 | 32,0 | 1.26 | 33,8 | 1.33 | 0,66 | 1.46 |
| **87341-24-20Z** | -24 | 60.3 | 2.37 | 32 | -20 | 148,2 | 5.83 | 95,9 | 3.78 | 27,0 | 1.06 | 35,2 | 1.39 | 0,58 | 1.28 |
| **87341-24-24Z** | -24 | 60.3 | 2.37 | 38 | -24 | 162,2 | 6.39 | 109,9 | 4.33 | 32,0 | 1.26 | 39,1 | 1.54 | 0,95 | 2.09 |
| **87341-24-32Z** | -24 | 60.3 | 2.37 | 50 | -32 | 180,9 | 7.12 | 128,6 | 5.06 | 43,0 | 1.69 | 41,3 | 1.63 | 1,22 | 2.69 |
| **87341-32-24Z** | -32 | 71.4 | 2.81 | 38 | -24 | 173,3 | 6.82 | 109,9 | 4.33 | 32,0 | 1.26 | 39,1 | 1.54 | 1,05 | 2.31 |
| **87341-32-32Z** | -32 | 71.4 | 2.81 | 50 | -32 | 192,7 | 7.59 | 129,3 | 5.09 | 46,0 | 1.81 | 46,3 | 1.82 | 1,54 | 3.39 |




## **Code 61 Flange** 90° Elbow

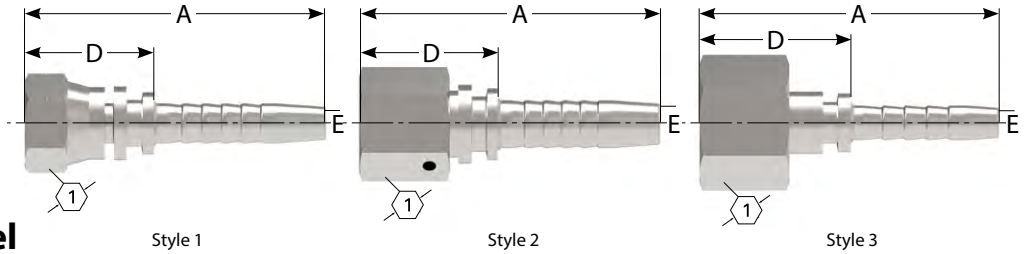
| PART | HOSE SIZE INFO | | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | K | | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | Weight | |
| | **Dash Size** | **mm** | **in** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **kg** | **lb** |
| **87391-08-08Z** | -08 | 30.2 | 1.19 | 12 | -08 | 72,5 | 2.85 | 41,0 | 1.61 | 10,0 | 0.39 | 47,0 | 1.85 | 0,122 | 0.268 |
| **87391-12-08Z** | -12 | 38,1 | 1.50 | 12 | -08 | 72,5 | 2.85 | 41,0 | 1.61 | 10,0 | 0.39 | 48,0 | 1.89 | 0,164 | 0.361 |
| **87391-12-10Z** | -12 | 38.1 | 1.50 | 16 | -10 | 90,0 | 3.54 | 56,0 | 2.20 | 12,0 | 0.47 | 52,5 | 2.07 | 0,220 | 0.484 |
| **87391-12-12Z** | -12 | 38.1 | 1.50 | 20 | -12 | 104,7 | 4.12 | 66,2 | 2.61 | 15,0 | 0.59 | 62,0 | 2.44 | 0,320 | 0.704 |
| **87391-12-16Z** | -12 | 38.1 | 1.50 | 25 | -16 | 123,7 | 4.87 | 76,7 | 3.02 | 21,0 | 0.83 | 67,5 | 2.66 | 0,384 | 0.845 |
| **87391-16-12Z** | -16 | 44.4 | 1.75 | 20 | -12 | 104,0 | 4.09 | 65,5 | 2.58 | 15,0 | 0.59 | 62,0 | 2.44 | 0,370 | 0.814 |
| **87391-16-16Z** | -16 | 44.4 | 1.75 | 25 | -16 | 123,7 | 4.87 | 76,7 | 3.02 | 21,0 | 0.83 | 67,5 | 2.66 | 0,425 | 0.935 |
| **87391-16-20Z** | -16 | 44.4 | 1.75 | 32 | -20 | 145,5 | 5.73 | 91,5 | 3.60 | 27,0 | 1.06 | 78,5 | 3.09 | 0,592 | 1.302 |
| **87391-20-12Z** | -20 | 50.8 | 2.00 | 20 | -12 | 104,7 | 4.12 | 66,2 | 2.61 | 15,0 | 0.59 | 62,0 | 2.44 | 0,388 | 0.853 |
| **87391-20-16Z** | -20 | 50.8 | 2.00 | 25 | -16 | 123,7 | 4.87 | 76,7 | 3.02 | 21,0 | 0.83 | 67,5 | 2.66 | 0,460 | 1.012 |
| **87391-20-20Z** | -20 | 50.8 | 2.00 | 32 | -20 | 145,5 | 5.73 | 91,5 | 3.60 | 27,0 | 1.06 | 78,5 | 3.09 | 0,636 | 1.399 |
| **87391-20-24Z** | -20 | 50.8 | 2.00 | 40 | -24 | 175,0 | 6.89 | 107,0 | 4.21 | 32,0 | 1.26 | 78,5 | 3.09 | 0,902 | 1.984 |
| **87391-24-16Z** | -24 | 60.3 | 2.37 | 25 | -16 | 123,7 | 4.87 | 76,7 | 3.02 | 21,0 | 0.83 | 69,5 | 2.74 | 0,538 | 1.184 |
| **87391-24-20Z** | -24 | 60.3 | 2.37 | 32 | -20 | 145,5 | 5.73 | 91,5 | 3.60 | 27,0 | 1.06 | 80,5 | 3.17 | 0,700 | 1.540 |
| **87391-24-24Z** | -24 | 60.3 | 2.37 | 40 | -24 | 177,4 | 6.98 | 109,4 | 4.31 | 32,0 | 1.26 | 94,0 | 3.70 | 1,212 | 2.666 |
| **87391-32-24Z** | -32 | 71.4 | 2.81 | 40 | -24 | 177,4 | 6.98 | 109,4 | 4.31 | 32,0 | 1.26 | 94,0 | 3.70 | 1,344 | 2.957 |
| **87391-32-32Z** | -32 | 71.4 | 2.81 | 50 | -32 | 203,8 | 8.02 | 131,8 | 5.19 | 43,0 | 1.69 | 114,3 | 4.50 | 2,200 | 4.840 |

# JIC




## JIC 37° Male Rigid

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **16711-04-04Z** | -04 | 7/16"-20 | 6 | -04 | 54,5 | 2.15 | 26,5 | 1.04 | 4,0 | 0.16 | -- | 12 | 0,024 | 0.053 |
| **16711-04-08Z** | -04 | 7/16"-20 | 12 | -08 | 58,5 | 2.30 | 27,0 | 1.06 | 10,0 | 0.39 | -- | 19 | 0,045 | 0.099 |
| **16711-05-04Z** | -05 | 1/2"-20 | 6 | -04 | 54,5 | 2.15 | 26,5 | 1.04 | 4,0 | 0.16 | -- | 14 | 0,024 | 0.053 |
| **16711-05-05Z** | -05 | 1/2"-20 | 8 | -05 | 54,5 | 2.15 | 26,5 | 1.04 | 5,5 | 0.22 | -- | 14 | 0,025 | 0.055 |
| **16711-05-06Z** | -05 | 1/2"-20 | 10 | -06 | 56,5 | 2.22 | 26,5 | 1.04 | 7,0 | 0.28 | -- | 17 | 0,032 | 0.071 |
| **16711-06-04Z** | -06 | 9/16"-18 | 6 | -04 | 54,5 | 2.15 | 26,5 | 1.04 | 4,0 | 0.16 | -- | 17 | 0,030 | 0.066 |
| **16711-06-05Z** | -06 | 9/16"-18 | 8 | -05 | 54,5 | 2.15 | 26,5 | 1.04 | 5,5 | 0.22 | -- | 17 | 0,030 | 0.066 |
| **16711-06-06Z** | -06 | 9/16"-18 | 10 | -06 | 56,5 | 2.22 | 26,5 | 1.04 | 7,0 | 0.28 | -- | 17 | 0,034 | 0.075 |
| **16711-06-08Z** | -06 | 9/16"-18 | 12 | -08 | 58,5 | 2.30 | 27,0 | 1.06 | 10,0 | 0.39 | -- | 19 | 0,046 | 0.101 |
| **16711-08-04Z** | -08 | 3/4"-16 | 6 | -04 | 59,5 | 2.34 | 26,7 | 1.05 | 4,0 | 0.16 | -- | 19 | 0,045 | 0.099 |
| **16711-08-06Z** | -08 | 3/4"-16 | 10 | -06 | 61,5 | 2.42 | 31,5 | 1.24 | 7,0 | 0.28 | -- | 22 | 0,062 | 0.137 |
| **16711-08-08Z** | -08 | 3/4"-16 | 12 | -08 | 63,5 | 2.50 | 32,0 | 1.26 | 9,9 | 0.39 | -- | 22 | 0,064 | 0.141 |
| **16711-10-06Z** | -10 | 7/8"-14 | 10 | -06 | 63,5 | 2.50 | 33,5 | 1.32 | 7,0 | 0.28 | -- | 24 | 0,070 | 0.154 |
| **16711-10-08Z** | -10 | 7/8"-14 | 12 | -08 | 65,5 | 2.58 | 34,0 | 1.34 | 10,0 | 0.39 | -- | 24 | 0,084 | 0.185 |
| **16711-10-10Z** | -10 | 7/8"-14 | 16 | -10 | 69,0 | 2.72 | 35,0 | 1.38 | 12,0 | 0.47 | -- | 24 | 0,092 | 0.203 |
| **16711-10-12Z** | -10 | 7/8"-14 | 20 | -12 | 75,5 | 2.97 | 37,0 | 1.46 | 15,0 | 0.59 | -- | 27 | 0,130 | 0.287 |
| **16711-12-08Z** | -12 | 1.1/16"-12 | 12 | -08 | 70,0 | 2.76 | 38,5 | 1.52 | 10,0 | 0.39 | -- | 30 | 0,116 | 0.256 |
| **16711-12-10Z** | -12 | 1.1/16"-12 | 16 | -10 | 73,5 | 2.89 | 39,5 | 1.56 | 12,0 | 0.47 | -- | 30 | 0,120 | 0.265 |
| **16711-12-12Z** | -12 | 1.1/16"-12 | 20 | -12 | 78,5 | 3.09 | 40,0 | 1.57 | 15,0 | 0.59 | -- | 30 | 0,140 | 0.309 |
| **16711-12-16Z** | -12 | 1.1/16"-12 | 25 | -16 | 89,5 | 3.52 | 42,5 | 1.67 | 21,0 | 0.83 | -- | 32 | 0,198 | 0.437 |
| **16711-14-12Z** | -14 | 1.3/16"-12 | 20 | -12 | 79,0 | 3.11 | 40,5 | 1.59 | 15,0 | 0.59 | -- | 32 | 0,162 | 0.357 |
| **16711-16-12Z** | -16 | 1.5/16"-12 | 20 | -12 | 81,5 | 3.21 | 43,0 | 1.69 | 15,0 | 0.59 | -- | 36 | 0,190 | 0.419 |
| **16711-16-16Z** | -16 | 1.5/16"-12 | 25 | -16 | 90,5 | 3.56 | 43,5 | 1.71 | 21,0 | 0.83 | -- | 36 | 0,206 | 0.454 |
| **16711-20-16Z** | -20 | 1.5/8"-12 | 25 | -16 | 94,0 | 3.70 | 47,0 | 1.85 | 21,0 | 0.83 | -- | 46 | 0,336 | 0.741 |
| **16711-20-20Z** | -20 | 1.5/8"-12 | 32 | -20 | 101,0 | 3.98 | 47,0 | 1.85 | 27,0 | 1.06 | -- | 46 | 0,370 | 0.816 |
| **16711-24-20Z** | -24 | 1.7/8"-12 | 32 | -20 | 107,0 | 4.21 | 53,0 | 2.09 | 27,0 | 1.06 | -- | 50 | 0,495 | 1.091 |
| **16711-24-24Z** | -24 | 1.7/8"-12 | 38 | -24 | 121,0 | 4.76 | 53,0 | 2.09 | 32,0 | 1.26 | -- | 50 | 0,542 | 1.195 |
| **16711-32-32Z** | -32 | 2.1/2"-12 | 50 | -32 | 134,0 | 5.28 | 62,0 | 2.44 | 43,0 | 1.69 | -- | 65 | 1,060 | 2.337 |



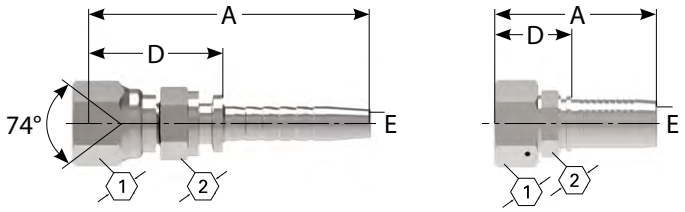

Style 1 Style 2 Style 3

# JIC 37° Female Swivel

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **26711-04-03Z*** | -04 | 7/16"-20 | 5 | -03 | 35,5 | 1.40 | 14,0 | 0.55 | 3,0 | 0.12 | 14 | -- | 0,015 | 0.033 |
| **26711-04-04Z*** | -04 | 7/16"-20 | 6 | -04 | 43,0 | 1.69 | 15,0 | 0.59 | 4,0 | 0.16 | 14 | -- | 0,020 | 0.044 |
| **26711-04-05Z*** | -04 | 7/16"-20 | 8 | -05 | 43,0 | 1.69 | 15,0 | 0.59 | 5,5 | 0.22 | 14 | -- | 0,022 | 0.049 |
| **26711-04-06Z*** | -04 | 7/16"-20 | 10 | -06 | 44,5 | 1.75 | 14,5 | 0.57 | 7,0 | 0.28 | 14 | -- | 0,028 | 0.062 |
| **26711-05-04Z*** | -05 | 1/2"-20 | 6 | -04 | 43,5 | 1.71 | 15,5 | 0.61 | 4,0 | 0.16 | 17 | -- | 0,026 | 0.057 |
| **26711-05-05Z*** | -05 | 1/2"-20 | 8 | -05 | 43,5 | 1.71 | 15,5 | 0.61 | 5,5 | 0.22 | 17 | -- | 0,025 | 0.055 |
| **26711-05-06Z*** | -05 | 1/2"-20 | 10 | -06 | 45,5 | 1.79 | 15,5 | 0.61 | 7,0 | 0.28 | 17 | -- | 0,032 | 0.071 |
| **26711-06-04Z*** | -06 | 9/16"-18 | 6 | -04 | 43,5 | 1.71 | 15,5 | 0.61 | 4,0 | 0.16 | 19 | -- | 0,032 | 0.071 |
| **26711-06-05Z*** | -06 | 9/16"-18 | 8 | -05 | 43,5 | 1.71 | 15,5 | 0.61 | 5,5 | 0.22 | 19 | -- | 0,035 | 0.077 |
| **26711-06-06Z*** | -06 | 9/16"-18 | 10 | -06 | 45,5 | 1.79 | 15,5 | 0.61 | 7,0 | 0.28 | 19 | -- | 0,037 | 0.082 |
| **26711-06-08Z*** | -06 | 9/16"-18 | 12 | -08 | 47,5 | 1.87 | 16,0 | 0.63 | 10,0 | 0.39 | 19 | -- | 0,046 | 0.101 |
| **26711-08-04TZ***** | -08 | 3/4"-16 | 6 | -04 | 43,5 | 1.71 | 15,5 | 0.61 | 4,0 | 0.16 | 24 | -- | 0,054 | 0.119 |
| **26711-08-06Z*** | -08 | 3/4"-16 | 10 | -06 | 47,5 | 1.87 | 17,5 | 0.69 | 7,0 | 0.28 | 22 | -- | 0,054 | 0.119 |
| **26711-08-08Z*** | -08 | 3/4"-16 | 12 | -08 | 50,0 | 1.97 | 18,5 | 0.73 | 9,9 | 0.39 | 22 | -- | 0,060 | 0.132 |
| **26711-08-10Z*** | -08 | 3/4"-16 | 16 | -10 | 52,0 | 2.05 | 18,0 | 0.71 | 12,0 | 0.47 | 22 | -- | 0,078 | 0.172 |
| **26711-08-12Z*** | -08 | 3/4"-16 | 20 | -12 | 58,0 | 2.28 | 19,5 | 0.77 | 15,0 | 0.59 | 22 | -- | 0,078 | 0.172 |
| **26711-10-06TZ***** | -10 | 7/8"-14 | 10 | -06 | 47,5 | 1.87 | 17,5 | 0.69 | 7,0 | 0.28 | 27 | -- | 0,080 | 0.176 |
| **26711-10-08Z*** | -10 | 7/8"-14 | 12 | -08 | 50,5 | 1.99 | 19,0 | 0.75 | 10,0 | 0.39 | 27 | -- | 0,090 | 0.198 |
| **26711-10-10Z*** | -10 | 7/8"-14 | 16 | -10 | 53,5 | 2.11 | 19,5 | 0.77 | 12,0 | 0.47 | 27 | -- | 0,100 | 0.220 |
| **26711-10-12Z*** | -10 | 7/8"-14 | 20 | -12 | 58,5 | 2.30 | 20,0 | 0.79 | 15,0 | 0.59 | 27 | -- | 0,110 | 0.243 |
| **26711-12-08TZ***** | -12 | 1.1/16"-12 | 12 | -08 | 51,0 | 2.01 | 19,5 | 0.77 | 10,0 | 0.39 | 32 | -- | 0,128 | 0.282 |
| **26711-12-10Z*** | -12 | 1.1/16"-12 | 16 | -10 | 55,0 | 2.17 | 21,0 | 0.83 | 12,0 | 0.47 | 32 | -- | 0,120 | 0.265 |
| **26711-12-12Z*** | -12 | 1.1/16"-12 | 20 | -12 | 60,0 | 2.36 | 21,5 | 0.85 | 15,0 | 0.59 | 32 | -- | 0,130 | 0.287 |
| **26711-12-16Z*** | -12 | 1.1/16"-12 | 25 | -16 | 70,0 | 2.76 | 23,0 | 0.91 | 21,0 | 0.83 | 32 | -- | 0,172 | 0.379 |
| **26711-14-12Z*** | -14 | 1.3/16"-12 | 20 | -12 | 60,0 | 2.36 | 21,5 | 0.85 | 15,0 | 0.59 | 36 | -- | 0,154 | 0.340 |
| **26711-14-16Z*** | -14 | 1.3/16"-12 | 25 | -16 | 69,5 | 2.74 | 22,5 | 0.89 | 21,0 | 0.83 | 36 | -- | 0,170 | 0.375 |
| **26711-16-12TZ***** | -16 | 1.5/16"-12 | 20 | -12 | 57,0 | 2.24 | 18,5 | 0.73 | 15,0 | 0.59 | 41 | -- | 0,215 | 0.474 |
| **26711-16-16Z*** | -16 | 1.5/16"-12 | 25 | -16 | 70,0 | 2.76 | 23,0 | 0.91 | 21,0 | 0.83 | 41 | -- | 0,210 | 0.463 |
| **26711-16-20Z*** | -16 | 1.5/16"-12 | 32 | -20 | 78,0 | 3.07 | 24,0 | 0.94 | 27,0 | 1.06 | 41 | -- | 0,306 | 0.675 |
| **26711-20-16TZ***** | -20 | 1.5/8"-12 | 25 | -16 | 70,0 | 2.76 | 23,0 | 0.91 | 21,0 | 0.83 | 50 | -- | 0,340 | 0.750 |
| **26711-20-20WZ**** | -20 | 1.5/8"-12 | 32 | -20 | 78,5 | 3.09 | 24,5 | 0.96 | 27,0 | 1.06 | 50 | -- | 0,400 | 0.882 |
| **26711-24-20TZ***** | -24 | 1.7/8"-12 | 32 | -20 | 79,0 | 3.11 | 25,0 | 0.98 | 27,0 | 1.06 | 60 | -- | 0,490 | 1.080 |
| **26711-24-24WZ**** | -24 | 1.7/8"-12 | 38 | -24 | 94,5 | 3.72 | 26,5 | 1.04 | 32,0 | 1.26 | 60 | -- | 0,568 | 1.252 |
| **26711-32-24TZ***** | -32 | 2.1/2"-12 | 38 | -24 | 95,0 | 3.74 | 27,0 | 1.06 | 32,0 | 1.26 | 75 | -- | 0,920 | 2.028 |
| **26711-32-32TZ***** | -32 | 2.1/2"-12 | 50 | -32 | 99,0 | 3.90 | 27,0 | 1.06 | 43,0 | 1.69 | 75 | -- | 1,072 | 2.363 |

** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*
**** Denotes Style 3 crimp nut design*

1. *Same nipple configuration as 26711 without back up hex*

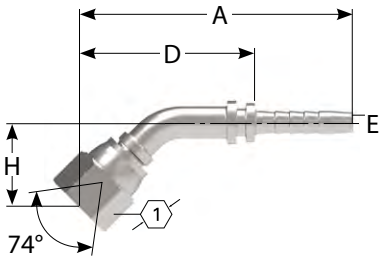



## JIC 37° Female Swivel

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **26711D-04-04Z*** | -04 | 7/16"-20 | 6 | -04 | 48,0 | 1.89 | 20,0 | 0.79 | 4,0 | 0.16 | 14 | 14 | 0,040 | 0.088 |
| **26711D-04-04SMZ*** | -04 | 7/16"-20 | 6 | -04 | 48,0 | 1.89 | 20,0 | 0.79 | 4,0 | 0.16 | 14 | 12 | 0,040 | 0.088 |
| **26711D-06-04Z*** | -06 | 9/16"-18 | 6 | -04 | 49,0 | 1.93 | 21,0 | 0.83 | 4,0 | 0.16 | 19 | 19 | 0,044 | 0.097 |
| **26711D-06-04SMZ*** | -06 | 9/16"-18 | 6 | -04 | 49,0 | 1.93 | 21,0 | 0.83 | 4,0 | 0.16 | 19 | 14 | 0,045 | 0.099 |
| **26711D-06-05Z*** | -06 | 9/16"-18 | 8 | -05 | 49,0 | 1.93 | 21,0 | 0.83 | 5,5 | 0.22 | 19 | 19 | 0,046 | 0.101 |
| **26711D-06-06Z*** | -06 | 9/16"-18 | 10 | -06 | 51,0 | 2.01 | 21,0 | 0.83 | 7,0 | 0.28 | 19 | 19 | 0,045 | 0.099 |
| **26711D-06-06SMZ*** | -06 | 9/16"-18 | 10 | -06 | 51,0 | 2.01 | 21,0 | 0.83 | 7,0 | 0.28 | 19 | 17 | 0,045 | 0.099 |
| **26711D-08-04Z*** | -08 | 3/4"-16 | 6 | -04 | 53,0 | 2.09 | 25,0 | 0.98 | 4,0 | 0.16 | 22 | 24 | 0,075 | 0.165 |
| **26711D-08-06Z*** | -08 | 3/4"-16 | 10 | -06 | 55,0 | 2.17 | 25,0 | 0.98 | 7,0 | 0.28 | 22 | 24 | 0,081 | 0.179 |
| **26711D-08-06SMZ*** | -08 | 3/4"-16 | 10 | -06 | 54,5 | 2.15 | 24,5 | 0.96 | 7,0 | 0.28 | 22 | 19 | 0,085 | 0.187 |
| **26711D-08-08Z*** | -08 | 3/4"-16 | 12 | -08 | 56,0 | 2.20 | 24,5 | 0.96 | 9,9 | 0.39 | 22 | 24 | 0,080 | 0.176 |
| **26711D-08-08SMZ*** | -08 | 3/4"-16 | 12 | -08 | 55,0 | 2.17 | 23,5 | 0.93 | 9,9 | 0.39 | 22 | 19 | 0,085 | 0.187 |
| **26711D-10-08Z*** | -10 | 7/8"-14 | 12 | -08 | 57,5 | 2.26 | 26,0 | 1.02 | 10,0 | 0.39 | 27 | 27 | 0,108 | 0.238 |
| **26711D-10-08SMZ*** | -10 | 7/8"-14 | 12 | -08 | 57,5 | 2.26 | 26,0 | 1.02 | 10,0 | 0.39 | 27 | 22 | 0,104 | 0.229 |
| **26711D-10-10Z*** | -10 | 7/8"-14 | 16 | -10 | 61,0 | 2.40 | 27,0 | 1.06 | 12,0 | 0.47 | 27 | 27 | 0,120 | 0.265 |
| **26711D-10-10SMZ*** | -10 | 7/8"-14 | 16 | -10 | 61,0 | 2.40 | 27,0 | 1.06 | 12,0 | 0.47 | 27 | 22 | 0,104 | 0.229 |
| **26711D-12-08SMZ*** | -12 | 1.1/16"-12 | 12 | -08 | 61,0 | 2.40 | 29,5 | 1.16 | 10,0 | 0.39 | 32 | 27 | 0,166 | 0.366 |
| **26711D-12-10Z*** | -12 | 1.1/16"-12 | 16 | -10 | 65,0 | 2.56 | 31,0 | 1.22 | 12,0 | 0.47 | 32 | 32 | 0,180 | 0.397 |
| **26711D-12-12Z*** | -12 | 1.1/16"-12 | 20 | -12 | 70,0 | 2.76 | 31,5 | 1.24 | 15,0 | 0.59 | 32 | 32 | 0,188 | 0.414 |
| **26711D-12-12SMZ*** | -12 | 1.1/16"-12 | 20 | -12 | 70,0 | 2.76 | 31,5 | 1.24 | 15,0 | 0.59 | 32 | 27 | 0,166 | 0.366 |
| **26711D-16-16Z*** | -16 | 1.5/16"-12 | 25 | -16 | 81,5 | 3.21 | 34,5 | 1.36 | 21,0 | 0.83 | 41 | 41 | 0,320 | 0.705 |
| **26711D-16-16SMWZ**** | -16 | 1.5/16"-12 | 25 | -16 | 84,5 | 3.33 | 37,5 | 1.48 | 21,0 | 0.83 | 41 | 32 | 0,312 | 0.688 |
| **26711D-20-20SMWZ**** | -20 | 1.5/8"-12 | 32 | -20 | 95,0 | 3.74 | 41,0 | 1.61 | 27,0 | 1.06 | 50 | 41 | 0,502 | 1.107 |
| **26711D-32-32SMWZ**** | -32 | 2.1/2"-12 | 50 | -32 | 117,0 | 4.61 | 45,0 | 1.77 | 43,0 | 1.69 | 75 | 65 | 1,380 | 3.042 |
| **26711D-24-24SMWZ**** | -24 | 1.7/8"-12 | 38 | -24 | 110,0 | 4.33 | 42,0 | 1.65 | 32,0 | 1.26 | 60 | 46 | 0,665 | 1.466 |

** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*

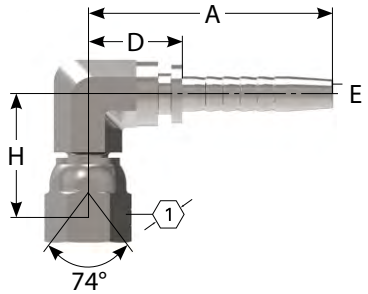
1. *Same nipple configuration as 26711 with back up hex*




## **JIC 37° Female** 45° Elbow

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **26741-04-03Z*** | -04 | 7/16"-20 | 5 | -03 | 54,0 | 2.13 | 32,5 | 1.28 | 3,0 | 0.12 | 12,1 | 0.48 | 14 | -- | 0,029 | 0.064 |
| **26741-04-04Z*** | -04 | 7/16"-20 | 6 | -04 | 63,1 | 2.48 | 35,1 | 1.38 | 4,0 | 0.16 | 13,0 | 0.51 | 14 | -- | 0,035 | 0.077 |
| **26741-04-06Z*** | -04 | 7/16"-20 | 10 | -06 | 65,2 | 2.57 | 35,2 | 1.39 | 7,0 | 0.28 | 13,1 | 0.52 | 14 | -- | 0,036 | 0.079 |
| **26741-05-04Z*** | -05 | 1/2"-20 | 6 | -04 | 63,6 | 2.50 | 35,6 | 1.40 | 4,0 | 0.16 | 13,5 | 0.53 | 17 | -- | 0,038 | 0.084 |
| **26741-05-05Z*** | -05 | 1/2"-20 | 8 | -05 | 65,7 | 2.59 | 37,7 | 1.48 | 5,5 | 0.22 | 14,4 | 0.57 | 17 | -- | 0,050 | 0,110 |
| **26741-06-04Z*** | -06 | 9/16"-18 | 6 | -04 | 63,6 | 2.50 | 35,6 | 1.40 | 4,0 | 0.16 | 13,5 | 0.53 | 19 | -- | 0,045 | 0.099 |
| **26741-06-05Z*** | -06 | 9/16"-18 | 8 | -05 | 65,7 | 2.59 | 37,7 | 1.48 | 5,5 | 0.22 | 14,4 | 0.57 | 19 | -- | 0,056 | 0.123 |
| **26741-06-06Z*** | -06 | 9/16"-18 | 10 | -06 | 68,8 | 2.71 | 38,8 | 1.53 | 7,0 | 0.28 | 14,8 | 0.58 | 19 | -- | 0,062 | 0.137 |
| **26741-06-08Z*** | -06 | 9/16"-18 | 12 | -08 | 70,8 | 2.79 | 39,3 | 1.55 | 10,0 | 0.39 | 14,8 | 0.58 | 19 | -- | 0,064 | 0.141 |
| **26741-06-10Z*** | -06 | 9/16"-18 | 16 | -10 | 75,8 | 2.98 | 41,8 | 1.65 | 12,0 | 0.47 | 14,8 | 0.58 | 19 | -- | 0,068 | 0.150 |
| **26741-08-06Z*** | -08 | 3/4"-16 | 10 | -06 | 70,2 | 2.76 | 40,2 | 1.58 | 7,0 | 0.28 | 16,2 | 0.64 | 22 | -- | 0,080 | 0.176 |
| **26741-08-08Z*** | -08 | 3/4"-16 | 12 | -08 | 76,8 | 3.02 | 45,3 | 1.78 | 10,0 | 0.39 | 19,0 | 0.75 | 22 | -- | 0,105 | 0.231 |
| **26741-08-10Z*** | -08 | 3/4"-16 | 16 | -10 | 87,7 | 3.45 | 53,7 | 2.11 | 12,0 | 0.47 | 21,4 | 0.84 | 22 | -- | 0,120 | 0.265 |
| **26741-10-06Z*** | -10 | 7/8"-14 | 10 | -06 | 71,6 | 2.82 | 41,6 | 1.64 | 7,0 | 0.28 | 17,6 | 0.69 | 27 | -- | 0,092 | 0.203 |
| **26741-10-08Z*** | -10 | 7/8"-14 | 12 | -08 | 78,2 | 3.08 | 46,7 | 1.84 | 10,0 | 0.39 | 20,4 | 0.80 | 27 | -- | 0,120 | 0.265 |
| **26741-10-10Z*** | -10 | 7/8"-14 | 16 | -10 | 88,4 | 3.48 | 54,4 | 2.14 | 12,0 | 0.47 | 22,1 | 0.87 | 27 | -- | 0,146 | 0.322 |
| **26741-10-12Z*** | -10 | 7/8"-14 | 20 | -12 | 98,4 | 3.87 | 58,9 | 2.32 | 15,0 | 0.59 | 22,1 | 0.87 | 27 | -- | 0,170 | 0.375 |
| **26741-12-08Z*** | -12 | 1.1/16"-12 | 12 | -08 | 81,9 | 3.22 | 50,4 | 1.98 | 10,0 | 0.39 | 21,1 | 0.83 | 32 | -- | 01,40 | 0.309 |
| **26741-12-10Z*** | -12 | 1.1/16"-12 | 16 | -10 | 89,1 | 3.51 | 55,1 | 2.17 | 12,0 | 0.47 | 22,8 | 0.90 | 32 | -- | 0,202 | 0.445 |
| **26741-12-12Z*** | -12 | 1.1/16"-12 | 20 | -12 | 97,8 | 3.85 | 59,3 | 2.33 | 15,0 | 0.59 | 24,2 | 0.95 | 32 | -- | 0,240 | 0.529 |
| **26741-12-16Z*** | -12 | 1.1/16"-12 | 25 | -16 | 117,3 | 4.62 | 70,3 | 2.77 | 21,0 | 0.83 | 24,2 | 0.95 | 32 | -- | 0,278 | 0.613 |
| **26741-14-12Z*** | -14 | 1.3/16"-12 | 20 | -12 | 98,6 | 3.88 | 60,1 | 2.37 | 15,0 | 0.59 | 24,2 | 0.95 | 36 | -- | 0,230 | 0.507 |
| **26741-16-12Z*** | -16 | 1.5/16"-12 | 20 | -12 | 99,4 | 3.91 | 60,9 | 2.40 | 15,0 | 0.59 | 25,0 | 0.98 | 41 | -- | 0,346 | 0.763 |
| **26741-16-16Z*** | -16 | 1.5/16"-12 | 25 | -16 | 121,3 | 4.78 | 74,3 | 2.93 | 21,0 | 0.83 | 28,7 | 1.13 | 41 | -- | 0,400 | 0.882 |
| **26741-20-16WZ**** | -20 | 1.5/8"-12 | 25 | -16 | 123,6 | 4.87 | 76,6 | 3.02 | 21,0 | 0.83 | 31,1 | 1.22 | 50 | -- | 0,536 | 1.182 |
| **26741-20-20WZ**** | -20 | 1.5/8"-12 | 32 | -20 | 150,3 | 5.92 | 96,3 | 3.79 | 27,0 | 1.06 | 35,5 | 1.40 | 50 | -- | 0,650 | 1.433 |
| **26741-24-20WZ**** | -24 | 1.7/8"-12 | 32 | -20 | 140,6 | 5.54 | 86,6 | 3.41 | 27,0 | 1.06 | 35,9 | 1.41 | 60 | -- | 0,780 | 1.720 |
| **26741-24-24WZ**** | -24 | 1.7/8"-12 | 38 | -24 | 182,8 | 7.20 | 114,8 | 4.52 | 32,0 | 1.26 | 44,1 | 1.74 | 60 | -- | 1,122 | 2.474 |
| **26741-32-32WZ**** | -32 | 2.1/2"-12 | 50 | -32 | 207,9 | 8.19 | 135,9 | 5.35 | 43,0 | 1.69 | 51,6 | 2.03 | 75 | -- | 2,076 | 4.577 |

** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*

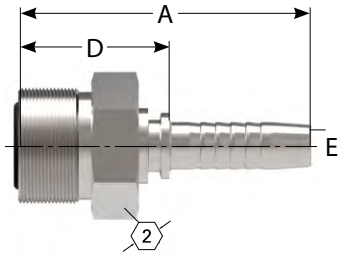



## **JIC 37° Female** 90° Elbow

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **26791-04-03Z*** | -04 | 7/16"-20 | 5 | -03 | 48,0 | 1.89 | 26,5 | 1.04 | 3,0 | 0.12 | 23,3 | 0.92 | 14 | -- | 0,024 | 0.053 |
| **26791-04-04Z*** | -04 | 7/16"-20 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 26,3 | 1.04 | 14 | -- | 0,040 | 0.088 |
| **26791-04-05Z*** | -04 | 7/16"-20 | 8 | -05 | 58,0 | 2.28 | 30,0 | 1.18 | 5,5 | 0.22 | 26,3 | 1.04 | 14 | -- | 0,040 | 0.088 |
| **26791-04-06Z*** | -04 | 7/16"-20 | 10 | -06 | 60,0 | 2.36 | 30,0 | 1.18 | 7,0 | 0.28 | 26,3 | 1.04 | 14 | -- | 0,040 | 0.088 |
| **26791-05-04Z*** | -05 | 1/2"-20 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 27,0 | 1.06 | 17 | -- | 0,042 | 0.093 |
| **26791-05-05Z*** | -05 | 1/2"-20 | 8 | -05 | 61,0 | 2.40 | 33,0 | 1.30 | 5,5 | 0.22 | 30,0 | 1.18 | 17 | -- | 0,050 | 0.110 |
| **26791-05-06Z*** | -05 | 1/2"-20 | 10 | -06 | 63,0 | 2.48 | 33,0 | 1.30 | 7,0 | 0.28 | 30,0 | 1.18 | 17 | -- | 0,055 | 0.121 |
| **26791-06-04Z*** | -06 | 9/16"-18 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 27,0 | 1.06 | 19 | -- | 0,048 | 0.106 |
| **26791-06-05Z*** | -06 | 9/16"-18 | 8 | -05 | 61,0 | 2.40 | 33,0 | 1.30 | 5,5 | 0.22 | 30,0 | 1.18 | 19 | -- | 0,062 | 0.137 |
| **26791-06-06Z*** | -06 | 9/16"-18 | 10 | -06 | 64,5 | 2.54 | 34,5 | 1.36 | 7,0 | 0.28 | 31,5 | 1.24 | 19 | -- | 0,070 | 0.154 |
| **26791-06-08Z*** | -06 | 9/16"-18 | 12 | -08 | 69,5 | 2.74 | 38,0 | 1.50 | 10,0 | 0.39 | 31,5 | 1.24 | 19 | -- | 0,070 | 0.154 |
| **26791-08-04Z*** | -08 | 3/4"-16 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 29,0 | 1.14 | 22 | -- | 0,063 | 0.139 |
| **26791-08-06Z*** | -08 | 3/4"-16 | 10 | -06 | 64,5 | 2.54 | 34,5 | 1.36 | 7,0 | 0.28 | 33,5 | 1.32 | 22 | -- | 0,088 | 0.194 |
| **26791-08-08Z*** | -08 | 3/4"-16 | 12 | -08 | 71,0 | 2.80 | 39,5 | 1.56 | 10,0 | 0.39 | 40,0 | 1.57 | 22 | -- | 0,118 | 0.260 |
| **26791-08-10Z*** | -08 | 3/4"-16 | 16 | -10 | 81,5 | 3.21 | 45,5 | 1.79 | 12,0 | 0.47 | 40,0 | 1.57 | 22 | -- | 0,124 | 0.273 |
| **26791-08-12Z*** | -08 | 3/4"-16 | 20 | -12 | 86,5 | 3.41 | 48,0 | 1.89 | 15,0 | 0.59 | 40,0 | 1.57 | 22 | -- | 0,134 | 0.295 |
| **26791-10-06Z*** | -10 | 7/8"-14 | 10 | -06 | 66,5 | 2.62 | 36,5 | 1.44 | 7,0 | 0.28 | 34,5 | 1.36 | 27 | -- | 0,100 | 0.220 |
| **26791-10-08Z*** | -10 | 7/8"-14 | 12 | -08 | 71,0 | 2.80 | 39,5 | 1.56 | 10,0 | 0.39 | 42,0 | 1.65 | 27 | -- | 0,132 | 0.291 |
| **26791-10-10Z*** | -10 | 7/8"-14 | 16 | -10 | 83,0 | 3.27 | 49,0 | 1.93 | 12,0 | 0.47 | 47,5 | 1.87 | 27 | -- | 0,190 | 0.419 |
| **26791-10-12Z*** | -10 | 7/8"-14 | 20 | -12 | 92,0 | 3.62 | 53,5 | 2.11 | 15,0 | 0.59 | 47,5 | 1.87 | 27 | -- | 0,196 | 0.432 |
| **26791-12-08Z*** | -12 | 1.1/16"-12 | 12 | -08 | 75,0 | 2.95 | 43,5 | 1.71 | 10,0 | 0.39 | 43,0 | 1.69 | 32 | -- | 0,150 | 0.331 |
| **26791-12-10Z*** | -12 | 1.1/16"-12 | 16 | -10 | 83,0 | 3.27 | 49,0 | 1.93 | 12,0 | 0.47 | 49,0 | 1.93 | 32 | -- | 0,226 | 0.498 |
| **26791-12-12Z*** | -12 | 1.1/16"-12 | 20 | -12 | 93,0 | 3.66 | 54,5 | 2.15 | 15,0 | 0.59 | 53,5 | 2.11 | 32 | -- | 0,300 | 0.661 |
| **26791-12-16Z*** | -12 | 1.1/16"-12 | 25 | -16 | 112,5 | 4.43 | 65,5 | 2.58 | 21,0 | 0.83 | 53,5 | 2.11 | 32 | -- | 0,320 | 0.705 |
| **26791-14-12Z*** | -14 | 1.3/16"-12 | 20 | -12 | 93,8 | 3.69 | 55,3 | 2.18 | 15,0 | 0.59 | 53,5 | 2.11 | 36 | -- | 0,230 | 0.507 |
| **26791-16-12Z*** | -16 | 1.5/16"-12 | 20 | -12 | 93,8 | 3.69 | 55,3 | 2.18 | 15,0 | 0.59 | 53,6 | 2.11 | 41 | -- | 0,408 | 0.899 |
| **26791-16-16Z*** | -16 | 1.5/16"-12 | 25 | -16 | 118,0 | 4.65 | 71,0 | 2.80 | 21,0 | 0.83 | 66,1 | 2.60 | 41 | -- | 0,460 | 1.014 |
| **26791-16-20Z*** | -16 | 1.5/16"-12 | 32 | -20 | 135,0 | 5.31 | 81,0 | 3.19 | 27,0 | 1.06 | 66,1 | 2.60 | 41 | -- | 0,576 | 1.270 |
| **26791-20-16WZ**** | -20 | 1.5/8"-12 | 25 | -16 | 118,0 | 4.65 | 71,0 | 2.80 | 21,0 | 0.83 | 69,5 | 2.74 | 50 | -- | 0,630 | 1.389 |
| **26791-20-20WZ**** | -20 | 1.5/8"-12 | 32 | -20 | 135,5 | 5.33 | 81,5 | 3.21 | 27,0 | 1.06 | 80,0 | 3.15 | 50 | -- | 0,784 | 1.728 |
| **26791-24-20WZ**** | -24 | 1.7/8"-12 | 32 | -20 | 135,5 | 5.33 | 81,5 | 3.21 | 27,0 | 1.06 | 81,5 | 3.21 | 60 | -- | 0,860 | 1.896 |
| **26791-24-24WZ**** | -24 | 1.7/8"-12 | 38 | -24 | 177,4 | 6.98 | 109,4 | 4.31 | 32,0 | 1.26 | 94,0 | 3.70 | 60 | -- | 1,386 | 3.056 |
| **26791-32-32WZ**** | -32 | 2.1/2"-12 | 50 | -32 | 205,1 | 8.07 | 133,1 | 5.24 | 43,0 | 1.69 | 121,8 | 4.80 | 75 | -- | 2,600 | 5.732 |

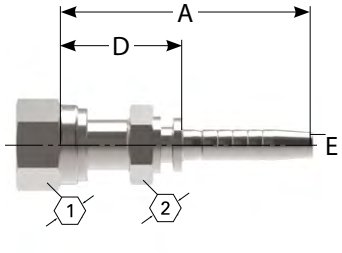
** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*

# ORS




## ORS Male Rigid

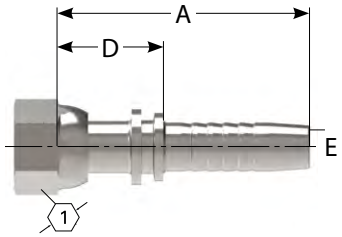
| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **14211-04-04Z** | -04 | 9/16"x18 | 6 | -04 | 50,5 | 1.99 | 22,5 | 0.89 | 4,0 | 0.16 | - - | 17 | 0,030 | 0.066 |
| **14211-06-04Z** | -06 | 11/16"x16 | 6 | -04 | 52,0 | 2.05 | 24,0 | 0.94 | 4,0 | 0.16 | - - | 19 | 0,038 | 0.084 |
| **14211-06-06Z** | -06 | 11/16"x16 | 10 | -06 | 54,0 | 2.13 | 24,0 | 0.94 | 6,7 | 0.26 | - - | 19 | 0,040 | 0.088 |
| **14211-08-06Z** | -08 | 13/16"x16 | 10 | -06 | 57,5 | 2.26 | 27,5 | 1.08 | 7,0 | 0.28 | - - | 22 | 0,060 | 0.132 |
| **14211-08-08Z** | -08 | 13/16"x16 | 12 | -08 | 60,0 | 2.36 | 28,5 | 1.12 | 9,6 | 0.38 | - - | 22 | 0,070 | 0.154 |
| **14211-10-08Z** | -10 | 1"X14 | 12 | -08 | 64,0 | 2.52 | 32,5 | 1.28 | 10,0 | 0.39 | - - | 27 | 0,108 | 0.238 |
| **14211-10-10Z** | -10 | 1"X14 | 16 | -10 | 67,5 | 2.66 | 33,5 | 1.32 | 12,0 | 0.47 | - - | 27 | 0,120 | 0.264 |
| **14211-12-08Z** | -12 | 1.3/16"x12 | 12 | -08 | 67,0 | 2.64 | 35,5 | 1.40 | 10,0 | 0.39 | - - | 32 | 0,148 | 0.326 |
| **14211-12-10Z** | -12 | 1.3/16"x12 | 16 | -10 | 70,0 | 2.76 | 36,0 | 1.42 | 12,0 | 0.47 | - - | 32 | 0,164 | 0.361 |
| **14211-12-12Z** | -12 | 1.3/16"x12 | 20 | -12 | 75,0 | 2.95 | 36,5 | 1.44 | 15,0 | 0.59 | - - | 32 | 0,172 | 0.378 |
| **14211-16-12Z** | -16 | 1.7/16"x12 | 20 | -12 | 75,5 | 2.97 | 37,0 | 1.46 | 15,0 | 0.59 | - - | 38 | 0,255 | 0.561 |
| **14211-16-16Z** | -16 | 1.7/16"x12 | 25 | -16 | 85,5 | 3.37 | 38,5 | 1.52 | 20,6 | 0.81 | - - | 38 | 0,248 | 0.546 |
| **14211-20-20Z** | -20 | 1.11/16"x12 | 32 | -20 | 95,5 | 3.76 | 41,5 | 1.63 | 26,0 | 1.02 | - - | 46 | 0,400 | 0.880 |
| **14211-24-24Z** | -24 | 2"x12 | 40 | -24 | 114,5 | 4.51 | 46,5 | 1.83 | 32,0 | 1.26 | - - | 55 | 0,624 | 1.373 |




## ORS Female Swivel

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **24211D-04-04SMZ** | -04 | 9/16"×18 | 6 | -04 | 55,5 | 2.19 | 27,5 | 1.08 | 4,0 | 0.16 | 17 | 14 | 0,041 | 0.090 |
| **24211D-06-06SMZ** | -06 | 11/16"×16 | 10 | -06 | 60,0 | 2.36 | 30,0 | 1.18 | 7,0 | 0.28 | 22 | 17 | 0,060 | 0.132 |
| **24211D-08-08SMZ** | -08 | 13/16"×16 | 12 | -08 | 65,0 | 2.56 | 33,5 | 1.32 | 10,0 | 0.39 | 27 | 19 | 0,096 | 0.212 |
| **24211D-10-10SMZ** | -10 | 1"×14 | 16 | -10 | 74,0 | 2.91 | 40,0 | 1.57 | 12,0 | 0.47 | 30 | 24 | 0,140 | 0.309 |
| **24211D-12-12SMZ** | -12 | 1.3/16"×12 | 20 | -12 | 83,8 | 3.30 | 45,3 | 1.78 | 15,0 | 0.59 | 36 | 30 | 0,195 | 0.430 |
| **24211D-16-16SMZ** | -16 | 1.7/16"×12 | 25 | -16 | 95,5 | 3.76 | 48,5 | 1.91 | 21,0 | 0.83 | 41 | 32 | 0,260 | 0.573 |

Same nipple configuration as 24211 with back up hex

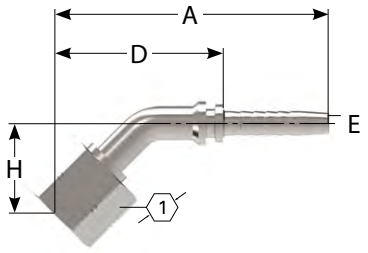



## ORS Female Swivel

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **24211-04-04Z*** | -04 | 9/16"×18 | 6 | -04 | 50,5 | 1.99 | 22,5 | 0.89 | 4,0 | 0.16 | 17 | -- | 0,034 | 0.075 |
| **24211-04-06Z*** | -04 | 9/16"×18 | 10 | -06 | 52,5 | 2.07 | 22,5 | 0.89 | 7,0 | 0.28 | 17 | -- | 0,043 | 0.095 |
| **24211-06-04TZ**** | -06 | 11/16"×16 | 6 | -04 | 51,5 | 2.03 | 23,5 | 0.93 | 4,0 | 0.16 | 22 | -- | 0,060 | 0.132 |
| **24211-06-05TZ**** | -06 | 11/16"×16 | 8 | -05 | 51,5 | 2.03 | 23,5 | 0.93 | 5,5 | 0.22 | 22 | -- | 0,065 | 0.143 |
| **24211-06-06Z*** | -06 | 11/16"×16 | 10 | -06 | 55,5 | 2.19 | 25,5 | 1 | 7,0 | 0.28 | 22 | -- | 0,055 | 0.121 |
| **24211-08-06TZ**** | -08 | 13/16"×16 | 10 | -06 | 55,0 | 2.17 | 25,0 | 0.98 | 7,0 | 0.28 | 24 | -- | 0,095 | 0.209 |
| **24211-08-08Z*** | -08 | 13/16"×16 | 12 | -08 | 59,5 | 2.34 | 28,0 | 1.1 | 10,0 | 0.39 | 27 | -- | 0,086 | 0.19 |
| **24211-10-08TZ**** | -10 | 1"×14 | 12 | -08 | 61,0 | 2.4 | 29,5 | 1.16 | 10,0 | 0.39 | 30 | -- | 0,130 | 0.287 |
| **24211-10-10Z*** | -10 | 1"×14 | 16 | -10 | 67,0 | 2.64 | 33,0 | 1.3 | 12,0 | 0.47 | 30 | -- | 0,120 | 0.265 |
| **24211-10-12Z*** | -10 | 1"×14 | 20 | -12 | 72,0 | 2.83 | 33,5 | 1.32 | 15,0 | 0.59 | 30 | -- | 0,146 | 0.322 |
| **24211-12-08TZ**** | -12 | 1.3/16"×12 | 12 | -08 | 62,0 | 2.44 | 30,5 | 1.2 | 10,0 | 0.39 | 36 | -- | 0,185 | 0.408 |
| **24211-12-10TZ**** | -12 | 1.3/16"×12 | 16 | -10 | 65,5 | 2.58 | 31,5 | 1.24 | 12,0 | 0.47 | 36 | -- | 0,210 | 0.463 |
| **24211-12-12Z*** | -12 | 1.3/16"×12 | 20 | -12 | 73,5 | 2.89 | 35,0 | 1.38 | 15,0 | 0.59 | 36 | -- | 0,195 | 0.43 |
| **24211-12-16Z*** | -12 | 1.3/16"×12 | 25 | -16 | 83,0 | 3.27 | 36,0 | 1.42 | 21,0 | 0.83 | 36 | -- | 0,236 | 0.52 |
| **24211-16-12TZ**** | -16 | 1.7/16"×12 | 20 | -12 | 73,5 | 2.89 | 35,0 | 1.38 | 15,0 | 0.59 | 41 | -- | 0,250 | 0.551 |
| **24211-16-16TZ**** | -16 | 1.7/16"×12 | 25 | -16 | 82,0 | 3.23 | 35,0 | 1.38 | 21,0 | 0.83 | 41 | -- | 0,260 | 0.573 |
| **24211-20-16TZ***** | -20 | 1.11/16"×12 | 25 | -16 | 81,5 | 3.21 | 34,5 | 1.36 | 21,0 | 0.83 | 50 | -- | 0,385 | 1.849 |
| **24211-20-20WZ***** | -20 | 1.11/16"×12 | 32 | -20 | 96,5 | 3.8 | 42,5 | 1.67 | 27,0 | 1.06 | 50 | -- | 0,464 | 1.023 |
| **24211-24-24TZ**** | -24 | 2"×12 | 40 | -24 | 104,0 | 4.09 | 36,0 | 1.42 | 32,0 | 1.26 | 60 | -- | 0,660 | 1.455 |

* Denotes Style 1 design
*** Denotes Style 2 wire nut design*
*** Denotes Style 3 crimp nut design

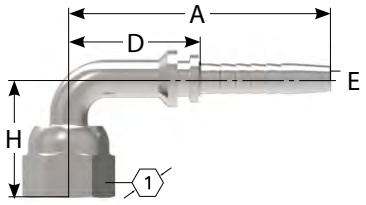
1. Same nipple configuration as 24211D without back up hex




## **ORS Female** 45° Elbow

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **24241-04-04Z*** | -04 | 9/16"×18 | 6 | -04 | 73,5 | 2.89 | 45,5 | 1.79 | 4,0 | 0.16 | 23,4 | 0.92 | 17 | -- | 0,046 | 0.101 |
| **24241-04-06Z*** | -04 | 9/16"x18 | 10 | -06 | 75,6 | 2.98 | 45,6 | 1.80 | 7,0 | 0.28 | 23,4 | 0.92 | 17 | -- | 0,056 | 0.123 |
| **24241-06-04TZ**** | -06 | 11/16"×16 | 6 | -04 | 68,9 | 2.71 | 40,9 | 1.61 | 4,0 | 0.16 | 18,8 | 0.74 | 22 | -- | 0,070 | 0.154 |
| **24241-06-06Z*** | -06 | 11/16"×16 | 10 | -06 | 81,3 | 3.20 | 51,3 | 2.02 | 7,0 | 0.28 | 27,1 | 1.07 | 22 | -- | 0,078 | 0.172 |
| **24241-06-08Z*** | -06 | 11/16"x16 | 12 | -08 | 95,7 | 3.77 | 64,2 | 2.53 | 10,0 | 0.39 | 29,3 | 1.15 | 22 | -- | 0,132 | 0.291 |
| **24241-08-06TZ**** | -08 | 13/16"×16 | 10 | -06 | 74,6 | 2.94 | 44,6 | 1.76 | 7,0 | 0.28 | 20,3 | 0.80 | 24 | -- | 0,110 | 0.243 |
| **24241-08-08Z*** | -08 | 13/16"×16 | 12 | -08 | 97,2 | 3.83 | 65,7 | 2.59 | 10,0 | 0.39 | 30,7 | 1.21 | 27 | -- | 0,100 | 0.220 |
| **24241-10-08TZ**** | -10 | 1"×14 | 12 | -08 | 89,7 | 3.53 | 58,2 | 2.29 | 10,0 | 0.39 | 23,3 | 0.92 | 30 | -- | 0,162 | 0.357 |
| **24241-10-10Z*** | -10 | 1"×14 | 16 | -10 | 113,2 | 4.46 | 79,2 | 3.12 | 12,0 | 0.47 | 34,9 | 1.37 | 30 | -- | 0,210 | 0.463 |
| **24241-10-12Z*** | -10 | 1"x14 | 20 | -12 | 124,4 | 4.90 | 85,9 | 3,38 | 15,0 | 0.59 | 38,5 | 1.52 | 30 | -- | 0,326 | 0.719 |
| **24241-12-08TZ**** | -12 | 1.3/16"x12 | 12 | -08 | 89,7 | 3.53 | 58,2 | 2.29 | 10,0 | 0.39 | 23,3 | 0.92 | 36 | -- | 0,210 | 0.463 |
| **24241-12-12Z*** | -12 | 1.3/16"×12 | 20 | -12 | 125,5 | 4.94 | 87,0 | 3.43 | 15,0 | 0.59 | 39,5 | 1.56 | 36 | -- | 0,350 | 0.772 |
| **24241-12-16TZ*** | -12 | 1.3/16"x12 | 25 | -16 | 139,3 | 5.48 | 92,3 | 3.63 | 21,0 | 0.83 | 41,0 | 1.61 | 36 | -- | 0,524 | 1.155 |
| **24241-16-16TZ*** | -16 | 1.7/16"×12 | 25 | -16 | 131,1 | 5.16 | 84,1 | 3.31 | 21,0 | 0.83 | 29,7 | 1.17 | 41 | -- | 0,423 | 0.933 |
| **24241-20-20WZ***** | -20 | 1.11/16"×12 | 32 | -20 | 165,2 | 6.50 | 111,2 | 4.38 | 27,0 | 1.06 | 49,0 | 1.93 | 50 | -- | 0,740 | 1.631 |
| **24241-24-24TZ**** | -24 | 2"×12 | 40 | -24 | 176,5 | 6.95 | 108,5 | 4.27 | 32,0 | 1.26 | 37,7 | 1.48 | 60 | -- | 1,236 | 2.725 |

** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*
**** Denotes Style 3 crimp nut design*

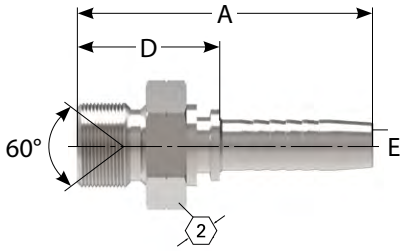



## **ORS Female** 90° Elbow

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **24291-04-04Z*** | -04 | 9/16"×18 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 41,0 | 1.61 | 17 | -- | 0,052 | 0.115 |
| **24291-06-04TZ**** | -06 | 11/16"×16 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 34,5 | 1.36 | 22 | -- | 0,065 | 0.143 |
| **24291-06-06Z*** | -06 | 11/16"×16 | 10 | -06 | 65,3 | 2.57 | 35,3 | 1.39 | 7,0 | 0.28 | 42,5 | 0.17 | 22 | -- | 0,090 | 0.198 |
| **24291-06-08Z*** | -06 | 11/16"x16 | 10 | -06 | 67,3 | 2.65 | 35,8 | 1.41 | 10,0 | 0.39 | 49,3 | 1.94 | 22 | -- | 0,098 | 0.216 |
| **24291-08-06TZ**** | -08 | 13/16"×16 | 10 | -06 | 65,3 | 2.57 | 35,3 | 1.39 | 7,0 | 0.28 | 39,8 | 1.56 | 24 | -- | 0,120 | 0.265 |
| **24291-08-08Z*** | -08 | 13/16"×16 | 12 | -08 | 72,5 | 2.85 | 41,0 | 1.61 | 10,0 | 0.39 | 57,5 | 2.26 | 27 | -- | 0,145 | 0.320 |
| **24291-10-08TZ**** | -10 | 1"×14 | 12 | -08 | 72,5 | 2.85 | 41,0 | 1.61 | 10,0 | 0.39 | 46,0 | 1.81 | 30 | -- | 0,174 | 0.384 |
| **24291-10-10Z*** | -10 | 1"×14 | 16 | -10 | 90,0 | 3.54 | 56,0 | 2.20 | 12,0 | 0.47 | 66,0 | 2.60 | 30 | -- | 0,235 | 0.518 |
| **24291-10-12Z*** | -10 | 1"×14 | 20 | -12 | 95,5 | 3.76 | 57,0 | 2.24 | 15,0 | 0.59 | 66,0 | 2.60 | 30 | -- | 0,282 | 0.622 |
| **24291-12-12Z*** | -12 | 1.3/16"×12 | 20 | -12 | 104,0 | 4.09 | 65,5 | 2.58 | 15,0 | 0.59 | 77,0 | 3.03 | 36 | -- | 0,390 | 0.860 |
| **24291-12-08TZ**** | -12 | 1.3/16"x12 | 12 | -8 | 84,0 | 3.31 | 52,5 | 2.07 | 10,0 | 0.39 | 51,5 | 2.03 | 36 | -- | 0,282 | 0.622 |
| **24291-16-12TZ**** | -16 | 1.7/16"x12 | 20 | -12 | 104,0 | 4.09 | 65,5 | 2.58 | 15,0 | 0.59 | 63,0 | 2.48 | 41 | -- | 0,410 | 0.904 |
| **24291-16-16TZ**** | -16 | 1.7/16"×12 | 25 | -16 | 123,9 | 4.88 | 76,9 | 3.03 | 21,0 | 0.83 | 67,5 | 2.66 | 41 | -- | 0,504 | 1.111 |
| **24291-20-16TZ**** | -20 | 1.11/16"x12 | 25 | -16 | 123,7 | 4.87 | 76,7 | 3.02 | 21,0 | 0.83 | 67,5 | 2.66 | 50 | -- | 0,622 | 1.371 |
| **24291-20-20WZ***** | -20 | 1.11/16"×12 | 32 | -20 | 147,0 | 5.79 | 93,0 | 3.66 | 27,0 | 1.06 | 100,0 | 3.94 | 50 | -- | 0,862 | 1.900 |
| **24291-24-24TZ**** | -24 | 2"×12 | 40 | -24 | 177,4 | 6.98 | 109,4 | 4.31 | 32,0 | 1.26 | 92,0 | 3.62 | 60 | -- | 1,372 | 3.025 |

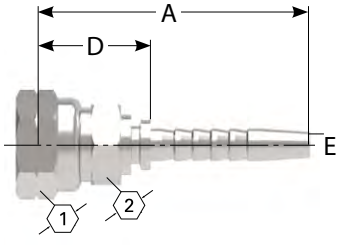
** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*
**** Denotes Style 3 crimp nut design*

# BSP




## BSP 60° Cone Male Rigid

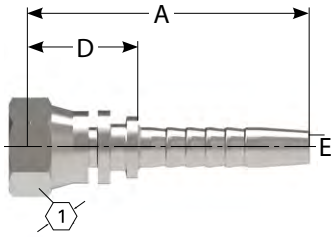
| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **12611A-02-04Z** | -02 | G1/8″x28 | 6 | -04 | 50,5 | 1.99 | 22,5 | 0.89 | 4,0 | 0.16 | - - | 14,0 | 0,020 | 0.044 |
| **12611A-04-04Z** | -04 | G1/4″x19 | 6 | -04 | 52,5 | 2.07 | 24,5 | 0.96 | 4,0 | 0.16 | - - | 19,0 | 0,030 | 0.066 |
| **12611A-06-04Z** | -06 | G3/8″x19 | 6 | -04 | 56,0 | 2.20 | 28,0 | 1.10 | 4,0 | 0.16 | - - | 22,0 | 0,045 | 0.099 |
| **12611A-06-05Z** | -06 | G3/8″x19 | 8 | -05 | 56,0 | 2.20 | 28,0 | 1.10 | 5,5 | 0.22 | - - | 22,0 | 0,052 | 0.114 |
| **12611A-06-06Z** | -06 | G3/8″x19 | 10 | -06 | 58,0 | 2.28 | 28,0 | 1.10 | 7,0 | 0.28 | - - | 22,0 | 0,050 | 0.110 |
| **12611A-06-08Z** | -06 | G3/8″x19 | 12 | -08 | 60,0 | 2.36 | 28,5 | 1.12 | 10,0 | 0.39 | - - | 22,0 | 0,058 | 0.128 |
| **12611A-08-06Z** | -08 | G1/2″x14 | 10 | -06 | 63,0 | 2.48 | 33,0 | 1.30 | 7,0 | 0.28 | - - | 27,0 | 0,082 | 0.180 |
| **12611A-08-08Z** | -08 | G1/2″x14 | 12 | -08 | 64,5 | 2.54 | 33,0 | 1.30 | 10,0 | 0.39 | - - | 27,0 | 0,090 | 0.198 |
| **12611A-10-10Z** | -10 | G5/8″x14 | 16 | -10 | 69,5 | 2.74 | 35,5 | 1.40 | 12,0 | 0.47 | - - | 30,0 | 0,121 | 0.266 |
| **12611A-12-12Z** | -12 | G3/4″x14 | 20 | -12 | 76,0 | 2.99 | 37,5 | 1.48 | 15,0 | 0.59 | - - | 32,0 | 0,150 | 0.330 |
| **12611A-16-12Z** | -16 | G1″x11 | 20 | -12 | 81,0 | 3.19 | 42,5 | 1.67 | 15,0 | 0.59 | - - | 41,0 | 0,230 | 0.506 |
| **12611A-16-16Z** | -16 | G1″x11 | 25 | -16 | 90,5 | 3.56 | 43,5 | 1.71 | 21,0 | 0.83 | - - | 41,0 | 0,253 | 0.557 |
| **12611A-20-20Z** | -20 | G1.1/4″x11 | 32 | -20 | 100,0 | 3.94 | 46,5 | 1.83 | 27,0 | 1.06 | - - | 50,0 | 0,406 | 0.893 |
| **12611A-24-24Z** | -24 | G1.1/2″x11 | 40 | -24 | 117,0 | 4.61 | 49,0 | 1.93 | 32,0 | 1.26 | - - | 55,0 | 0,554 | 1.219 |




## BSP 60° Cone Female Swivel

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **22611D-04-04Z** | -04 | G1/4"X19 | 6 | -04 | 51,5 | 2.03 | 32,5 | 1.28 | 4,0 | 0.16 | 19 | 19 | 0,044 | 0.097 |
| **22611D-06-06Z** | -06 | G3/8"X19 | 10 | -06 | 56,5 | 2.22 | 26,5 | 1.04 | 7,0 | 0.28 | 22 | 22 | 0,065 | 0.143 |
| **22611D-08-08Z** | -08 | G1/2"X14 | 12 | -08 | 62,5 | 2.46 | 31,0 | 1.22 | 10,0 | 0.39 | 27 | 27 | 0,120 | 0.264 |
| **22611D-12-12Z** | -12 | G3/4"X14 | 20 | -12 | 72,0 | 2.83 | 33,5 | 1.32 | 15,0 | 0.59 | 32 | 32 | 0,190 | 0.418 |
| **22611D-16-16Z** | -16 | G1"X11 | 25 | -16 | 82,5 | 3.25 | 35,5 | 1.40 | 21,0 | 0.83 | 41 | 41 | 0,296 | 0.651 |

1. Same nipple configuration as 26611 with back up hex

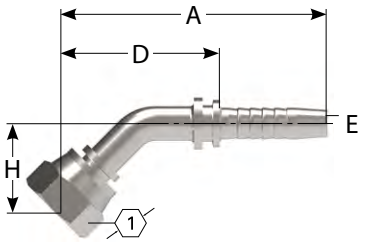



## BSP 60° Cone Female Swivel

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **22611-04-04Z*** | -04 | G1/4"X19 | 6 | -04 | 46,0 | 1.81 | 18,0 | 0.71 | 4,0 | 0.16 | 19 | -- | 0,032 | 0.070 |
| **22611-04-05Z*** | -04 | G1/4"X19 | 8 | -05 | 46,0 | 1.81 | 18,0 | 0.71 | 5,0 | 0.20 | 19 | -- | 0,035 | 0.077 |
| **22611-04-06Z*** | -04 | G1/4"X19 | 10 | -06 | 48,0 | 1.89 | 18,0 | 0.71 | 7,0 | 0.28 | 19 | -- | 0,040 | 0.088 |
| **22611-06-04TZ**** | -06 | G3/8"X19 | 6 | -04 | 45,5 | 1.79 | 17,5 | 0.69 | 4,0 | 0.16 | 22 | -- | 0,050 | 0.110 |
| **22611-06-05Z*** | -06 | G3/8"X19 | 8 | -05 | 47,0 | 1.85 | 19,0 | 0.75 | 5,5 | 0.22 | 22 | -- | 0,044 | 0.097 |
| **22611-06-06Z*** | -06 | G3/8"X19 | 10 | -06 | 49,5 | 1.95 | 19,5 | 0.77 | 7,0 | 0.28 | 22 | -- | 0,046 | 0.101 |
| **22611-06-08Z*** | -06 | G3/8"X19 | 12 | -08 | 51,0 | 2.01 | 19,5 | 0.77 | 10,0 | 0.39 | 22 | -- | 0,060 | 0.132 |
| **22611-08-06TZ**** | -08 | G1/2"X14 | 10 | -06 | 48,5 | 1.91 | 18,5 | 0.73 | 7,0 | 0.28 | 27 | -- | 0,080 | 0.176 |
| **22611-08-08Z*** | -08 | G1/2"X14 | 12 | -08 | 53,0 | 2.09 | 21,5 | 0.85 | 10,0 | 0.39 | 27 | -- | 0,078 | 0.172 |
| **22611-08-10Z*** | -08 | G1/2"X14 | 16 | -10 | 56,5 | 2.22 | 22,5 | 0.89 | 12,0 | 0.47 | 27 | -- | 0,092 | 0.202 |
| **22611-10-08Z*** | -10 | G5/8"X14 | 12 | -08 | 53,5 | 2.11 | 22,0 | 0.87 | 10,0 | 0.39 | 30 | -- | 0,100 | 0.220 |
| **22611-10-10Z*** | -10 | G5/8"X14 | 16 | -10 | 57,0 | 2.24 | 23,0 | 0.91 | 12,0 | 0.47 | 30 | -- | 0,114 | 0.251 |
| **22611-12-08TZ**** | -12 | G3/4"X14 | 12 | -08 | 51,5 | 2.03 | 20,0 | 0.79 | 10,0 | 0.39 | 32 | -- | 0,130 | 0.286 |
| **22611-12-10Z*** | -12 | G3/4"X14 | 16 | -10 | 57,5 | 2.26 | 23,5 | 0.93 | 12,0 | 0.47 | 32 | -- | 0,126 | 0.277 |
| **22611-12-12Z*** | -12 | G3/4"X14 | 20 | -12 | 62,5 | 2.46 | 24,0 | 0.94 | 15,0 | 0.59 | 32 | -- | 0,132 | 0.290 |
| **22611-16-12TZ**** | -16 | G1"X11 | 20 | -12 | 61,5 | 2.42 | 23,0 | 0.91 | 15,0 | 0.59 | 41 | -- | 0,220 | 0.484 |
| **22611-16-16Z*** | -16 | G1"X11 | 25 | -16 | 74,0 | 2.91 | 27,0 | 1.06 | 21,0 | 0.83 | 41 | -- | 0,226 | 0.497 |
| **22611-20-16TZ**** | -20 | G1.1/4"X11 | 25 | -16 | 74,0 | 2.91 | 27,0 | 1.06 | 21,0 | 0.83 | 50 | -- | 0,350 | 0.770 |
| **22611-24-20TZ**** | -24 | G1.1/2"X11 | 32 | -20 | 83,5 | 3.29 | 29,5 | 1.16 | 27,0 | 1.06 | 55 | -- | 0,466 | 1.025 |
| **22611-20-20WZ***** | -20 | G1.1/4"X11 | 32 | -20 | 84,5 | 3.33 | 30,5 | 1.20 | 27,0 | 1.06 | 50 | -- | 0,406 | 0.893 |
| **22611-24-24WZ***** | -24 | G1.1/2"X11 | 40 | -24 | 100,0 | 3.94 | 32,0 | 1.26 | 32,0 | 1.26 | 55 | -- | 0,546 | 1.201 |
| **22611-32-32WZ***** | -32 | G2"X11 | 50 | -32 | 103,0 | 4.06 | 31,0 | 1.22 | 43,0 | 1.69 | 70 | -- | 0,960 | 2.112 |

* Denotes Style 1 design
*** Denotes Style 2 wire nut design*
**** Denotes Style 3 crimp nut design*

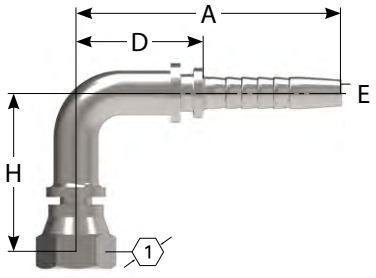
1. Same nipple configuration as 22611D without back up hex




## **BSP 60° Cone Female** 45° Elbow

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | | | **mm** | **mm** | **kg** | **lb** |
| **22641-04-04Z*** | -04 | G1/4"X19 | 6 | -04 | 70,3 | 2.77 | 42,3 | 1.67 | 4,0 | 0.16 | 20,2 | 0.80 | 19 | - - | 0,046 | 0.101 |
| **22641-06-04Z*** | -06 | G3/8"X19 | 6 | -04 | 71,2 | 2.80 | 43,2 | 1.70 | 4,0 | 0.16 | 21,1 | 0.83 | 22 | - - | 0,055 | 0.121 |
| **22641-06-06Z*** | -06 | G3/8"X19 | 10 | -06 | 76,9 | 3.03 | 46,9 | 1.85 | 7,0 | 0.28 | 22,6 | 0.89 | 22 | - - | 0,070 | 0.154 |
| **22641-08-06Z** | -06 | G1/2"X14 | 10 | -06 | 76,7 | 3.02 | 46,7 | 1.84 | 7,0 | 0.28 | 22,5 | 0.89 | 27 | - - | 0,104 | 0.229 |
| **22641-08-08Z*** | -08 | G1/2"X14 | 12 | -08 | 92,6 | 3.65 | 61,1 | 2.41 | 10,0 | 0.39 | 26,1 | 1.03 | 27 | - - | 0,130 | 0.286 |
| **22641-10-10Z*** | -10 | G5/8"X14 | 16 | -10 | 106,1 | 4.18 | 72,1 | 2.84 | 12,0 | 0.47 | 27,8 | 1.09 | 30 | - - | 0,196 | 0.431 |
| **22641-12-12Z*** | -12 | G3/4"X14 | 20 | -12 | 117,1 | 4.61 | 78,6 | 3.09 | 15,0 | 0.59 | 31,8 | 1.25 | 32 | - - | 0,285 | 0.627 |
| **22641-16-16Z*** | -16 | G1"X11 | 25 | -16 | 135,4 | 5.33 | 88,4 | 3.48 | 21,0 | 0.83 | 34,2 | 1.35 | 41 | - - | 0,402 | 0.884 |
| **22641-20-20WZ**** | -20 | G1.1/4"X11 | 32 | -20 | 152,8 | 6.02 | 98,8 | 3.89 | 27,0 | 1.06 | 38,0 | 1.50 | 50 | - - | 0,650 | 1.430 |
| **22641-24-24WZ**** | -24 | G1.1/2"X11 | 40 | -24 | 184,2 | 7.25 | 116,2 | 4.57 | 32,0 | 1.26 | 45,5 | 1.79 | 55 | - - | 1,095 | 2.409 |
| **22641-32-32WZ**** | -32 | G2"X11 | 50 | -32 | 207,7 | 8.18 | 135,7 | 5.34 | 43,0 | 1.69 | 52,7 | 2.07 | 70 | - - | 1,898 | 4.176 |

** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*

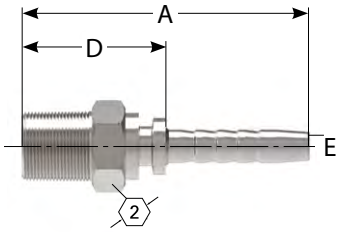



## **BSP 60° Cone Female** 90° Elbow

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | H | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **22691-04-04Z*** | -04 | G1/4"X19 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 36,5 | 1.44 | 19 | -- | 0,048 | 0.106 |
| **22691-04-05Z*** | -04 | G1/4"X19 | 8 | -05 | 61,0 | 2.40 | 33,0 | 1.30 | 5,5 | 0.22 | 39,5 | 1.56 | 19 | -- | 0,060 | 0.132 |
| **22691-04-06Z*** | -04 | G1/4"X19 | 10 | -06 | 60,0 | 2.36 | 30,0 | 1.18 | 7,0 | 0.28 | 36,5 | 1.44 | 19 | -- | 0,055 | 0.121 |
| **22691-06-04TZ*** | -06 | G3/8"X19 | 6 | -04 | 58,0 | 2.28 | 30,0 | 1.18 | 4,0 | 0.16 | 35,7 | 1.41 | 22 | -- | 0,070 | 0.154 |
| **22691-06-06Z*** | -06 | G3/8"X19 | 10 | -06 | 65,3 | 2.57 | 35,3 | 1.39 | 7,0 | 0.28 | 43,0 | 1.69 | 22 | -- | 0,080 | 0.176 |
| **22691-06-08Z*** | -06 | G3/8"X19 | 12 | -08 | 72,5 | 2.85 | 41,0 | 1.61 | 10,0 | 0.39 | 49,2 | 1.94 | 22 | -- | 0,126 | 0.277 |
| **22691-08-06TZ*** | -08 | G1/2"X14 | 10 | -06 | 65,3 | 2.57 | 35,3 | 1.39 | 7,0 | 0.28 | 41,8 | 1.65 | 27 | -- | 0,115 | 0.253 |
| **22691-08-08Z*** | -08 | G1/2"X14 | 12 | -08 | 72,5 | 2.85 | 41,0 | 1.61 | 10,0 | 0.39 | 51,0 | 2.01 | 27 | -- | 0,134 | 0.293 |
| **22691-10-08Z*** | -10 | G5/8"X14 | 12 | -08 | 72,5 | 2.85 | 41,0 | 1.61 | 10,0 | 0.39 | 51,5 | 2.03 | 30 | -- | 0,160 | 0.352 |
| **22691-10-10Z*** | -10 | G5/8"X14 | 16 | -10 | 90,0 | 3.54 | 56,0 | 2.20 | 12,0 | 0.47 | 56,0 | 2.20 | 30 | -- | 0,218 | 0.480 |
| **22691-12-10Z*** | -12 | G3/4"X14 | 16 | -10 | 90,0 | 3.54 | 56,0 | 2.20 | 12,0 | 0.47 | 56,6 | 2.23 | 32 | -- | 0,228 | 0.502 |
| **22691-12-12Z*** | -12 | G3/4"X14 | 20 | -12 | 103,4 | 4.07 | 64,9 | 2.56 | 15,0 | 0.59 | 66,0 | 2.60 | 32 | -- | 0,330 | 0.726 |
| **22691-16-12TZ**** | -16 | G1"X11 | 20 | -12 | 104,0 | 4.09 | 65,5 | 2.58 | 15,0 | 0.59 | 63,8 | 2.51 | 41 | -- | 0,360 | 0.660 |
| **22691-16-16Z*** | -16 | G1"X11 | 25 | -16 | 123,7 | 4.87 | 76,7 | 3.02 | 21,0 | 0.83 | 73,8 | 2.91 | 41 | -- | 0,495 | 1.089 |
| **22691-20-20WZ***** | -20 | G1.1/4"X11 | 32 | -20 | 145,5 | 5.73 | 91,5 | 3.60 | 27,0 | 1.06 | 84,3 | 3.32 | 50 | -- | 0,775 | 1.705 |
| **22691-24-24WZ***** | -24 | G1.1/2"X11 | 40 | -24 | 177,4 | 6.98 | 109,4 | 4.31 | 32,0 | 1.26 | 103,0 | 4.06 | 55 | -- | 1,395 | 3.069 |
| **22691-32-32WZ***** | -32 | G2"X11 | 50 | -32 | 203,8 | 8.02 | 131,8 | 5.19 | 43,0 | 1.69 | 123,3 | 4.85 | 70 | | 2,360 | 5.192 |

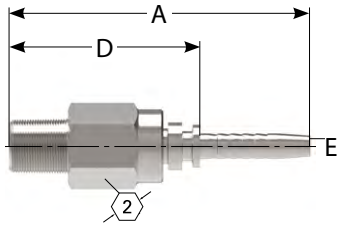
** Denotes Style 1 design*
*** Denotes Style 2 wire nut design*
**** Denotes Style 3 crimp nut design*

# NPTF




## NPTF Male Rigid

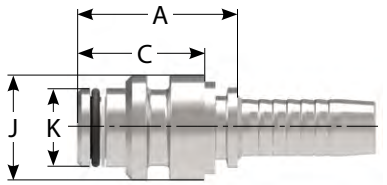
| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | Dash Size | | DN | Dash Size | mm | in | mm | in | mm | in | mm | mm | kg | lb |
| **15611-F02-04Z** | -02 | 1/8"x27 | 6 | -04 | 50,5 | 1.99 | 22,5 | 0.89 | 4,0 | 0.16 | -- | 12 | 0,015 | 0.033 |
| **15611-F04-04Z** | -04 | 1/4"x18 | 6 | -04 | 56,0 | 2.20 | 28,0 | 1.10 | 4,0 | 0.16 | -- | 17 | 0,030 | 0.066 |
| **15611-F04-05Z** | -04 | 1/4"x18 | 8 | -05 | 56,0 | 2.20 | 28,0 | 1.10 | 4,0 | 0.16 | -- | 17 | 0,030 | 0.066 |
| **15611-F04-06Z** | -04 | 1/4"x18 | 10 | -06 | 57,5 | 2.26 | 27,5 | 1.08 | 7,0 | 0.28 | -- | 17 | 0,032 | 0.070 |
| **15611-F06-04Z** | -06 | 3/8"x18 | 6 | -04 | 57,0 | 2.24 | 29,0 | 1.14 | 4,0 | 0.16 | -- | 19 | 0,038 | 0.084 |
| **15611-F06-05Z** | -06 | 3/8"x18 | 8 | -05 | 57,0 | 2.24 | 29,0 | 1.14 | 5,5 | 0.22 | -- | 19 | 0,044 | 0.097 |
| **15611-F06-06Z** | -06 | 3/8"x18 | 10 | -06 | 59,0 | 2.32 | 29,0 | 1.14 | 7,0 | 0.28 | -- | 19 | 0,048 | 0.106 |
| **15611-F06-08Z** | -06 | 3/8"x18 | 12 | -08 | 62,0 | 2.44 | 30,5 | 1.20 | 9,0 | 0.35 | -- | 19 | 0,060 | 0.132 |
| **15611-F08-04Z** | -08 | 1/2"x14 | 6 | -04 | 62,0 | 2.44 | 34,0 | 1.34 | 4,0 | 0.16 | -- | 22 | 0,066 | 0.145 |
| **15611-F08-06Z** | -08 | 1/2"x14 | 10 | -06 | 64,0 | 2.52 | 34,0 | 1.34 | 7,0 | 0.28 | -- | 22 | 0,068 | 0.150 |
| **15611-F08-08Z** | -08 | 1/2"x14 | 12 | -08 | 66,0 | 2.60 | 34,5 | 1.36 | 10,0 | 0.39 | -- | 22 | 0,075 | 0.165 |
| **15611-F08-10Z** | -08 | 1/2"x14 | 16 | -10 | 69,5 | 2.74 | 35,5 | 1.40 | 12,0 | 0.47 | -- | 22 | 0,085 | 0.187 |
| **15611-F08-12Z** | -08 | 1/2"x14 | 20 | -12 | 76,5 | 3.01 | 38,0 | 1.50 | 15,0 | 0.59 | -- | 27 | 0,124 | 0.273 |
| **15611-F12-08Z** | -12 | 3/4"x14 | 12 | -08 | 69,0 | 2.72 | 37,5 | 1.48 | 10,0 | 0.39 | -- | 27 | 0,103 | 0.227 |
| **15611-F12-10Z** | -12 | 3/4"x14 | 16 | -10 | 71,5 | 2.81 | 37,5 | 1.48 | 12,0 | 0.47 | -- | 27 | 0,130 | 0.286 |
| **15611-F12-12Z** | -12 | 3/4"x14 | 20 | -12 | 77,0 | 3.03 | 38,5 | 1.52 | 15,0 | 0.59 | -- | 27 | 0,130 | 0.286 |
| **15611-F12-16Z** | -12 | 3/4"x14 | 25 | -16 | 86,5 | 3.41 | 39,5 | 1.56 | 21,0 | 0.83 | -- | 32 | 0,190 | 0.418 |
| **15611-F16-12Z** | -16 | 1"x11.5 | 20 | -12 | 83,5 | 3.29 | 45,0 | 1.77 | 15,0 | 0.59 | -- | 36 | 0,210 | 0.462 |
| **15611-F16-16Z** | -16 | 1"x11.5 | 25 | -16 | 93,5 | 3.68 | 46,5 | 1.83 | 21,0 | 0.83 | -- | 36 | 0,230 | 0.506 |
| **15611-F20-16Z** | -20 | 1.1/4"x11.5 | 25 | -16 | 96,5 | 3.80 | 49,5 | 1.95 | 21,0 | 0.83 | -- | 46 | 0,344 | 0.757 |
| **15611-F20-20Z** | -20 | 1.1/4"x11.5 | 32 | -20 | 104,5 | 4.11 | 50,5 | 1.99 | 27,0 | 1.06 | -- | 46 | 0,406 | 0.893 |
| **15611-F24-24Z** | -24 | 1.1/2"x11.5 | 40 | -24 | 119,0 | 4.69 | 51,0 | 2.01 | 32,0 | 1.26 | -- | 50 | 0,550 | 1.210 |
| **15611-F32-32Z** | -32 | 2"x11.5 | 50 | -32 | 127,0 | 5.00 | 55,0 | 2.17 | 43,0 | 1.69 | -- | 65 | 0,945 | 2.079 |




## NPTF Male Swivel

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Thread | Hose Size | | A | | D Cut Off Factor | | E Ø | | 1 | 2 | Weight | |
| | **Dash Size** | | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **mm** | **kg** | **lb** |
| **15611SW-F04-04SZ** | -04 | 1/4"x18 | 6 | -04 | 76,0 | 2.99 | 48,0 | 1.89 | 4,0 | 0.16 | - - | 19 | 0,064 | 0.141 |
| **15611SW-F06-06SZ** | -06 | 3/8"x18 | 10 | -06 | 85,0 | 3.35 | 55,0 | 2.17 | 7,0 | 0.28 | - - | 22 | 0,100 | 0.220 |
| **15611SW-F08-06SZ** | -08 | 1/2"x14 | 10 | -06 | 87,0 | 3.43 | 57,0 | 2.24 | 7,0 | 0.28 | - - | 22 | 0,152 | 0.334 |
| **15611SW-F08-08SZ** | -08 | 1/2"x14 | 12 | -08 | 88,5 | 3.49 | 57,0 | 2.24 | 10,0 | 0.39 | - - | 27 | 0,152 | 0.334 |
| **15611SW-F12-12SZ** | -12 | 3/4"x14 | 20 | -12 | 99,0 | 3.90 | 60,5 | 2.38 | 15,0 | 0.59 | - - | 32 | 0,225 | 0.495 |
| **15611SW-F16-16SZ** | -16 | 1"x11.5 | 25 | -16 | 116,5 | 4.59 | 69,5 | 2.74 | 21,0 | 0.83 | - - | 41 | 0,375 | 0.825 |

# Staple-Lock



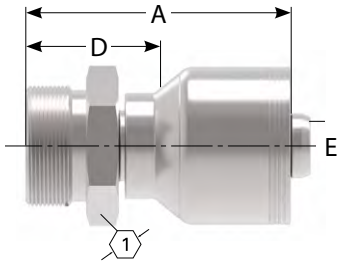

## Male DN Series D Type

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|
| # BRAIDED | DN | Dash | O-RNG Hose Size | A | C | J | K |
| | **DN** | **Dash Size** | | | | **mm** | |
| **60011-04-04DZ** | 6 | 4 | O06 0X2.0 | 36 | 29 | 15 | 10 |
| **60011-06-06DZ** | 10 | 6 | O10.0X2.0 | 36 | 29 | 20 | 14 |
| **60011-08-08DZ** | 12 | 8 | O10.0X2.0 | 36.5 | 29 | 24 | 18 |
| **60011-10-10DZ** | 16 | 10 | O10.0X2.0 | 37.5 | 29 | 26 | 21 |
| **60011-12-12DZ** | 20 | 12 | O19.0X2.5 | 38 | 29 | 29 | 24 |
| **60011-16-16DZ** | 25 | 16 | O25.0X2.5 | 45 | 35 | 39 | 31 |
| **60011-20-20DZ** | 32 | 20 | O33.0X2.5 | 47 | 35 | 46 | 38 |
| **60011-24-24DZ** | 40 | 24 | O40.0X3.0 | 52 | 40 | 55 | 47 |
| **60011-32-32DZ** | 50 | 32 | O49.0X3.0 | 52 | 40 | 64 | 56 |

# DIN 24° DKO Light (DKO-L)

## **Male Rigid DIN 24 seat (DK)** l.Rh DKO (Light) Straight

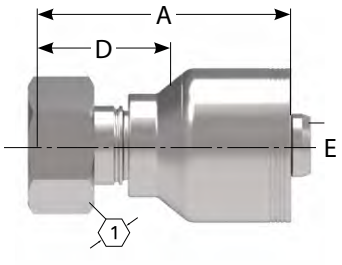
| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Thread | A | | D | | E Ø | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T10DK6** | 12L | 10 | -6 | M18X1,5 | 53.5 | 2.11 | 24 | 0.95 | 6.5 | 0.26 | 19 |
| **1T12DK8** | 15L | 12 | -8 | M22X1,5 | 58 | 2.29 | 25 | 0.99 | 9.1 | 0.36 | 24 |
| **1T16DK10** | 18L | 16 | -10 | M26X1,5 | 62 | 2.44 | 25.4 | 1.00 | 12.1 | 0.48 | 27 |




**4S**

## **Female Swivel DIN 24° seat (DL)** l.Rh DKO (Light) Straight

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Thread | A | | D | | E Ø | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T10DL6** | 12L | 10 | -6 | M18X1,5 | 55 | 2.17 | 25.5 | 1.00 | 6.5 | 0.26 | 22 |
| **1T12DL8** | 15L | 12 | -8 | M22X1,5 | 58 | 2.29 | 25 | 0.99 | 8 | 0.32 | 27 |
| **1T16DL10** | 18L | 16 | -10 | M26X1,5 | 62 | 2.44 | 25.4 | 1.00 | 12.1 | 0.48 | 32 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S20DL12** | 22L | 19 | -12 | M30X2 | 76,0 | 2.99 | 39,7 | 1.56 | 14,2 | 0.56 | 36,0 |
| **4S25DL16** | 28L | 25 | -16 | M36X2 | 79,7 | 3.14 | 40,3 | 1.59 | 19,2 | 0.76 | 41,0 |
| **4S32DL20** | 35L | 31 | -20 | M45X2 | 100,5 | 3.96 | 45,5 | 1.79 | 25,2 | 0.99 | 50,0 |

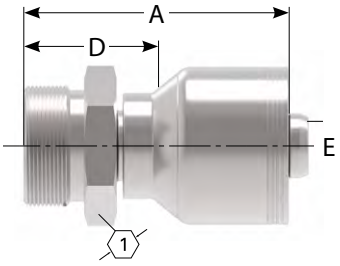



**4S**

# DIN 24° DKO Heavy (DKO-S)

## **Male DIN 24° Seat Rigid (EK)** S.Rh. DKO (Heavy) Straight

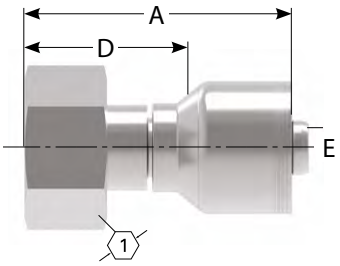
| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Thread | A | | D | | E Ø | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T8EK6** | 12S | 10 | -6 | M20X1,5 | 54 | 2.13 | 24.5 | 0.97 | 6.5 | 0.26 | 22 |
| **1T12EK8** | 16S | 12 | -8 | M24X1,5 | 60 | 2.36 | 27 | 1.06 | 9 | 0.35 | 27 |
| **1T16EK10** | 20S | 16 | -10 | M30X2 | 68 | 2.68 | 31.4 | 1.24 | 12 | 0.47 | 32 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S20EK12** | 25S | 19 | -12 | M36X2 | 78,6 | 3.09 | 42,3 | 1.67 | 14,2 | 0.56 | 41,0 |
| **4S25EK16** | 30S | 25 | -16 | M42X2 | 83,7 | 3.30 | 44,0 | 1.73 | 19,2 | 0.75 | 46,0 |
| **4S32EK20** | 38S | 31 | -20 | M52X2 | 106,9 | 4.21 | 51,7 | 2.04 | 25,2 | 0.99 | 55,0 |



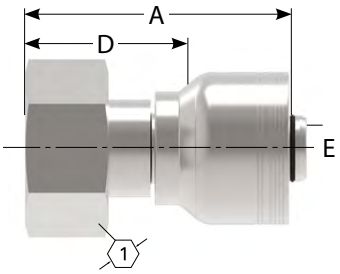
**4S**

## **Female Swivel DIN 24° Seat (DS)** S.Rh DKO (Heavy) Straight

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Thread | A | | D | | E Ø | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T8DS6** | 12S | 10 | -6 | M20X1,5 | 58.2 | 2.29 | 28.7 | 1.13 | 6.5 | 0.26 | 24 |
| **1T12DS8** | 16S | 12 | -8 | M24X1,5 | 61.2 | 2.41 | 28 | 1.10 | 6.5 | 0.26 | 30 |
| **1T12DS10** | 16S | 12 | -8 | M24X1,5 | 65 | 2.56 | 32 | 1.26 | 9 | 0.35 | 30 |
| **1T16DS10** | 20S | 16 | -10 | M30X2 | 68.5 | 2.70 | 31.9 | 1.26 | 11 | 0.43 | 36 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S16DS12** | 20S | 19 | -12 | M30X2 | 73,7 | 2.90 | 37,4 | 1.47 | 14,2 | 0.56 | 36,0 |
| **4S20DS12** | 25S | 19 | -12 | M36X2 | 86,6 | 3.41 | 50,3 | 1.98 | 14,2 | 0.56 | 46,0 |
| **4S25DS12** | 30S | 19 | -12 | M42X2 | 88,2 | 3.47 | 51,9 | 2.04 | 14,2 | 0.56 | 50,0 |
| **4S25DS16** | 30S | 25 | -16 | M42X2 | 91,1 | 3.59 | 51,4 | 2.02 | 19,2 | 0.76 | 50,0 |
| **4S32DS16** | 38S | 25 | -16 | M52X2 | 94,5 | 3.72 | 55,3 | 2.18 | 19,2 | 0.76 | 60,0 |
| **4S25DS20** | 30S | 31 | -20 | M42X2 | 96,6 | 3.80 | 41,6 | 1.64 | 22,1 | 0.87 | 50,0 |
| **4S32DS20** | 38S | 31 | -20 | M52X2 | 111,5 | 4.39 | 56,5 | 2.22 | 25,2 | 0.99 | 60,0 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S25DS16** | 30S | 25 | -16 | M42X2 | 91,1 | 3.59 | 51,4 | 2.02 | 19,2 | 0.76 | 50,0 |
| **6S32DS16** | 38S | 25 | -16 | M52X2 | 95,0 | 3.74 | 55,3 | 2.18 | 19,2 | 0.76 | 60,0 |
| **6S32DS20** | 38S | 31 | -20 | M52X2 | 112,5 | 4.43 | 56,5 | 2.22 | 25,2 | 0.99 | 60,0 |



**4S**

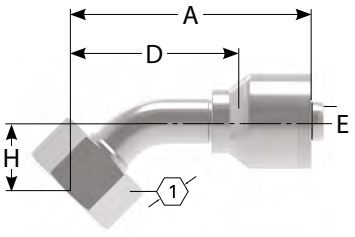


**6S**

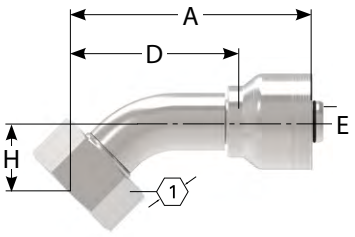
# DIN 24° DKO Heavy (DKO-S)

## **Female Swivel DIN 24°Seat (DSA)** S.Rh DKO (heavy) 45° Elbow

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | H | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T8DSA6** | 12S | 10 | -6 | M20X1,5 | 73.1 | 2.88 | 43.6 | 1.72 | 6.5 | 0.26 | 17.1 | 0.67 | 24 |
| **1T12DSA8** | 16S | 12 | -8 | M24X1,5 | 73.7 | 2.90 | 44.2 | 1.74 | 6.5 | 0.26 | 18.2 | 0.72 | 30 |
| **1T16DSA10** | 20S | 16 | -10 | M30X2 | 96 | 3.78 | 63 | 2.48 | 9 | 0.35 | 28.5 | 1.12 | 36 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S20DSA12** | 25S | 19 | -12 | M36X2 | 116,7 | 4.59 | 80,4 | 3.17 | 14,2 | 0.56 | 32,0 | 1.26 | 46,0 |
| **4S25DSA12** | 30S | 19 | -12 | M42X2 | 130,8 | 5.15 | 94,4 | 3.72 | 14,2 | 0.56 | 35,0 | 1.38 | 50,0 |
| **4S25DSA16** | 30S | 25 | -16 | M42X2 | 134,2 | 5.28 | 94,4 | 3.72 | 19,2 | 0.76 | 35,0 | 1.38 | 50,0 |
| **4S32DSA16** | 38S | 25 | -16 | M52X2 | 145,1 | 5.71 | 105,3 | 4.15 | 19,2 | 0.76 | 39,0 | 1.54 | 60,0 |
| **4S32DSA20** | 38S | 31 | -20 | M52X2 | 161,3 | 6.35 | 106,3 | 4.19 | 25,2 | 0.99 | 39,0 | 1.54 | 60,0 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S25DSA16** | 30S | 25 | -16 | M42X2 | 134,1 | 5.28 | 94,4 | 3.72 | 19,2 | 0.76 | 35,0 | 1.38 | 50,0 |
| **6S32DSA16** | 38S | 25 | -16 | M52X2 | 145,1 | 5.71 | 105,3 | 4.15 | 19,2 | 0.76 | 39,0 | 1.54 | 60,0 |
| **6S32DSA20** | 38S | 31 | -20 | M52X2 | 162,4 | 6.39 | 106,3 | 4.19 | 25,2 | 0.99 | 39,0 | 1.54 | 60,0 |



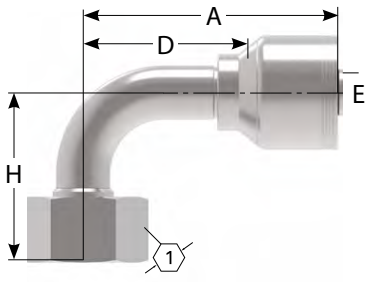

**4S**



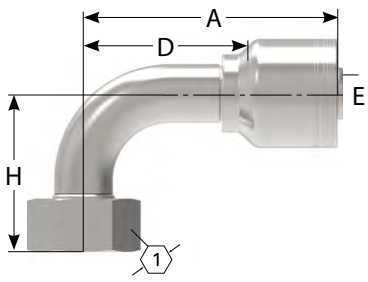

**6Sw**

## **Female swivel DIN 24° Seat (DSB)** S.Rh DKO (heavy) 90° Elbow

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | H | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T8DSB6** | 12S | 10 | -6 | M20X1,5 | 67.5 | 2.66 | 38 | 1.50 | 6.5 | 0.26 | 37 | 1.46 | 24 |
| **1T12DSB8** | 16S | 12 | -8 | M24X1,5 | 83 | 3.27 | 50 | 1.97 | 9 | 0.35 | 55 | 2.17 | 30 |
| **1T12DSB10** | 16S | 16 | -10 | M24X1,5 | 87 | 3.43 | 50.4 | 1.99 | 12 | 0.47 | 50 | 1.97 | 30 |
| **1T16DSB10** | 20S | 16 | -10 | M30X2 | 92 | 3.62 | 55.4 | 2.18 | 12 | 0.47 | 61.5 | 2.42 | 36 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S20DSB12** | 25S | 19 | -12 | M36X2 | 103,9 | 4.09 | 67,7 | 2.67 | 14,2 | 0.56 | 65,0 | 2.56 | 46,0 |
| **4S25DSB12** | 30S | 19 | -12 | M42X2 | 122,7 | 4.83 | 86,4 | 3.40 | 14,2 | 0.56 | 76,0 | 2.99 | 50,0 |
| **4S25DSB16** | 30S | 25 | -16 | M42X2 | 124,5 | 4.90 | 84,8 | 3.34 | 19,2 | 0.76 | 76,0 | 2.99 | 50,0 |
| **4S32DSB16** | 38S | 25 | -16 | M52X2 | 136,7 | 5.38 | 97,0 | 3.82 | 19,2 | 0.76 | 89,0 | 3.50 | 60,0 |
| **4S32DSB20** | 38S | 31 | -20 | M52X2 | 153,0 | 6.02 | 98,0 | 3.86 | 25,2 | 0.99 | 89,0 | 3.50 | 60,0 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S25DSB16** | 30S | 25 | -16 | M42X2 | 124,5 | 4.90 | 84,8 | 3.34 | 19,2 | 0.76 | 76,0 | 2.99 | 50,0 |
| **6S32DSB16** | 38S | 25 | -16 | M52X2 | 136,7 | 5.38 | 97,0 | 3.82 | 19,2 | 0.76 | 89,0 | 3.50 | 60,0 |
| **6S32DSB20** | 38S | 31 | -20 | M52X2 | 154,2 | 6.07 | 98,0 | 3.86 | 25,2 | 0.99 | 89,0 | 3.50 | 60,0 |




**4S**

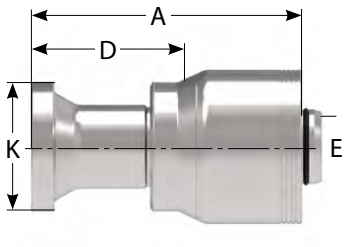



**6S**

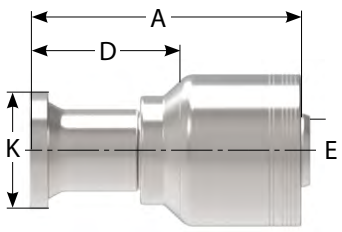
# Code 61 Flange

## **SAE Code 61 Flange (FL)** Straight

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Flange Head Dia. K Ø | | A | | D | | E Ø | |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **1T8FL8** | -8 | 12 | -8 | 30.2 | 1.19 | 83 | 3.27 | 50 | 1.97 | 9 | 0.35 |
| **1T12FL10** | -12 | 16 | -10 | 38.1 | 1.50 | 94 | 3.70 | 57.4 | 2.26 | 12 | 0.47 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12FL12** | -12 | 19 | -12 | 38,1 | 1.50 | 90,7 | 3.57 | 54,5 | 2.15 | 14,2 | 0.56 |
| **4S16FL12** | -16 | 19 | -12 | 44,5 | 1.75 | 90,2 | 3.55 | 54,0 | 2.13 | 14,2 | 0.56 |
| **4S20FL12** | -20 | 19 | -12 | 50,8 | 2.00 | 97,7 | 3.85 | 61,5 | 2.42 | 14,2 | 0.56 |
| **4S16FL16** | -16 | 25 | -16 | 44,5 | 1.75 | 93,3 | 3.67 | 53,6 | 2.11 | 19,2 | 0.76 |
| **4S20FL16** | -20 | 25 | -16 | 50,8 | 2.00 | 100,8 | 3.97 | 61,1 | 2.41 | 19,2 | 0.76 |
| **4S24FL16** | -24 | 25 | -16 | 60,4 | 2.38 | 97,4 | 3.83 | 57,7 | 2.27 | 19,2 | 0.76 |
| **4S16FL20** | -16 | 31 | -20 | 44,5 | 1.75 | 110,5 | 4.35 | 55,5 | 2.18 | 25,2 | 0.99 |
| **4S20FL20** | -20 | 31 | -20 | 50,8 | 2.00 | 117,4 | 4.62 | 62,2 | 2.45 | 25,2 | 0.99 |
| **4S24FL20** | -24 | 31 | -20 | 60,4 | 2.38 | 106,7 | 4.20 | 51,6 | 2.03 | 25,2 | 0.99 |
| **4S32FL20** | -32 | 31 | -20 | 71,4 | 2.81 | 104,9 | 4.13 | 49,9 | 1.96 | 25,2 | 0.99 |
| **4S24FL24** | -24 | 38 | -24 | 60,4 | 2.38 | 171,6 | 6.75 | 93,6 | 3.68 | 31,1 | 1.22 |
| **4S32FL24** | -32 | 38 | -24 | 71,4 | 2.81 | 174,7 | 6.88 | 96,7 | 3.81 | 31,1 | 1.22 |
| **4S32FL32** | -32 | 51 | -32 | 71,4 | 2.81 | 177,5 | 6.99 | 99,5 | 3.92 | 42,1 | 1.66 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16FL16** | -16 | 25 | -16 | 44,5 | 1.75 | 93,3 | 3.67 | 53,6 | 2.11 | 19,2 | 0.76 |
| **6S20FL20** | -20 | 31 | -20 | 50,8 | 2.00 | 118,2 | 4.65 | 62,2 | 2.45 | 25,2 | 0.99 |
| **6S24FL24** | -24 | 38 | -24 | 60,4 | 2.38 | 171,6 | 6.75 | 93,6 | 3.68 | 31,1 | 1.22 |
| **6S32FL24** | -32 | 38 | -24 | 71,4 | 2.81 | 174,7 | 6.88 | 96,7 | 3.81 | 31,1 | 1.22 |
| **6S32FL32** | -32 | 51 | -32 | 71,4 | 2.81 | 177,5 | 6.99 | 99,5 | 3.92 | 42,1 | 1.66 |



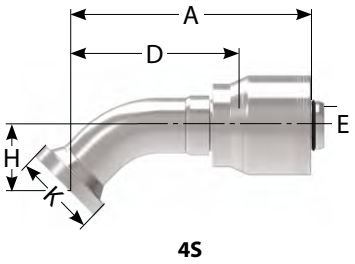

**4S**



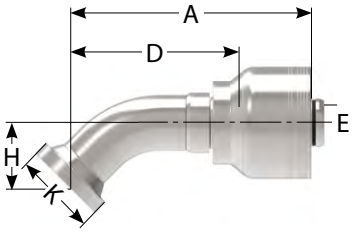

**6S**

## **SAE Code 61 Flange (FLA)** 45° Elbow

| PART | HOSE SIZE INFO | | | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Flange Head Dia. K Ø | | A | | D | | E Ø | | H | |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **1T8FLA8** | -8 | 12 | -8 | 30.2 | 1.9 | 91.7 | 3.61 | 58.7 | 2.31 | 9 | 0.35 | 23 | 0.91 |
| **1T12FLA10** | -12 | 16 | -10 | 38.1 | 1.50 | 100.7 | 3.97 | 64.1 | 2.53 | 12 | 0.47 | 25.3 | 1.00 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12FLA12** | -12 | 19 | -12 | 38,1 | 1.50 | 113,8 | 4.48 | 77,6 | 3.06 | 14,2 | 0.56 | 27,0 | 1.06 |
| **4S16FLA12** | -16 | 19 | -12 | 44,4 | 1.75 | 127,9 | 5.04 | 91,7 | 3.61 | 14,2 | 0.56 | 32,0 | 1.26 |
| **4S12FLA16** | -12 | 25 | -16 | 38,1 | 1.50 | 116,9 | 4.60 | 77,2 | 3.04 | 19,2 | 0.76 | 27,0 | 1.06 |
| **4S16FLA16** | -16 | 25 | -16 | 44,4 | 1.75 | 131,0 | 5.16 | 91,3 | 3.59 | 19,2 | 0.76 | 32,0 | 1.26 |
| **4S20FLA16** | -16 | 31 | -20 | 44,4 | 1.75 | 152,1 | 5.99 | 97,0 | 3.82 | 25,2 | 0.99 | 32,0 | 1.26 |
| **4S16FLA20** | -20 | 25 | -16 | 50,8 | 2.00 | 150,2 | 5.91 | 110,5 | 4.35 | 19,2 | 0.76 | 39,0 | 1.54 |
| **4S20FLA20** | -20 | 31 | -20 | 50,8 | 2.00 | 166,8 | 6.57 | 111,6 | 4.39 | 25,2 | 0.99 | 39,0 | 1.54 |
| **4S24FLA20** | -24 | 31 | -20 | 60,4 | 2.38 | 161,6 | 6.36 | 106,6 | 4.20 | 25,2 | 0.99 | 39,5 | 1.34 |
| **4S24FLA24** | -24 | 38 | -24 | 60,3 | 2.37 | 214,3 | 8.44 | 136,3 | 5.37 | 31,1 | 1.22 | 45,0 | 1.77 |
| **4S32FLA24** | -32 | 38 | -24 | 71,4 | 2.81 | 251,0 | 9.88 | 173,0 | 6.81 | 31,1 | 1.22 | 57,5 | 2.26 |
| **4S32FLA32** | -32 | 51 | -32 | 71,4 | 2.81 | 253,9 | 10.00 | 175,9 | 6.92 | 42,1 | 1.66 | 57,5 | 2.26 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16FLA16** | -16 | 25 | -16 | 44,4 | 1.75 | 131,0 | 5.16 | 91,3 | 3.59 | 19,2 | 0.76 | 32,0 | 1.26 |
| **6S20FLA16** | -20 | 25 | -16 | 50,8 | 2.00 | 150,2 | 5.91 | 110,5 | 4.35 | 19,2 | 0.76 | 39,0 | 1.54 |
| **6S20FLA20** | -20 | 31 | -20 | 50,8 | 2.00 | 167,6 | 6.60 | 111,6 | 4.39 | 25,2 | 0.99 | 39,0 | 1.54 |
| **6S24FLA24** | -24 | 38 | -24 | 60,3 | 2.37 | 214,3 | 8.44 | 136,3 | 5.37 | 31,1 | 1.22 | 45,0 | 1.77 |
| **6S32FLA24** | -32 | 38 | -24 | 71,4 | 2.81 | 251,0 | 9.88 | 173,0 | 6.81 | 31,1 | 1.22 | 57,5 | 2.26 |
| **6S32FLA32** | -32 | 51 | -32 | 71,4 | 2.81 | 253,9 | 10.00 | 175,9 | 6.92 | 42,1 | 1.66 | 57,5 | 2.26 |



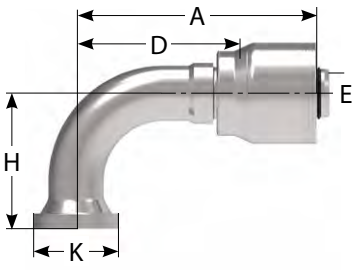

**4S**



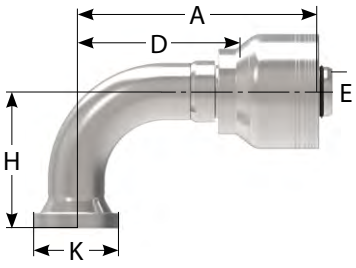

**6S**

## **SAE Code 61 Flange (FLB)** 90° Elbow

| PART | HOSE SIZE INFO | | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Flange Head Dia. K Ø | | A | | D | | E Ø | | H | |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **1T8FLB8** | -8 | 12 | -8 | 30.2 | 1.19 | 83.5 | 3.29 | 50 | 1.97 | 9 | 0.35 | 47 | 1.58 |
| **1T12FLB10** | -12 | 16 | -10 | 38.1 | 1.50 | 93.3 | 3.68 | 56.7 | 2.23 | 12 | 0.47 | 53.8 | 2.12 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12FLB12** | -12 | 19 | -12 | 38,1 | 1.50 | 108,5 | 4.27 | 72,3 | 2.85 | 14,2 | 0.56 | 59,0 | 2.32 |
| **4S16FLB12** | -16 | 19 | -12 | 44,4 | 1.75 | 122,8 | 4.84 | 86,6 | 3.41 | 14,2 | 0.56 | 71,0 | 2.80 |
| **4S20FLB12** | -20 | 19 | -12 | 50,8 | 2.00 | 108,5 | 4.72 | 72,3 | 2.85 | 14,2 | 0.56 | 65,0 | 2.56 |
| **4S16FLB16** | -16 | 25 | -16 | 44,4 | 1.75 | 126,0 | 4.96 | 86,2 | 3.39 | 19,2 | 0.76 | 71,0 | 2.80 |
| **4S16FLB16.116** | -16 | 25 | -16 | 44,4 | 1.75 | 126,0 | 4.96 | 86,2 | 3.39 | 19,2 | 0.76 | 116,0 | 4.57 |
| **4S20FLB16** | -20 | 25 | -16 | 50,8 | 2.00 | 145,2 | 5.72 | 105,4 | 4.15 | 19,2 | 0.76 | 89,0 | 3.50 |
| **4S24FLB16** | -24 | 25 | -16 | 60,4 | 2.38 | 136,5 | 5.37 | 96,8 | 3.81 | 19,2 | 0.76 | 81,9 | 3.22 |
| **4S16FLB20** | -16 | 31 | -20 | 44,4 | 1.75 | 147,1 | 5.79 | 91,9 | 3.62 | 25,2 | 0.99 | 71,0 | 2.80 |
| **4S20FLB20** | -20 | 31 | -20 | 50,8 | 2.00 | 161,8 | 6.37 | 106,5 | 4.19 | 25,2 | 0.99 | 89,0 | 3.50 |
| **4S24FLB20** | -24 | 31 | -20 | 60,4 | 2.38 | 152,9 | 6.02 | 97,9 | 3.85 | 25,2 | 0.99 | 81,9 | 3.22 |
| **4S24FLB24** | -24 | 38 | -24 | 60,3 | 2.37 | 208,9 | 8.22 | 130,9 | 5.15 | 31,1 | 1.22 | 104,0 | 4.09 |
| **4S32FLB24** | -32 | 38 | -24 | 71,4 | 2.81 | 247,4 | 9.74 | 169,4 | 6.67 | 31,1 | 1.22 | 138,0 | 5.43 |
| **4S32FLB32** | -32 | 51 | -32 | 71,4 | 2.81 | 250,3 | 9.85 | 172,2 | 6.78 | 42,1 | 1.66 | 138,0 | 5.43 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16FLB16** | -16 | 25 | -16 | 44,4 | 1.75 | 126,0 | 4.96 | 86,2 | 3.39 | 19,2 | 0.76 | 71,0 | 2.80 |
| **6S20FLB16** | -20 | 25 | -16 | 50,8 | 2.00 | 145,2 | 5.72 | 105,4 | 4.15 | 19,2 | 0.76 | 89,0 | 3.50 |
| **6S20FLB20** | -20 | 31 | -20 | 50,8 | 2.00 | 162,5 | 6.40 | 106,5 | 4.19 | 25,2 | 0.99 | 89,0 | 3.50 |
| **6S24FLB24** | -24 | 38 | -24 | 60,3 | 2.37 | 208,8 | 8.22 | 130,8 | 5.15 | 31,1 | 1.22 | 104,0 | 4.09 |
| **6S32FLB24** | -32 | 38 | -24 | 71,4 | 2.81 | 247,4 | 9.74 | 169,4 | 6.67 | 31,1 | 1.22 | 138,0 | 5.43 |
| **6S32FLB32** | -32 | 51 | -32 | 71,4 | 2.81 | 250,3 | 9.85 | 172,2 | 6.78 | 42,1 | 1.66 | 138,0 | 5.43 |




**4S**

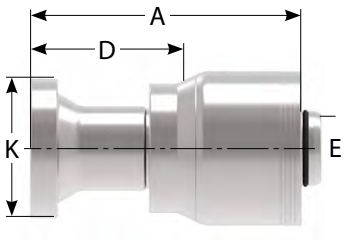



**6S**

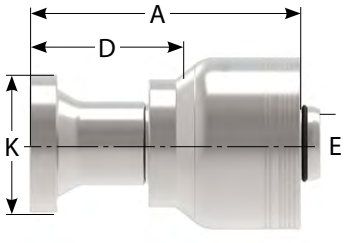
# Code 62 Flange

## **SAE Code 62 Flange (FH)** Straight

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Flange Head Dia. K Ø | | A | | D | | E Ø | |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **1T8FH8** | -8 | 12 | -8 | 31.8 | 1.25 | 80.7 | 3.18 | 47.7 | 1.88 | 9 | 0.35 |
| **1T12FH8** | -12 | 12 | -8 | 41.3 | 1.63 | 84.5 | 3.33 | 51.5 | 2.03 | 9 | 0.35 |
| **1T8FH10** | -8 | 16 | -10 | 31.8 | 1.25 | 87.2 | 3.44 | 50.6 | 1.99 | 12 | 0.47 |
| **1T12FH10** | -12 | 16 | -10 | 41.3 | 1.63 | 90.5 | 3.57 | 53.9 | 2.12 | 12 | 0.47 |
| **1T16FH10** | -16 | 16 | -10 | 47.6 | 1.87 | 104.5 | 4.11 | 67.9 | 2.68 | 12.1 | 0.48 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12FH12** | -12 | 19 | -12 | 41,3 | 1.63 | 90,7 | 3.57 | 54,5 | 2.15 | 14,2 | 0.56 |
| **4S16FH12** | -16 | 19 | -12 | 47,7 | 1.88 | 90,2 | 3.55 | 54,0 | 2.13 | 14,2 | 0.56 |
| **4S12FH16** | -12 | 25 | -16 | 41,3 | 1.63 | 96,3 | 3.79 | 56,7 | 2.23 | 14,2 | 0.56 |
| **4S16FH16** | -16 | 25 | -16 | 47,7 | 1.88 | 98,9 | 3.89 | 59,1 | 2.33 | 19,2 | 0.76 |
| **4S20FH16** | -20 | 25 | -16 | 54,0 | 2.13 | 100,8 | 3.97 | 61,0 | 2.40 | 19,2 | 0.76 |
| **4S16FH20** | -16 | 31 | -20 | 47,7 | 1.88 | 123,8 | 4.87 | 68,6 | 2.70 | 25,2 | 0.99 |
| **4S20FH20** | -20 | 31 | -20 | 54,0 | 2.13 | 123,3 | 4.85 | 68,1 | 2.68 | 25,2 | 0.99 |
| **4S24FH20** | -24 | 31 | -20 | 63,5 | 2.50 | 129,0 | 5.08 | 73,9 | 2.91 | 25,2 | 0.99 |
| **4S24FH24** | -24 | 38 | -24 | 63,5 | 2.50 | 189,6 | 7.46 | 111,6 | 4.39 | 31,1 | 1.22 |
| **4S32FH24** | -32 | 38 | -24 | 79,4 | 3.13 | 204,4 | 8.05 | 126,4 | 4.89 | 31.1 | 1.22 |
| **4S32FH32** | -32 | 51 | -32 | 79,4 | 3.13 | 202,7 | 7.98 | 124,7 | 4.91 | 42,1 | 1.66 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16FH16** | -16 | 25 | -16 | 47,7 | 1.88 | 98,8 | 3.89 | 59,2 | 2.33 | 19,2 | 0.76 |
| **6S20FH16** | -20 | 25 | -16 | 54,0 | 2.13 | 100,8 | 3.97 | 61,0 | 2.40 | 19,2 | 0.76 |
| **6S20FH20** | -20 | 31 | -20 | 54,0 | 2.13 | 124,0 | 4.88 | 68,1 | 2.68 | 25,2 | 0.99 |
| **6S24FH20** | -24 | 31 | -20 | 63,5 | 2.50 | 129,8 | 5.11 | 73,9 | 2.91 | 25,2 | 0.99 |
| **6S24FH24** | -24 | 38 | -24 | 63,5 | 2.50 | 189,6 | 7.46 | 111,6 | 4.39 | 31,1 | 1.22 |
| **6S32FH24** | -32 | 38 | -24 | 79,4 | 3.13 | 204,4 | 8.05 | 126,4 | 4.98 | 31,1 | 1.22 |
| **6S32FH32** | -32 | 51 | -32 | 79,4 | 3.13 | 202,7 | 7.98 | 124,7 | 4.91 | 42,1 | 1.66 |



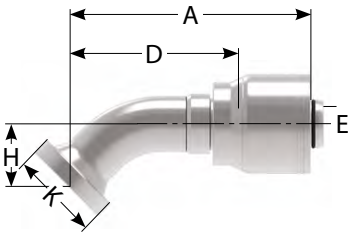

**4S**



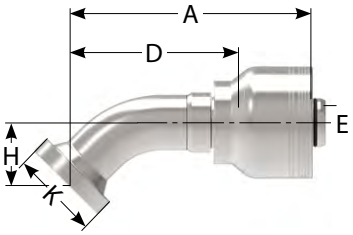

**6S**

## **SAE Code 62 Flange (FHA)** 45° Elbow

| PART | HOSE SIZE INFO | | | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Flange Head Dia. K Ø | | A | | D | | E Ø | | H | |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **1T8FHA8** | -8 | 12 | -8 | 31.8 | 1.25 | 90.1 | 3.55 | 57.1 | 2.25 | 9 | 0.35 | 21.3 | 0.84 |
| **1T12FHA8** | -12 | 12 | -8 | 41.3 | 1.62 | 92.8 | 3.66 | 59.8 | 2.36 | 9 | 0.35 | 23.9 | 0.94 |
| **1T8FHA10** | -8 | 16 | -10 | 31.8 | 1.25 | 94.1 | 3.71 | 57.5 | 2.27 | 12 | 0.47 | 21.3 | 0.84 |
| **1T12FHA10** | -12 | 16 | -10 | 41.3 | 1.62 | 101 | 3.98 | 64.4 | 2.54 | 12 | 0.47 | 25.7 | 1.01 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12FHA12** | -12 | 19 | -12 | 41,3 | 1.63 | 113,8 | 4.48 | 77,6 | 3.06 | 14,2 | 0.56 | 27,0 | 1.06 |
| **4S16FHA12** | -16 | 19 | -12 | 47,7 | 1.88 | 128,0 | 5.04 | 91,7 | 3.61 | 14,2 | 0.56 | 32,0 | 1.26 |
| **4S12FHA16** | -12 | 25 | -16 | 41,3 | 1.63 | 116,9 | 4.60 | 77,2 | 3.04 | 15,1 | 0.59 | 27,0 | 1.06 |
| **4S16FHA16** | -16 | 25 | -16 | 47,7 | 1.88 | 130,9 | 5.15 | 91,2 | 3.59 | 19,2 | 0.76 | 32,0 | 1.26 |
| **4S20FHA16** | -20 | 25 | -16 | 54,0 | 2.13 | 150,2 | 5.91 | 110,5 | 4.35 | 19,2 | 0.76 | 39,0 | 1.54 |
| **4S20FHA20** | -20 | 31 | -20 | 54,0 | 2.13 | 166,6 | 6.56 | 111,6 | 4.39 | 25,2 | 0.99 | 39,0 | 1.54 |
| **4S24FHA20** | -24 | 31 | -20 | 63,5 | 2.50 | 183,2 | 7.21 | 128,2 | 5.05 | 25,2 | 0.99 | 45,0 | 1.77 |
| **4S24FHA24** | -24 | 38 | -24 | 63,5 | 2.50 | 214,1 | 8.43 | 136,1 | 5.36 | 31,1 | 1.22 | 45,0 | 1.77 |
| **4S32FHA24** | -32 | 38 | -24 | 79,4 | 3.13 | 251,0 | 9.88 | 173,0 | 6.81 | 31,1 | 1.22 | 57,5 | 2.26 |
| **4S32FHA32** | -32 | 51 | -32 | 79,4 | 3.13 | 253,9 | 10.00 | 175,9 | 6.93 | 42,1 | 1.66 | 57,5 | 2.26 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16FHA16** | -16 | 25 | -16 | 47,7 | 1.88 | 130,9 | 5.15 | 91,2 | 3.59 | 19,2 | 0.76 | 32,0 | 1.26 |
| **6S20FHA16** | -20 | 25 | -16 | 54,0 | 2.13 | 150,2 | 5.91 | 110,0 | 4.35 | 19,0 | 0.75 | 39,0 | 1.54 |
| **6S20FHA20** | -20 | 31 | -20 | 54,0 | 2.13 | 167,6 | 6.60 | 111,6 | 4.39 | 25,2 | 0.99 | 39,0 | 1.54 |
| **6S24FHA20** | -24 | 31 | -20 | 63,5 | 2.50 | 184,2 | 7.25 | 128,2 | 5.05 | 25,2 | 0.99 | 45,0 | 1.77 |
| **6S24FHA24** | -24 | 38 | -24 | 63,5 | 2.50 | 214,1 | 8.43 | 136,1 | 5.36 | 31,1 | 1.22 | 45,0 | 1.77 |
| **6S32FHA24** | -32 | 38 | -24 | 79,4 | 3.13 | 251,0 | 9.88 | 173,0 | 6.81 | 31,1 | 1.22 | 57,5 | 2.26 |
| **6S32FHA32** | -32 | 51 | -32 | 79,4 | 3.13 | 253,9 | 10.00 | 175,9 | 6.93 | 42,1 | 1.66 | 57,5 | 2.26 |



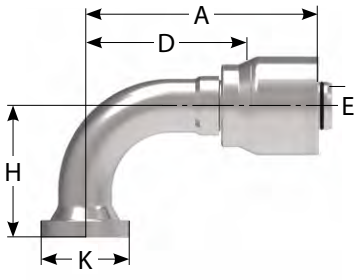

**4S**



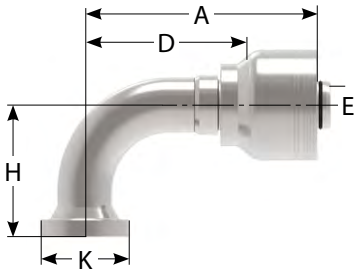

**6S**

## **SAE Code 62 Flange (FHB)** 90° Elbow

| PART | HOSE SIZE INFO | | | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Flange Head Dia. K Ø | | A | | D | | E Ø | | H | |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **1T8FHB8** | -8 | 12 | -8 | 31.8 | 1.25 | 83.5 | 3.29 | 50.5 | 1.99 | 9 | 0.35 | 44.7 | 1.76 |
| **1T12FHB8** | -12 | 12 | -8 | 41.8 | 1.64 | 83.5 | 3.29 | 50.5 | 1.99 | 9 | 0.35 | 78 | 3.07 |
| **1T8FHB10** | -8 | 16 | -10 | 31.8 | 1.25 | 87.5 | 3.45 | 50.9 | 2.01 | 12 | 0.47 | 44.7 | 1.76 |
| **1T12FHB10** | -12 | 16 | -10 | 41.3 | 1.62 | 92.5 | 3.64 | 56.5 | 2.23 | 12 | 0.47 | 53.5 | 2.11 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12FHB12** | -12 | 19 | -12 | 41,3 | 1.63 | 108,5 | 4.27 | 72,3 | 2.85 | 14,2 | 0.56 | 59,0 | 2.32 |
| **4S16FHB12** | -16 | 19 | -12 | 47,7 | 1.88 | 122,9 | 4.84 | 86,6 | 3.41 | 14,2 | 0.56 | 71,0 | 2.80 |
| **4S16FHB16** | -16 | 25 | -16 | 47,7 | 1.88 | 125,5 | 4.94 | 86,1 | 3.39 | 19,2 | 0.76 | 71,0 | 2.80 |
| **4S16FHB16.120** | -16 | 25 | -16 | 47,7 | 1.88 | 126,0 | 4.96 | 86,2 | 3.39 | 19,2 | 0.76 | 120,0 | 4.72 |
| **4S20FHB16** | -20 | 25 | -16 | 54,0 | 2.13 | 145,3 | 5.72 | 105,4 | 4.15 | 19,2 | 0.76 | 89,0 | 3.50 |
| **4S16FHB20** | -16 | 31 | -20 | 47,7 | 1.88 | 147,1 | 5.79 | 91.9 | 3.62 | 25,2 | 0.99 | 71,0 | 2.80 |
| **4S20FHB20** | -20 | 31 | -20 | 54,0 | 2.13 | 161,5 | 6.36 | 106,5 | 4.19 | 25,2 | 0.99 | 89,0 | 3.50 |
| **4S20FHB20.120** | -20 | 31 | -20 | 54,0 | 2.13 | 161,5 | 6.36 | 106,5 | 4.19 | 25,2 | 0.99 | 120,0 | 4.72 |
| **4S24FHB20** | -24 | 31 | -20 | 63,5 | 2.50 | 178,0 | 7.01 | 123,0 | 4.84 | 25,2 | 0.99 | 104,0 | 4.09 |
| **4S24FHB24** | -24 | 38 | -24 | 63,5 | 2.50 | 208,9 | 8.22 | 130,8 | 5.15 | 31,1 | 1.22 | 104,0 | 4.09 |
| **4S32FHB24** | -32 | 38 | -24 | 79,4 | 3.13 | 247,4 | 9.74 | 169,4 | 9.74 | 31,1 | 1.22 | 138,0 | 5.43 |
| **4S32FHB32** | -32 | 51 | -32 | 79,4 | 3.13 | 250,3 | 9.85 | 172,2 | 6.78 | 42,1 | 1.66 | 138,0 | 5.43 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16FHB16** | -16 | 25 | -16 | 47,7 | 1.88 | 125,5 | 4.94 | 86,1 | 3.39 | 19,2 | 0.76 | 71,0 | 2.80 |
| **6S20FHB16** | -20 | 25 | -16 | 54,0 | 2.13 | 145,3 | 5.72 | 105,4 | 4.15 | 19,2 | 0.76 | 89,0 | 3.50 |
| **6S16FHB20** | -16 | 31 | -20 | 47,7 | 1.88 | 147,9 | 5.82 | 91,9 | 3.62 | 25,2 | 0.99 | 71,0 | 2.80 |
| **6S20FHB20** | -20 | 31 | -20 | 54,0 | 2.13 | 162,5 | 6.40 | 106,5 | 4.19 | 25,2 | 0.99 | 89,0 | 3.50 |
| **6S24FHB20** | -24 | 31 | -20 | 63,5 | 2.50 | 179,0 | 7.05 | 123,0 | 4.84 | 25,2 | 0.99 | 104,0 | 4.09 |
| **6S24FHB24** | -24 | 38 | -24 | 63,5 | 2.50 | 208,9 | 8.22 | 130,8 | 5.15 | 31,1 | 1.22 | 104,0 | 4.09 |
| **6S32FHB24** | -32 | 38 | -24 | 79,4 | 3.13 | 247,4 | 9.74 | 169,4 | 6.67 | 31,1 | 1.22 | 138,0 | 5.43 |
| **6S32FHB32** | -32 | 51 | -32 | 79,4 | 3.13 | 250,3 | 9.85 | 172,2 | 6.78 | 42,1 | 1.66 | 138,0 | 5.43 |




**4S**

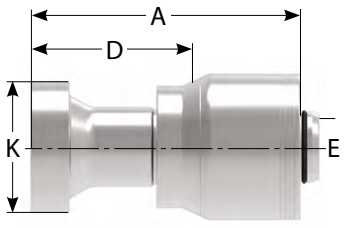



**6S**

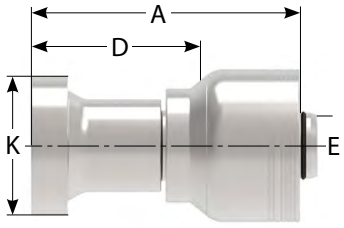
# CAT® Flange

## **CAT® Flange (CT)** Straight

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Flange Head Dia. K Ø | | A | | D | | E Ø | |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12CT12** | -12 | 19 | -12 | 41,3 | 1.63 | 96,2 | 3.79 | 60,0 | 2.36 | 14,2 | 0.56 |
| **4S16CT12** | -16 | 19 | -12 | 47,6 | 1.87 | 94,9 | 3.74 | 58,7 | 2.31 | 14,2 | 0.56 |
| **4S16CT16** | -16 | 25 | -16 | 47,6 | 1.87 | 102,1 | 4.02 | 62,3 | 2.45 | 19,2 | 0.76 |
| **4S20CT16** | -20 | 25 | -16 | 54,0 | 2.13 | 104,8 | 4.13 | 65,0 | 2.56 | 19,2 | 0.76 |
| **4S20CT20** | -20 | 31 | -20 | 54,0 | 2.13 | 124,5 | 4.90 | 69,1 | 2.72 | 25,2 | 0.99 |
| **4S24CT20** | -24 | 31 | -20 | 63,5 | 2.50 | 130,9 | 5.15 | 75,9 | 2.99 | 25,2 | 0.99 |
| **4S24CT24** | -24 | 38 | -24 | 63,5 | 2.50 | 195,0 | 7.68 | 117,0 | 4.61 | 31,1 | 1.22 |
| **4S32CT24** | -32 | 38 | -24 | 79,4 | 3.13 | 206,0 | 8.11 | 128,0 | 5.04 | 31,1 | 1.22 |
| **4S32CT32** | -32 | 51 | -32 | 79,4 | 3.13 | 208,9 | 8.22 | 130,9 | 5.15 | 42,1 | 1.66 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16CT16** | -16 | 25 | -16 | 47,6 | 1.87 | 102,1 | 4.02 | 62,3 | 2.45 | 19,2 | 0.76 |
| **6S20CT16** | -20 | 25 | -16 | 54,0 | 2.13 | 104,8 | 4.13 | 65,0 | 2.56 | 19,2 | 0.76 |
| **6S20CT20** | -20 | 31 | -20 | 54,0 | 2.13 | 125,2 | 4.93 | 69,1 | 2.72 | 25,2 | 0.99 |
| **6S24CT20** | -24 | 31 | -20 | 63,5 | 2.50 | 131,8 | 5.19 | 75,9 | 2.99 | 25,2 | 0.99 |
| **6S24CT24** | -24 | 38 | -24 | 63,5 | 2.50 | 195,0 | 7.68 | 117,0 | 4.61 | 31,1 | 1.22 |
| **6S32CT24** | -32 | 38 | -24 | 79,4 | 3.13 | 206,0 | 8.11 | 128,1 | 5.04 | 31,1 | 1.22 |
| **6S32CT32** | -32 | 51 | -32 | 79,4 | 3.13 | 208,9 | 8.22 | 130,9 | 5.15 | 42,1 | 1.66 |



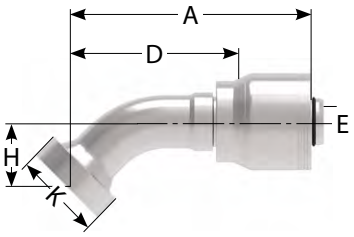

**4S**



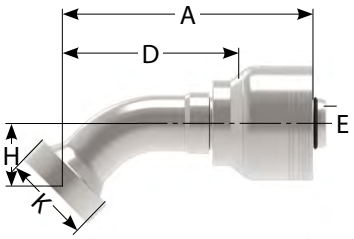

**6S**

## **CAT® Flange (CTA)** 45° Elbow

| PART | HOSE SIZE INFO | | | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Flange Head Dia. K Ø | | A | | D | | E Ø | | H | |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12CTA12** | -12 | 19 | -12 | 41,3 | 1,63 | 117,7 | 4.63 | 81,5 | 3.21 | 14,2 | 0.56 | 30,9 | 1.22 |
| **4S16CTA12** | -16 | 19 | -12 | 47,6 | 1,87 | 131,2 | 5.17 | 95,0 | 3.74 | 14,2 | 0.56 | 35,3 | 1.39 |
| **4S16CTA16** | -16 | 25 | -16 | 47,6 | 1,87 | 134,3 | 5.29 | 94,6 | 3.72 | 19,2 | 0.76 | 35,3 | 1.39 |
| **4S20CTA16** | -20 | 25 | -16 | 54,0 | 2,13 | 153,0 | 6.02 | 113,2 | 4.46 | 19,2 | 0.76 | 41,8 | 1.65 |
| **4S20CTA20** | -20 | 31 | -20 | 54,0 | 2.13 | 169,4 | 6.67 | 114,3 | 4.50 | 25,2 | 0.99 | 41,8 | 1.65 |
| **4S24CTA20** | -24 | 31 | -20 | 63,5 | 2.50 | 185,3 | 7.30 | 129,1 | 5.08 | 25,2 | 0.99 | 46,2 | 1.82 |
| **4S24CTA24** | -24 | 38 | -24 | 63,5 | 2.50 | 215,2 | 8.47 | 137,2 | 5.40 | 31,1 | 1.22 | 46,2 | 1.82 |
| **4S32CTA32** | -32 | 51 | -32 | 79,4 | 3.13 | 255,1 | 10.04 | 177,0 | 6.97 | 42,1 | 1.66 | 58,7 | 1.31 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16CTA16** | -16 | 25 | -16 | 47,6 | 1,87 | 134,3 | 5.29 | 94,6 | 3.72 | 19,2 | 0.76 | 35,3 | 1.39 |
| **6S20CTA16** | -20 | 25 | -16 | 54,0 | 2.13 | 153,0 | 6.02 | 113,2 | 4.46 | 19,2 | 0.76 | 41,8 | 1.65 |
| **6S20CTA20** | -20 | 31 | -20 | 54,0 | 2.13 | 170,3 | 6.70 | 114,3 | 4.50 | 25,2 | 0.99 | 41,8 | 1.65 |
| **6S24CTA20** | -24 | 31 | -20 | 63,5 | 2.50 | 185,3 | 7.30 | 129,1 | 5.08 | 25,2 | 0.99 | 46,2 | 1.82 |
| **6S24CTA24** | -24 | 38 | -24 | 63,5 | 2.50 | 215,2 | 8.47 | 137,2 | 5.40 | 31,1 | 1.22 | 46,2 | 1.82 |
| **6S32CTA24** | -32 | 38 | -24 | 79,4 | 3.13 | 252,2 | 9.93 | 174,2 | 6.86 | 31,1 | 1.22 | 58,7 | 2.31 |
| **6S32CTA32** | -32 | 51 | -32 | 79,4 | 3.13 | 255,1 | 10.04 | 177,0 | 6.97 | 42,1 | 1.66 | 58,7 | 2.31 |



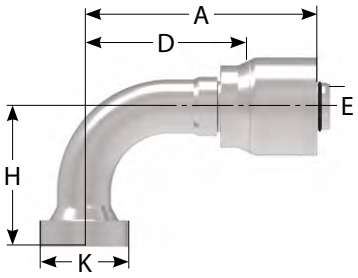

**4S**



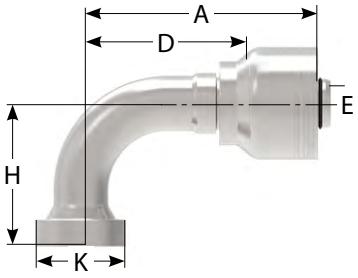

**6S**

## **CAT® Flange (CTB)** 90° Elbow

| PART | HOSE SIZE INFO | | | | | DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Flange Head Dia. K Ø | | A | | D | | E Ø | | H | |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **4S12CTB12** | -12 | 19 | -12 | 41,3 | 1.63 | 108,5 | 4.27 | 72,3 | 2.85 | 14,2 | 0.56 | 64,5 | 2.54 |
| **4S16CTB12** | -16 | 19 | -12 | 47,6 | 1.87 | 122,8 | 4.83 | 86,6 | 3.41 | 14,2 | 0.56 | 75,7 | 2.98 |
| **4S16CTB16** | -16 | 25 | -16 | 47,6 | 1.87 | 126,0 | 4.96 | 86,2 | 3.39 | 19,2 | 0.76 | 75,7 | 2.98 |
| **4S20CTB16** | -20 | 25 | -16 | 54,0 | 2.13 | 145,2 | 5.72 | 105,4 | 4.15 | 19,2 | 0.76 | 92,9 | 3.66 |
| **4S20CTB20** | -20 | 31 | -20 | 54,0 | 2.13 | 161,5 | 6.36 | 106,5 | 4.19 | 25,2 | 0.99 | 92,9 | 3.66 |
| **4S24CTB20** | -24 | 31 | -20 | 63,5 | 2.50 | 179,0 | 7.05 | 123,0 | 4.84 | 25,2 | 0.99 | 105,6 | 4.16 |
| **4S24CTB24** | -24 | 38 | -24 | 63,5 | 2.50 | 208,9 | 8.22 | 130,9 | 5.15 | 31,1 | 1.22 | 105,7 | 4.16 |
| **4S32CTB32** | -32 | 51 | -32 | 79,4 | 3.13 | 250,3 | 9.85 | 172,2 | 6.78 | 42,1 | 1.66 | 139,7 | 5.50 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** |
| **6S16CTB16** | -16 | 25 | -16 | 47,6 | 1.87 | 126,0 | 4.96 | 86,2 | 3.39 | 19,2 | 0.76 | 75,7 | 2.98 |
| **6S20CTB16** | -20 | 25 | -16 | 54,0 | 2.13 | 145,2 | 5.72 | 105,4 | 4.15 | 19,2 | 0.76 | 92,9 | 3.66 |
| **6S20CTB20** | -20 | 31 | -20 | 54,0 | 2.13 | 162,5 | 6.40 | 106,5 | 4.19 | 25,2 | 0.99 | 92,9 | 3.66 |
| **6S24CTB20** | -24 | 31 | -20 | 63,5 | 2.50 | 179,0 | 7.05 | 123,0 | 4.84 | 25,2 | 0.99 | 105,6 | 4.16 |
| **6S24CTB24** | -24 | 38 | -24 | 63,5 | 2.50 | 208,9 | 8.22 | 130,9 | 5.15 | 31,1 | 1.22 | 105,7 | 4.16 |
| **6S32CTB24** | -32 | 38 | -24 | 69,6 | 2.74 | 247,4 | 9.74 | 169,4 | 6.67 | 31,1 | 1.22 | 139,7 | 5.50 |
| **6S32CTB32** | -32 | 51 | -32 | 79,4 | 3.13 | 250,3 | 9.85 | 172,2 | 6.78 | 42,1 | 1.66 | 139,7 | 5.50 |




**4S**



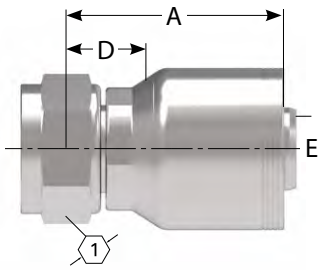

**6S**

# JIC

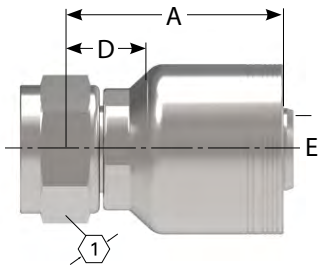
## **Female JIC/37° Swivel (FJ)** Straight

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Thread | A | | D | | E Ø | | ⬡1 | |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | |
| **1T6FJ6** | -6 | 10 | -6 | 9/16 -18 | 47 | 1.85 | 17.5 | 0.69 | 6.5 | 0.2561 | 17 | |
| **1T8FJ6** | -8 | 10 | -6 | 3/4 - 16 | 49 | 1.93 | 19 | 0.75 | 6.5 | 0.2561 | 22 | |
| **1T8FJ8** | -8 | 12 | -8 | 3/4 - 16 | 52.5 | 2.07 | 19.5 | 0.77 | 9 | 0.3546 | 22 | |
| **1T10FJ8** | -10 | 12 | -8 | 7/8 - 14 | 54 | 2.13 | 21 | 0.83 | 9 | 0.3546 | 27 | |
| **1T10FJ10** | -10 | 16 | -10 | 7/8 - 14 | 59.5 | 2.34 | 22.9 | 0.90 | 12 | 0.4728 | 27 | |
| **1T12FJ10** | -12 | 16 | -10 | 1 1/16- 12 | 57 | 2.25 | 20 | 0.79 | 12 | 0.4728 | 32 | |

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | | Thread | A | | D | | E Ø | | ⬡1 | | ⬡1 | |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | |
| **4S10FJ12** | -10 | 19 | -12 | 7/8-14 | 75,0 | 2.95 | 38,8 | 1.53 | 12,3 | 0.48 | 30,0 | 1 3/16 | 27 | |
| **4S12FJ12** | -12 | 19 | -12 | 1 1/16-12 | 82,0 | 3.23 | 45,7 | 1.80 | 14,2 | 0.56 | 30,0 | 1 3/16 | 32 | |
| **4S14FJ12** | -14 | 19 | -12 | 1 3/16-12 | 77,5 | 3.05 | 41,3 | 1.63 | 14,2 | 0.56 | 30,0 | 1 3/16 | 36 | |
| **4S16FJ12** | -16 | 19 | -12 | 1 5/16-12 | 80,2 | 3.16 | 44,0 | 1.73 | 14,2 | 0.56 | 30,0 | 1 3/16 | 41 | |
| **4S12FJ16** | -12 | 25 | -16 | 1 1/16-12 | 78,8 | 3.10 | 39,1 | 1.54 | 15,5 | 0.61 | 41,0 | 1 5/8 | 32 | |
| **4S16FJ16** | -16 | 25 | -16 | 1 5/16-12 | 89,2 | 3.51 | 49,3 | 1.94 | 19,2 | 0.76 | 41,0 | 1 5/8 | 41 | |
| **4S20FJ16** | -20 | 25 | -16 | 1 5/8-12 | 85,8 | 3.38 | 46,0 | 1.81 | 19,2 | 0.76 | 41,0 | 1 5/8 | 50 | |
| **4S16FJ20** | -16 | 31 | -20 | 1 5/16-12 | 99,1 | 3.90 | 43,7 | 1.72 | 25,2 | 0.99 | 46,0 | 1 13/16 | 41 | |
| **4S20FJ20** | -20 | 31 | -20 | 1 5/8-12 | 101,6 | 4.00 | 46,3 | 1.82 | 25,2 | 0.99 | 46,0 | 1 13/16 | 50 | |
| **4S24FJ20** | -24 | 31 | -20 | 1 7/8-12 | 106,8 | 4.20 | 51,5 | 2.03 | 25,2 | 0.99 | 46,0 | 1 13/16 | 55 | |
| **4S24FJ24** | -24 | 38 | -24 | 1 7/8-12 | 134,9 | 5.31 | 56,8 | 2.24 | 31,1 | 1.22 | 57,0 | 2 1/4 | 55 | |
| **4S32FJ32** | -32 | 51 | -32 | 2 1/2-12 | 146,0 | 5.75 | 68,0 | 2.68 | 42,1 | 1.66 | | | 75 | |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | |
| **6S16FJ16** | -16 | 25 | -16 | 1 5/16-12 | 89,2 | 3.51 | 49,3 | 1.94 | 19,2 | 0.76 | 41,0 | 1 5/8 | 41 | |
| **6S20FJ20** | -20 | 31 | -20 | 1 5/8-12 | 102,3 | 4.03 | 46,3 | 1.82 | 25,2 | 0.99 | 46,0 | 1 13/16 | 50 | |
| **6S24FJ20** | -24 | 31 | -20 | 1 7/8-12 | 107,5 | 4.23 | 51,5 | 2.03 | 25,2 | 0.99 | 46,0 | 1 13/16 | 55 | |
| **6S24FJ24** | -24 | 38 | -24 | 1 7/8-12 | 134,9 | 5.31 | 56,8 | 2.24 | 31,1 | 1.22 | 57,0 | 2 1/4 | 55 | |
| **6S32FJ32** | -32 | 51 | -32 | 2 1/2-12 | 146,0 | 5.75 | 68,0 | 2.68 | 42,1 | 1.66 | | | 75 | |




**4S**

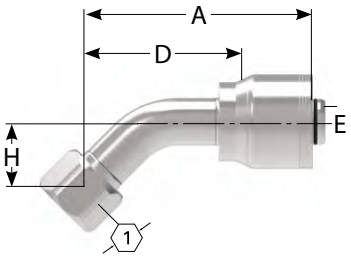



**6S**

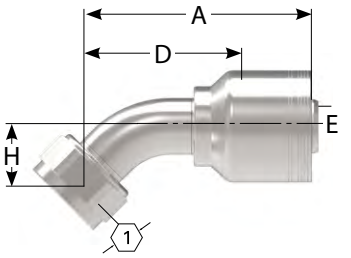
⚠ When assembled with all Danfoss components, all SAE 37° JIC male and female terminal ends in the 4S & 6S product line are rated at the pressures listed in the table above and have passed one million impulse cycles at 133% of this pressure. All straight configurations achieve a 4:1 burst. The 45° and 90° elbow configurations in the -12 size meet a 3.2:1 burst the 45° and 90° elbow configurations in the -16 size achieve a 2.8:1 burst; the 45° and 90° elbow configurations in the -20 size meet a 4:1 burst and the 45° & 90° elbow configurations in the -24 size meet a 2.4:1 burst.

## **Female JIC/37° Swivel (FJA)** 45° Elbow

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | H | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6FJA6** | -6 | 10 | -6 | 9/16 - 18 | 64.9 | 2.56 | 35.4 | 1.39 | 6.6 | 0.26 | 13.4 | 0.53 | 17 |
| **1T8FJA8** | -8 | 12 | -8 | 3/4 - 16 | 78.2 | 3.08 | 45 | 1.77 | 9 | 0.35 | 19.7 | 0.78 | 22 |
| **1T10FJA10** | -10 | 16 | -10 | 7/8 - 14 | 97 | 3.82 | 60 | 2.36 | 12 | 0.47 | 24.5 | 0.97 | 27 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S12FJA12** | -12 | 19 | -12 | 1 1/16-12 | 112,3 | 4.42 | 76,1 | 3.00 | 14,2 | 0.56 | 29,0 | 1.14 | 32 |
| **4S16FJA12** | -16 | 19 | -12 | 1 5/16-12 | 133,6 | 5.26 | 97,5 | 3.84 | 14,2 | 0.56 | 38,0 | 1.50 | 41 |
| **4S16FJA16** | -16 | 25 | -16 | 1 5/16-12 | 128,8 | 5.07 | 89,3 | 3.52 | 19,2 | 0.76 | 38,0 | 1.50 | 41 |
| **4S20FJA16** | -20 | 25 | -16 | 1 5/8-12 | 120,1 | 4.73 | 80,4 | 3.17 | 19,2 | 0.75 | 32,0 | 1.26 | 50 |
| **4S20FJA20** | -20 | 31 | -20 | 1 5/8-12 | 135,6 | 5.34 | 80,4 | 3.17 | 25,2 | 0.99 | 32,0 | 1.26 | 50 |
| **4S24FJA24** | -24 | 38 | -24 | 1 7/8-12 | 212,0 | 8.35 | 134,0 | 5.28 | 31,1 | 1.22 | 43,0 | 1.69 | 55 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S20FJA20** | -20 | 31 | -20 | 1 5/8-12 | 136,4 | 5.37 | 80,4 | 3.17 | 25,2 | 0.99 | 32,0 | 1.26 | 50 |
| **6S24FJA24** | -24 | 38 | -24 | 1 7/8-12 | 212,0 | 8.35 | 134,0 | 5.28 | 31,1 | 1.22 | 43,0 | 1.69 | 55 |




**4S**

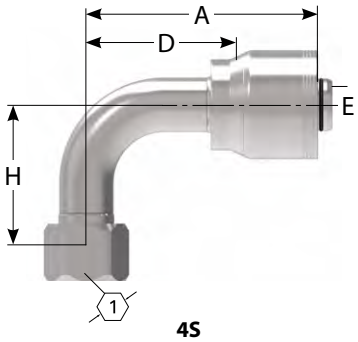



**4S**

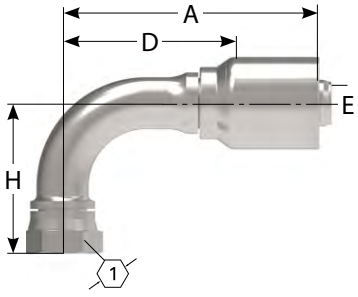
**!** When assembled with all Danfoss components, all SAE 37o JIC male and female terminal ends in the 4S & 6S product line are rated at the pressures listed in the table above and have passed one million impulse cycles at 133% of this pressure. All straight configurations achieve a 4:1 burst. The 45o and 90o elbow configurations in the -12 size meet a 3.2:1 burst the 45o and 90o elbow configurations in the -16 size achieve a 2.8:1 burst; the 45o and 90o elbow configurations in the -20 size meet a 4:1 burst and the 45o & 90o elbow configurations in the -24 size meet a 2.4:1 burst.

## **Female JIC/37° Swivel (FJB)** 90° Elbow

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | H | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6FJB6** | -6 | 10 | -6 | 9/16 - 18 | 58 | 2.29 | 28.5 | 1.12 | 6.5 | 0.26 | 25.5 | 1.00 | 17 |
| **1T8FJB8** | -8 | 12 | -8 | 3/4 - 16 | 69 | 2.72 | 36 | 1.42 | 9 | 0.35 | 34 | 1.34 | 22 |
| **1T10FJB10** | -10 | 16 | -10 | 7/8 - 14 | 87 | 3.43 | 46.4 | 1.83 | 12 | 0.47 | 49 | 1.93 | 27 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S12FJB12** | -12 | 19 | -12 | 1 1/16-12 | 101,3 | 3.99 | 65,3 | 2.57 | 14,2 | 0.56 | 58,0 | 2.28 | 32 |
| **4S16FJB12** | -16 | 19 | -12 | 1 5/16-12 | 110,0 | 4.33 | 73,8 | 2.91 | 14,2 | 0.56 | 71,0 | 2.80 | 41 |
| **4S16FJB16** | -16 | 25 | -16 | 1 5/16-12 | 113,1 | 4.45 | 73,5 | 2.89 | 19,2 | 0.76 | 71,0 | 2.80 | 41 |
| **4S20FJB16** | -20 | 25 | -16 | 1 5/8-12 | 117,1 | 4.61 | 77,4 | 3.05 | 19,2 | 0.75 | 78,0 | 3.07 | 50 |
| **4S20FJB20** | -20 | 31 | -20 | 1 5/8-12 | 132,6 | 5.22 | 77,4 | 3.05 | 25,2 | 0.99 | 78,0 | 3.07 | 50 |
| **4S24FJB24** | -24 | 38 | -24 | 1 7/8-12 | 208,9 | 8.22 | 130,8 | 5.15 | 31,1 | 1.22 | 104,0 | 4.09 | 55 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S16FJB16** | -16 | 25 | -16 | 1 5/16-12 | 113,1 | 4.45 | 73,5 | 2.89 | 19,0 | 0.75 | 71,0 | 2.80 | 41 |
| **6S20FJB20** | -20 | 31 | -20 | 1 5/8-12 | 133,4 | 5.25 | 77,4 | 3.05 | 25,2 | 0.99 | 78,0 | 3.07 | 50 |
| **6S24FJB24** | -24 | 38 | -24 | 1 7/8-12 | 208,9 | 8.22 | 130,8 | 5.15 | 31,1 | 1.22 | 104,0 | 4.09 | 55 |




**4S**



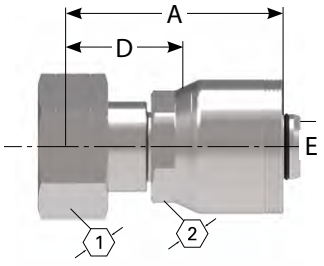

**6S**

**!** When assembled with all Danfoss components, all SAE 37o JIC male and female terminal ends in the 4S & 6S product line are rated at the pressures listed in the table above and have passed one million impulse cycles at 133% of this pressure. All straight configurations achieve a 4:1 burst. The 45o and 90o elbow configurations in the -12 size meet a 3.2:1 burst the 45o and 90o elbow configurations in the -16 size achieve a 2.8:1 burst; the 45o and 90o elbow configurations in the -20 size meet a 4:1 burst and the 45o & 90o elbow configurations in the -24 size meet a 2.4:1 burst.

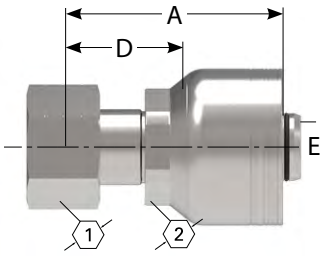
# ORS

## **Female ORS Swivel (FR)** Straight

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | ⬡2 | | ⬡1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6FR6** | -6 | 10 | -6 | 1 1/16- 16 | 60.5 | 2.38 | 31 | 1.22 | 6 | 0.24 | 22 | 7/8 | 19 |
| **1T8FR8** | -8 | 12 | -8 | 1 3/16- 16 | 70.5 | 2.78 | 37.5 | 1.48 | 9 | 0.35 | 24 | 15/16 | 22 |
| **1T10FR10** | -10 | 16 | -10 | 1- 14 | 75.5 | 2.97 | 38.9 | 1.53 | 12 | 0.47 | 30 | 1 3/16 | 27 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S10FR12** | -10 | 19 | -12 | 1 - 14 | 74,4 | 2.93 | 38,1 | 1.50 | 14,2 | 0.56 | 30,0 | 1 3/16 | 30 |
| **4S12FR12** | -12 | 19 | -12 | 1 3/16-12 | 77,4 | 3.05 | 41,2 | 1.62 | 14,2 | 0.56 | 30,0 | 1 3/16 | 36 |
| **4S16FR12** | -16 | 19 | -12 | 1 7/16-12 | 79,2 | 3.12 | 43,1 | 1.70 | 14,2 | 0.56 | 30,0 | 1 3/16 | 41 |
| **4S12FR16** | -12 | 25 | -16 | 1 3/16-12 | 80,5 | 3.17 | 40,8 | 1.61 | 19,2 | 0.76 | 41,0 | 1 5/8 | 36 |
| **4S16FR16** | -16 | 25 | -16 | 1 7/16-12 | 82,4 | 3.24 | 42,6 | 1.68 | 19,2 | 0.76 | 41,0 | 1 5/8 | 41 |
| **4S20FR16** | -20 | 25 | -16 | 1 11/16-12 | 82,4 | 3.24 | 42,7 | 1.68 | 19,2 | 0.76 | 41,0 | 1 5/8 | 50 |
| **4S20FR20** | -20 | 31 | -20 | 1 11/16-12 | 99,0 | 3.90 | 43,8 | 1.72 | 25,2 | 0.99 | 46,0 | 1 13/16 | 50 |
| **4S24FR24** | -24 | 38 | -24 | 2 - 12 | 125,7 | 4.95 | 47,6 | 1.87 | 31,1 | 1.22 | 57,0 | 2 1/4 | 55 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S16FR16** | -16 | 25 | -16 | 1 7/16-12 | 82,4 | 3.24 | 42,6 | 1.68 | 19,2 | 0.76 | 41,0 | 1 5/8 | 41 |
| **6S20FR16** | -20 | 25 | -16 | 1 11/16-12 | 82,4 | 3.24 | 42,7 | 1.68 | 19,2 | 0.76 | 41,0 | 1 5/8 | 50 |
| **6S20FR20** | -20 | 31 | -20 | 1 11/16-12 | 99,8 | 3.93 | 43,8 | 1.72 | 25,2 | 0.99 | 46,0 | 1 13/16 | 50 |
| **6S24FR24** | -24 | 38 | -24 | 2 - 12 | 125,7 | 4.95 | 47,6 | 1.87 | 31,1 | 1.22 | 57,0 | 2 1/4 | 55 |



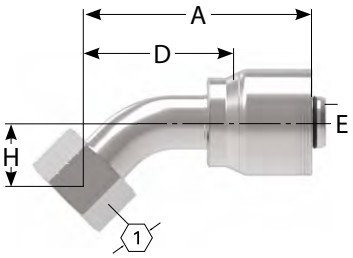

**4S**



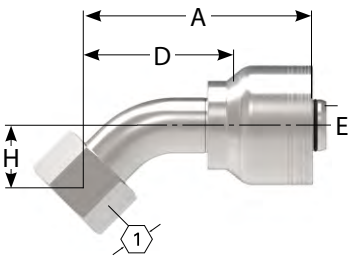

**6S**

## **Female ORS Swivel (FRA)** 45° Elbow

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | H | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6FRA6** | -6 | 10 | -6 | 11/16- 16 | 65 | 2.56 | 35.5 | 1.40 | 6 | 0.24 | 10.5 | 0.41 | 22 |
| **1T8FRA8** | -8 | 12 | -8 | 13/16- 16 | 78.5 | 3.09 | 45.4 | 1.79 | 9 | 0.35 | 15 | 0.59 | 24 |
| **1T10FRA10** | -10 | 16 | -10 | 1- 14 | 85.2 | 3.36 | 48.6 | 1.91 | 12 | 0.47 | 16.4 | 0.65 | 30 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S12FRA12** | -12 | 19 | -12 | 1 3/16-12 | 108,7 | 4.28 | 72,5 | 2.85 | 14,2 | 0.56 | 24,0 | 0.94 | 36 |
| **4S16FRA12** | -16 | 19 | -12 | 1 7/16-12 | 119,9 | 4.72 | 83,7 | 3.30 | 14,2 | 0.56 | 28,0 | 1.10 | 41 |
| **4S16FRA16** | -16 | 25 | -16 | 1 7/16-12 | 112,8 | 4.44 | 73,0 | 2.87 | 19,2 | 0.76 | 28,0 | 1.10 | 41 |
| **4S20FRA16** | -20 | 25 | -16 | 1 11/16-12 | 136,7 | 5.38 | 97,0 | 3.82 | 19,2 | 0.76 | 31,0 | 1.22 | 50 |
| **4S20FRA20** | -20 | 31 | -20 | 1 11/16-12 | 153,4 | 6.04 | 98,1 | 3.86 | 25,2 | 0.99 | 31,0 | 1.22 | 50 |
| **4S24FRA24** | -24 | 38 | -24 | 2 - 12 | 212,0 | 8.35 | 134,0 | 5.28 | 31,1 | 1.22 | 43,0 | 1.69 | 55 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S16FRA16** | -16 | 25 | -16 | 1 7/16-12 | 112,8 | 4.44 | 73,0 | 2.87 | 19,2 | 0.76 | 28,0 | 1.10 | 41 |
| **6S20FRA16** | -20 | 25 | -16 | 1 11/16-12 | 136,7 | 5.38 | 97,0 | 3.82 | 19,2 | 0.76 | 31,0 | 1.22 | 50 |
| **6S20FRA20** | -20 | 31 | -20 | 1 11/16-12 | 154,1 | 6.07 | 98,1 | 3.86 | 25,2 | 0.99 | 31,0 | 1.22 | 50 |
| **6S24FRA24** | -24 | 38 | -24 | 2 - 12 | 212,0 | 8.35 | 134,0 | 5.28 | 31.1 | 1.22 | 43,0 | 1.69 | 55 |



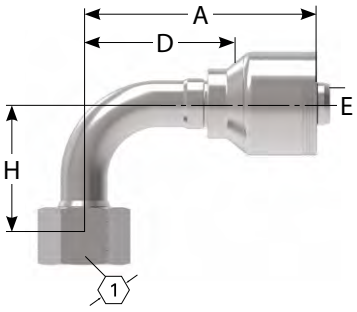

**4S**



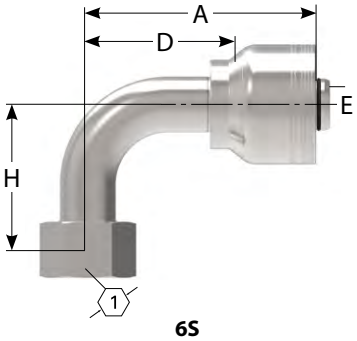

**6S**

## **Female ORS Swivel (FRB)** 90° Elbow

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | H | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6FRB6** | -6 | 10 | -6 | 1 3/16- 16 | 61.9 | 2.44 | 32.4 | 1.28 | 6.5 | 0.26 | 22.4 | 0.88 | 22 |
| **1T8FRB8** | -8 | 12 | -8 | 1 3/16- 16 | 71.7 | 2.82 | 38.7 | 1.52 | 9 | 0.35 | 29.1 | 1.15 | 24 |
| **1T10FRB10** | -10 | 16 | -10 | 1- 14 | 77.8 | 3.07 | 41.2 | 1.62 | 12 | 0.47 | 32.2 | 1.27 | 30 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S10FRB12** | -10 | 19 | -12 | 1 - 14 | 91,5 | 3.60 | 55,3 | 2.18 | 14,2 | 0.56 | 32,3 | 1.27 | 30 |
| **4S12FRB12** | -12 | 19 | -12 | 1 3/16-12 | 104,4 | 4.11 | 68,1 | 2.68 | 14,2 | 0.56 | 58,0 | 2.28 | 36 |
| **4S16FRB12** | -16 | 19 | -12 | 1 7/16-12 | 117,1 | 4.61 | 80,9 | 3.19 | 14,2 | 0.56 | 71,0 | 2.80 | 41 |
| **4S12FRB16** | -12 | 25 | -16 | 1 3/16-12 | 107,5 | 4.23 | 67,7 | 2.67 | 19,2 | 0.76 | 58,0 | 2.28 | 36 |
| **4S16FRB16** | -16 | 25 | -16 | 1 7/16-12 | 112,8 | 4.44 | 73,0 | 2.87 | 19,2 | 0.76 | 71,0 | 2.80 | 41 |
| **4S20FRB16** | -20 | 25 | -16 | 1 11/16-12 | 136,5 | 5.37 | 96,8 | 3.81 | 19,2 | 0.76 | 78,0 | 3.07 | 50 |
| **4S20FRB20** | -20 | 31 | -20 | 1 11/16-12 | 153,1 | 6.03 | 97,9 | 3.85 | 25,2 | 0.99 | 78,0 | 3.07 | 50 |
| **4S24FRB20** | -24 | 31 | -20 | 2 - 12 | 152,9 | 6.02 | 97,9 | 3.85 | 25,2 | 0.99 | 86,0 | 3.39 | 55 |
| **4S24FRB24** | -24 | 38 | -24 | 2 - 12 | 208,9 | 8.22 | 130,8 | 5.15 | 31,1 | 1.22 | 104,0 | 4.09 | 55 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S16FRB16** | -16 | 25 | -16 | 1 7/16-12 | 112,8 | 4.44 | 73,0 | 2.87 | 19,2 | 0.76 | 71,0 | 2.80 | 41 |
| **6S20FRB16** | -20 | 25 | -16 | 1 11/16-12 | 136,5 | 5.37 | 96,8 | 3.81 | 19,2 | 0.76 | 78,0 | 3.07 | 50 |
| **6S20FRB20** | -20 | 31 | -20 | 1 11/16-12 | 153,9 | 6.06 | 97,9 | 3.85 | 25,2 | 0.99 | 78,0 | 3.07 | 50 |
| **6S24FRB24** | -24 | 38 | -24 | 2 - 12 | 208,9 | 8.22 | 130,8 | 5.15 | 31,1 | 1.22 | 104,0 | 4.09 | 55 |




**4S**



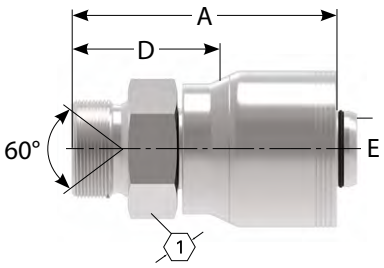

**6S**

# BSP 60° Cone

## **BSP Male Parallel Rigid (BP)** 60° Cone Seat, Straight

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6BP6** | -6 | 10 | -8 | G 3/8" | 55 | 2.17 | 25.5 | 1.00 | 6.5 | 0.26 | 19 |
| **1T8BP8** | -8 | 12 | -8 | G 1/2" | 61 | 2.40 | 28 | 1.10 | 9 | 0.35 | 22 |
| **1T10BP10** | 10 | 16 | 10 | G 5/8" | 68 | 2.68 | 27.4 | 1.08 | 12 | 0.47 | 27 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S12BP12** | -12 | 19 | -12 | G 3/4-14 | 79,6 | 3.13 | 43,4 | 1.71 | 14,2 | 0.56 | 32,0 |
| **4S16BP16** | -16 | 25 | -16 | G 1-11 | 89,8 | 3.53 | 50,1 | 1.97 | 19,2 | 0.75 | 41,0 |
| **4S20BP20** | -20 | 31 | -20 | G 1 1/4-11 | 109,7 | 4.32 | 54,5 | 2.15 | 25,1 | 0.99 | 50,0 |

"G" as part of thread size is ISO designation for parellel thread.

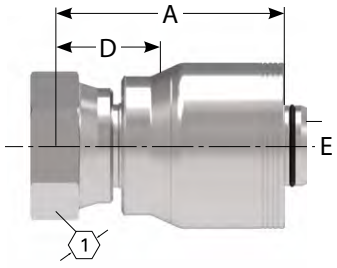


**4S**

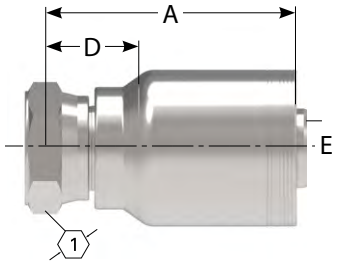
## **BSP Male Parallel Rigid (BP)** 60° Cone Seat, Straight

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6BF6** | -6 | 10 | -6 | G 3/8" | 50 | 1.97 | 20.5 | 0.81 | 6.5 | 0.26 | 22 |
| **1T8BF8** | -8 | 12 | -8 | G 1/2" | 55.5 | 2.19 | 22.5 | 0.89 | 9 | 0.35 | 27 |
| **1T10BF10** | -10 | 16 | -10 | G 5/8" | 60 | 2.36 | 23.5 | 0.93 | 12 | 0.47 | 27 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S12BF12** | -12 | 19 | -12 | G 3/4-14 | 66,2 | 2.61 | 29,9 | 1.18 | 14,2 | 0.56 | 32,0 |
| **4S16BF12** | -16 | 19 | -12 | G 1-11 | 68,7 | 2.70 | 32,3 | 1.27 | 14,2 | 0.56 | 41,0 |
| **4S16BF16** | -16 | 25 | -16 | G 1-11 | 71,0 | 2.80 | 32,3 | 1.27 | 19,2 | 0.76 | 41,0 |
| **4S20BF16** | -20 | 25 | -16 | G 1 1/4-11 | 72,5 | 2.85 | 32,7 | 1.29 | 19,2 | 0.76 | 50,0 |
| **4S20BF20** | -20 | 31 | -20 | G 1 1/4-11 | 82,8 | 3.26 | 32,7 | 1.29 | 25,2 | 0.99 | 50,0 |
| **4S24BF24** | -24 | 38 | -24 | G 1 1/2-11 | 117,9 | 4.64 | 39,8 | 1.57 | 31,1 | 1.22 | 55,0 |
| **4S32BF32** | -32 | 51 | -32 | G 2-11 | 121,0 | 4.76 | 43,0 | 1.69 | 42,1 | 1.66 | 70,0 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S24BF24** | -24 | 38 | -24 | G 1 1/2-11 | 117,9 | 4.64 | 39,8 | 1.57 | 31,1 | 1.22 | 55,0 |
| **6S32BF32** | -32 | 51 | -32 | G 2-11 | 121,0 | 4.76 | 43,0 | 1.69 | 42,1 | 1.66 | 70,0 |

"G" as part of thread size is ISO designation for parellel thread.




**4S**

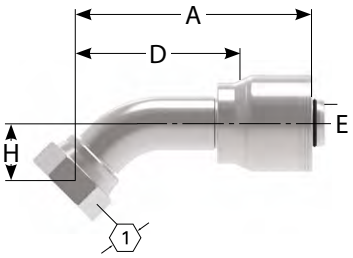



**6S**

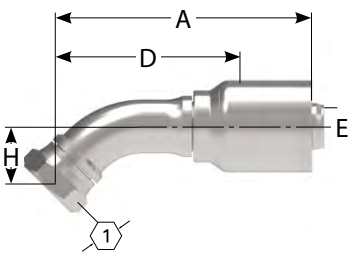
## **Female BSPP Swivel (BFA)** 60° Cone Seat, 45° Elbow

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | H | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6BFA6** | -6 | 10 | -6 | G 3/8" | 68 | 2.68 | 38.5 | 1.52 | 6 | 0.24 | 14 | 0.55 | 22 |
| **1T8BFA8** | -8 | 12 | -8 | G 1/2" | 74 | 2.92 | 41 | 1.62 | 9 | 0.35 | 15 | 0.59 | 27 |
| **1T10BFA10** | -10 | 16 | -10 | G 5/8" | 80 | 3.15 | 43 | 1.69 | 12 | 0.47 | 16.5 | 0.65 | 30 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S12BFA12** | -12 | 19 | -12 | G 3/4-14 | 112,3 | 4.42 | 75,9 | 2.99 | 14,2 | 0.56 | 26,0 | 1.02 | 32,0 |
| **4S16BFA12** | -16 | 19 | -12 | G 1-11 | 115,8 | 4.56 | 79,5 | 3.13 | 14,2 | 0.56 | 30,0 | 1.18 | 41,0 |
| **4S16BFA16** | -16 | 25 | -16 | G 1-11 | 130,3 | 5.13 | 90,6 | 3.57 | 19,2 | 0.76 | 30,0 | 1.18 | 41,0 |
| **4S20BFA16** | -20 | 25 | -16 | G 1 1/4-11 | 133,0 | 5.24 | 93,4 | 3.68 | 19,2 | 0.76 | 34,0 | 1.34 | 50,0 |
| **4S20BFA20** | -20 | 31 | -20 | G 1 1/4-11 | 149,5 | 5.89 | 99,1 | 3.90 | 25,2 | 0.99 | 34,0 | 1.34 | 50,0 |
| **4S24BFA24** | -24 | 38 | -24 | G 1 1/2-11 | 208,3 | 8.20 | 130,3 | 5.13 | 31,1 | 1.22 | 42,4 | 1.67 | 55,0 |
| **4S32BFA32** | -32 | 51 | -32 | G 2-11 | 248,4 | 9,78 | 170,4 | 6.71 | 42,1 | 1.66 | 54,1 | 2.13 | 70,0 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S24BFA24** | -24 | 38 | -24 | G 1 1/2-11 | 208,3 | 8.20 | 130,3 | 5.13 | 31,1 | 1.22 | 42,4 | 1.67 | 55,0 |
| **6S32BFA32** | -32 | 51 | -32 | G 2-11 | 248,4 | 9.78 | 170,4 | 6.71 | 42,1 | 1.66 | 54,1 | 2.13 | 70,0 |

"G" as part of thread size is ISO designation for parellel thread.



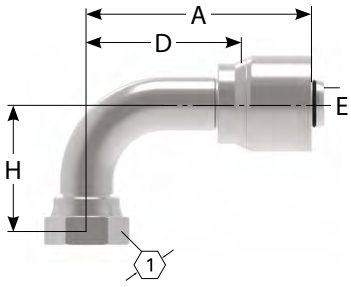

**4S**



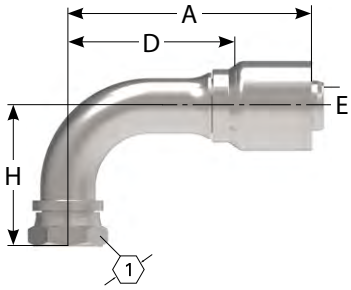

**6S**

## **Female BSPP Swivel (BFB)** 60° Cone Seat, 90° Elbow

| PART | HOSE SIZE INFO | | | DIMENSIONS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Terminal End | Hose Size | Thread | A | | D | | E Ø | | H | | 1 |
| **1T** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **1T6BFB6** | -6 | 10 | -6 | G 3/8" | 62 | 2.44 | 32.4 | 1.28 | 6.5 | 0.26 | 28 | 1.10 | 22 |
| **1T8BFB8** | -8 | 12 | -8 | G 1/2" | 69.5 | 2.74 | 36.5 | 1.44 | 9 | 0.35 | 32 | 1.26 | 27 |
| **1T10BFB10** | -10 | 16 | -10 | G 5/8" | 76.5 | 3.01 | 39 | 1.54 | 12 | 0.47 | 36 | 1.42 | 27 |
| **4S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **4S12BFB12** | -12 | 19 | -12 | G 3/4-14 | 105,9 | 4.17 | 69,6 | 2.74 | 14,2 | 0.56 | 57,0 | 2.24 | 32,0 |
| **4S16BFB12** | -16 | 19 | -12 | G 1-11 | 105,9 | 4.17 | 69,6 | 2.74 | 14,2 | 0.56 | 68,0 | 2.68 | 41,0 |
| **4S16BFB16** | -16 | 25 | -16 | G 1-11 | 125,5 | 4.94 | 85,8 | 3.38 | 19,2 | 0.76 | 68,0 | 2.68 | 41,0 |
| **4S20BFB16** | -20 | 25 | -16 | G 1 1/4-11 | 125,5 | 4.94 | 85,8 | 3.38 | 19,2 | 0.76 | 79,0 | 3.11 | 50,0 |
| **4S20BFB20** | -20 | 31 | -20 | G 1 1/4-11 | 145,0 | 5.71 | 95,0 | 3.74 | 25,2 | 0.99 | 79,0 | 3.11 | 50,0 |
| **4S24BFB24** | -24 | 38 | -24 | G 1 1/2-11 | 205,1 | 8.07 | 127,0 | 5.00 | 31,1 | 1.22 | 98,6 | 3.88 | 55,0 |
| **4S32BFB32** | -32 | 51 | -32 | G 2-11 | 245,7 | 9.67 | 167,6 | 6.60 | 42,1 | 1.66 | 125,3 | 4.93 | 70,0 |
| **6S** | **Dash Size** | **DN** | **Dash Size** | **Metric** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** | **in** | **mm** |
| **6S24BFB24** | -24 | 38 | -24 | G 1 1/2-11 | 205,1 | 8.07 | 127,0 | 5.00 | 31,1 | 1.22 | 98,6 | 3.88 | 55,0 |
| **6S32BFB32** | -32 | 51 | -32 | G 2-11 | 245,7 | 9.67 | 167,6 | 6.60 | 42,1 | 1.66 | 125,3 | 4.93 | 70,0 |




**4S**




**6S**

ENGINEERING
TOMORROW

# About
# Danfoss Power Solutions

**Danfoss Power Solutions** is a global manufacturer and supplier of high-quality hydraulic and electric components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway market as well as the marine sector. Building on our extensive applications expertise, we work closely with you to ensure exceptional performance for a broad range of applications. We help you and other customers around the world speed up system development, reduce costs and bring vehicles and vessels to market faster.

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**Danfoss Power Solutions (US) Company**
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

**Danfoss Power Solutions ApS**
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

**Danfoss Power Solutions GmbH & Co. OHG**
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

**Danfoss Power Solutions Trading (Shanghai) Co. Ltd.**
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 3418 5200



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