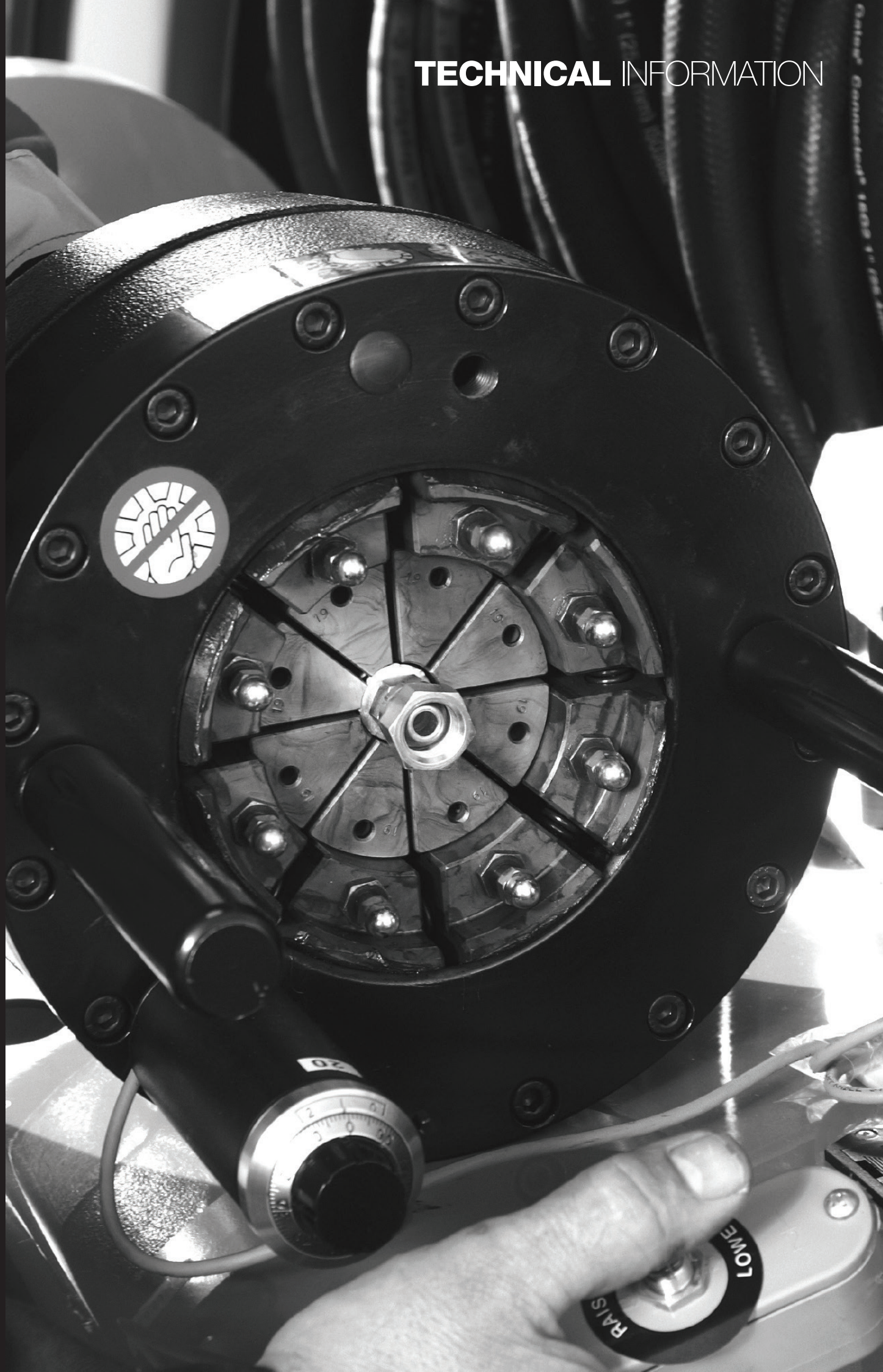




GENERAL INFORMATION

An essential step in ensuring that a hydraulic system is safe and delivers optimum performance and service life is selecting the correct fluid conveying components.

Although a lot of the work undertaken in this industry is the replacement of existing components with a duplicate it is still good practice to check the product against the application especially if the service life of the product to be replaced was not acceptable or when fault finding on an existing system.

In some cases a problem with a hose assembly or other fluid conveying products can point to an underlying problem with the system itself or possibly the products have been incorrectly specified originally.

INFORMATION - HOSE

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS

Hydraulic hose (and hose assemblies) have a finite life span that is dependent upon the actual operating conditions the assembly is subjected to. An effective way to remember hose selection criteria is to remember the word STAMPED. STAMPED is an acronym for the following:

S = Size
T = Temperature
A = Application
M = Medium or Media
P = Pressure
E = Ends
D = Delivery

1. Size - Hose Internal Diameter can be determined using the Nomographic Chart found in this section. The correct hose I.D. must be selected for the flow required. Too small an I.D. for a given volume will result in pressure drop, heat generation, fluid turbulence and possible internal tube damage. If in doubt, select the next size up.

2. Temperature. Hose selection is determined by two variables of temperature; the ambient (external) temperature and the fluid/material (internal) temperature. The hose should not be exposed to internal or external temperatures which exceed the manufacturer's stated maximum and minimum limits. Both continual and intermittent temperatures must be accommodated within the recommended limits. Extra care must be taken when specifying hoses that are routed near to (or terminate on) hot components such as engine manifolds.

3. Application. The determination of how the hydraulic hose or hose assembly will be used. Questions that may need to be answered to ensure correct hose selection could include: What is the suitable hose construction? What type of equipment is it used on? What are the end connections? Are there applicable Government or Industry standards to be satisfied? Questions that may need to be answered to ensure correct hose selection could include; What are the environmental conditions the hose will be used in? Does the hose require a special cover or armour? Are there unusual mechanical loads or excessive movement? What are the routing requirements? What are the required lengths and bend radius to satisfy those routing requirements? (Further data regarding Hose Installation Recommendation can be found in this section.)

4. Medium (or media, material) to be conveyed. Hose selection must ensure compatibility of the hose tube (liner) and outer cover with the oil, chemical or gas to be conveyed. A chemical resistance table to rubber compounds can be found in this section. Similar care to ensure compatibility should be taken when specifying end connections (hosetails and adaptors), especially those that contain o-rings.

5. Pressure. The pressure in a hydraulic system should not exceed the stated hose working pressure at any time. System pressure spikes and surges must be considered and accommodated within the stated working pressure limits. Minimum burst pressures are reference pressures, and are intended for destructive testing and design purposes only.

6. Ends. The thread portions of the hose assembly must of course, be compatible with what it is connecting to. Different thread types have different working pressures, always insure that the threaded ends selected meet or exceed the designed working pressure. Check the technical section of this catalogue for pressure ratings. Also the chemical compatibility of the end fittings must be checked as per the hose. Ensure that the ends chosen are of the type matched to the hose.

7. Delivery. When a product is actually needed is important. A decision of what product is used can need to be altered by what is available when needed. Always specify up, not down to meet a timeline. A simple change of adaptor may be all that is needed to meet a requirement.

Exposure of hose or hose assemblies to operating conditions which exceed recommended or stated limits will significantly reduce the expected service life. If in doubt, over-specify hose assemblies to ensure as much safety margin on the recommended limits as possible.

Notes;

The potential service life of products can be significantly reduced if they are constantly operating at maximum limits.

Some areas of the selection process are interrelated however the key to correct product selection is the understanding of the application and what is required of the product.

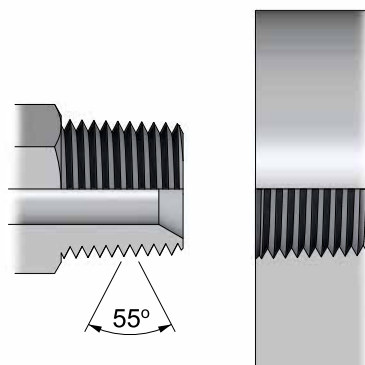
B.S.P.T. - BRITISH STANDARD PIPE TAPER

Taper: 1 in 16 by diameter

Thread Angle: 55°

The BSPT (British Standard Pipe Taper) male is intended to mate with the BSPT female only. Although the taper male will screw into BSP Parallel fixed female sockets, this is not recommended practice where avoidable as a reliable seal cannot be guaranteed.

While many BSPT males are coned 30° and will mate with BSP Parallel swivel nut females, this is not recommended practice as the taper form can deform the parallel thread and reduce the integrity of the seal.



Thread Size & TPI	Male Thread O.D. BSPT*	Female Thread I.D. BSPT
1/8-28	9.7	8.5
1/4-19	13.1	11.4
3/8-19	16.6	14.9
1/2-14	20.9	18.6
5/8-14	22.9	20.6
3/4-14	26.4	24.1
1-11	33.2	30.2
1.1/4-11	41.9	38.9
1.1/2-11	47.8	44.8
2-11	59.6	56.6

**Basic gauge plane diameter at basic gauge depth*

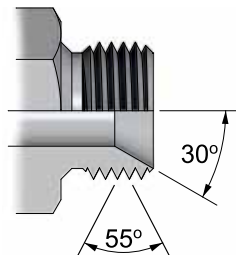
B.S.P.P. - BRITISH STANDARD PIPE PARALLEL

Thread Angle: 55°

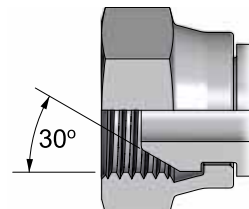
The British Standard Pipe Parallel (BSPP) male is typically coned 30° and will mate with either a BSPP swivel nut female or a BSPP female port.

BSPP female ports are normally spot faced, sealing is by either a soft metal washer, a bonded seal or a captive "O" ring.

In some cases, the port is chamfered to accept an "O" ring seal. (Similar to the U.N.O. style).

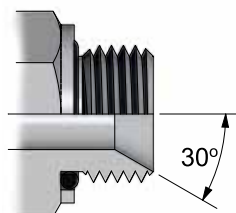


BSPP male



BSPP swivel nut female

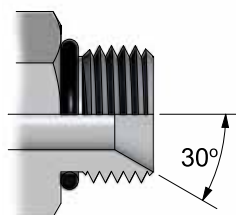
Thread Size & TPI	Male Thread O.D. BSPP	Female Thread I.D. BSPP	Torque Settings BSPP nuts
1/8-28	9.7	8.5	12 Nm
1/4-19	13.1	11.4	26 Nm
3/8-19	16.6	14.9	47 Nm
1/2-14	20.9	18.6	79 Nm
5/8-14	22.9	20.6	104 Nm
3/4-14	26.4	24.1	128 Nm
1-11	33.2	30.2	160 Nm
1.1/4-11	41.9	38.9	200 Nm
1.1/2-11	47.8	44.8	270 Nm
2-11	59.6	56.6	350 Nm



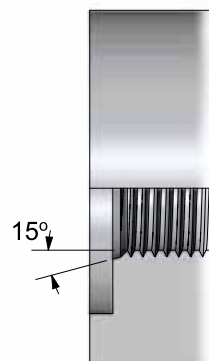
BSPP male with captive o-ring seal



BSPP female port (spot-faced)



BSPP male with o-ring seal



BSPP female port (chamfered)

N.B. Torque values are nominal and supplied as a guide only.

N.P.T. - NATIONAL PIPE THREAD

N.P.T.F.; National Pipe Taper Fuel
N.P.S.M.; National Pipe Straight Mechanical
N.P.S.F.; National Pipe Straight Fuel

Taper: 1 in 16 by diameter.

Thread Angle: 60°

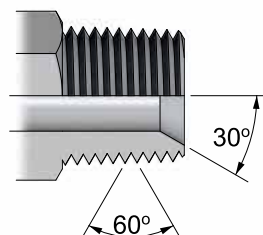
The National Pipe Taper Fuel (NPTF) male is coned 30° and will mate with the NPTF female port (taper), the National Pipe Straight Mechanical (NPSM) female (swivel nut female with 30° sealing cone), or the National Pipe Straight Fuel (NPSF) female port (parallel).

As NPTF is a “dryseal” thread, no sealing medium is required. However a sealing medium can be used to prevent thread galling.

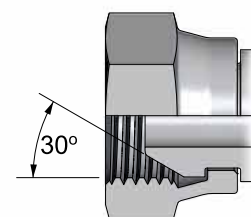
Thread Size & TPI	Male Thread O.D.	Female Thread I.D.	
	NPTF	NPTF	NPSF/SM
1/8-27	10.0	8.6	8.7
1/4-18	13.3	11.2	11.4
3/8-18	16.7	14.7	14.9
1/2-14	20.8	18.2	18.8
3/4-14	26.1	23.5	23.9
1-11.1/2	32.7	29.5	30.2
1.1/4-11.1/2	41.4	38.3	39.1
1.1/2-11.1/2	47.5	44.4	45
2-11.1/2	59.3	56.2	57



**NPTF female
port (taper)**



**NPTF male
(taper)**



**NPSM swivel
nut female**



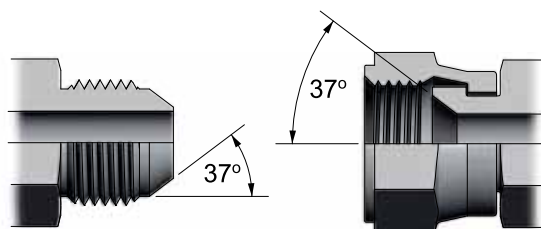
**NPSF female
port (parallel)**

J.I.C / U.N. O-RING THREAD

J.I.C. and U.N.“O”-Ring threads are both of the Unified National Form.

J.I.C. refers to the 37° flare type sealing face. The J.I.C. female is usually a swivel nut, but can also be a fixed socket (port) with a 37° sealing face in the base of the socket.

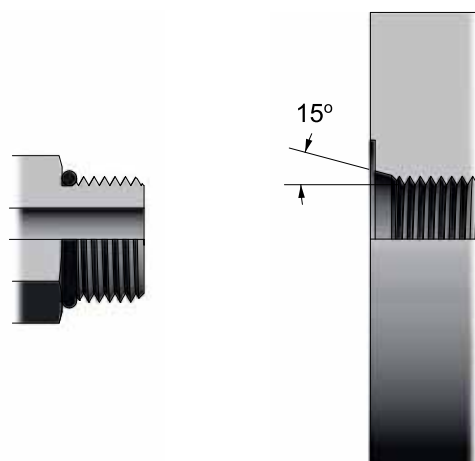
U.N.“O”-Ring refers to the thread type and “O”-Ring for sealing. The female U.N.O port has a chamfer to accept the o-ring.



JIC male

JIC swivel nut female

Thread Size & TPI	Female Thread I.D.	Tube O.D.	Torque Settings	
			JIC	UN"O"
7/16 x 20 UNF	9.8	1/4"	14 Nm	21 Nm
1/2 x 20 UNF	11.5	5/16"	19 Nm	25 Nm
9/16 x 18 UNF	13.0	3/8"	30 Nm	34 Nm
3/4 x 16 UNF	17.4	1/2"	50 Nm	72 Nm
7/8 x 14 UNF	20.3	5/8"	80 Nm	100 Nm
1 1/16 x 12 UN	24.8	3/4"	130 Nm	176 Nm
1 3/16 x 12 UN	28.2	7/8"	140 Nm	220 Nm
1 5/16 x 12 UN	31.2	1"	156 Nm	290 Nm
1 5/8 x 12 UN	39.2	1.1/4"	188 Nm	350 Nm
1 7/8 x 12 UN	45.5	1.1/2"	268 Nm	460 Nm
2 1/2 x 12 UN	61.5	2"	346 Nm	540 Nm



UNO male

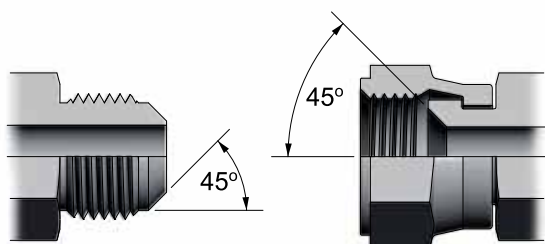
UNO female port (chamfered)

N.B. Torque values are nominal and supplied as a guide only.

S.A.E. - SOCIETY OF AUTOMOTIVE ENGINEERS

This system utilises the U.N. thread series and a 45° flare sealing face. Primarily used in the automotive and refrigeration industries.

This system uses an "O"-Ring for sealing. The "O"-Ring is housed in the face of the male and is compressed by the face of the female on connection. Connecting threads are U.N. form.

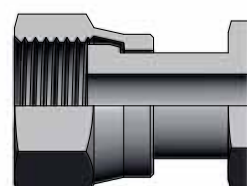


SAE male

**SAE swivel
nut female**



ORFS male



**ORFS swivel
nut female**

Thread Size & TPI	Tube O.D.	Female Thread I.D.
7/16-20	1/4"	9.8
1/2-20	5/16"	11.4
5/8-18	3/8"	14.3
11/16-16	7/16"	16
3/4-16	1/2"	17.5
7/8-14	5/8"	20.5
1.1/16-14	3/4"	24.8
1.1/4-12	7/8"	30.1
1.3/8-12	1"	33.2

Thread Size & TPI	Female Thread I.D.	Tube O.D.	"O"-ring size	Torque Settings *
9/16-18 UNF	12.8	1/4"	5/16x1/16	14-16 Nm
11/16-16 UN	16.0	3/8"	3/8x1/16	24-27 Nm
13/16-16 UN	19.1	1/2"	1/2x1/16	43-47 Nm
1-14 UN	23.5	5/8"	5/8x1/16	60-69 Nm
1.3/16-12UN	26.1	3/4"	3/4x1/16	90-95 Nm
1.7/16-12 UN	34.2	1"	15/16x1/16	125-135 Nm
1.11/16-12 UN	40.6	1.1/4"	1.3/16x1/16	170-190 Nm
2-12 UN	48.0	1.1/2"	1.1/2x1/16	200-225 Nm

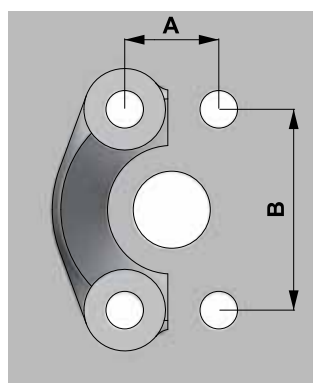
N.B. Torque values are nominal and supplied as a guide only.

S.A.E. O-RING FLANGES (SAE - J518)

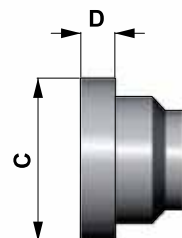
These connections utilise an “O”-Ring for sealing and are widely used for connecting to pump and motor parts as well as end terminations for pipe runs.

The “O”-Ring is housed in the flange head face and seals on a flat face female port, the flange is held in place by two clamp halves (or a one piece clamp) which are secured by four bolts.

SAE flanges are available in two pressure classes: **Standard Series, Code 61**, which goes to 5000 psi (dependent on size), and the **High Pressure Series, Code 62**, which is rated to 6000 psi for all sizes.



**SAE flange
clamp / port
bolt spacing**



**SAE flange
head
dimensions**

Nominal Flange Size	A (mm)		B (mm)		C (mm)		D (mm)	
	Code 61	Code 62	Code 61	Code 62	Code 61	Code 62	Code 61	Code 62
1/2	17.48	18.24	38.1	40.49	30.18	31.75	6.75	7.75
*5/8	19.8	-	42.90	-	34.0	-	6.73	-
3/4	22.23	23.80	47.63	50.80	38.10	41.28	6.73	8.76
1	26.19	27.76	52.37	57.15	44.45	47.63	8.0	9.53
1.1/4	30.18	31.75	58.72	66.68	50.80	53.98	8.0	10.29
1.1/2	35.71	36.50	69.85	79.38	60.33	63.50	8.0	12.57
2	42.88	44.45	77.77	96.82	71.42	79.38	9.53	12.57

Nominal Flange Size	Pressure Rating		"O"-ring size		UNC Bolt size		Bolt torque	
	Code 61	Code 62	Code 61 and 62	AS568A number	Code 61	Code 62	Code 61	Code 62
1/2	5000 psi	6000 psi	3/4x1/8	210	5/16x1.1/4	5/16x1.1/4	20-25 Nm	20-25 Nm
3/4	5000 psi	6000 psi	1x1/8	214	3/8x1.1/4	3/8x1.1/2	28-40 Nm	34-45 Nm
1	5000 psi	6000 psi	1.5/16x1/8	219	3/8x1.1/4	7/16x1.3/4	37-48 Nm	56-68 Nm
1.1/4	4000 psi	6000 psi	1.1/2x1/8	222	7/16x1.1/2	1/2x1.3/4	48-62 Nm	85-102 Nm
1.1/2	3000 psi	6000 psi	1.7/8x1/8	225	1/2x1.1/2	5/8x2.1/4	62-79 Nm	158-181 Nm
2	3000 psi	6000 psi	2.1/4x1/8	228	1/2x1.1/2	3/4x2.3/4	73-90 Nm	271-294 Nm

**The 5/8* size flange is not part of the SAE`standard. It is included in the J.I.S. standards and is used by Komatsu and other O.E.M's.*

N.B. Torque values are nominal and supplied as a guide only

Caterpillar flanges used on XT3 hose are the same as the SAE Code 61, XT5 flanges have the same diameter as the SAE Code 62 but are thicker in the flange head.

French Gaz (Poclain) flanges are completely different to, and will not interchange with the SAE flanges.

J.I.S. - JAPANESE INDUSTRIAL STANDARDS

Japanese Industrial Standards (J.I.S.) incorporate B.S.P. and metric threads as well as flanges in their connection standards.

Taper Threads:

Type R; BSPT Male (*Identical to BSP standard*)

Parallel Threads:

Type G; BSPP Male (*Identical to BSP standard*)

Type C; BSPP Swivel Nut Female (*Identical to BSP standard - for thread data please refer to BSPP section*)

Type F; BSPP Swivel Nut Female, 30° Flare Seat

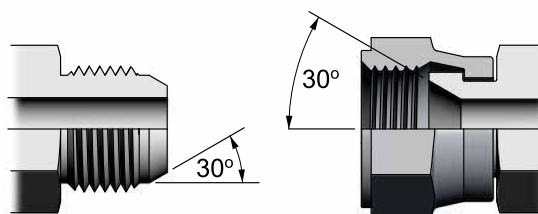
Type M; Metric, Male, 30° Cone

Type MF; Metric, Swivel Nut Female, 30° Flare Seat

“O”-Ring Flanges:

Type I; Equivalent to Code 61 (*Identical to SAE standard*)

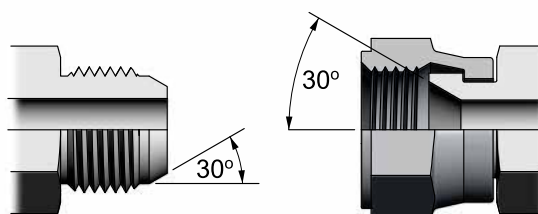
Type II; Equivalent to Code 62 (*Identical to SAE standard*)



Type F JIS male

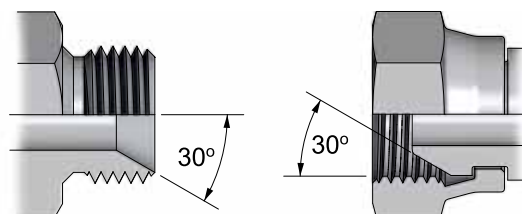
For thread data please refer to BSPP section

Type F JIS swivel nut female



Type MF JIS male

Type MF JIS swivel nut female



Type M JIS male

Type M JIS swivel nut female

THREAD SPECIFICATIONS			
Metric Threads (J.I.S)		Komatsu Threads (Metric)	
14-1.5*	12.5	14-1.5*	12.5
18-1.5*	16.5	18-1.5*	16.5
22-1.5*	20.5	22-1.5*	20.5
27-2.0	25	24-1.5	22.5
33-2.0	31	30-1.5	28.5
42-2.0	40	33-1.5	31.5
50-2.0	48	36-1.5	34.5
60-2.0	58	42-1.5	40.5

* denotes interchange sizes between JIS and Komatsu.

D.I.N. METRICS 24° CONE SYSTEM

The D.I.N. System allows for the connection of hose assemblies and tube in three main pressure series:

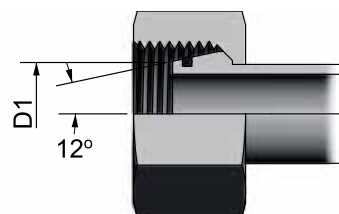
Series LL;	Extra Light, up to 100 bar
Series L;	Light up to 250 bar
Series S;	Heavy up to 640 bar

The pressure ranges are determined by the tube O.D. and the thread size e.g. a 12mm light coupling has an 18mm thread O.D. whereas a 12mm heavy coupling has a 20mm O.D. thread.

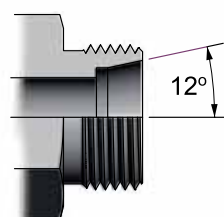
N.B: Rated coupling pressures are subject to the design pressures of the tube or hose being used.

Tubing is connected to the D.I.N. Male by the use of a cutting ring and nut. Hose assemblies can be connected by swivel nut females having either a spherical seal, 24° cone seal (can be fitted with "O"-Ring), or a standpipe with cutting ring and nut. Hose can also be connected directly to tube by use of a hose tail with the D.I.N. Male form

The male form will accept all three female styles shown (right).



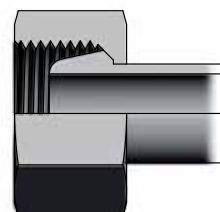
DIN 24° cone female with o-ring



DIN 24° cone male



DIN cutting ring and nut on tube



DIN female swivel nut with spherical seat

THREAD SPECIFICATIONS LIGHT (L) SERIES			
Thread O.D. & Pitch	Female Thread I.D.	Diameter D1 (mm)	Tube O.D.(mm)
M12-1.5	10.5	7.2	6
M14-1.5	12.5	9.2	8
M16-1.5	14.5	11.6	10
M18-1.5	16.5	13.8	12
M22-1.5	20.5	16.8	15
M26-1.5	24.5	19.8	18
M30-2.0	28	23.8	22
M36-2.0	34	29.8	28
M45-2.0	43	37.2	35
M52-2.0	50	44.2	42

THREAD SPECIFICATIONS HEAVY (S) SERIES			
Thread O.D. & Pitch	Female Thread I.D.	Diameter D1 (mm)	Tube O.D.(mm)
M14-1.5	12.5	7.2	6
M16-1.5	14.5	9.2	8
M18-1.5	16.5	11.6	10
M20-1.5	18.5	13.8	12
M22-1.5	20.5	15.8	14
M24-1.5	22.5	17.8	16
M30-2.0	28	22	20
M36-2.0	34	27	25
M42-2.0	40	32	30
M52-2.0	50	40	38

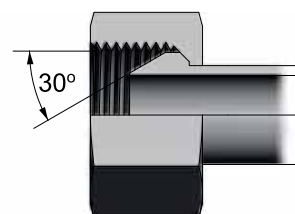
* N.B. Diameter D1 is nominal and may vary between manufacturers.

D.I.N. METRICS 60° CONE SYSTEM

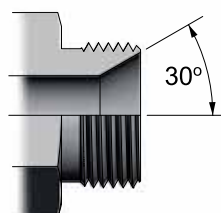
This series utilises a 60° cone seating angle and is used for the connection of hose assemblies and tube. It differs from the 24° series in that the threads are predominately 1.5mm pitch and there is no light or heavy pressure ranges.

The D.I.N. 60° male will accept the universal (spherical seat) female, a 60° coned female and tube fitted with a cutting ring and nut.

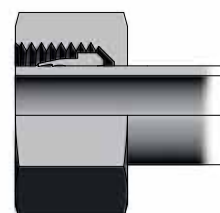
THREAD SPECIFICATIONS		
Thread O.D. & Pitch	Female Thread I.D.	Tube O.D.(mm)
M10-1.0	9.0	5
M12-1.5	10.5	6
M14-1.5	12.5	8
M16-1.5	14.5	10
M18-1.5	16.5	12
M22-1.5	20.5	15
M26-1.5	24.5	18
M30-1.5	28.5	22
M38-1.5	36.5	28
M45-1.5	43.5	35
M52-2.0	56.5	42



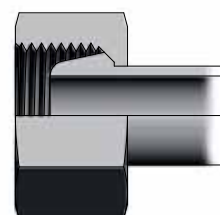
DIN 60° cone female



DIN 60° cone male



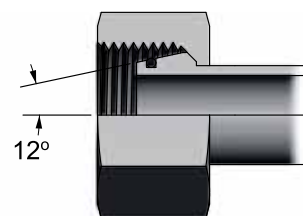
DIN cutting ring and nut on tube



DIN female swivel nut with spherical seat

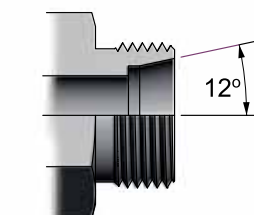
I.S.O. METRICS (INTERNATIONAL STANDARDS ORGANISATION)

The I.S.O. series of couplings is similar to the D.I.N. light and heavy in function. The male has a 24° included angle sealing cone and a recessed counter bore for locating the tube when used in conjunction with a cutting ring and nut. The male will also accept a swivel nut female with either a cone or a spherical seal.

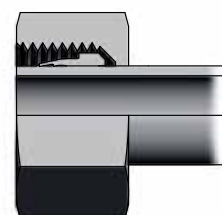


**ISO (24° cone)
female with o-ring**

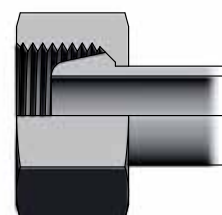
THREAD SPECIFICATIONS		
Thread O.D. & Pitch	Female Thread I.D.	Tube O.D.(mm)
M12-1.0	11.0	6
M14-1.5*	12.5	8
M16-1.5*	14.5	10
M18-1.5*	16.5	12
M20-1.5	18.5	14
M22-1.5*	20.5	15
M24-1.5**	22.5	16
M27-1.5	25.5	18
M30-1.5	28.5	22
M33-1.5	31.5	25
M36-1.5	34.5	28
M39-1.5	37.5	30
M42-1.5	40.5	32
M45-1.5	43.5	35
M48-1.5	46.5	38
M52-1.5	50.5	40



**ISO (24° cone)
male**



**ISO cutting ring and
nut on tube**



**ISO female swivel
nut with spherical
seat**

* Interchange with D.I.N. Light

** Interchange with D.I.N. Heavy

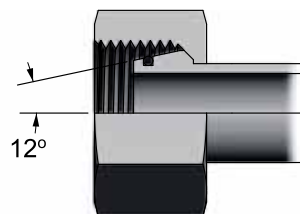
FRENCH METRICS (GAZ & MILLIMETRIQUE SERIES)

The series are similar to the D.I.N. 24° type where the male has a 24° included angle sealing cone and a recessed counterbore for locating the tube.

The male will accept a cutting ring and nut for use with tube or a swivel nut female with either a cone or spherical seal.

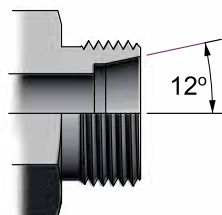
The Gaz and Millimetrique series are identical in all respects except for the O.D. of the tube:

- Gaz series uses fractional number O.D. metric tubing.
- Millimetrique series uses whole number O.D. metric tubing.

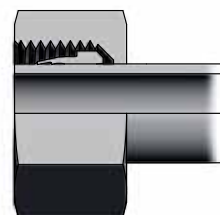


French 24° cone female with o-ring

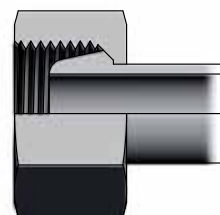
THREAD SPECIFICATIONS LIGHT (L) SERIES			
Thread O.D. & Pitch	Female Thread I.D.	Diameter	
		GAZ	Millimetrique
M12-1.0	11.0	-	6
M14-1.5	12.5	-	8
M16-1.5	14.5	-	10
M18-1.5	16.5	-	12
M20-1.5	18.5	13.25	14
M22-1.5	20.5	-	15
M24-1.5	22.5	16.75	16
M27-1.5	25.5	-	18
M30-1.5	28.5	21.25	22
M33-1.5	31.5	-	25
M36-1.5	34.5	26.75	28
M39-1.5	37.5	-	30
M42-1.5	40.5	-	32
M45-1.5	43.5	33.5	35
M48-1.5	46.5	-	38
M52-1.5	50.5	42.25	40
M54-2.0	52.0	-	45
M58-2.0	56.0	48.25	-



French 24° cone male



Cutting ring and nut on tube

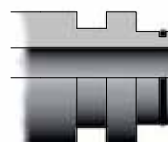


French female swivel nut with spherical seat

STAPLE-LOK COUPLINGS

Originally designed in Germany for underground mining equipment, the Staple-lok requires no spanners for connection or disconnection. The male and female are pushed together and held with a retaining staple or "U" clip.

Sealing is achieved by the captive "O"-Ring located on the male spigot. The female can either be fixed or swivel type. The coupling is not designed to swivel under pressure.

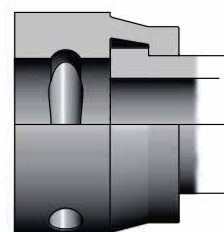


Staple-lok male



Staple-lok fixed female

Coupling Dash Size	Imperial Size	Male O.D.		Female I.D.	
		inch	mm	inch	mm
-4	1/4	0.58	14.8	.59	15.0
-6	3/8	0.78	19.8	.79	20.0
-8	1/2	0.94	23.9	.95	24.1
-12	3/4	1.13	28.8	1.14	29.0
-16	1	1.53	38.9	1.54	39.1
-20	1.1/4	1.80	45.7	1.81	46.0
-24	1.1/2	2.16	54.9	2.17	55.1
-32	2	2.52	64.0	2.53	64.3



Staple-lok swivel female

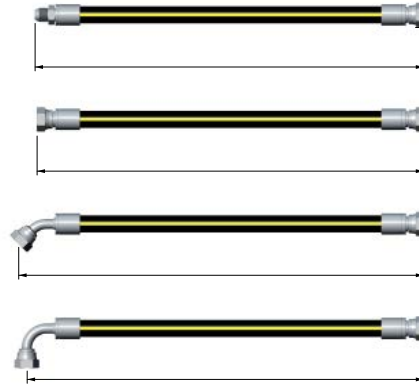


Staple-lok staple

STRAIGHT HOSE ASSEMBLY LENGTH

Overall hose assembly lengths are determined by measuring the centreline length between the coupling end faces for straight couplings, or through the sealing face centreline for angled couplings (examples to right).

Sufficient length allowance should be made to compensate for hose contraction and expansion under operating procedures.



BENT HOSE ASSEMBLY LENGTH

For installations that require a 180° bend in the hose assembly, the overall length can be calculated as follows:

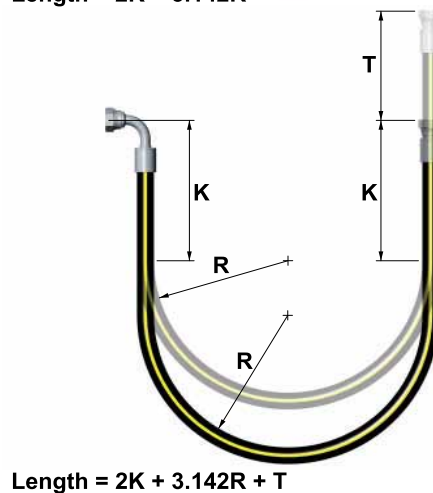
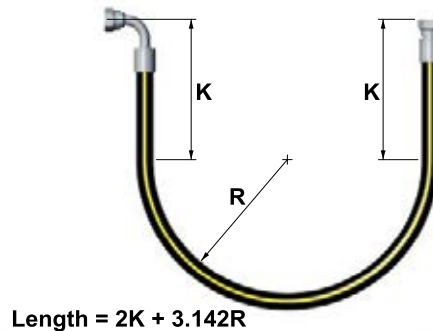
Static Installations

To avoid localised concentration of bending strain on the hose couplings, a free distance (K) of hose should be designed into the length of each assembly. Distance "K" includes length of coupling and adaptor (if used). Dimension "R" should not be less than the manufacturer's recommended bend radius for the hose used. Refer to chart below for "K" dimensions of hoses with I.D. from 3/16" to 2".

Hose I.D.	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2
K (mm)	110	130	130	160	180	210	210	260	260	260	310

Dynamic Installations

When a hose assembly is subjected to relative motion between the two end couplings, additional hose length is required to accommodate the travel distance. In the diagram (right) "T" represents the amount of travel.



Off-Set Angle Measurement

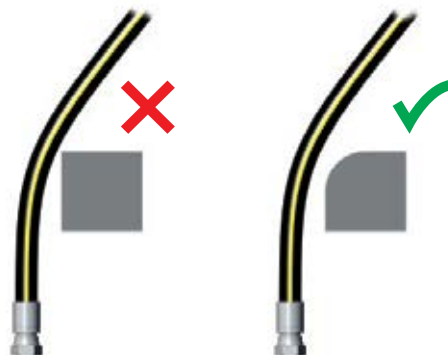
Place hose assembly in line of sight position with coupling furthest away facing upwards. Determine off-set angle by comparing relative position of closest coupling to the far coupling in a clockwise direction.



1. Hose Protection

Protect the hose cover from damage such as abrasion, erosion, snagging, and cutting. Where possible, route hose to reduce abrasion from hose rubbing other hose or objects that may abrade it (Fig. 1). Special abrasion-resistant hoses and hose guards are available for additional protection. Special consideration may also need to be given to hose assemblies near heat sources.

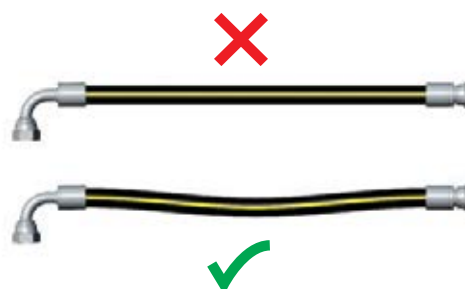
Fig. 1



2. Hose And Machine Tolerances

Avoid tension on hose assemblies and adaptors. Design hose to allow for changes in length due to machine motion and tolerances (Fig. 2). Failure to do so may result in seal or assembly failure.

Fig. 2



3. Torsional Twist

Do not transfer torque to hose while installing. This transfer of torque can result in torsional twist, which may result in premature hose assembly failure. Use swivel type couplings or adaptors for ease of alignment as needed to prevent twisting during installation. Use the brand lay-line as a guide to ensure the hose is not pre-loaded with torsional twist when installed (Fig. 3).

Fig. 3



4. Minimum Bend Radius

The minimum bend radius for hose supplied by Hydraulink is detailed in this catalogue. Routing at less than minimum bend radius is not recommended and may reduce hose life.

Prevent sharp bending at the hose/fitting juncture (Fig. 4a). Unnecessary stress at this point may result in leaking, hose rupturing, or the hose assembly blowing apart.

Stress at this point can be minimised by ensuring adequate hose length (Fig. 4b), or by use of angled adaptors and couplings (Fig 4c).

Fig. 4a

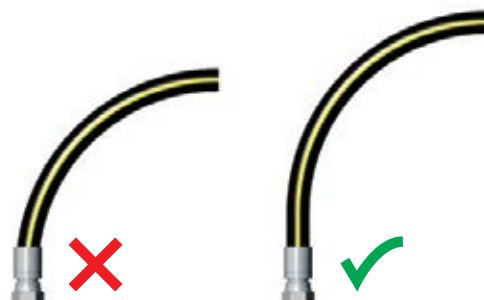


Fig. 4b

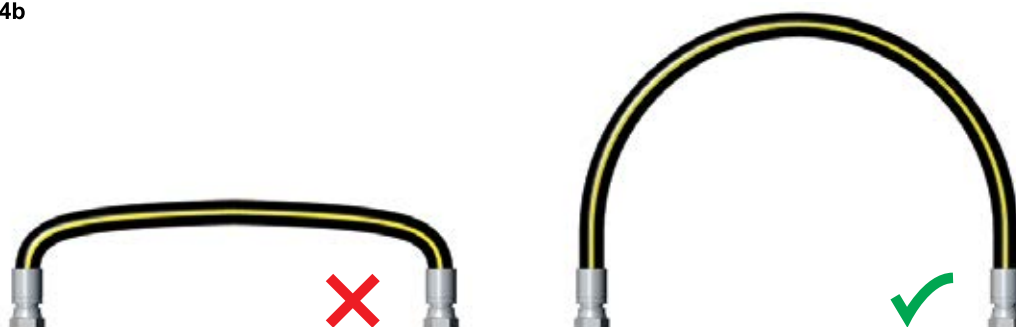


Fig. 4c



5. Hose Length Change

Hydraulic hose can expand longitudinally when pressurised, and this hose length change must be considered when specifying or installing hose assemblies (Fig. 5) When clamping hose lengths, always place clamps to avoid stressing the fitting end.

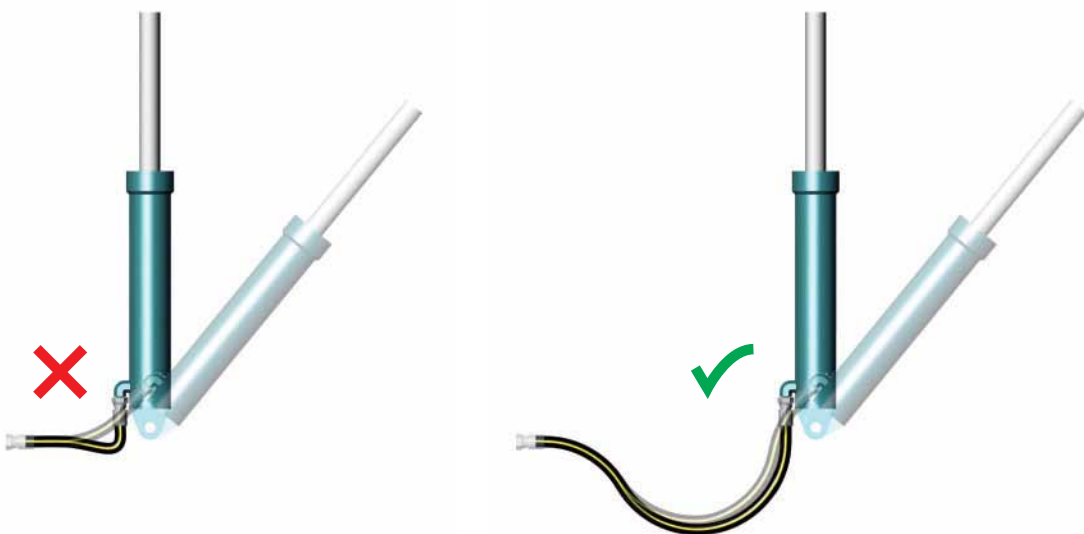
Fig. 5



6. Relative Movement

When specifying or installing hoses that have movement relative to each other, provide adequate hose length to absorb the required movement and prevent bends occurring that are smaller than the minimum bend radius (Fig. 6a).

Fig. 6a





HYDRAULINK BRANDED HOSES



GENERAL INFORMATION

Hydraulink has established itself as a proven hydraulic hose & fitting specialist for over 70 years. With the selection of braided and multi spiral hoses on offer, the Hydraulink range of hoses will satisfy all of your needs.

The Super Tuff “ST” range of braided hoses come standard with flame and abrasion resistant features – ideal for use in harsh and adverse environments.

For general pressure-wash applications up to 400 bar, the Hydraulink range of Jet Wash hoses are designed to be easier to handle and use due to their light, flexible and compact design.

All Hydraulink branded hoses are easily identifiable for fast fix and replacement, and are readily available across our nationwide network of service centres and mobile service vans.



	Range	Construction	Constant Pressure	MSHA (Flame Resist)	HARC Abrasion	Compact
●	Braided	H1T	1 Wire	✓		
		H2T	2 Wire	✓		
●	X SPIRAL	HX4K	Multi Spiral	✓		
		HX5K	Multi Spiral	✓		
		HX6K	Multi Spiral	✓		
●	X SPIRAL Enduro ST	HX4K-ST	Multi Spiral	✓	✓	
		HX6K-ST	Multi Spiral	✓	✓	
●	ST SuperTuff	H17	1 & 2 Wire	✓	✓	✓
		H19	2 Wire	✓	✓	
		H16	2 Wire	✓	✓	✓
●	Jet Wash	HJW250	1 Wire	250bar		
		HJW400	2 Wire	400bar		

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS

Extracts from SAE J1273 SEP2014: Recommended Practices for Hydraulic Hose Assemblies

1. Scope—SAE J1273 provides guidelines for selection, routing, fabrication, installation, replacement, maintenance, and storage of hose and hose assemblies for fluid-power systems. Many of these SAE Recommended Practices also may be suitable for other hoses and systems.

5. Hose Selection and Routing—A wide variety of interacting factors influence hose service life and the ability of each fluid-power system to operate satisfactorily, and the combined effects of these factors on service life are often unpredictable. Therefore, these documents should not be construed as design standards. For applications outside the specifications in SAE J517, SAE J514, or other relevant design standards, performance of hose assemblies should be determined by appropriate testing. Carefully analyze each system. Then design routings and select hose and related components to meet the system-performance and hose-service-life requirements, and to minimize the risks of personal injury and/or property damage. Consider the following factors:

5.1 System Pressures—Excessive pressure can accelerate hose assembly failure. Analyze the steady-state pressures, and the frequency and amplitude of pressure surges, such as pulses and spikes. These are rapid and transient rises in pressure which may not be indicated on many common pressure gauges and can be identified best on high-frequency-response electronic measuring instruments.

For maximum hose service life, hose selection should be based on a system pressure, including surges, that is less than the hose maximum working pressure. Hose may be used above its maximum working pressure where reduced life expectancy is acceptable. SAE J1927 provides one method to help predict wire-reinforced hose service life for a given hydraulic application, where the surge pressure peaks vary, and/or the highest pressure peaks occur infrequently.

5.2 Suction—For suction applications, such as inlet flow to pumps, select hose to withstand both the negative and positive pressures the system imposes on the hose.

5.3 External Pressure—In certain applications, such as in autoclaves or under water, the external environmental pressures may exceed the fluid pressure inside the hose. In these applications, consider the external pressures, and if necessary, consult the manufacturers.

5.4 Temperature—Exceeding hose temperature ratings may significantly reduce hose life. Select hose so the fluid and ambient temperatures, both static and transient, fall within the hose ratings. The effects of external heat sources should not raise the temperature of the hose above its maximum operating temperature. Select hose, heat shields, sleeving, and other methods for these requirements, and route or shield hose to avoid hose damage from external heat sources.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

5.5 Permeation—Permeation, or effusion, is seepage of fluid through the hose. Certain materials in hose construction are more permeable than others. Consider the effects of permeation when selecting hose, especially with gaseous fluids. Consult the hose and fluid manufacturers for permeability information.

5.6 Hose-Material Compatibility—Variables that can affect compatibility of system fluids with hose materials include, but are not limited to:

- a. Fluid pressure
- b. Temperature
- c. Concentration
- d. Duration of exposure

Because of permeation (see 5.5), consider compatibility of system fluids with the hose, tube, cover, reinforcement, and fittings. Consult the fluid and hose manufacturers for compatibility information.

NOTE— Many fluid/elastomer compatibility tables in manufacturers' catalogs show ratings based on fluids at 21 °C, room temperature. These ratings may change at other temperatures. Carefully read the notes on the compatibility tables, and if in doubt, consult the manufacturer.

5.7 Environment—Environmental conditions can cause hose and fitting degradation. Conditions to evaluate include, but are not limited to:

- a. Ultraviolet light
- b. Salt water
- c. Air pollutants
- d. Temperature (see 5.4)
- e. Ozone
- f. Chemicals
- g. Electricity
- h. Abrasion

If necessary, consult the manufacturers for more information.

5.8 Static-Electric Discharge—Fluid passing through hose can generate static electricity resulting in static-electric discharge. This may create sparks that can puncture hose. If this potential exists, select hose with sufficient conductivity to carry the static-electric charge to ground.

5.9 Sizing—The power transmitted by pressurized fluid varies with pressure and rate of flow. Select hose with adequate size to minimize pressure loss, and to avoid hose damage from heat generation or excessive velocity. Conduct calculations, or consult the manufacturers for sizing at flow velocities.

5.10 Unintended Uses—Hose assemblies are designed for the internal forces of conducted fluids. Do not pull hose or use it for purposes that may apply external forces for which the hose or fittings were not designed.

5.11 Specifications and Standards—When selecting hose and fittings for specific applications, refer to applicable government, industry, and manufacturer's specifications and standards.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

5.12 Unusual Applications—Applications not addressed by the manufacturer or by industry standards may require special testing prior to selecting hose.

5.13 Hose Cleanliness—The cleanliness requirements of system components, other than hose, will determine the cleanliness requirements of the application. Consult the component manufacturers' cleanliness information for all components in the system. Hose assemblies vary in cleanliness levels; therefore, specify hose assemblies with adequate cleanliness for the system.

5.14 Hose Fittings—Selection of the proper hose fittings for the hose and application is essential for proper operation and safe use of hose and related assembly equipment. Hose fittings are qualified with the hose. Therefore, select only hose fittings compatible with the hose for the applications. Improper selection of hose fittings or related assembly equipment for the application can result in injury or damage from leaks, or from hose assemblies blowing apart (see 4.2, 6.2, 6.3, and 6.4).

5.15 Vibration—Vibration can reduce hose service life. If required, conduct tests to evaluate the frequency and amplitude of system vibration. Clamps or other means may be used to reduce the effects of vibration. Consider the vibration requirements when selecting hose and predicting service life.

5.16 Hose Cover Protection—Protect the hose cover from abrasion, erosion, snagging, and cutting. Special abrasion-resistant hoses and hose guards are available for additional protection. Route hose to reduce abrasion from hose rubbing other hose or objects that may abrade it.

5.17 External Physical Abuse—Route hose to avoid:

- a. Tensile loads
- b. Side loads
- c. Flattening
- d. Thread damage
- e. Kinking
- f. Damage to sealing surfaces
- g. Abrasion
- h. Twisting

5.18 Swivel-Type Adapters—Swivel-type fittings or adapters do not transfer torque to hose while being tightened. Use these as needed to prevent twisting during installation.

5.19 Live Swivels—If two components in the system are rotating in relation to each other, live swivels may be necessary. These connectors reduce the torque transmitted to the hose.

5.20 Slings and Clamps—Use slings and clamps to support heavy or long hose and to keep it away from moving parts. Use clamps that prevent hose movement that will cause abrasion.

5.21 Minimum Bend Radius—The minimum bend radius is defined in SAE J343 and is specified in other SAE standards and hose manufacturer's product literature. Routing at less than minimum bend radius may reduce hose life. Sharp bending at the hose/fitting juncture may result in leaking, hose rupturing, or the hose assembly blowing apart (see 4.2)

5.22 Elbows and Adapters—In special cases, use elbows or adapters to relieve hose strain.

5.23 Lengths—Unnecessarily long hose can increase pressure drop and affect system performance.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

When pressurized, hose that is too short may pull loose from its fittings, or stress the fitting connections, causing premature metallic or seal failures. When establishing hose length, use the following practices:

5.23.1 MOTION ABSORPTION—Provide adequate hose length to distribute movement and prevent bends smaller than the minimum bend radius.

5.23.2 HOSE AND MACHINE TOLERANCES—Design hose to allow for changes in length due to machine motion and tolerances.

5.23.3 HOSE LENGTH CHANGE DUE TO PRESSURE—Design hose to accommodate length changes from changing pressures. Do not cross or clamp together high- and low-pressure hoses. The difference in length changes could wear the hose covers.

5.24 Hose Movement and Bending—Hose allows relative motion between system components. Analyze this motion when designing hose systems. The number of cycles per day may significantly affect hose life. Also avoid multiple planes of motion and twisting motion. Consider the motion of the hose when selecting hose and predicting service life. In applications that require hose to move or bend, use these practices:

5.24.1 BEND IN ONLY ONE PLANE TO AVOID TWISTING

5.24.2 PREVENT HOSE BENDING IN MORE THAN ONE PLANE—If hose follows a compound bend, couple it into separate segments, or clamp it into segments that flex in only one plane.

7. Hose Installation and Replacement—Use the following practices when installing hose assemblies in new systems or replacing hose assemblies in existing systems:

7.1 Pre-Installation Inspection—Before installing hose assemblies, examine:

- a. Hose length and routing for compliance with original design
- b. Assemblies for correct style, size, length, and visible nonconformities
- c. Fitting sealing surfaces for burrs, nicks, or other damage

NOTE— When replacing hose assemblies in existing systems, verify that the replacement is of equal quality to the original assembly.

7.2 Handling During Installation—Handle hose with care during installation. Kinking hose, or bending at less than minimum bend radius may reduce hose life. Avoid sharp bending at the hose/fitting juncture (see 5.21).

7.3 Twist Angle and Orientation—Pressure applied to a twisted hose may shorten the life of the hose or loosen the connections. To avoid twisting, use the hose lay line or marking as a reference.

7.4 Securement and Protection—Install necessary restraints and protective devices. Determine that such devices do not create additional stress or wear points.

7.5 Routing—Review proper routing practices provided in Section 5 and make appropriate corrections to obtain optimum performance.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

7.6 Assembly Torque—The connection end of a hose fitting is normally threaded to obtain a tight pressure seal when attached to a port, an adapter, or another fitting. Sometimes bolts or screws provide the threaded connection. Each size and type of connection requires different torque values, and these may vary due to type of material or exterior coating.

Follow appropriate torquing instructions to obtain a proper pressure seal without over-torquing. A properly calibrated torque wrench should be used to tighten each connection, except when the manufacturer specifies tightening a specified number of hex flat turns beyond finger tight to obtain a seal.

7.7 System Checkouts—In hydraulic or other liquid systems, eliminate all air entrapment after completing the installation. Follow manufacturers' instructions to test the system for possible malfunctions and leaks.

7.7.1 TO AVOID INJURY DURING SYSTEM CHECKOUTS:

- a. Do not touch any part of the system when checking for leaks (see 4.1).
- b. Stay out of potentially hazardous areas while testing hose systems (see Section 4).
- c. Relieve system pressure before tightening connections.

8. Maintenance Inspection—A hose and fitting maintenance program may reduce equipment downtime, maintain peak operating performance, and reduce the risk of personal injury and/or property damage. The user should design and implement a maintenance program that suits the specific application and each specific hose in that application.

8.1 Inspection Frequency—Evaluate factors such as the nature and severity of the application, past history, and manufacturers' information to establish the frequency of visual inspections and functional tests.

8.2 Visual Inspection (Hose and Fittings)—Visually inspect hose and fittings for:

- a. Leaks at hose fitting or in hose
- b. Damaged, cut, or abraded cover
- c. Exposed reinforcement
- d. Kinked, crushed, flattened, or twisted hose
- e. Hard, stiff, heat cracked, or charred hose
- f. Blistered, soft, degraded, or loose cover
- g. Cracked, damaged, or badly corroded fittings
- h. Fitting slippage on hose
- i. Other signs of significant deterioration

If any of these conditions exist, evaluate the hose assemblies for correction or replacement.

8.3 Visual Inspection (All Other Components)—When visually inspecting hose and fittings, inspect for related items including:

- a. Leaking ports
- b. Damaged or missing hose clamps, guards, or shields
- c. Excessive dirt and debris around hose
- d. System fluid: level, type, contamination, condition, and air entrainment

If any of these are found, address them appropriately.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

8.4 Functional Test—Functional tests determine if systems with hose are leak free and operating properly. Carry out functional tests per information from equipment manufacturers.

9. Hose Storage—Age control and the manner of storage can affect hose life. Use the following practices when storing hose.

9.1 Age Control—Maintain a system of age control to determine that hose is used before its shelf life has expired. Shelf life is the period of time when it is reasonable to expect the hose to retain full capabilities for rendering the intended service.

Store hose in a manner that facilitates age control and first-in, first-out usage based on manufacturing date on hose or hose assembly. Per SAE J517:

- a. Shelf life of rubber hose in bulk form, or in hose assemblies passing visual inspection and proof test, is forty quarters (ten years) from the date of vulcanization.
- b. Shelf life of thermoplastic and polytetrafluoroethylene hose is considered to be unlimited.

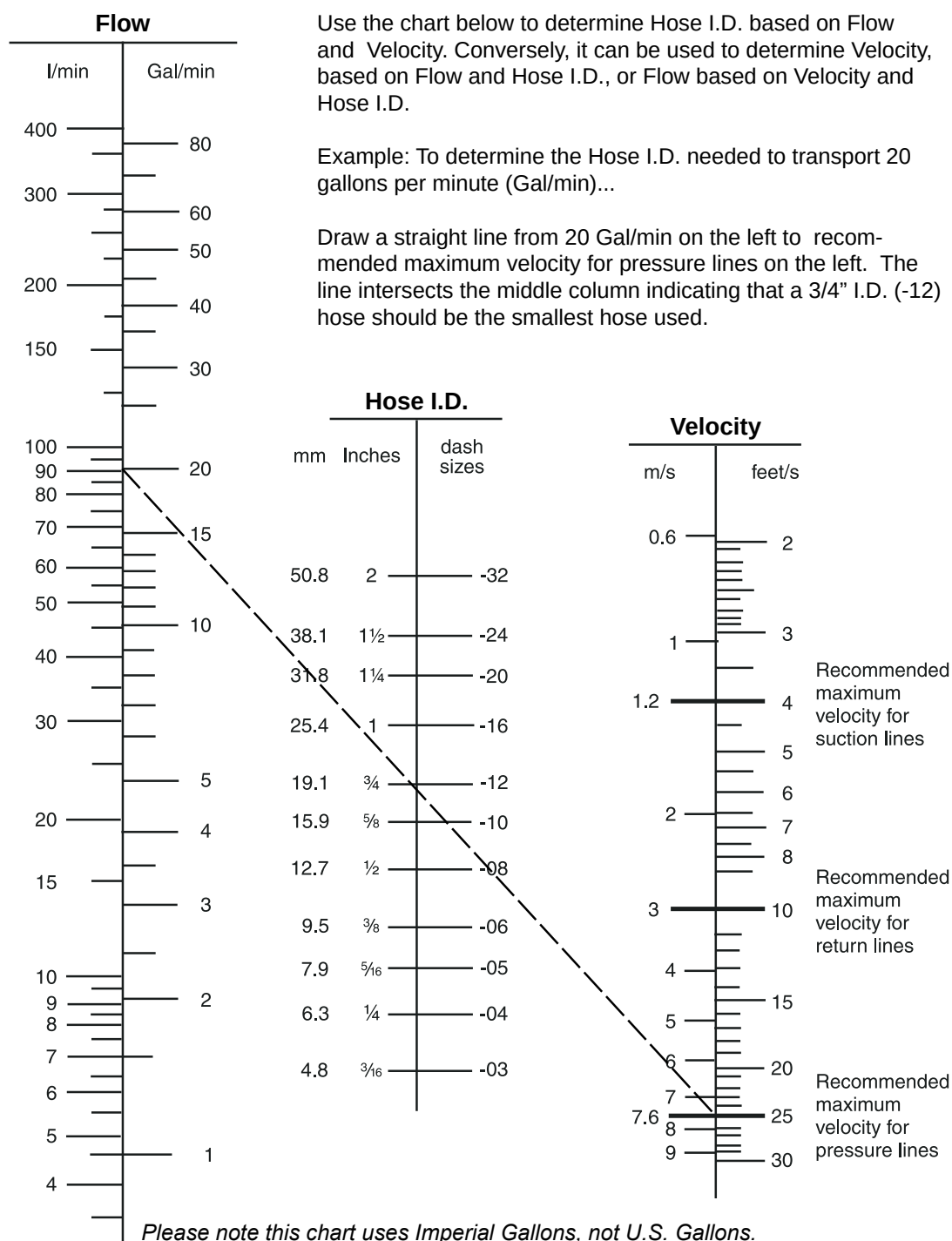
NOMOGRAPHIC CHART

Flow Capacity of Hose Assemblies Recommended Flow Velocities

Use the chart below to determine Hose I.D. based on Flow and Velocity. Conversely, it can be used to determine Velocity, based on Flow and Hose I.D., or Flow based on Velocity and Hose I.D.

Example: To determine the Hose I.D. needed to transport 20 gallons per minute (Gal/min)...

Draw a straight line from 20 Gal/min on the left to recommended maximum velocity for pressure lines on the left. The line intersects the middle column indicating that a 3/4" I.D. (-12) hose should be the smallest hose used.



To convert Imperial Gallons to U.S Gallons, multiply the volume by 1.201

Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

ENDURO MULTISPIRAL HOSE

ENDURO6000

ENDURO ST COVER - FOUR/SIX SPIRAL WIRE HOSE
SPIRALLED WIRE REINFORCED HOSE - SAE 100
R15 - MILLION IMPULSE CYCLES

- Comes with SuperTuff (ST) cover for increased protection against abrasion in severe operating environments
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC) and bio-degradable hydraulic fluids.
- Reinforcement: Four (six for -24) alternating layers of spiralled, high tensile steel wires.
- External cover: Weather & abrasion resistant synthetic rubber. MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: ISO 18752-CC, Exceeds SAE 100 R15.
- Characteristics: Extra flexible, up to 1/2 SAE bend radius



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - Inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
ENDURO60 00-06	06	10	3/8	20.2	6100	420	24400	1680	65
ENDURO60 00-08	08	12	1/2	22.9	6100	420	24400	1680	90
ENDURO60 00-10	10	16	5/8	26.5	6100	420	24400	1680	100
ENDURO60 00-12	12	19	3/4	30.5	6100	420	24400	1680	120
ENDURO60 00-16	16	25	1	37.5	6100	420	24400	1680	150
ENDURO60 00-20	20	32	1 1/4	47.3	6100	420	24400	1680	400
ENDURO60 00-24	24	38	1 1/2	57.4	6100	420	24400	1680	460

ENDURO5000

ENDURO ST COVER - FOUR SPIRAL WIRE HOSE
SPIRALLED WIRE REINFORCED HOSE - SAE 100
R13 - MILLION IMPULSE CYCLES

- Comes with SuperTuff (ST) cover for increased protection against abrasion in severe operating environments
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC) and bio-degradable hydraulic fluids.
- Reinforcement: Four (six for -32) alternating layers of spiralled, high tensile steel wires.
- External cover: Weather & abrasion resistant synthetic rubber. MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: ISO 18752-CC Exceeds SAE 100 R13.
- Characteristics: Extra flexible, up to 1/2 SAE bend radius

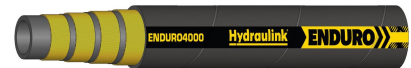


Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - Inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
ENDURO50 00-06	06	10	3/8	20.2	5510	380	22040	1520	65
ENDURO50 00-08	08	12	1/2	22.9	5510	380	22040	1520	90
ENDURO50 00-10	10	16	5/8	26.5	5510	380	22040	1520	100
ENDURO50 00-12	12	19	3/4	30.5	5510	380	22040	1520	120
ENDURO50 00-16	16	25	1	37.9	5075	350	20300	1400	150
ENDURO50 00-20	20	32	1 1/4	45.9	5075	350	20300	1400	210
ENDURO50 00-24	24	38	1 1/2	53.4	5075	350	20300	1400	250
ENDURO50 00-32	32	51	2	71.5	5075	350	20300	1400	540

ENDURO4000

ENDURO ST COVER - FOUR/SIX SPIRAL WIRE HOSE
SPIRALLED WIRE REINFORCED HOSE - SAE 100
R12 - MILLION IMPULSE CYCLES

- Comes with SuperTuff (ST) cover for increased protection against abrasion in severe operating environments
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC) and bio-degradable hydraulic fluids.
- Reinforcement: Four alternating layers of spiralled, high tensile steel wires.
- External cover: Weather & abrasion resistant synthetic rubber. MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: ISO 18752-CC Exceeds SAE 100 R12.
- Characteristics: Extra flexible, up to 1/2 SAE bend radius



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - Inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
ENDURO4000-32	32	51	2	68.0	4060	280	16240	1120	390

MULTISPIRAL HOSE

HX4K

FOUR SPIRAL WIRE HOSE

SPIRALED WIRE REINFORCED HOSE - SAE 100 R12

- Due to manufacturing tolerances, external dimension is an average.
- Recommended for: Very high pressure hydraulic applications.
- Suitable for: Mineral & vegetable oils, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber
- Reinforcement: Four alternating layers of spiralled, high tensile steel wires.
- External cover: Weather and abrasion resistant synthetic rubber. MSHA approve.
- Temperature range: -40°C to +121°C (125°C discontinuous)
- Standards: Hydraulink proprietary. Exceeds EN 856 R12. SAE 100 R12.
- Characteristics: Extremely flexible, 1/2 SAE bend radius.



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - Inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
HX4K-06	06	10	3/8	19.7	4100	280	16400	1120	65
HX4K-08	08	12	1/2	22.7	4100	280	16400	1120	90
HX4K-10	10	16	5/8	26.3	4100	280	16400	1120	100
HX4K-12	12	19	3/4	30	4100	280	16400	1120	120
HX4K-16	16	25	1	37	4100	280	16400	1120	150
HX4K-20	20	32	1 1/4	44.6	4100	280	16400	1120	210
HX4K-24	24	38	1 1/2	51.6	4100	280	16400	1120	290

SLIMLINE WIRE BRAID HOSE

H16

R16 TWO WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - SAE 100R16

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: medium pressure hydraulic applications.
- Suitable for: Mineral & vegetable oils, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber.
- Reinforcement: Two high-tensile steel braids.
- External cover: H.A.R.C weather & high abrasion resistance synthetic rubber. MSHA approved.
- Temperature range: -40°C to 100°C (125°C discontinuous)
- Standards: Meets or exceeds SAE 100R16, EN857 2SC.
- Characteristics: Compact construction, extra flexible.



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
H16-04ST	04	6	1/4	13.2	6100	420	24400	1680	45
H16-06ST	06	10	3/8	16.7	5100	350	20400	1400	65
H16-08ST	08	12	1/2	20.1	5100	350	20400	1400	90

H19

R19 TWO WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - SAE 100R19

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications.
- Suitable for: Mineral & vegetable oils, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber.
- Reinforcement: One high-tensile steel braid for sizes -04, -06 -08 & -10 and two high-tensile steel braids for sizes -12 & -16.
- External cover: Weather & high abrasion resistance synthetic rubber. MSHA approved.
- Temperature range: -40°C to 100°C (125°C discontinuous)
- Standards: SAE 100R19.
- Characteristics: Compact construction, extra flexible.



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
D19-10ST	10	16	5/8	23.8	4100	280	16400	1120	100
H19-12ST	12	19	3/4	27.8	4100	280	16400	1120	120

H17

R17 ONE/TWO WIRE BRAID HOSE BRAIDED WIRE REINFORCED HOSE - SAE 100R17

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications.
- Suitable for: Mineral & vegetable oils, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber.
- Reinforcement: One high-tensile steel braid for sizes -04, -06, -08 and two high-tensile steel braids for sizes -12, -16:
- External cover: Weather & high abrasion resistance synthetic rubber. MSHA approved.
- Temperature range: -40°C to 100°C (125°C discontinuous)
- Standards: SAE 100R17.
- Characteristics: Compact construction, extra flexible.



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
H17-05ST	05	8	5/16	14	3000	210	12000	840	55
H17-04ST	04	6	1/4	12.3	3000	210	12000	840	50
H17-06ST	06	10	3/8	15.9	3000	210	12000	840	65
H17-08ST	08	12	1/2	19.1	3000	210	12000	840	90
H17-12ST	12	19	3/4	28	3000	210	12000	840	100
H17-16ST	16	25	1	35.3	3000	210	12000	840	150

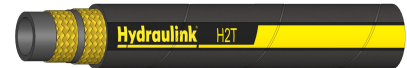
WIRE BRAID HOSE - 1SN/2SN

H2T

TWO WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - EN 853 2SN

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High to medium pressure hydraulic applications.
- Suitable for: Mineral & vegetable oils, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber.
- Reinforcement: Two high tensile steel wire braids.
- External cover: Weather & abrasion resistant synthetic rubber. MSHA approved.
- Temperature range: -40°C to +100°C constant (125°C discontinuous).
- Standards: EN 853 2SN, SAE 100R2AT.



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - Inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
H2T-04	04	6	1/4	14.3	5800	400	23200	1600	100
D2T-05	05	8	5/16	16	5100	350	20400	1400	115
H2T-06	06	10	3/8	18.4	4800	330	19200	1320	125
H2T-08	08	12	1/2	21.3	4000	275	16000	1100	180
H2T-10	10	16	5/8	24.7	3600	250	14400	1000	205
H2T-12	12	19	3/4	28.6	3100	215	12400	860	240
H2T-16	16	25	1	37.2	2400	165	9600	660	300
H2T-20	20	32	1 1/4	46.7	1800	125	7200	500	420
H2T-24	24	38	1 1/2	53.7	1300	90	5200	360	500
H2T-32	32	51	2	67	1150	80	4600	320	630

H1T

ONE WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - EN853 1SN

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications.
- Suitable for: Mineral & vegetable oils, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber.
- Reinforcement: One high-tensile steel braid.
- External cover: Weather & abrasion resistant synthetic rubber. MSHA approved.
- Temperature range: -40°C to 100°C (125°C discontinuous)
- Standards: EN 853 1SN, SAE 100R1AT.



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
D1T-03	03	5	3/16	11.5	3650	250	1460	1000	90
H1T-04	04	6	1/4	12.8	3250	225	13000	900	100
H1T-06	06	10	3/8	16.9	2600	180	10400	720	125
H1T-08	08	12	1/2	19.9	2300	160	9200	640	180
D1T-10	10	16	5/8	23.1	1900	130	7600	520	205
H1T-12	12	19	3/4	27.1	1500	105	6000	420	240
H1T-16	16	25	1	35.1	1300	87	5200	348	300
H1T-20	20	32	1 1/4	42.5	900	62	3600	248	450
H1T-24	24	38	1 1/2	49.8	725	50	2900	200	500
H1T-32	32	51	2	63.9	580	40	2320	160	630

LOW PRESSURE HOSE

HSD

SUCTION AND DELIVERY HOSE

FIBRE AND WIRE REINFORCED HOSE

- Suction and delivery hose for filling and discharging tanks, petrol tankers and ships with unleaded fuels (EN228:2017) with an aromatic content of components 50% max
- Suitable for industrial oils, diesel oils (EN 590:2017), fuel oils (DIN 51 603 parts 1 - 5) and mineral oil-based hydraulic oils
- Safety Factor 3:1
- Vacuum resistance up to -0.9 bar
- Internal tube: NBR, black, electrically conductive, smooth
- Reinforcement: Textile wrapped, zinc plated double steel wire helix (DN > 50,0 zinc plated steel wire helix), 2 crossed copper wires
- External cover: SBR/EPDM, black, resistant to ozone and weather, abrasion resistant, resistant to oil (according SAE J517:2017), cloth impression.
- -40°C / +90°C, oils +100°C



Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
HSD-12	12	19	3/4	29	145	10	435	30	45
HSD-16	16	25	1	35	145	10	435	30	55
HSD-20	20	31	1.1/4	42	145	10	435	30	65
HSD-24	24	38	1.1/2	48	145	10	435	30	80
HSD-32	32	51	2	61.8	145	10	435	30	130
HSD-40	40	63	2.1/2	75.5	145	10	435	30	180
HSD-48	48	76	3	88.2	145	10	435	30	350

HIGH TEMPERATURE HOSE

H2CXT

HIGH TEMP TWO WIRE BRAID HOSE

FAHRENHEIT HIGH TEMP - BRAIDED WIRE

REINFORCED HOSE - EN 857 2SC



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High to medium pressure hydraulic applications.
- Suitable for: Mineral & vegetable oils, diesel, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber.
- Reinforcement: Two high tensile steel wire braids.
- External cover: Weather & abrasion resistant synthetic rubber. MSHA approved.
- Temperature range: -40°C to +135°C constant (150°C discontinuous). Air not higher than 121°C
- Standards: EN 857 2SC, SAE J30

Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - Inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
H2CXT-04	04	6	1/4	13.4	5800	400	23200	1600	50
H2CXT-06	06	10	3/8	17.3	4800	330	19200	1320	65
H2CXT-08	08	12	1/2	20.5	4000	275	16000	1100	90
H2CXT-10	10	16	5/8	24.2	3600	250	14400	1000	100
H2CXT-12	12	19	3/4	27.8	3100	215	12400	860	120
H2CXT-16	16	25	1	34.7	2400	165	9600	660	150
H2CXT-20	20	32	1 1/4	43.3	1800	125	7200	500	210
H2CXT-24	24	38	1 1/2	49.6	1300	90	5200	360	300
D2XT-32	32	51	2	67	1150	80	4600	320	630

PRESSURE WASHER HOSE

HJW250

PRESSURE WASHER HOSE 250 BAR
BRAIDED WIRE REINFORCED HOSE



- Due to manufacturing tolerances, the external dimension is an average.
- Suitable for: Water, water-soap, emulsion.
- Internal tube: Synthetic rubber.
- Reinforcement: One high-tensile steel braid.
- External cover: Weather & high abrasion resistance synthetic rubber. Blue cover.
- Temperature range: -40°C to +150°C.
- Standards: Proprietary.
- Characteristics: Compact construction, extra flexible.

Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
HJW250-04 B	04	6	1/4	12.8	3625	250	14500	1000	100
HJW250-06 B	06	10	3/8	16.9	3625	250	14500	1000	120

HJW400

PRESSURE WASHER HOSE 400 BAR
BRAIDED WIRE REINFORCED HOSE



- Due to manufacturing tolerances, the external dimension is an average.
- Suitable for: Water, water-soap, emulsion.
- Internal tube: Synthetic rubber.
- Reinforcement: Two high-tensile steel braids.
- External cover: Weather & high abrasion resistance synthetic rubber. Blue cover.
- Temperature range: -40°C to +150°C.
- Standards: Proprietary.
- Characteristics: Compact construction, extra flexible.

Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
HJW400-06 B	06	10	3/8	17.5	5800	400	23200	1600	80

JACKING HOSE

DSJ

TWO WIRE BRAID JACKING HOSE

BRAIDED WIRE REINFORCED JACK HOSE

- Due to manufacturing tolerances, the external dimension is an average.
- Static (non-impulse) pressure rating for hydraulic jack applications only, reduced safety factor (2:1)
- Recommended for: Hydraulic jack applications.
- Suitable for: Mineral & vegetable oils.
- Internal tube: Synthetic rubber.
- Reinforcement: Two high-tensile steel braids.
- External cover: Weather & high abrasion resistance synthetic rubber. MSHA approved.
- Temperature range: -40°C to +100°C (150°C discontinuous)
- Standards: Proprietary. (Meets performance requirements of former IJ100 standard)
- Characteristics: Compact construction.



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
DSJ-04	04	6	1/4	13.3	10000	700	20000	1400	50
DSJ-06	06	10	3/8	17.3	10000	700	20000	1400	65

FIRE SUPPRESSION HOSE

H1FS

ONE WIRE BRAID HOSE

RED FIRE SUPPRESSANT BRAIDED WIRE

REINFORCED HOSE - SAE 100R1 Type AT



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications.
- Suitable for: Mineral & vegetable oils, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber.
- Reinforcement: One high-tensile steel braid.
- External cover: Weather & abrasion resistant synthetic rubber. MSHA approved.
- Temperature range: -40°C to 100°C (125°C discontinuous)
- Standards: EN 853 1SN, SAE 100R1AT.

Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
H1FS-04	04	6	1/4	12.8	3250	225	13000	900	100
H1FS-08	08	12	1/2	19.9	2300	160	9200	640	180
H1FS-12	12	19	3/4	27.1	1500	105	6000	420	240

PILOT LINE HOSE

H1PL

ONE WIRE BRAID HOSE
PILOT LINE HOSE WITH EMBOSSED LAYLINE

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Pilot line applications.
- Suitable for: Mineral & vegetable oils, water-based solutions, water, air & inert gases.
- Internal tube: Synthetic rubber.
- Reinforcement: One high-tensile steel braid.
- External cover: Weather & abrasion resistant synthetic rubber. MSHA approved.
- Temperature range: -40°C to 100°C (125°C discontinuous)
- Standards: EN 853 1SN, SAE 100R1AT.



Part Number	Internal Size	Internal Diameter - DN	Internal Diameter - inches	External Diameter - mm	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius - mm
H1PL-04	04	6	1/4	11.5	1750	120	7000	480	25
H1PL-06	06	10	3/8	14.8	1450	100	5800	400	40



HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS

Extracts from SAE J1273 DEC2014: Recommended Practices for Hydraulic Hose Assemblies

1. Scope—SAE J1273 provides guidelines for selection, routing, fabrication, installation, replacement, maintenance, and storage of hose and hose assemblies for fluid-power systems. Many of these SAE Recommended Practices also may be suitable for other hoses and systems.

5. Hose Selection and Routing—A wide variety of interacting factors influence hose service life and the ability of each fluid-power system to operate satisfactorily, and the combined effects of these factors on service life are often unpredictable. Therefore, these documents should not be construed as design standards. For applications outside the specifications in SAE J517, SAE J514, or other relevant design standards, performance of hose assemblies should be determined by appropriate testing. Carefully analyze each system. Then design routings and select hose and related components to meet the system-performance and hose-service-life requirements, and to minimize the risks of personal injury and/or property damage. Consider the following factors:

5.1 System Pressures—Excessive pressure can accelerate hose assembly failure. Analyze the steady-state pressures, and the frequency and amplitude of pressure surges, such as pulses and spikes. These are rapid and transient rises in pressure which may not be indicated on many common pressure gauges and can be identified best on high-frequency-response electronic measuring instruments.

For maximum hose service life, hose selection should be based on a system pressure, including surges, that is less than the hose maximum working pressure. Hose may be used above its maximum working pressure where reduced life expectancy is acceptable. SAE J1927 provides one method to help predict wire-reinforced hose service life for a given hydraulic application, where the surge pressure peaks vary, and/or the highest pressure peaks occur infrequently.

5.2 Suction—For suction applications, such as inlet flow to pumps, select hose to withstand both the negative and positive pressures the system imposes on the hose.

5.3 External Pressure—In certain applications, such as in autoclaves or under water, the external environmental pressures may exceed the fluid pressure inside the hose. In these applications, consider the external pressures, and if necessary, consult the manufacturers.

5.4 Temperature—Exceeding hose temperature ratings may significantly reduce hose life. Select hose so the fluid and ambient temperatures, both static and transient, fall within the hose ratings. The effects of external heat sources should not raise the temperature of the hose above its maximum operating temperature. Select hose, heat shields, sleeving, and other methods for these requirements, and route or shield hose to avoid hose damage from external heat sources.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

5.5 Permeation—Permeation, or effusion, is seepage of fluid through the hose. Certain materials in hose construction are more permeable than others. Consider the effects of permeation when selecting hose, especially with gaseous fluids. Consult the hose and fluid manufacturers for permeability information.

5.6 Hose-Material Compatibility—Variables that can affect compatibility of system fluids with hose materials include, but are not limited to:

- a. Fluid pressure
- b. Temperature
- c. Concentration
- d. Duration of exposure

Because of permeation (see 5.5), consider compatibility of system fluids with the hose, tube, cover, reinforcement, and fittings. Consult the fluid and hose manufacturers for compatibility information.

NOTE— Many fluid/elastomer compatibility tables in manufacturers' catalogs show ratings based on fluids at 21 °C, room temperature. These ratings may change at other temperatures. Carefully read the notes on the compatibility tables, and if in doubt, consult the manufacturer.

5.7 Environment—Environmental conditions can cause hose and fitting degradation. Conditions to evaluate include, but are not limited to:

- a. Ultraviolet light
- b. Salt water
- c. Air pollutants
- d. Temperature (see 5.4)
- e. Ozone
- f. Chemicals
- g. Electricity
- h. Abrasion

If necessary, consult the manufacturers for more information.

5.8 Static-Electric Discharge—Fluid passing through hose can generate static electricity resulting in static-electric discharge. This may create sparks that can puncture hose. If this potential exists, select hose with sufficient conductivity to carry the static-electric charge to ground.

5.9 Sizing—The power transmitted by pressurized fluid varies with pressure and rate of flow. Select hose with adequate size to minimize pressure loss, and to avoid hose damage from heat generation or excessive velocity. Conduct calculations, or consult the manufacturers for sizing at flow velocities.

5.10 Unintended Uses—Hose assemblies are designed for the internal forces of conducted fluids. Do not pull hose or use it for purposes that may apply external forces for which the hose or fittings were not designed.

5.11 Specifications and Standards—When selecting hose and fittings for specific applications, refer to applicable government, industry, and manufacturer's specifications and standards.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

5.12 Unusual Applications—Applications not addressed by the manufacturer or by industry standards may require special testing prior to selecting hose.

5.13 Hose Cleanliness—The cleanliness requirements of system components, other than hose, will determine the cleanliness requirements of the application. Consult the component manufacturers' cleanliness information for all components in the system. Hose assemblies vary in cleanliness levels; therefore, specify hose assemblies with adequate cleanliness for the system.

5.14 Hose Fittings—Selection of the proper hose fittings for the hose and application is essential for proper operation and safe use of hose and related assembly equipment. Hose fittings are qualified with the hose. Therefore, select only hose fittings compatible with the hose for the applications. Improper selection of hose fittings or related assembly equipment for the application can result in injury or damage from leaks, or from hose assemblies blowing apart (see 4.2, 6.2, 6.3, and 6.4).

5.15 Vibration—Vibration can reduce hose service life. If required, conduct tests to evaluate the frequency and amplitude of system vibration. Clamps or other means may be used to reduce the effects of vibration. Consider the vibration requirements when selecting hose and predicting service life.

5.16 Hose Cover Protection—Protect the hose cover from abrasion, erosion, snagging, and cutting. Special abrasion-resistant hoses and hose guards are available for additional protection. Route hose to reduce abrasion from hose rubbing other hose or objects that may abrade it.

5.17 External Physical Abuse—Route hose to avoid:

- a. Tensile loads
- b. Side loads
- c. Flattening
- d. Thread damage
- e. Kinking
- f. Damage to sealing surfaces
- g. Abrasion
- h. Twisting

5.18 Swivel-Type Adapters—Swivel-type fittings or adapters do not transfer torque to hose while being tightened. Use these as needed to prevent twisting during installation.

5.19 Live Swivels—If two components in the system are rotating in relation to each other, live swivels may be necessary. These connectors reduce the torque transmitted to the hose.

5.20 Slings and Clamps—Use slings and clamps to support heavy or long hose and to keep it away from moving parts. Use clamps that prevent hose movement that will cause abrasion.

5.21 Minimum Bend Radius—The minimum bend radius is defined in SAE J343 and is specified in other SAE standards and hose manufacturer's product literature. Routing at less than minimum bend radius may reduce hose life. Sharp bending at the hose/fitting juncture may result in leaking, hose rupturing, or the hose assembly blowing apart (see 4.2)

5.22 Elbows and Adapters—In special cases, use elbows or adapters to relieve hose strain.

5.23 Lengths—Unnecessarily long hose can increase pressure drop and affect system performance.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

When pressurized, hose that is too short may pull loose from its fittings, or stress the fitting connections, causing premature metallic or seal failures. When establishing hose length, use the following practices:

5.23.1 MOTION ABSORPTION—Provide adequate hose length to distribute movement and prevent bends smaller than the minimum bend radius.

5.23.2 HOSE AND MACHINE TOLERANCES—Design hose to allow for changes in length due to machine motion and tolerances.

5.23.3 HOSE LENGTH CHANGE DUE TO PRESSURE—Design hose to accommodate length changes from changing pressures. Do not cross or clamp together high- and low-pressure hoses. The difference in length changes could wear the hose covers.

5.24 Hose Movement and Bending—Hose allows relative motion between system components. Analyze this motion when designing hose systems. The number of cycles per day may significantly affect hose life. Also avoid multiple planes of motion and twisting motion. Consider the motion of the hose when selecting hose and predicting service life. In applications that require hose to move or bend, use these practices:

5.24.1 BEND IN ONLY ONE PLANE TO AVOID TWISTING

5.24.2 PREVENT HOSE BENDING IN MORE THAN ONE PLANE—If hose follows a compound bend, couple it into separate segments, or clamp it into segments that flex in only one plane.

7. Hose Installation and Replacement—Use the following practices when installing hose assemblies in new systems or replacing hose assemblies in existing systems:

7.1 Pre-Installation Inspection—Before installing hose assemblies, examine:

- a. Hose length and routing for compliance with original design
- b. Assemblies for correct style, size, length, and visible nonconformities
- c. Fitting sealing surfaces for burrs, nicks, or other damage

NOTE— When replacing hose assemblies in existing systems, verify that the replacement is of equal quality to the original assembly.

7.2 Handling During Installation—Handle hose with care during installation. Kinking hose, or bending at less than minimum bend radius may reduce hose life. Avoid sharp bending at the hose/fitting juncture (see 5.21).

7.3 Twist Angle and Orientation—Pressure applied to a twisted hose may shorten the life of the hose or loosen the connections. To avoid twisting, use the hose lay line or marking as a reference.

7.4 Securement and Protection—Install necessary restraints and protective devices. Determine that such devices do not create additional stress or wear points.

7.5 Routing—Review proper routing practices provided in Section 5 and make appropriate corrections to obtain optimum performance.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

7.6 Assembly Torque—The connection end of a hose fitting is normally threaded to obtain a tight pressure seal when attached to a port, an adapter, or another fitting. Sometimes bolts or screws provide the threaded connection. Each size and type of connection requires different torque values, and these may vary due to type of material or exterior coating.

Follow appropriate torquing instructions to obtain a proper pressure seal without over-torquing. A properly calibrated torque wrench should be used to tighten each connection, except when the manufacturer specifies tightening a specified number of hex flat turns beyond finger tight to obtain a seal.

7.7 System Checkouts—In hydraulic or other liquid systems, eliminate all air entrapment after completing the installation. Follow manufacturers' instructions to test the system for possible malfunctions and leaks.

7.7.1 TO AVOID INJURY DURING SYSTEM CHECKOUTS:

- a. Do not touch any part of the system when checking for leaks (see 4.1).
- b. Stay out of potentially hazardous areas while testing hose systems (see Section 4).
- c. Relieve system pressure before tightening connections.

8. Maintenance Inspection—A hose and fitting maintenance program may reduce equipment downtime, maintain peak operating performance, and reduce the risk of personal injury and/or property damage. The user should design and implement a maintenance program that suits the specific application and each specific hose in that application.

8.1 Inspection Frequency—Evaluate factors such as the nature and severity of the application, past history, and manufacturers' information to establish the frequency of visual inspections and functional tests.

8.2 Visual Inspection (Hose and Fittings)—Visually inspect hose and fittings for:

- a. Leaks at hose fitting or in hose
- b. Damaged, cut, or abraded cover
- c. Exposed reinforcement
- d. Kinked, crushed, flattened, or twisted hose
- e. Hard, stiff, heat cracked, or charred hose
- f. Blistered, soft, degraded, or loose cover
- g. Cracked, damaged, or badly corroded fittings
- h. Fitting slippage on hose
- i. Other signs of significant deterioration

If any of these conditions exist, evaluate the hose assemblies for correction or replacement.

8.3 Visual Inspection (All Other Components)—When visually inspecting hose and fittings, inspect for related items including:

- a. Leaking ports
- b. Damaged or missing hose clamps, guards, or shields
- c. Excessive dirt and debris around hose
- d. System fluid: level, type, contamination, condition, and air entrainment

If any of these are found, address them appropriately.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

8.4 Functional Test—Functional tests determine if systems with hose are leak free and operating properly. Carry out functional tests per information from equipment manufacturers.

9. Hose Storage—Age control and the manner of storage can affect hose life. Use the following practices when storing hose.

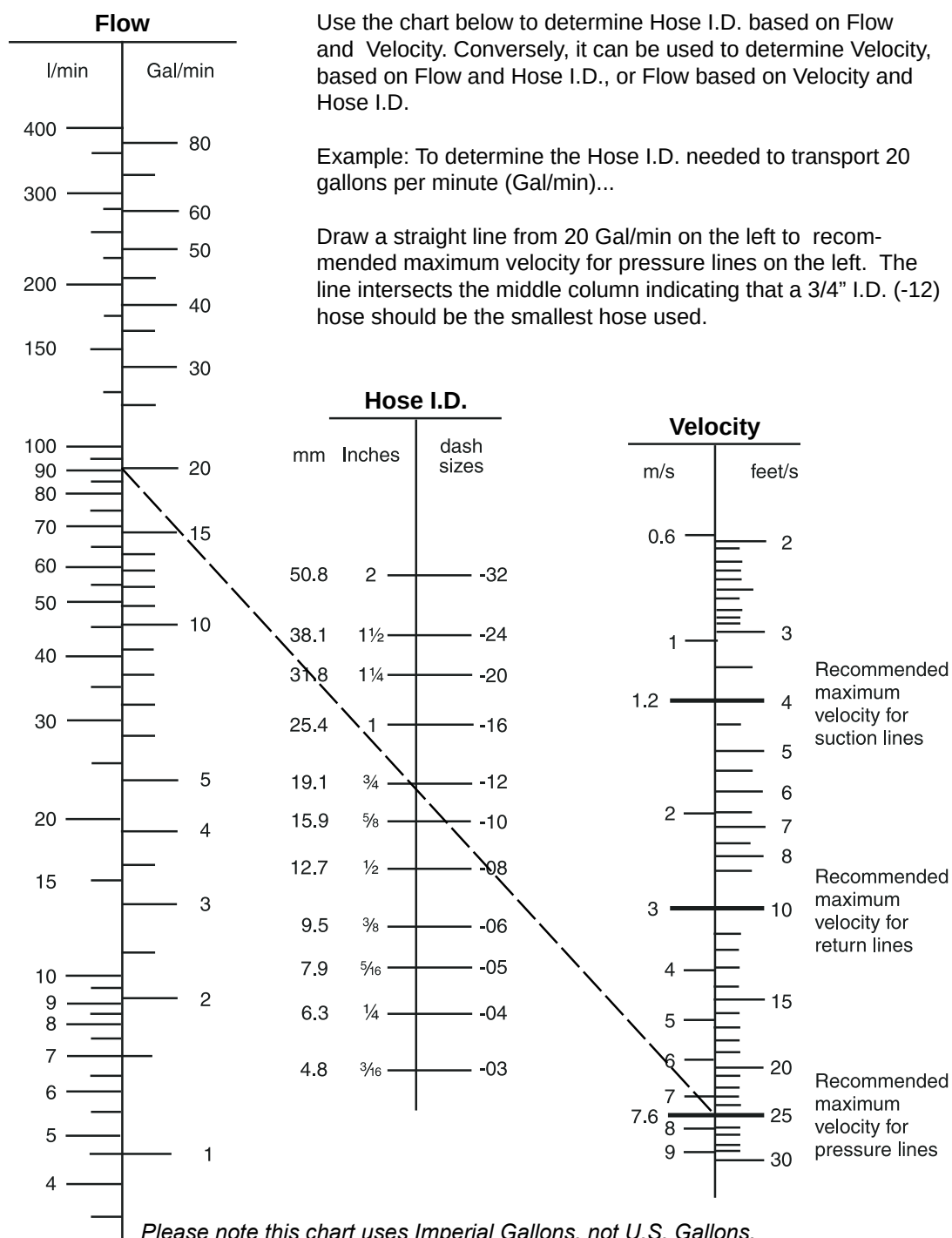
9.1 Age Control—Maintain a system of age control to determine that hose is used before its shelf life has expired. Shelf life is the period of time when it is reasonable to expect the hose to retain full capabilities for rendering the intended service.

Store hose in a manner that facilitates age control and first-in, first-out usage based on manufacturing date on hose or hose assembly. Per SAE J517:

- a. Shelf life of rubber hose in bulk form, or in hose assemblies passing visual inspection and proof test, is forty quarters (ten years) from the date of vulcanization.
- b. Shelf life of thermoplastic and polytetrafluoroethylene hose is considered to be unlimited.

NOMOGRAPHIC CHART

Flow Capacity of Hose Assemblies Recommended Flow Velocities



Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

EXTREMELY HIGH PRESSURE HOSE

EFG6K

FOUR/SIX SPIRAL WIRE HOSE

SPIRAL WIRE REINFORCED HOSE - SAE 100R15



- Due to manufacturing tolerances, external dimension is an average.
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: -6, -8, -10, -12, -16, -20: Nitrile based; -24: Neoprene based.
- Reinforcement: Four (six for -20, -24) alternating layers of spiralled, high tensile steel wire.
- External cover: Neoprene based, MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: SAE 100R15. Meets or exceeds performance requirements of EN 856 4SP (-8) and EN 856 4SH (-12, -16)
- Characteristics: Extremely flexible. Compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils and petroleum-based fluids in sizes -06 to -20 (not -24)
- Optional: EFG6K-MTF: the range of EFG6K is also available with the Gates special MegaTuff™ cover which offers 300 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone/weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6EFG6K	06	10	3/8	20.5	6000	420	24000	1680	65
8EFG6K	08	12	1/2	24.0	6000	420	24000	1680	90
10EFG6K	10	16	5/8	27.6	6000	420	24000	1680	100
12EFG6K	12	19	3/4	31.4	6000	420	24000	1680	120
16EFG6K	16	25	1	38.7	6000	420	24000	1680	150
20EFG6K	20	31	1.1/4	50.0	6000	420	24000	1680	210
24EFG6K	24	38	1.1/2	57.4	6000	420	24000	1680	250
32EFG6K	32	51	2	71.1	6000	420	24000	1680	635

EFG4K

FOUR SPIRAL WIRE HOSE

SPIRAL WIRE REINFORCED HOSE - SAE 100R12



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: Nitrile based.
- Reinforcement: Four alternating layers of spiralled, high tensile steel wire.
- External cover: Neoprene based, MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: Gates proprietary. EN 856 R12. SAE 100R12. Meets or exceeds performance requirements of EN 856 4SP (-16, -20).
- Characteristics: Extremely flexible. Compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids in sizes -06 to -20 (not -24).
- Optional: EFG4K-MTF: the range of EFG4K is also available with the Gates special MegaTuff™ cover which offers 300 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone and weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6EFG4K-RL	06	10	3/8	20.5	4000	280	16000	1120	65
8EFG4K-RL	08	12	1/2	24.0	4000	280	16000	1120	90
10EFG4K	10	16	5/8	27.6	4000	280	16000	1120	100
12EFG4K-RL	12	19	3/4	30.7	4000	280	16000	1120	120
16EFG4K	16	25	1	38.0	4000	280	16000	1120	150
20EFG4K	20	31	1.1/4	47.0	4000	280	16000	1120	210

HIGH PRESSURE HOSE

G2

TWO WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - SAE 100R2

Type AT



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R2AT. SAE 100R2S. EN 853 2SN. ISO 1436.
- Characteristics: G2 hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
20G2	20	31	1.1/4	47.5	1825	125	7300	500	420
24G2	24	38	1.1/2	53.6	1300	90	5200	360	508
32G2	32	51	2	66.6	1175	80	4700	324	635

G2XH

HIGH TEMP. TWO WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R2
Type S



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High temperature, high pressure hydraulic applications
- Internal tube: CPE based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: CSM based. MSHA approved. Blue.
- Temperature range: -40°C to +150°C.
- Standards: EN 853 2SN. SAE 100R2S - high temperature. ISO 1436.
- Characteristics: G2XH hose is compatible with biodegradable hydraulic fluids like synthetic esters, and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4G2XH	04	6	1/4	15.0	6000	420	24000	1680	100
6G2XH	06	10	3/8	18.8	5000	350	20000	1400	130
8G2XH	08	12	1/2	21.8	4250	290	17000	1160	180
10G2XH	10	16	5/8	24.9	3625	250	14500	1000	200
12G2XH	12	19	3/4	29.0	3100	215	12400	860	240
16G2XH	16	25	1	37.6	2500	170	10000	680	300

M2T-MTF

TWO WIRE BRAID SLIMLINE HOSE - MTF COVER
BRAIDED WIRE REINFORCED HOSE - SAE 100R16
MEGATUFF COVER



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based MegaTuff (MTF) abrasion resistant. MSHA approved. Dual green stripe layline.
- Temperature range: -40°C to +100°C.
- Standards: Gates proprietary. Exceeds SAE 100R16.
- Characteristics: M2T hose has smaller exterior dimensions and significantly tighter bend radius than specified in SAE 100R16.
- Optional: M2T-MTF: the range of M2T is also available with the Gates special MegaTuff™ cover which offers 300 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone/weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius (mm)
4M2T-MTF	04	6	1/4	13.7	6000	420	24000	1680	38
6M2T-MTF	06	10	3/8	17.5	5000	350	20000	1400	50
8M2T-MTF	08	12	1/2	20.6	4300	300	7200	1200	71
10M2T-MTF	10	16	5/8	24.1	3800	260	15200	1040	76
12M2T-MTF	12	19	3/4	27.9	3500	240	14000	960	96
16M2T-MTF	16	25	1	35.1	2500	140	10000	560	114

CM2TDL-XTF

TWINLINE TWO WIRE BRAID HOSE

TWINLINE BRAIDED WIRE REINFORCED HOSE - SAE 100R16



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure and return lines such as boom arm and forklift applications.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved. Dual green stripe layline.
- Temperature range: -40°C to +100°C.
- Standards: Gates proprietary. EN 857 2SC. ISO 1436.
- Characteristics: No need to use clamps as the two lines are vulcanised together to form one single unit. CM2T twin hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.
- Gates recommends minimum split length of 250 mm depending on the application. Do not expose hose reinforcement when splitting hoses.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6CM2TDL-XTF	06	10	3/8	17.7	4800	330	19200	1320	90
8CM2TDL-XTF	08	12	1/2	20.8	4000	275	16000	1100	130

M3K

ONE/TWO WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R17



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: -4, -5, -6, -8: one braid of high tensile steel wire; -10, -12, -16: two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R17. ISO 11237-1. Meets or exceeds EN 857 1SC/2SC performance requirements.
- Characteristics: M3K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.
- Optional: M3K-XTF: the range of M3K is also available with the Gates special XtraTuff™ cover which offers 25 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone/weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M3K	04	6	1/4	12.2	3000	210	12000	840	50
6M3K	06	10	3/8	16.0	3000	210	12000	840	65
8M3K	08	12	1/2	20.2	3000	210	12000	840	90
12M3K	12	19	3/4	29.0	3000	210	12000	840	120
16M3K	16	25	1	37.7	3000	210	12000	840	150

M4K

TWO WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - SAE 100R19



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R19. ISO 11237-1. Meets or exceeds EN 857 2SC performance requirements.
- Characteristics: Alternative to spiral hoses in high pressure lines where flexibility is required. M4K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.
- Special item - please contact Hydraulink for further details and availability.
- -XTF (XtraTuff™) hose lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M4K	04	6	1/4	13.7	4000	275	16000	1100	50
6M4K	06	10	3/8	17.5	4000	275	16000	1100	65
8M4K	08	12	1/2	20.8	4000	275	16000	1100	90
10M4K	10	16	5/8	25.0	4000	275	16000	1100	100
12M4K	12	19	3/4	29.0	4000	275	16000	1100	120
16M4K	16	25	1	38.6	4000	275	16000	1100	114

M4K-XTF

TWO WIRE BRAID HOSE - XTF COVER
BRAIDED WIRE REINFORCED HOSE - SAE 100R19



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R19. ISO 11237-1. Meets or exceeds EN 857 2SC performance requirements.
- Characteristics: Alternative to spiral hoses in high pressure lines where flexibility is required. M4K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.
- Special item - please contact Hydraulink for further details and availability.
- -XTF (XtraTuff™) hose lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M4K-XTF	04	6	1/4	13.7	4000	280	16000	1120	50
6M4K-XTF	06	10	3/8	17.5	4000	280	16000	1120	65
8M4K-XTF	08	12	1/2	20.8	4000	280	16000	1120	90
10M4K-XTF	10	16	5/8	25.0	4000	280	16000	1120	100
12M4K-XTF	12	19	3/4	29.0	4000	280	16000	1120	120

M5K

TWO WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - 5000PSI



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: Exceeds ISO 18752 Grade B.
- Characteristics: Alternative to spiral hoses in high pressure lines where flexibility is required. M5K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M5K	04	6	1/4	14	5000	350	20000	1400	50
6M5K	06	10	3/8	17.8	5000	350	20000	1400	63
8M5K	08	12	1/2	21.6	5000	350	20000	1400	89

M6K

TWO WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - 6000PSI



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Characteristics: Alternative to spiral hoses in high pressure lines where flexibility is required. M6K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M6K	04	6	1/4	14.7	6000	420	24000	1680	50

J2AT

TWO WIRE BRAID JACK HOSE

BRAIDED WIRE REINFORCED JACK HOSE



- Due to manufacturing tolerances, the external dimension is an average.
- Static (non-impulse) pressure rating for hydraulic jack applications only.
- Recommended for: Hydraulic jack applications. Meets Material Handling Institute specification IJ 100 for hydraulic hose and assemblies used with jacking systems.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +49°C constant.
- Standards: Gates proprietary.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4J2AT	04	6	1/4	15.0	10000	690	20000	1380	100
6J2AT	06	10	3/8	18.8	10000	690	20000	1380	130

MEDIUM PRESSURE HOSE

G1

ONE WIRE BRAID HOSE

BRAIDED WIRE REINFORCED HOSE - SAE 100R1

Type AT



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications.
- Internal tube: Nitrile based.
- Reinforcement: One braid of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R1AT. SAE 100R1S. EN 853 1SN. ISO 1436.
- Characteristics: G1 hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3G1	03	5	3/16	11.9	3625	250	14500	1000	100
4G1	04	6	1/4	13.5	3275	225	13100	900	100
5G1	05	8	5/16	15.0	3125	215	12500	860	110
6G1	06	10	3/8	17.5	2600	180	10400	720	130
8G1	08	12	1/2	20.8	2325	160	9300	640	180
10G1	10	16	5/8	23.9	1900	130	7600	520	200
12G1	12	19	3/4	27.9	1525	105	6100	420	240
16G1	16	25	1	35.8	1275	90	5100	360	300
20G1	20	31	1.1/4	43.4	925	63	3700	252	420
24G1	24	38	1.1/2	49.8	725	50	2900	200	510
32G1	32	51	2	64	600	40	2400	168	635

ACP

HIGH TEMP. OIL/AIR RETURN
BRAIDED WIRE REINFORCED HOSE - FABRIC
COVER



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Multi-purpose, high pressure hydraulic, air compressor lines, petroleum base or phosphate ester hydraulic fluid supply lines. Easy to route and to install in tight areas.
- Internal tube: Black, oil resistant synthetic CPE rubber.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: Blue, oil and abrasion resistant, polyester braid.
- Temperature range: -40°C to +149°C.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
24ACP	24	38	1.1/2	54.1	1500	105	6000	420	508
32ACP	32	51	2	66.3	1300	90	5200	360	635

ACR

HIGH TEMP. OIL/AIR RETURN
BRAIDED WIRE REINFORCED HOSE - FABRIC
COVER



- Due to manufacturing tolerances, the external dimension is an average.
- For -24 and 32 sizes please see alternative ACP series.
- Recommended for: Pressurised hot oil return lines and air compressor lines, power steering, tilt cab cylinders, engine and transmission coolant and filtration lines.
- Internal tube: CPE based.
- Reinforcement: One braid of high tensile steel wire.
- External cover: Oil resistant textile braid, impregnated with synthetic rubber. MSHA approved.
- Temperature range: -40°C to +150°C. Phosphate ester fluids: -40°C to +100°C.
- Air: -40°C to +121°C.
- Vacuum range: To 30In.Hg (760mm.Hg)
- Standards: Gates proprietary. Meets the requirements of SAE J1019 performance specifications for use in high temperature transmission oil systems and high temperature lubrication oil systems using petroleum based oils.
- Characteristics: Very good resistance to weathering and ozone. ACR hose is compatible with a variety of fluids such as hydraulic oil, phosphate esters.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
24ACR500	24	38	1.1/2	49.5	500	35	2000	140	380
32ACR500	32	51	2	63.0	500	35	2000	140	460
40ACR500	40	63	2.1/2	75.4	500	35	2000	140	560
48ACR500	48	76	3	88.9	500	35	2000	140	610

WATER JETTING

PC

POWERCLEAN™ WIRE BRAID HOSE

BRAIDED WIRE REINFORCED WATERBLAST HOSE



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Hot and cold water high pressure cleaning equipment where heavy duty service is required. Specially compounded cover to handle pressure washer environment.
- Internal tube: Black nitrile.
- Reinforcement: Braided high tensile steel wire.
- External cover: Nitrile and PVC - non marking.
- Temperature range: -40°C to +121°C.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4PC3500	04	6	1/4	13.5	3500	240	14000	900	64
6PC3000	06	10	3/8	17.2	3000	210	12000	840	127
6PC5000	06	10	3/8	18.8	5000	350	20000	1320	127

LOW PRESSURE HOSE

LOL

PUSH-LOCK FIBRE BRAID HOSE
BRAIDED FIBRE REINFORCED HOSE



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Petroleum-based hydraulic oils, antifreeze solutions, water, hot lubricating oils and air. Suitable for low-pressure cleaning and pneumatic systems, return lines and low pressure lines. Push-Lock hose and couplings are not recommended for pressure surge applications or critical applications.
- Internal tube: Nitrile based.
- Reinforcement: One fibre braid.
- External cover: Oil and abrasion resistant synthetic rubber (blended nitrile). MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: Gates proprietary.
- Characteristics: Available in 6 colours for easy colour coding. Easy to assemble.
- Suffix A = black, B = blue, C = grey, G = green, R = red, Y = yellow. Please note some size/colour combinations are not held in inventory and are subject to minimum order requirements.

Part Number	Colour	Internal Size	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3LOLA	Black	03	3/16	10.4	300	21	1200	84	75
4LOLA	Black	04	1/4	11.9	300	21	1200	84	75
5LOLA	Black	05	5/16	14.0	300	21	1200	84	75
6LOLA	Black	06	3/8	15.9	300	21	1200	84	75
8LOLA	Black	08	1/2	19.6	300	21	1200	84	130
10LOLA	Black	10	5/8	23.9	300	21	1200	84	150
12LOLA	Black	12	3/4	26.9	300	21	1200	84	180

LOC

PUSH-LOCK FIBRE BRAID HOSE BRAIDED FIBRE REINFORCED HOSE

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Petroleum based hydraulic oils, glycol anti-freeze compounds, water, engine lubricating oils and air.
- Standards: Meets SAE R2, SAE30 R6, SAE 30R7 performance requirements for fuel and B20 biodiesel fuel transfer applications.
- Internal tube: Black oil resistant synthetic nitrile.
- Reinforcement: Single fibre braid.
- External cover: Oil and mildew resistant, textile braid, impregnated with synthetic rubber.
- Temperature range: -40°C to +121°C. For air, -40°C to 71°C.



Part Number	Internal Size	Colour	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4LOC	04	Black	1/4	13.2	300	21	1200	84	75
6LOC	06	Black	3/8	16.3	300	21	1200	84	75
8LOC	08	Black	1/2	20.3	300	21	1200	84	130
10LOC	10	Black	5/8	22.9	300	21	1200	84	150
12LOC	12	Black	3/4	25.4	300	21	1200	84	180

GTH

PUSH-LOCK FIBRE BRAID HOSE

BRAIDED FIBRE REINFORCED HOSE - SAE 100R6



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Hydraulic oil lines, heavy-duty transmission oil cooler lines and glycol anti-freeze solutions. Push-Lock hose and couplings are not recommended for pressure surge applications or critical applications.
- Internal tube: Nitrile based.
- Reinforcement: One fibre braid.
- External cover: Black - Neoprene based.
- Temperature range: -40°C to +135°C constant and +149°C intermittent.
- Vacuum range: -3, -4, -5, -6: 28In.Hg (710mm.Hg). -8: 18In.Hg (450mm.Hg). -10, -12: 15In.Hg (380mm.Hg). -16: 10In.Hg (250mm.Hg)
- Standards: Gates proprietary. Meets or exceeds requirements of SAE 100R6.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3GTH	03	5	3/16	11.2	500	35	2000	140	50
4GTH	04	6	1/4	12.7	400	30	1600	120	65
5GTH	05	8	5/16	14.2	400	30	1600	120	75
6GTH	06	10	3/8	16.0	400	30	1600	120	75
8GTH	08	12	1/2	19.8	400	30	1600	120	100
10GTH	10	16	5/8	23.1	350	25	1400	100	130
12GTH	12	19	3/4	26.9	300	20	1200	80	150

GMV-MEGAFLEX

MultiMaster® RETURN AND SUCTION
FIBRE AND WIRE REINFORCED HOSE - SAE 100R4

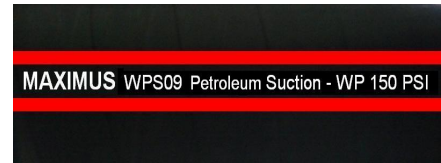
- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Petroleum and water based hydraulic fluids in suction lines or in low pressure return lines.
- Internal tube: Nitrile based.
- Reinforcement: Synthetic high tensile steel wire helix.
- External cover: Black corrugated chloroprene. MSHA approved.
- Temperature range: -40°C to +135°C constant and +150°C intermittent.
- Vacuum range: to 25In.Hg (635mm.Hg) for all sizes.
- Standards: Gates proprietary. SAE 100R4.
- Characteristics: Extremely flexible and lightweight.



Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
12GMV-MEGAFLEX	12	19	3/4	30.5	350	24	1400	96	20.3
16GMV-MEGAFLEX	16	25	1	35.8	300	21	1200	84	25.4
20GMV-MEGAFLEX	20	31	1.1/4	42.2	250	17	1000	68	33.0
24GMV-MEGAFLEX	24	38	1.1/2	48.3	160	11	640	44	38.1
32GMV-MEGAFLEX	32	51	2	60.7	150	10	600	40	50.8
40GMV-MEGAFLEX	40	63	2.1/2	74.7	150	10	600	40	63.5
48GMV-MEGAFLEX	48	76	3	87.4	150	10	600	40	76.2
64GMV-MEGAFLEX	64	102	4	166.4	150	10	600	40	152.4

RWPS09

MAXIMUS PETROLEUM SUCTION
RUBBER OIL SUCTION - 150 PSI



- Conforming Standards: AS2683 Type 1; Grade 2; Kind 1
- Temperature: -20°C to +80°C
- Cover: Black; Smooth Wrapped Finish SBR Rubber
- Tube: Black; NBR Rubber Compound
- Reinforcement: High Strength Synthetic Cord Plus Embedded Steel Helix Wire
- Application: Lightweight Suction Hose for the transfer of petroleum products with an aromatic content up to 30%. Resistant to Abrasion And Weather.

Part Number	Hose I.D (mm)	Hose O.D (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)
RWPS09-102	101.6	118	150	10.4	450	31

G3H

PUSH-LOCK FIBRE BRAID HOSE
BRAIDED FIBRE REINFORCED HOSE - SAE 100R3



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Hydraulic oil lines, anti-freeze solutions, or water.
- Standards: Meets or exceeds SAE R3.
- Internal tube: Black synthetic nitrile.
- Reinforcement: Two fibre braids.
- External cover: Oil and abrasion synthetic rubber.
- Temperature range: -40°C to +135°C.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min. bend radius (in)
4G3H	04	6	1/4	14.2	1250	88	5000	352	3
6G3H	06	10	3/8	19.1	1125	79	4500	316	4
8G3H	08	12	1/2	23.9	1000	70	4000	280	5
12G3H	12	19	3/4	31.8	750	52	3000	208	6

FLEET APPLICATION HOSE

C5C

ONE WIRE NOMINAL BORE HOSE

BRAIDED WIRE REINFORCED HOSE - SAE 100R5



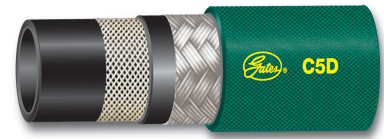
- -Size is based on nominal bore of corresponding tube size.
- Due to manufacturing tolerances, external dimension is an average.
- Recommended for: Medium pressure hydraulic petroleum-based oil lines in impulse applications, lube oil, air and water in applications such as air brakes, power steering, turbocharger oil supplies, tilt cab cylinders, transmission coolant and filtration lines. Not recommended for gasoline or diesel fuel.
- Internal tube: -4, -5; Neoprene based. Balance of range: Nitrile based.
- Reinforcement: One braid of high tensile steel wire over one braid of polyester.
- External cover: Black, oil and mildew resistant polyester braid.
- Temperature range: Under SAE 100R5 (hydraulic) -40°C to +100°C. All-purpose fleet application (hot lube oil lines) -40°C to +149°C. Air to +71°C only. Avoid continuous use at maximum temperature concurrent with maximum working pressures.
- Standards: Gates proprietary. Meets or exceeds requirements of SAE 100R5 for hydraulic applications).

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4C5C	04	5	3/16	13.2	3000	210	12000	840	75
5C5C	05	6	1/4	14.7	3000	210	12000	840	85
6C5C	06	8	5/16	17.0	2250	155	9000	620	100
8C5C	08	10	13/32	19.6	2000	140	8000	560	115
10C5C	10	12	1/2	23.4	1750	120	7000	480	140
12C5C	12	16	5/8	27.4	1500	105	6000	420	165
16C5C	16	22	7/8	31.2	800	55	3200	220	190
20C5C	20	28	1.1/8	38.1	625	45	2500	180	230
24C5C	24	35	1.3/8	44.5	500	35	2000	140	270
32C5C	32	46	1.13/16	56.4	350	24	1400	96	340

C5D

ONE WIRE NOMINAL BORE HOSE

MULTI-FLUID BRAIDED WIRE REINFORCED HOSE



- -Size is based on nominal bore of corresponding tube size.
- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Petroleum-base or phosphate ester fluids; diesel fuels and filtration lines, transmission coolant lines, hot lube oil lines, power steering (CAUTION: Intended for heavy-duty commercial vehicle use only), gasoline and turbocharger oil supplies. Tilt cab cylinder and air brakes.
- Internal tube: CPE based.
- Reinforcement: One braid of high tensile steel wire over one braid of polyester.
- External cover: Green for easy identification, oil and mildew resistant, polyester braid impregnated with synthetic rubber.
- Temperature range: -40°C to +149°C. Air to +121°C only. Maximum phosphate esters to +100°C.
- Standards: Gates proprietary. Sizes -4 to -12 meet or exceed DOT FMVSS 106-74 Type All, SAE J1402 Type All and SAE J1019 and fuel resistance of SAE J30R2.
- Special item - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4C5D	04	5	3/16	13.2	1500	105	6000	420	25
5C5D	05	6	1/4	14.7	1500	105	6000	420	40
6C5D	06	8	5/16	17.0	1500	105	6000	420	45
8C5D	08	10	13/32	19.6	1250	85	5000	340	50
10C5D	10	12	1/2	23.4	1250	85	5000	340	50
12C5D	12	16	5/8	27.4	750	52	3000	208	58
16C5D	16	22	7/8	31.2	400	28	1600	112	89

C5E

ONE WIRE NOMINAL BORE HOSE

HIGH TEMP. BRAIDED WIRE REINFORCED HOSE



- -Size is based on nominal bore of corresponding tube size.
- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Air brake hose, power steering (for heavy duty commercial vehicle use only), engine and transmission coolant lines, and hot lube oil lines. Not recommended for gasoline or diesel fuel.
- Internal tube: Black, oil and heat resistant synthetic nitrile rubber.
- Reinforcement: One braid of high tensile steel wire over one braid of polyester.
- External cover: Black, oil and heat resistant, textile braid impregnated with synthetic rubber.
- Temperature range: -40°C to +149°C. Air to +121°C only.
- Standards: Gates proprietary. Sizes -4 to -12 meet or exceed DOT FMVSS 106, SAE J1402 Type A1.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4C5E	04	5	3/16	12.4	1500	105	6000	420	20
5C5E	05	6	1/4	14	1500	105	6000	420	25
6C5E	06	8	5/16	15.5	1500	105	6000	420	35
8C5E	08	10	13/32	18.5	1250	85	5000	340	45
10C5E	10	12	1/2	21.1	1250	85	5000	340	60
12C5E	12	16	5/8	24.1	750	52	3000	208	70
16C5E	16	22	7/8	30.5	400	28	1600	112	90
20C5E	20	28	1.1/8	37.9	300	21	1200	84	115

C5M

ONE WIRE NOMINAL BORE HOSE

MARINE FUEL BRAIDED WIRE REINFORCED HOSE



- -Size is based on nominal bore of corresponding tube size.
- Due to manufacturing tolerances, the external dimension is an average.
- Reference SAE J1942/-1 for USCG-approved working pressures.
- Recommended for: On-shore/off-shore and marine diesel fuel and gasoline applications, and hot oil lines up to 100°C.
- Internal tube: Nitrile based.
- Reinforcement: One braid of high tensile steel wire.
- External cover: NBR/PVC based. Blue.
- Temperature range: -20°C to +100°C.
- Standards: Gates proprietary. Meets marine fuel line specifications SAE J1527 Type A Class I and SAE J1942 requirements. Exceeds performance requirements of SAE J30R2 for non-marine applications.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
5C5M	05	6	1/4	14.7	500	35	2000	140	25
6C5M	06	8	5/16	17.0	500	35	2000	140	32
8C5M	08	10	13/32	19.6	500	35	2000	140	45
10C5M	10	12	1/2	23.4	500	35	2000	140	60
12C5M	12	16	5/8	27.4	500	35	2000	140	70

PS188

POWER STEERING HOSE

BRAIDED FIBRE HOSE FOR POWER STEERING



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Power steering pressure lines.
- Internal tube: CSM based.
- Reinforcement: Two high strength nylon braids that resist high temperatures and allow for expansion for system noise dampening.
- External cover: CSM based.
- Temperature range: -40°C to +150°C. Standards: Gates proprietary. Designed to meet requirements of SAE J2050 specifications.

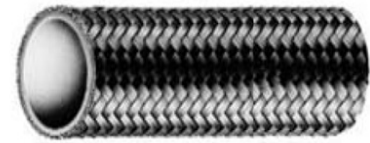
Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6PS188	06	10	3/8	18.0	1500	105	6000	420	85

PTFE HOSE

R14

STAINLESS BRAIDED PTFE HOSE

PTFE HOSE WITH STAINLESS STEEL BRAIDED COVER



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Air compressor discharge, hot oil fluids, hot and greasy environments.
- Internal tube: Non-conductive white, smooth bore Teflon®/PTFE.
- Reinforcement.
- External cover: AISI 304/S15 or BS970-1 1996 quality hard drawn tensile stainless steel wire.
- Temperature range: -54°C to +204°C. Characteristics: The PTFE hose tube is virtually inert to all chemicals and solvents. It is resistant to fuming Sulphuric and Nitric Acids, Amines, Antioxidants and Methanol. It is only known to react with elemental alkali metals (molten or in solution), Fluorine and Chlorine Trifluoride.
- NOTE: A damaging electrostatic charge can build up inside the hose when electrically resistive fluids are being transmitted at very high flow rates (particularly if the hose assemblies are lengthy).

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
R14-03	03	5	3/16	7.9	4000	275	12000	825	50
R14-04	04	6	1/4	9.35	3250	224	9750	672	76
R14-05	05	8	5/16	11.3	3160	218	9500	655	102
R14-06	06	10	3/8	12.65	2660	183	8000	552	127
R14-08	08	12	1/2	16.55	2330	161	7000	483	152
R14-10	10	16	5/8	19.75	1660	114	5000	345	178
R14-12	12	19	3/4	22.96	1500	103	4500	310	203
R14-16	16	25	1	27.8	1000	69	3495	241	310

THERMOPLASTIC HOSE

R7

FIBRE BRAID THERMOPLASTIC HOSE

BRAIDED FIBRE REINFORCED HOSE - SAE 100R7



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications requiring increased resistance to abrasion.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of synthetic fiber. External cover: Abrasion resistant polyurethane, black, pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R7.
- Characteristics: R7 is a medium pressure hose for use with petroleum, synthetic or water based hydraulic fluids. Suitable for general fluid power transmission like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility).
- Not suitable for use on forklift mast application below ambient temperatures.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3R7	03	5	3/16	9.6	3000	210	12000	840	25
4R7	04	6	1/4	12.2	3000	210	12000	840	35
5R7	05	8	5/16	14.3	2700	190	10800	760	45
6R7	06	10	3/8	16.0	2300	160	9200	640	55
8R7	08	12	1/2	20.3	2000	140	8000	560	75
12R7	12	19	3/4	27.1	1300	90	5200	360	140

R7NC

FIBRE BRAID THERMOPLASTIC HOSE

NON-CONDUCTIVE FIBRE REINFORCED HOSE - SAE 100R7



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications requiring increased resistance to abrasion and electrical non-conductivity.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of synthetic fiber. External cover: Abrasion resistant polyurethane, orange, non pinpricked, black ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R7.
- Characteristics: R7NC is a medium pressure hose for use with petroleum, synthetic or water based hydraulic fluids in applications requiring high electrical insulation or non-conductivity; e.g. High voltage equipment, safety and rescue equipment, Aerial platforms, Cranes.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3R7NC	03	5	3/16	9.6	3000	210	12000	840	25
4R7NC	04	6	1/4	12.2	3000	210	12000	840	35
5R7NC	05	8	5/16	14.3	2700	190	10800	760	45
6R7NC	06	10	3/8	16.0	2300	160	9200	640	55
8R7NC	08	12	1/2	20.3	2000	140	8000	560	75
12R7NC	12	19	3/4	27.1	1300	90	5200	360	140

R7T

TWINLINE THERMOPLASTIC HOSE

BRAIDED FIBRE REINFORCED HOSE - SAE 100R7



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications requiring increased resistance to abrasion.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of synthetic fiber.
- External cover: Abrasion resistant polyurethane, black, pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R7.
- Characteristics: R7 is a medium pressure hose for use with petroleum, synthetic or water based hydraulic fluids. Suitable for general fluid power transmission like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility).
- Please note customised multi-line combinations of different hose types or diameters can also be produced to customer requirements.
- Not suitable for use on forklift mast application below ambient temperatures.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R7T	04	6	1/4	12.2	3000	210	12000	840	35
5R7T	05	8	5/16	14.3	2700	190	10800	760	45
6R7T	06	10	3/8	16.0	2300	160	9200	640	55
8R7T	08	12	1/2	20.3	2000	140	8000	560	75
12R7T	12	19	3/4	27.1	1300	90	5200	360	140

R8X

FIBRE BRAID THERMOPLASTIC HOSE
BRAIDED FIBRE REINFORCED SLIMLINE HOSE -
SAE 100R8



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications requiring increased resistance to abrasion.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of aramid fiber.
- External cover: Abrasion resistant polyurethane, black, pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R8.
- Characteristics: R8X is a compact high pressure hose for use with petroleum, synthetic or water based hydraulic fluids. Suitable for general fluid power transmission like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility).

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
2R8X	02	4	1/8	8	6000	420	24000	1680	25
3R8X	03	5	3/16	8.9	5000	350	20000	1400	30
4R8X	04	6	1/4	11.5	5000	350	20000	1400	50
5R8X	05	8	5/16	13.4	4300	300	17200	1200	55
6R8X	06	10	3/8	15.5	4000	280	16000	1120	60
8R8X	08	12	1/2	19.9	3500	245	14000	980	80
12R8X	12	19	3/4	26.9	2300	165	9200	660	150

R8XNC

FIBRE BRAID THERMOPLASTIC HOSE

NON-CONDUCTIVE FIBRE REINFORCED HOSE - SAE 100R8



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications requiring increased resistance to abrasion and electrical non-conductivity.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of aramid fiber.
- External cover: Abrasion resistant polyurethane, orange, non-pinpricked, black ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R8.
- Characteristics: R8XNC is a compact high pressure hose for use with petroleum, synthetic or water based hydraulic fluids in applications requiring high electrical insulation or non-conductivity; e.g. High voltage equipment, Safety and rescue equipment, Aerial platforms, Cranes.
- Special item - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R8XNC	04	6	1/4	11.5	5000	350	20000	1400	50
5R8XNC	05	8	5/16	13.4	4300	300	17200	1200	55
6R8XNC	06	10	3/8	15.5	4000	280	16000	1120	60
8R8XNC	08	12	1/2	19.9	3500	245	14000	980	80

R8XT

TWINLINE THERMOPLASTIC HOSE

BRAIDED FIBRE REINFORCED SLIMLINE HOSE -
SAE 100R8



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications requiring increased resistance to abrasion.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of aramid fiber.
- External cover: Abrasion resistant polyurethane, black, pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R8.
- Characteristics: R8X is a compact high pressure hose for use with petroleum, synthetic or water based hydraulic fluids. Suitable for general fluid power transmission like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility).
- Please note customised multi-line combinations of different hose types or diameters can also be produced to customer requirements.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R8XT	04	6	1/4	11.5	5000	350	20000	1400	50
6R8XT	06	10	3/8	15.5	4000	280	16000	1120	60
8R8XT	08	12	1/2	19.9	3500	245	14000	980	80

R18NEO

FIBRE BRAID THERMOPLASTIC HOSE
LOW TEMP. FIBRE REINFORCED HOSE - SAE
100R18



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications exposed to low temperatures, or cyclic and quick temperature changes, such as cool-stores. Ideal for forklift applications
- Internal tube: Polyester elastomer.
- Reinforcement: Two braids of synthetic fiber.
- External cover: Special polyurethane cover, black, non-pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 10018.
- Characteristics: R18 is a medium pressure hose suitable for petroleum or synthetic based hydraulic fluids in hydraulic systems of forklifts. Optimum bonding characteristics and special cover also make it an ideal for equipment operating in cold environments, while maintaining a high level of flexibility.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R18NEO	04	6	1/4	11.8	3000	210	12000	840	35
5R18NEO	05	8	5/16	14.3	3000	210	12000	840	45
6R18NEO	06	10	3/8	16.5	3000	210	12000	840	45
8R18NEO	08	12	1/2	21.2	3000	210	12000	840	70
10R18NEO	10	16	5/8	26.1	3000	210	12000	840	100

R18TNEO

TWINLINE THERMOPLASTIC HOSE

BRAIDED FIBRE REINFORCED HOSE - SAE 100R18



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications exposed to low temperatures, or cyclic and quick temperature changes, such as cool-stores. Ideal for forklift applications
- Internal tube: Polyester elastomer.
- Reinforcement: Two braids of synthetic fiber.
- External cover: Special polyurethane cover, black, non-pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 10018.
- Characteristics: R18 is a medium pressure hose suitable for petroleum or synthetic based hydraulic fluids in hydraulic systems of forklifts. Optimum bonding characteristics and special cover also make it an ideal for equipment operating in cold environments, while maintaining a high level of flexibility.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R18TNEO	04	6	1/4	11.8	3000	210	12000	840	35
5R18TNEO	05	8	5/16	14.3	3000	210	12000	840	45
6R18TNEO	06	10	3/8	16.5	3000	210	12000	840	45
8R18TNEO	08	12	1/2	21.2	3000	210	12000	840	70
10R18TNEO	10	16	5/8	26.1	3000	210	12000	840	100

PAINTSPRAY HOSE

PS1B

ONE WIRE BRAID THERMOPLASTIC
BRAIDED WIRE REINFORCED HOSE FOR
PAINT/SOLVENTS



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Airless paint spray systems or applications requiring high chemical resistance to solvents and aggressive fluids.
- Internal tube: Polyamide PA6.
- Reinforcement: One braid of high tensile steel wire.
- External cover: Polyurethane, blue, non-pinpricked, black ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Characteristics: PS1B is a high pressure hose with blue cover, particularly designed for paint spray and solvent applications with increased resistance to abrasion, mechanical strength and providing electrical conductivity. Due to low dissipation rate of tube, the hose is also suitable for many industrial gases (check for compatibility).

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4PS1B	04	6	1/4	11.6	4400	310	12000	840	40
6PS1B	06	10	3/8	15.5	3200	225	12800	900	65

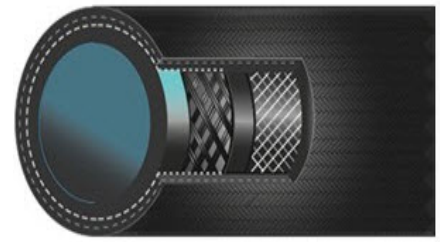
AUTOMOTIVE HOSE

LPG

LPG SERVICE HOSE

WIRE AND FIBRE REINFORCED HOSE FOR LPG

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: LPG service line for mobile plant, particularly forklift trucks.
- Internal tube: Synthetic rubber, LP Gas, oil and low temp resistant.
- Reinforcement: One textile and one stainless wire braid.
- External cover: Textile braid.
- Standards: Meets AS/NZ 1869 Class D, AGA Certificate no. AGA5318



Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
5LPG	05	8	5/16	17.1	350	24	1400	96	

MVAP

LPG VAPORISER HOSE

UNREINFORCED VAPORISER HOSE FOR LPG

- Due to manufacturing tolerances, the external dimension is an average.
- the 18mm ID will clamp down to suit 5/8, or stretch over 3/4.
- Recommended for: High temperature gas transportation hose up to +125C.
- Internal tube: Synthetic rubber, LP Gas resistant.
- Reinforcement: n/a
- External cover: Textile braid.



Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
18MVAP	10-12	18	5/8-3/4	25.4	110	8	440	32	

27000FUEL

FUEL LINE

FUEL LINE SAE 30R6 AND 30R7



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Use on fuel lines, PCV and EEC systems, and for fuel return hose connections on diesel fuel injection systems.
- Approved for use with leaded and unleaded petrol, diesel, methanol, and ethers.
- Internal tube: Nitrile.
- Reinforcement: Spiral reinforced construction.
- External cover: Oil resistant NBR/PVC cover.
- Temperature: -40°C to 125°C with gasoline blends.
- Standards: Meets SAE 30R6 and 30R7.

Part Number	Internal Size	Internal Diameter (mm)	Working Pressure (psi)	Working pressure (bar)
27000	1/8	3.2	50	4
27001	3/16	4.8	50	4
27002	1/4	6.3	50	4
27003	5/16	8	50	4
27004	3/8	9.5	50	4
27005	7/16	11.1	35	2.4
27006	1/2	12.7	35	2.4
27008	5/8	15.9	35	2.4
27010	3/4	19	35	2.4

27000VAC VACUUM HOSE VACUUM HOSE



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Windshield washers, vacuum operated accessories, and radiator overflow.
- Vacuum rated to 24in/Hg.
- Temperature: -40°C to 125°C
- Standards: Meets SAE J1037, J942b specifications.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Suction (In. Hg)	Suction (mm Hg)
27042	5/32	4	0.16	4.8	24	610
27043	7/32	6	0.22	10.7	24	610
27041	7/64	3	0.11	5.6	24	610
27050	5/16	8	0.31	12.7	24	610
27044	1/4	6	0.25	11.4	24	610

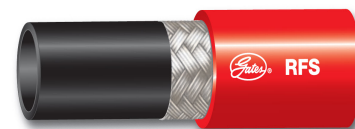
FIRE SUPPRESSION HOSE

RFS

ONE WIRE BRAID HOSE

RED FIRE SUPPRESSANT BRAIDED WIRE

REINFORCED HOSE - SAE 100R1 Type AT



- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Low pressure powder fire suppressant applications in mining, forestry and firefighting equipment.
- Internal tube: Black, oil and heat resistant synthetic nitrile rubber.
- Reinforcement: One braid of high tensile steel wire.
- External cover: Red, oil and abrasion resistant nitrile and PVC.
- Temperature range: -40°C to +100°C.
- Standards: Meets performance requirements of SAE 100R1.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3RFS	03	5	3/16	11.4	3000	205	12000	820	75
4RFS	04	6	1/4	13.5	2750	190	11000	760	100
6RFS	06	10	3/8	17.3	2250	155	9000	620	130
8RFS	08	12	1/2	20.3	2000	140	8000	560	180
12RFS	12	19	3/4	27.7	1250	85	5000	340	240

MULTIPURPOSE HOSE

PREMOFLEX

Premoflex MULTI-PURPOSE HOSE
TWO YARN SPIRAL REINFORCED INDUSTRIAL
HOSE



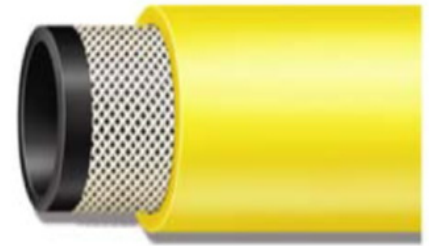
- Recommended for: Premo Flex is the perfect choice for multiple applications requiring a highly flexible and cost-effective hose with maximum resistance to petroleum oils/kerosene/fuel oil (to 120°F) and lubricating oils (to 212°F). Premo Flex can be used for transferring gasoline or diesel fuels. It is also suitable for air and water applications; It offers excellent weather and ozone resistance and is nonconductive at 1000 volts D.C.
- Temperature range: -40°F to +212°F (-40°C to +100°C) continuous service.
- Tube: Type C (Nitrile). Black. RMA (Class A) high oil resistance.
- Reinforcement: Synthetic high tensile cord.
- Cover: Type C2 (Modified Nitrile). Red (black cover available on special order). All sizes thru 1/2 are perforated. RMA(Class B) medium oil resistance.

Part Number	Internal Size	Internal Size (mm)	External Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min. bend radius (in)
PREMOFLEX-04	04	6.4	.5	12.7	250	17	750	52	2
PREMOFLEX-06	06	9.5	.66	16.8	250	17	750	52	3
PREMOFLEX-08	08	12.7	.85	21.6	250	17	750	52	4
PREMOFLEX-10	10	15.8	1	25.4	250	17	750	52	5
PREMOFLEX-12	12	19.1	1.15	29.2	250	17	750	52	5
PREMOFLEX-16	16	25.4	1.47	37.3	250	17	750	52	8

TERMINATOR

Terminator MULTI-PURPOSE HOSE
CORD REINFORCED INDUSTRIAL HOSE

- Recommended for: Terminator is one tough hose with a rugged cover for outstanding abrasion resistant capability and extended service life where constant flexing and bending is required. This top-of-the-line industrial and oil-resistant hose is designed for applications involving air/oil/water transfer as well as grease sprays/paraffin waxes/salt solutions and a variety of chemicals. It offers excellent durability for extra long life in mining/air drill/construction/poultry plants/quarries/shipyards/food processing/ railroads and other severe service environments. Excellent industrial hose with weather and ozone resistance; Nonconductive at 1000 volts D.C.
- Temperature range: -40°F to +212°F (-40°C to +100°C) continuous service.
- Tube: Type C (Nitrile) hose. Black. RMA (Class A) high oil resistance.
- Reinforcement: Synthetic high tensile cord.
- Cover: Type C4 (Carboxylated Nitrile). Yellow. RMA (Class A) high oil resistance.



Part Number	Internal Size	Internal Size (mm)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Max suction pressure - (mm Hg)	Min bend radius (mm)
TERMINATO R-04	04	6.4	14.5	501	35	750	762	76
TERMINATO R-06	06	9.5	19.1	501	35	750	635	76
TERMINATO R-08	08	12.7	22.6	501	35	750	635	127
TERMINATO R-12	12	19.1	31	501	35	30	381	152
TERMINATO R-16	16	25.4	38.4	501	35	30	254	203



GENERAL INFORMATION

The Hydraulink range of hose couplings are available in three main series; Swage, Field Attachable (often referred to as reusable) and Push-on.

The swage series hosetail is designed as a combination tail suitable for use with all hose types from multi-spiral wire to fibre-reinforced thermoplastic. Simply select the ferrule type to match the relevant hose. Please note that Hydraulink swage hositails should only be used with the ferrules listed in section four of this catalogue.

Hydraulink thread forms and sealing methods are manufactured to the relevant international standards where applicable. All dimensions shown are nominal, and subject to change due to ongoing product development. For critical applications, please contact Hydraulink to confirm dimensions.

Hydraulink swage hositails are typically manufactured from high quality steel and finished with a silver trivalent chromium plating and clear sealant to further increase protection against corrosion. Other material types (such as AISI 316 stainless steel) and finishes are available on request.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

PART NUMBERING SYSTEM – STEEL SWAGE COUPLINGS

The Hydraulink part numbering system is a concise product description in coded form. The part number consists of four modules as follows:

Module 1. Prefix letter; denotes coupling type.

S = Swage

F = Field Attachable (Reusable)

P = Push-on

R5 = Field Attachable (Reusable) to suit SAE 100R5 hose

SU = Suction tail.

Module 2. Series Code; denotes the thread form or sealing method (coupling end) and the configuration of the hosetail.

E.g.; series code #51 denotes a BSPP swivel nut female in a swept 90° configuration,
series code #29 denotes a JIC female swivel nut in a compact 90° configuration.

Series codes may also have a suffix, denoting further information about the coupling.

Please refer to the following “Series Codes and Descriptions” for further information regarding coupling ends and configurations.

Module 3. Coupling end size; denotes the size of the thread form or sealing method of the hosetail. Sizes are expressed as follows;

English/American threads; expressed in 1/16th inch increments denoting the key diameter.
For example; 08 = $8/16 = 1/2$ " and 19 = $19/16 = 1\ 3/16$ ".

Metric threads; expressed in millimetres with prefix M, denoting the key diameter.
For example; M10 = 10mm O.D. thread.

Flanges; express the nominal size of the flange head. Nominal sizing refers to the maximum internal bore.

For example a 12 flange head would have a maximum internal bore of $12/16 = 3/4$ ".

Please refer technical section for further information regarding coupling ends, thread forms and sealing methods.

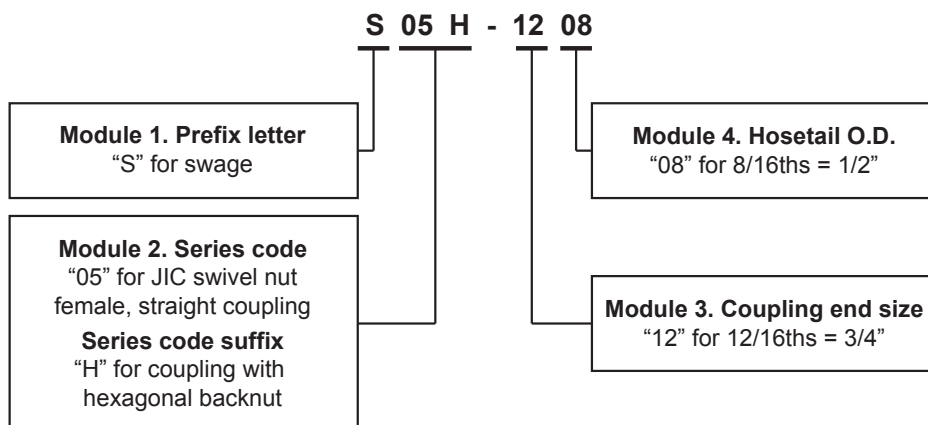
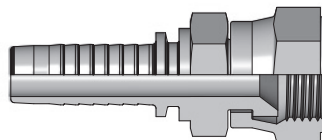
Module 4. Hosetail outside diameter; denotes both the nominal O.D. of the hosetail and the I.D. of the hose it would suit. Sizes are expressed in 1/16th inch increments.

For example; 06 = $6/16 = 3/8$ " and 20 = $20/16 = 1\ 1/4$ ".

PART NUMBERING SYSTEM - EXAMPLES

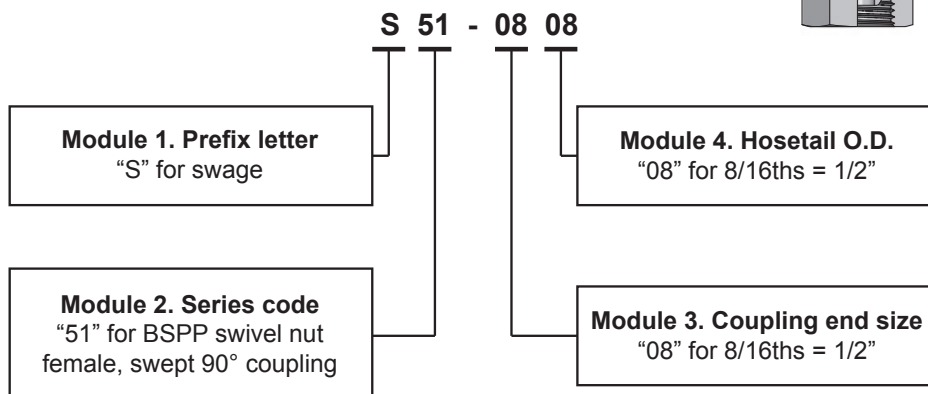
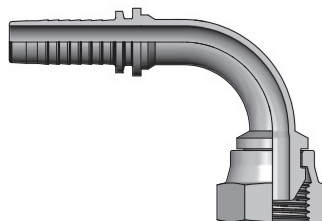
Part number: S05H-1208

Complete description: 3/4" JIC swivel nut female x 1/2" hose tail, straight swage coupling with back hex.



Part number: S51-0808

Complete description: 1/2" BSPP swivel nut female x 1/2" hose tail, swept 90° swage coupling.



SERIES CODES AND DESCRIPTIONS - HOSETAILS

CODE	DESCRIPTION	CODE	DESCRIPTION
01	BSP PARALLEL SWIVEL NUT FEMALE	51	BSPP SWIVEL NUT FEMALE 90° SWEPT BEND
02	BSP PARALLEL SWIVEL NUT FEMALE FLATFACE	52	ORFS SWIVEL NUT FEMALE 90° SWEPT BEND
03	SAE SWIVEL NUT FEMALE	53	METRIC ISO/GAZ SWIVEL NUT FEMALE 90° SWEPT BEND
04	JIC SOLID (FIXED) FEMALE	54	SAE CODE 62 FLANGE 60° SWEPT BEND
05	JIC SWIVEL NUT FEMALE	545	CAT XT5 FLANGE 60° SWEPT BEND
06	BSPT SOLID (FIXED) FEMALE	55	JIC SWIVEL NUT FEMALE 90° SWEPT BEND
07	NPSM SWIVEL NUT FEMALE	56	ORFS SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
08	BSP PARALLEL SOLID (FIXED) FEMALE	57	BSPP SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
09	SAE MALE	58	JIC SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
10	SAE INVERTED FLARE MALE	59	SAE CODE 61 FLANGE 90° SWEPT BEND
11	NPTF SOLID (FIXED) FEMALE	60	BSPP SWIVEL NUT FEMALE 45° SWEPT BEND
110	SAE CODE 61 FLANGE 110° SWEPT BEND	61	SAE CODE 62 FLANGE 90° SWEPT BEND
12	BSP PARALLEL MALE	615	CAT XT5 FLANGE 90° SWEPT BEND
13	ORFS SWIVEL NUT FEMALE	616	O&K SAE CODE 62 FLANGE 90° SWEPT BEND
13R	ORFS SWIVEL NUT FEMALE, SHORT STEM	62	SAE CODE 62 FLANGE 45° SWEPT BEND
133	ORFS SWIVEL NUT FEMALE 30° SWEPT BEND	625	CAT XT5 FLANGE 45° SWEPT BEND
135	SAE CODE 61 FLANGE 135° SWEPT BEND	626	O&K SAE CODE 62 FLANGE 45° SWEPT BEND
14	BSP TAPER MALE SWIVEL	63	ORFS SWIVEL NUT FEMALE 45° SWEPT BEND
15	BSP TAPER MALE	64	JIC SWIVEL NUT FEMALE 45° SWEPT BEND
16	NPTF MALE	65	MINI-CHECK TEST POINT METRIC FEMALE/SPIGOT
17	METRIC MALE (STUD END)	66	SAE CODE 61 FLANGE 60° SWEPT BEND
18	JIC MALE	67	SAE CODE 61 FLANGE 22.5° SWEPT BEND
19	UNO MALE SWIVEL	674	SAE CODE 62 FLANGE 22.5° SWEPT BEND
20	UNO MALE	675	CAT XT5 FLANGE 22.5° SWEPT BEND
21	POCLAIN FLANGE	68	SAE CODE 61 FLANGE 45° SWEPT BEND
22	SAE CODE 62 FLANGE STRAIGHT	69	SAE CODE 61 FLANGE 67.5° SWEPT BEND
225	CAT XT5 FLANGE STRAIGHT	695	CAT XT5 FLANGE 67.5° SWEPT BEND
226	O&K SAE CODE 62 FLANGE STRAIGHT	70	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE
23	SAE CODE 61 FLANGE STRAIGHT	71	JIS (KOMATSU) FLANGE STRAIGHT
236	O&K SAE CODE 61 FLANGE STRAIGHT	72	JIS (KOMATSU) FLANGE 90° SWEPT BEND
24	BSPT MALE SWIVEL 90°	73	JIS (KOMATSU) FLANGE 45° SWEPT BEND
25	BSP PARALLEL SWIVEL NUT FEMALE 90° COMPACT	74	FRENCH GAZ METRIC SWIVEL NUT FEMALE
26	BSPT MALE 90° COMPACT	75	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEMALE
27	SAE SWIVEL NUT FEMALE 90° COMPACT	76	DIN METRIC 60° CONE SWIVEL NUT FEMALE
28	JIC MALE SWIVEL 90° COMPACT	77	METRIC GLOBESEAL SWIVEL NUT FEMALE
29	JIC SWIVEL NUT FEMALE 90° COMPACT	78	HEAVY DIN METRIC MALE
30	WATERBLAST SWIVEL NUT FEMALE	79	HEAVY DIN METRIC SWIVEL NUT FEMALE
31	DIN METRIC 60° CONE MALE STRAIGHT	80	LIGHT DIN METRIC MALE
32	UNO MALE SWIVEL 90° COMPACT	81	LIGHT DIN METRIC SWIVEL NUT FEMALE
33	JIC MALE 90° COMPACT	82	METRIC STANDPIPE
34	JIS (KOMATSU) METRIC MALE	83	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
35	JIS 30° FLARE (MITSUBISHI) MALE	84	HEAVY DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
36	BSP TAPER MALE 45°	85	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
37	SAE SWIVEL NUT FEMALE 45° SWEPT BEND	86	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
38	BANJO	87	LIGHT DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
39	POCLAIN FLANGE	88	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
39N	POCLAIN FLANGE 90°	89	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
39F	POCLAIN FLANGE 45°	90	HOSE JOINER
40	ORFS MALE	91	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEM. 90° SWEPT BEND
S40N	ORFS MALE 90° SWEPT BEND	92	IMPERIAL STANDPIPE
41	SAE SWIVEL NUT FEMALE 90° SWEPT BEND	93	METRIC 90° STANDPIPE
42	SAE INVERTED FLARE MALE 45° SWEPT BEND	94	SAE IMPERIAL TUBE CONNECTOR
43	SAE INVERTED FLARE MALE 90 SWEPT BEND	95	DIN 60° METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
44	KOBELCO METRIC MALE	96	LIFESAVER
45	SAE CODE 61 FLANGE 30° SWEPT BEND	97	WEO (CEJN) STRAIGHT STANDPIPE
456	O&K SAE CODE 61 FLANGE 30° SWEPT BEND	109	METRIC 45° FLARE BULKHEAD
46	SAE CODE 62 FLANGE 30° SWEPT BEND	131	CHINESE FLAT FACE STRAIGHT FEMALE
465	CAT XT5 FLANGE 30° SWEPT BEND		
466	O&K SAE CODE 62 FLANGE 30° SWEPT BEND		
47	FRENCH GAZ METRIC MALE		
48	JIS (KOMATSU) METRIC MALE		
49	STAPLELOCK FEMALE		
50	STAPLELOCK MALE		

SUFFIX CODES FOR SERIES CODES

N	NINETY DEGREE	e.g. S40N
F	FORTY FIVE DEGREE	e.g. S40F
S	SWIVEL MALE	e.g. S18S
K	COMPACT BLOCK 45°	e.g. S64K, S60K
C	CYLINDRICAL/ROUND BAR TAIL STYLE	e.g. S01C
H	HEXAGONAL BAR TAIL STYLE	e.g. S05H

SUFFIX CODES FOR PART NUMBERS

X	EXTENDED DROP LENGTH IN MM e.g S615-1616-X132
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PREFIX CODES FOR SERIES

GS	GATES GLOBAL SPIRAL NON-SKIVE e.g. GS01-2020
GSM	GATES GLOBAL SPIRAL MAXIMUM NON-SKIVE e.g. GSM01-3232

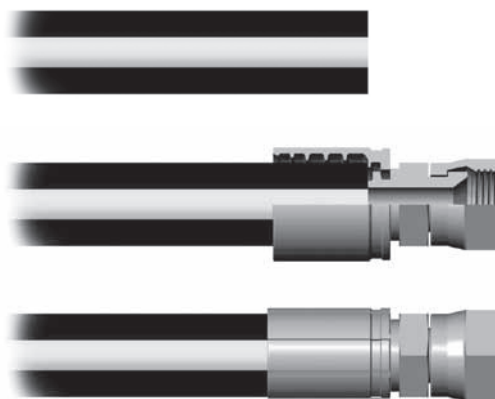
ASSEMBLY INSTRUCTIONS

Non-Skive Swage Couplings

Ensure hose is cut square, with minimal end “flaring”.

Insert hose into ferrule, ensuring sufficient clearance for location of tail locking collar between hose end and ferrule shoulder. Lightly lubricate tailpiece and insert into hose until collar abuts the ferrule. Check alignment of ferrule shoulder and tailpiece locking collar before swaging.

Select correct die set, and swage to diameter nominated on latest Hydraulink Crimp Chart. Check final swage diameter with verniers, and adjust crimp dimensions if necessary.

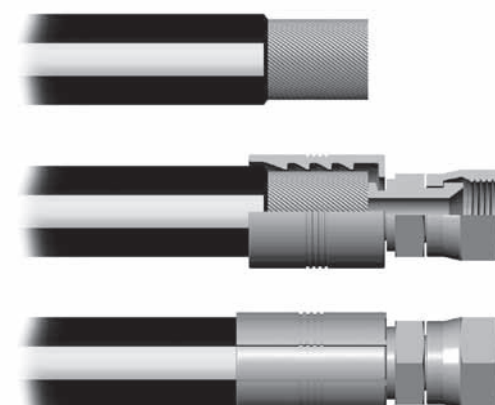


Skive Swage Couplings

Ensure hose is cut square, and refer to latest Hydraulink Crimp Chart for skive dimension. Mark dimension from cut end, then cut and strip the rubber cover, exposing the wire.

Insert hose into ferrule, ensuring sufficient clearance for location of tail locking collar between hose end and ferrule shoulder. Lightly lubricate tailpiece and insert into hose until collar abuts the ferrule. Check alignment of ferrule shoulder and tailpiece locking collar before swaging.

Select correct die set, and swage to diameter nominated on latest Hydraulink Crimp Chart. Check final swage diameter with verniers, and adjust crimp dimensions if necessary.



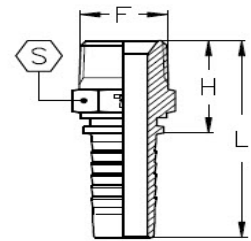
Please refer to training manual for more detailed assembly instructions.

Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

BSP

S15

BSP TAPER MALE STRAIGHT

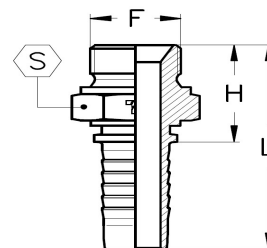


Part Number	BSPT Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S15-0204	1/8-28	1/4	6.4	04	12	21	49	350	5000
S15-0404	1/4-19	1/4	6.4	04	15	25	53	350	5000
S15-0406	1/4-19	3/8	9.5	06	15	26	56	350	5000
S15-0408	1/4-19	1/2	12.7	08	22	29	62	350	5000
S15-0604	3/8-19	1/4	6.4	04	19	26	54	280	4000
S15-0605	3/8-19	5/16	7.9	05	19	26	54	280	4000
S15-0606	3/8-19	3/8	9.5	06	19	27	57	280	4000
S15-0608	3/8-19	1/2	12.7	08	19	28	64	280	4000
S15-0806	1/2-14	3/8	9.5	06	22	32	63	280	4000
S15-0808	1/2-14	1/2	12.7	08	22	33	66	280	4000
S15-0812	1/2-14	3/4	19	12	27	38	78	280	4000
S15-1010	5/8-14	5/8	15.9	10	25	35	72	280	4000
S15-1208	3/4-14	1/2	12.7	08	27	36	68	280	4000
S15-1210	3/4-14	5/8	15.9	10	27	35	71	280	4000
S15-1212	3/4-14	3/4	19	12	27	36	77	280	4000
S15-1216	3/4-14	1	25.4	16	32	42	98	280	4000
S15-1612	1-11	3/4	19	12	36	41	82	280	4000
S15-1616	1-11	1	25.4	16	36	44	101	280	4000
S15-1620	1-11	1 1/4	31.8	20	41	52	118	280	4000
S15-2016	1 1/4-11	1	25.4	16	48	52	108	210	3000
S15-2020	1 1/4-11	1 1/4	31.8	20	46	51	118	210	3000
S15-2424	1 1/2-11	1 1/2	38	24	50	54	137	185	2700
S15-3232	2-11	2	51	32	65	64	160	175	2500

S12

BSPP MALE STRAIGHT
BSP 60° CONE

- ISO 12151-6

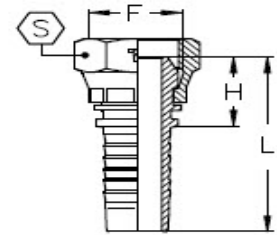


Part Number	BSPP Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S12-0204	1/8-28	1/4	6.4	04	12	21	49	350	5000
S12-0404	1/4-19	1/4	6.4	04	19	25	53	450	6500
S12-0406	1/4-19	3/8	9.5	06	19	25	55	450	6500
S12-0604	3/8-19	1/4	6.4	04	22	27	55	450	6500
S12-0606	3/8-19	3/8	9.5	06	22	27	58	450	6500
S12-0608	3/8-19	1/2	12.7	08	22	28	61	420	6000
S12-0806	1/2-14	3/8	9.5	06	27	32	62	420	6000
S12-0808	1/2-14	1/2	12.7	08	27	33	66	420	6000
S12-1008	5/8-14	1/2	12.7	08	30	35	68	350	5000
S12-1010	5/8-14	5/8	15.9	10	30	35	71	350	5000
S12-1208	3/4-14	1/2	12.7	08	32	36	69	350	5000
S12-1212	3/4-14	3/4	19	12	32	37	77	350	5000
S12-1612	1-11	3/4	19	12	41	42	82	280	4000
S12-1616	1-11	1	25.4	16	41	45	101	280	4000
S12-2020	1.1/4-11	1 1/4	31.8	20	46	51	118	210	3000

S01C

BSPP FEMALE STRAIGHT
BSP 60° CONE SWIVEL NUT

- ISO 12151-6



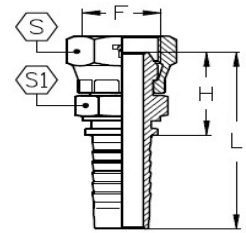
Part Number	BSPP Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S01C-0203	1/8-28	3/16	4.8	03	14	16	41	350	5000
S01C-0204	1/8-28	1/4	6.4	04	14	17	45	350	5000
S01C-0403	1/4-19	3/16	4.8	03	19	19	44	420	6000
S01C-0404	1/4-19	1/4	6.4	04	19	19	47	450	6500
S01C-0406	1/4-19	3/8	9.5	06	19	19	49	450	6500
S01C-0604	3/8-19	1/4	6.4	04	22	22	50	450	6500
S01C-0605	3/8-19	5/16	7.9	05	22	22	50	350	5000
S01C-0606	3/8-19	3/8	9.5	06	22	21	51	450	6500
S01C-0608	3/8-19	1/2	12.7	08	22	22	56	420	6000
S01C-0806	1/2-14	3/8	9.5	06	27	23	54	420	6000
S01C-0808	1/2-14	1/2	12.7	08	27	23	54	420	6000
S01C-1010	5/8-14	5/8	15.9	10	30	23	59	350	5000
S01C-1208	3/4-14	1/2	12.7	08	32	27	60	350	5000
S01C-1210	3/4-14	5/8	15.9	10	32	27	63	350	5000
S01C-1212	3/4-14	3/4	19	12	32	27	67	350	5000
S01C-1612	1-11	3/4	19	12	41	30	70	280	4000
S01C-1616	1-11	1	25.4	16	41	34	90	380	5500
S01C-2020	1.1/4-11	1 1/4	31.8	20	50	39	106	325	4700
S01C-2420	1.1/2-11	1 1/4	31.8	20	60	42	109	290	4200
S01C-2424	1.1/2-11	1 1/2	38.1	24	60	43	125	290	4200
S01C-3232	2-11	2	50.8	32	75	47	143	250	3600

S01H

BSPP FEMALE STRAIGHT

BSP 60° CONE SWIVEL NUT - BACK HEX

- ISO 12151-6



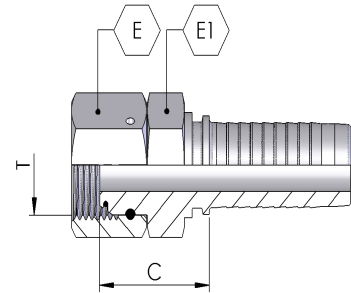
Part Number	BSPP Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Hex A/F - S1 (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S01H-0204	1/8-28	1/4	6.4	04	14	16	22	50	350
S01H-0404	1/4-19	1/4	6.4	04	19	14	24	52	450
S01H-0405	1/4-19	5/16	7.9	05	19	16	24	52	450
S01H-0406	1/4-19	3/8	9.5	06	19	19	27	55	450
S01H-0408	1/4-19	1/2	12.7	08	19	22	27	59	450
S01H-0604	3/8-19	1/4	6.4	04	22	17	26	54	450
S01H-0605	3/8-19	5/16	7.9	05	22	17	26	54	350
S01H-0606	3/8-19	3/8	9.5	06	22	17	26	57	450
S01H-0608	3/8-19	1/2	12.7	08	22	22	29	63	420
S01H-0806	1/2-14	3/8	9.5	06	27	22	29	60	420
S01H-0808	1/2-14	1/2	12.7	08	27	22	30	63	420
S01H-0810	1/2-14	5/8	15.9	10	27	25	31	67	420
S01H-0812	1/2-14	3/4	19	12	27	28	35	75	420
S01H-1008	5/8-14	1/2	12.7	08	28	25	30	63	350
S01H-1010	5/8-14	5/8	15.9	10	29	24	31	67	350
S01H-1208	3/4-14	1/2	12.7	08	32	28	33	67	350
S01H-1210	3/4-14	5/8	15.9	10	32	27	34	70	350
S01H-1212	3/4-14	3/4	19	12	32	27	36	76	350
S01H-1216	3/4-14	1	25.4	16	32	32	39	95	350
S01H-1612	1-11	3/4	19	12	38	32	39	79	250
S01H-1616	1-11	1	25.4	16	38	38	45	101	250
S01H-1620	1-11	1 1/4	31.8	20	38	41	46	112	250
S01H-2016	1 1/4-11	1	25.4	16	51	41	45	101	200
S01H-2020	1 1/4-11	1 1/4	31.8	20	51	44	54	120	200
S01H-2424	1 1/2-11	1 1/2	38.1	24	55	51	53	135	160
S01H-3232	2-11	2	50.8	32	70	70	64	160	125

S01XH

BSPP FEMALE STRAIGHT

BSP 60° CONE SWIVEL NUT - BACK HEX HEAVY DUTY

- ISO 12151-6

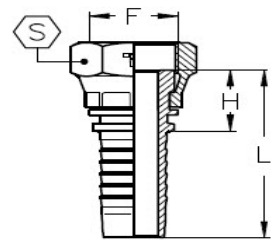


Part Number	BSPP Female Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Hex A/F - E1 (mm)	Cutoff - C (mm)
S01XH-1212	3/4-14	3/4	19	12	32	28	36
S01XH-1616	1-11	1	25.4	16	38	38	42

S02C

BSPP FLAT FACE FEMALE STRAIGHT

BSP FLAT FACE SWIVEL NUT



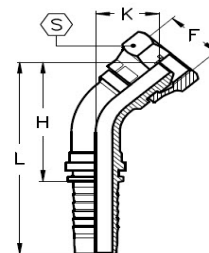
Part Number	BSPP Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S02C-0404	1/4-19	1/4	6.4	04	19	15	43	450	6500
S02C-0606	3/8-19	3/8	9.5	06	22	17	47	450	6500
S02C-0608	3/8-19	1/2	12.7	08	22	16	48	450	6500
S02C-0806	1/2-14	3/8	9.5	06	27	19	49	420	6000
S02C-0808	1/2-14	1/2	12.7	08	27	19	52	420	6000
S02C-1208	3/4-14	1/2	12.7	08	32	23	56	350	5000
S02C-1212	3/4-14	3/4	19	12	32	22	63	350	5000
S02C-1616	1-11	1	25.4	16	38	29	85	250	3600

S60

BSPP FEMALE 45° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT

- ISO 12151-6



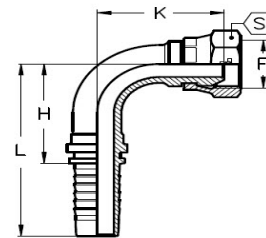
Part Number	BSPP Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S60-0404	1/4-19	1/4	6.4	04	19	16	37	65	450
S60-0604	3/8-19	1/4	6.4	04	22	19	40	68	450
S60-0606	3/8-19	3/8	9.5	06	22	19	42	73	450
S60-0806	1/2-14	3/8	9.5	06	27	21	44	75	420
S60-0808	1/2-14	1/2	12.7	08	27	22	49	82	420
S60-1010	5/8-14	5/8	15.9	10	30	24	54	90	350
S60-1212	3/4-14	3/4	19	12	32	28	66	106	350
S60-1616	1-11	1	25.4	16	36	41	86	142	380
S60-2020	1 1/4-11	1 1/4	31.8	20	43	50	103	169	325
S60-2424	1 1/2-11	1 1/2	38	24	51	60	123	203	290
S60-3232	2-11	2	51	32	65	75	160	257	250

S51

BSPP FEMALE 90° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT

- ISO 12151-6

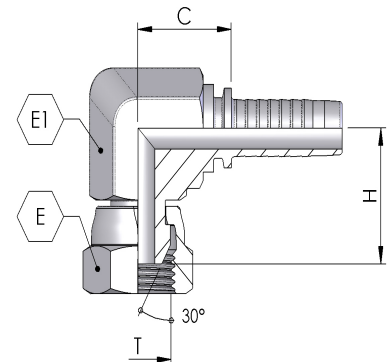


Part Number	BSPP Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S51-0204	1/8-28	1/4	6.4	04	14	28	26	54	350
S51-0404	1/4-19	1/4	6.4	04	19	28	26	54	450
S51-0604	3/8-19	1/4	6.4	04	22	32	26	54	450
S51-0606	3/8-19	3/8	9.5	06	22	35	31	61	450
S51-0806	1/2-14	3/8	9.5	06	27	38	31	61	420
S51-0808	1/2-14	1/2	12.7	08	27	42	37	70	420
S51-1010	5/8-14	5/8	15.9	10	30	46	45	80	350
S51-1208	3/4-14	1/2	12.7	08	32	48	37	70	350
S51-1210	3/4-14	5/8	15.9	10	32	50	45	80	350
S51-1212	3/4-14	3/4	19	12	32	56	54	95	350
S51-1616	1-11	1	25.4	16	41	72	71	128	380
S51-2020	1 1/4-11	1 1/4	31.8	20	50	88	87	154	325
S51-2424	1 1/2-11	1 1/2	38	24	60	104	105	188	290
S51-3232	2-11	2	51	32	75	137	140	237	250

S25

BSPP FEMALE 90° COMPACT ELBOW
BSP 60° CONE SWIVEL NUT

- ISO 12151-6

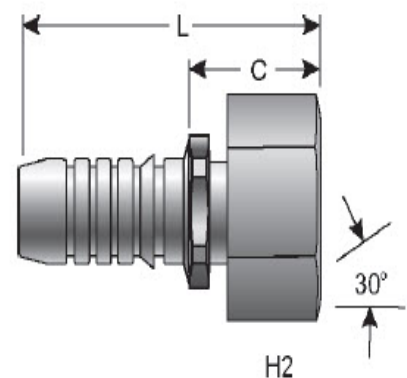


Part Number	BSPP Female Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Body Hex - E1 (mm)	Cutoff - C (mm)	Drop - H (mm)	Working Pressure (bar)
S25-0404	1/4-19	1/4	6.4	04	19	14	19	21	400
S25-0604	3/8-19	1/4	6.4	04	22	19	22	25	400
S25-0606	3/8-19	3/8	9.5	06	22	19	23	25	400
S25-0806	1/2-14	3/8	9.5	06	27	24	25	31	350
S25-0808	1/2-14	1/2	12.7	08	27	24	25	31	350
S25-1010	5/8-14	5/8	15.9	10	29	30	32	31	350
S25-1212	3/4-14	3/4	19.0	12	32	27	32	36	315
S25-1616	1-11	1	25.4	16	41	36	42	42	250

GS-FBSPORX (GS01)

GATES GS BSP FEMALE STRAIGHT
60° CONE SWIVEL NUT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.



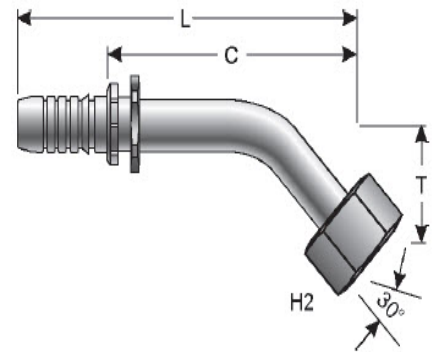
Part Number	Gates Code	BSPP Female Thread	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Hex A/F - H2 (mm)	Cutoff - C (mm)
20GS-20FBS PORX	20GS-20FBS PORX	1 1/4-11	1 1/4	31.8	20	116.6	50	45.5

GS-FBSPORX45 (GS60)

GATES GS BSP FEMALE 45° ELBOW

60° CONE SWIVEL NUT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.



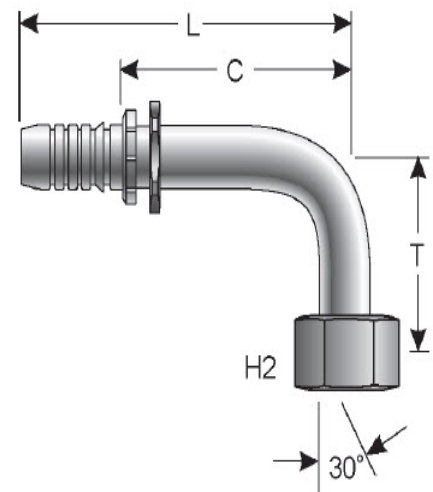
Part Number	Gates Code	BSPP Female Thread	Hose I.D (in)	Dash size	Length - L (mm)	Hex A/F - H2 (mm)	Cutoff - C (mm)	Drop - T (mm)
20GS-20FBS PORX45	20GS-20FBS PORX45	1 1/4-11	1 1/4	20	191	50	119.9	37.6

GS-FBSPORX90 (GS51)

GATES GS BSP FEMALE 90° ELBOW

60° CONE SWIVEL NUT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

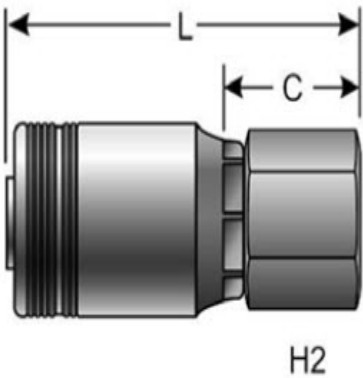


Part Number	Gates Code	BSPP Female Thread	Hose I.D (in)	Dash size	Length - L (mm)	Hex A/F - H2 (mm)	Cutoff - C (mm)	Drop - T (mm)
20GS-20FBS PORX90	20GS-20FBS PORX90	1 1/4-11	1 1/4	20	180.6	50	109.5	80

GSM-FBSPORX (GSM01)

GATES GSM BSP FEMALE STRAIGHT
60° CONE SWIVEL NUT ONE PIECE

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.



Part Number	Gates Code	BSPP Female Thread	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Hex A/F - H2 (mm)	Cutoff - C (mm)
24GSM-24FB SPORX	24GSM-24FB SPORX	1 1/2 - 11	1 1/2	24	38.1	154	55	58.8
32GSM-32FB SPORX	32GSM-32FB SPORX	2 - 11	2	32	50.8	183.9	70.1	69.9

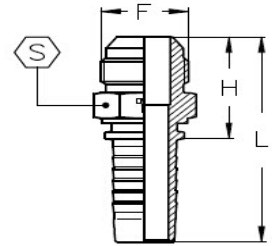
JIC

S18

JIC MALE STRAIGHT

JIC 37° FLARE MALE STRAIGHT

- ISO 12151-5/SAE J516

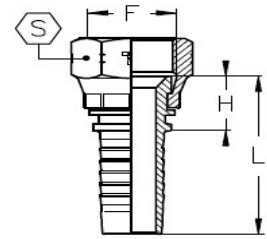


Part Number	JIC Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S18-0704	7/16-20	1/4	6.4	04	12	25.5	53.5	400	5800
S18-0804	1/2-20	1/4	6.4	04	14	25.5	53.5	400	5800
S18-0904	9/16-18	1/4	6.4	04	15	26.6	54.6	350	5000
S18-0906	9/16-18	3/8	9.5	06	15	26.6	57.1	350	5000
S18-1204	3/4-16	1/4	6.4	04	22	32	60	350	5000
S18-1206	3/4-16	3/8	9.5	06	19	29.7	60.2	350	5000
S18-1208	3/4-16	1/2	12.7	08	19	30.7	63.7	350	5000
S18-1408	7/8-14	1/2	12.7	08	24	35.3	68.3	350	5000
S18-1410	7/8-14	5/8	15.9	10	24	35.5	71.3	350	5000
S18-1412	7/8-14	3/4	19	12	27	37.3	77.8	350	5000
S18-1708	1 1/16-12	1/2	12.7	08	27	38.9	71.9	350	5000
S18-1710	1 1/16-12	5/8	15.9	10	27	39.1	74.9	350	5000
S18-1712	1 1/16-12	3/4	19	12	27	39.9	80.4	350	5000
S18-1716	1 1/16-12	1	25.4	16	32	43	99.5	350	5000
S18-1912	1 3/16-12	3/4	19	12	32	41.6	82.1	280	4000
S18-2112	1 5/16-12	3/4	19	12	34	42.1	82.6	280	4000
S18-2116	1 5/16-12	1	25.4	16	36	45	101.5	280	4000
S18-2616	1 5/8-12	1	25.4	16	46	48	104.5	210	3000
S18-2620	1 5/8-12	1 1/4	31.8	20	46	50.5	117	210	3000
S18-3024	1 7/8-12	1 1/2	38	24	50	57	139.5	185	2700
S18-4032	2 1/2-12	2	51	32	65	68.5	165	175	2500

S05C

JIC FEMALE STRAIGHT
37° CONE ROLLED NUT

- ISO 12151-5/SAE J516

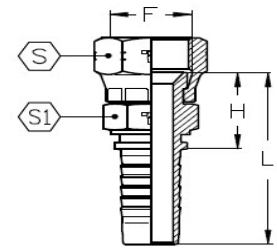


Part Number	JIC Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Cutoff - C (mm)	Working Pressure (bar)	Working Pressure (psi)
S05C-0703	7/16-20	3/16	4.8	03	15	14	420	6000
S05C-0704	7/16-20	1/4	6.4	04	15	14.2	400	5800
S05C-0804	1/2-20	1/4	6.4	04	17	14.5	400	5800
S05C-0806	1/2-20	3/8	9.5	9.5	17	14.8	350	5000
S05C-0904	9/16-18	1/4	6.4	04	19	16.1	350	5000
S05C-0905	9/16-18	5/16	7.9	05	19	16.1	350	5000
S05C-0906	9/16-18	3/8	9.5	06	19	16.1	350	5000
S05C-1204	3/4-16	1/4	6.4	04	22	15.5	350	5000
S05C-1206	3/4-16	3/8	9.5	06	22	17.3	350	5000
S05C-1208	3/4-16	1/2	12.7	08	22	18.3	350	5000
S05C-1406	7/8-14	3/8	9.5	06	27	21.3	350	5000
S05C-1408	7/8-14	1/2	12.7	08	27	19.3	350	5000
S05C-1410	7/8-14	5/8	15.9	10	27	19.3	350	5000
S05C-1412	7/8-14	3/4	19	12	27	19.8	350	5000
S05C-1708	1.1/16-12	1/2	12.7	08	32	23.5	350	5000
S05C-1710	1.1/16-12	5/8	15.9	10	32	21	350	5000
S05C-1712	1.1/16-12	3/4	19	12	32	21.5	350	5000
S05C-1912	1.3/16-12	3/4	19	12	36	21	280	4000
S05C-2112	1.5/16-12	3/4	19	19	38	22.7	280	4000

S05H

JIC FEMALE STRAIGHT
37° FLARE SWIVEL NUT - BACK HEX

- ISO 12151-5/SAE J516



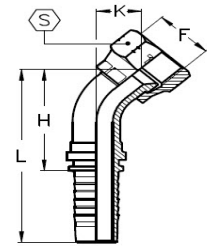
Part Number	JIC Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Hex A/F - S1 (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S05H-0703	7/16-20	3/16	5	03	14	12	19	44	420
S05H-0704	7/16-20	1/4	6.4	04	14	14	20.5	48.5	420
S05H-0804	1/2-20	1/4	6.4	04	17	14	21	49	400
S05H-0904	9/16-18	1/4	6.4	04	19	14	22	50	350
S05H-0906	9/16-18	3/8	9.5	06	19	16	22.5	53	350
S05H-0908	9/16-18	1/2	12.7	08	19	19	24.5	57.5	350
S05H-1206	3/4-16	3/8	9.5	06	22	19	24.5	55	350
S05H-1208	3/4-16	1/2	12.7	08	22	19	25.5	58.5	350
S05H-1210	3/4-16	5/8	15.9	10	22	22	26.7	62.5	350
S05H-1408	7/8-14	1/2	12.7	08	27	22	27.5	60.5	350
S05H-1410	7/8-14	5/8	15.9	10	27	22	27.7	63.5	350
S05H-1412	7/8-14	3/4	19	12	27	27	30	70.5	350
S05H-1708	1 1/16-12	1/2	12.7	08	32	25	30.3	63.3	350
S05H-1710	1 1/16-12	5/8	15.9	10	32	25	30.5	66.3	350
S05H-1712	1 1/16-12	3/4	19	12	32	27	31.8	72.3	350
S05H-1716	1 1/16-12	1	25.4	16	32	32	37	93	350
S05H-1912	1 3/16-12	3/4	19	12	36	30	34.5	75	280
S05H-2112	1 5/16-12	3/4	19	12	41	32	35.5	76	280
S05H-2116	1 5/16-12	1	25.4	16	41	32	39.5	96	280
S05H-2616	1 5/8-12	1	25.4	16	50	41	46	102.5	210
S05H-2620	1 5/8-12	1 1/4	31.8	20	50	41	42.8	114.5	210
S05H-3020	1 7/8-12	1 1/4	31.8	20	60	46	51	117.5	185
S05H-3024	1 7/8-12	1 1/2	38	24	60	46	53	135.5	185
S05H-4032	2 1/2-12	2	51	32	75	60	69	165.5	175

S64

JIC FEMALE 45° ELBOW

JIC 37° FLARE SWIVEL NUT

- ISO 12151-5/SAE J516



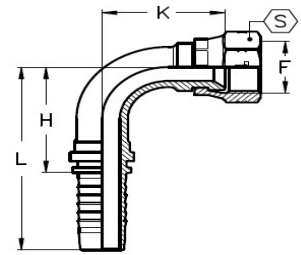
Part Number	JIC Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S64-0703	7/16-20	3/16	4.8	03	14	10	29	54	420
S64-0704	7/16-20	1/4	6.4	04	14	10	31	59	400
S64-0804	1/2-20	1/4	6.4	04	17	11	32	60	400
S64-0904	9/16-18	1/4	6.4	04	19	12	33	61	350
S64-0906	9/16-18	3/8	9.5	06	19	12	35.5	66	350
S64-1206	3/4-16	3/8	9.5	06	22	14	37.5	68	350
S64-1208	3/4-16	1/2	12.7	08	22	14.5	41	76	350
S64-1408	7/8-14	1/2	12.7	08	27	16	43	76	350
S64-1410	7/8-14	5/8	15.9	10	27	16	47	83	350
S64-1412	7/8-14	3/4	19	12	27	27	64	105	350
S64-1708	1 1/16-12	1/2	12.7	08	32	19	50	86	350
S64-1710	1 1/16-12	5/8	15.9	10	32	19	45.5	78.5	350
S64-1712	1 1/16-12	3/4	19	12	32	22	59	99	350
S64-1912	1 3/16-12	3/4	19	12	36	22	59	100	280
S64-2112	1 5/16-12	3/4	19	12	41	24	61	101	280
S64-2116	1 5/16-12	1	25.4	16	41	32	82	138	280
S64-2620	1 5/8-12	1 1/4	31.8	20	50	38	98	164	210
S64-3024	1 7/8-12	1 1/2	38	24	60	46	118	201	185
S64-4032	2 1/2-12	2	51	32	75	62	157	253	175

S55

JIC FEMALE 90° ELBOW

JIC 37° FLARE SWIVEL NUT

- ISO 12151-5/SAE J516



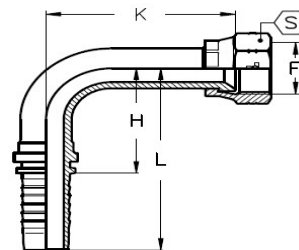
Part Number	JIC Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S55-0703	7/16-20	3/16	5	03	14	21	21	46	420
S55-0704	7/16-20	1/4	6.4	04	14	26	25.5	53.5	420
S55-0804	1/2-20	1/4	6.4	04	17	26	25.5	53.5	400
S55-0904	9/16-18	1/4	6.4	04	19	27	25.5	53.5	350
S55-0906	9/16-18	3/8	9.5	06	19	33	31	61.5	350
S55-1204	3/4-16	1/4	6.4	04	24	30	25	53.78	350
S55-1206	3/4-16	3/8	9.5	06	22	33	31	61.5	350
S55-1208	3/4-16	1/2	12.7	08	22	39	37	70	350
S55-1406	7/8-14	3/8	9.5	06	27	31	31	61.5	350
S55-1408	7/8-14	1/2	12.7	08	27	40	37	70	350
S55-1410	7/8-14	5/8	15.9	10	27	45	45	81	350
S55-1412	7/8-14	3/4	19	12	27	54	55	95	350
S55-1708	1 1/16-12	1/2	12.7	08	32	40	40	73	350
S55-1710	1 1/16-12	5/8	15.9	10	32	47	45	81	350
S55-1712	1 1/16-12	3/4	19	12	32	53	55	95	350
S55-1716	1 1/16-12	1	25.4	16	32	71	71	122	280
S55-1912	1 3/16-12	3/4	19	12	36	54	55	95	280
S55-2112	1 5/16-12	3/4	19	12	41	56	55	95	280
S55-2116	1 5/16-12	1	25.4	16	41	67	71	128	280
S55-2620	1 5/8-12	1 1/4	31.8	20	50	81	87	154	210
S55-3020	1 7/8-12	1 1/4	31.8	20	60	82	87	154	185
S55-3024	1 7/8-12	1 1/2	38	24	60	97	105	188	185
S55-4032	2 1/2-12	2	51	32	75	132	140	237	175

S58

JIC FEMALE 90° ELBOW - EXTENDED

JIC 37° FLARE SWIVEL NUT

- ISO 12151-5/SAE J516



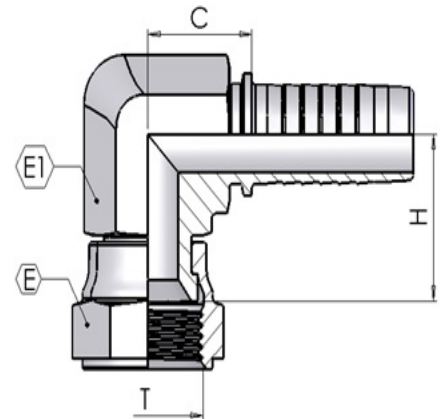
Part Number	JIC Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S58-0704	7/16-20	1/4	6.4	04	14	46	25.5	53.5	400
S58-0904	9/16-18	1/4	6.4	04	17	46	25.5	53.5	350
S58-0906	9/16-18	3/8	9.5	06	19	54	31	61.5	350
S58-1206	3/4-16	3/8	9.5	06	22	64	31	61.5	350
S58-1208	3/4-16	1/2	12.7	08	22	64	38	71	350
S58-1408	7/8-14	1/2	12.7	08	27	70	38	71	350
S58-1712	1 1/16-12	3/4	19	12	32	96	55	95	350
S58-2116	1 5/16-12	1	25.4	16	41	116	71	128	280

S29

JIC FEMALE 90° COMPACT ELBOW

JIC 37° FLARE SWIVEL NUT

- ISO 12151-5/SAE J516



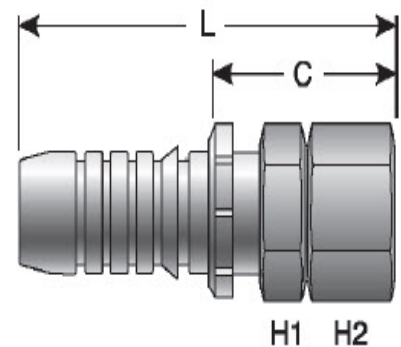
Part Number	JIC Female Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Body Hex - E1 (mm)	Cutoff - C (mm)	Drop - H (mm)	Working Pressure (bar)
S29-0703	7/16-20	3/16	4.8	03	15	17	19	17	350
S29-0704	7/16-20	1/4	6.4	04	14	14	18	17	350
S29-0804	1/2-20	1/4	6.4	04	16	21	20	18	350
S29-0904	9/16-18	1/4	6.4	04	19	14	18	19	350
S29-0906	9/16-18	3/8	9.5	06	19	19	23	22	350
S29-1206	3/4-16	3/8	9.5	06	22	19	23	23	310
S29-1208	3/4-16	1/2	12.7	08	22	24	25	27	310
S29-1408	7/8-14	1/2	12.7	08	27	24	25	27	240
S29-1410	7/8-14	5/8	15.9	10	27	24	25	27	240
S29-1712	1.1/16-12	3/4	19.0	12	32	27	32	30	240
S29-2116	1.5/16-12	1	25.4	16	41	36	42	38	210

GS-FJX (GS05)

GATES GS JIC FEMALE STRAIGHT

JIC 37° FLARE SWIVEL NUT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

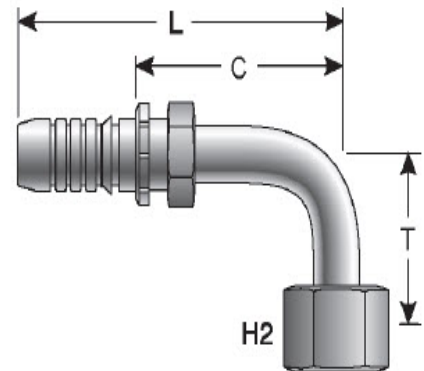


Part Number	Gates Code	JIC Female Thread	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Hex A/F - H1 (mm)	Hex A/F - H2 (mm)
20GS-20FJ X	20GS-20FJ X	1 5/8-12	1 1/4	31.8	20	134.4	65	47.6	50.8

GS-FJX90M (GS55)

GATES GS JIC FEMALE 90° ELBOW
JIC 37° FLARE SWIVEL NUT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

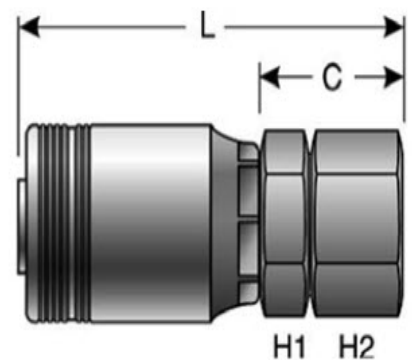


Part Number	Gates Code	JIC Female Thread	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Hex A/F - H2 (mm)
20GS-20FJ X90M	20GS-20FJ X90M	1 5/8-12	1 1/4	31.8	20	174	102.9	64	50.8

GSM-FJX (GSM05)

GATES GSM JIC FEMALE STRAIGHT
JIC 37° FLARE SWIVEL NUT

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.

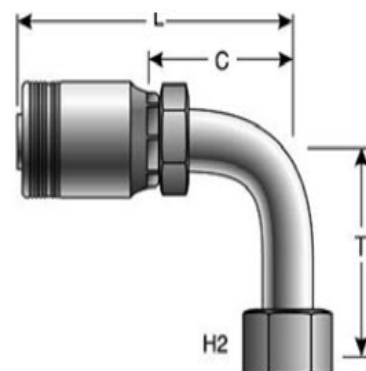


Part Number	Gates Code	JIC Female Thread	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Hex A/F - H2 (mm)	Hex A/F - H1 (mm)	Cutoff - C (mm)
24GSM-24F JX	24GSM-24F JX	1 7/8 - 12	1 1/2	24	38.1	172.2	59.9	55	77.2
32GSM-32F JX	32GSM-32F JX	2 1/2 - 12	2	32	50.8	205.1	74.9	70.1	90.9

GSM-FJX90M (GSM55)

GATES GSM JIC FEMALE 90° ELBOW
JIC 37° FLARE SWIVEL NUT

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.

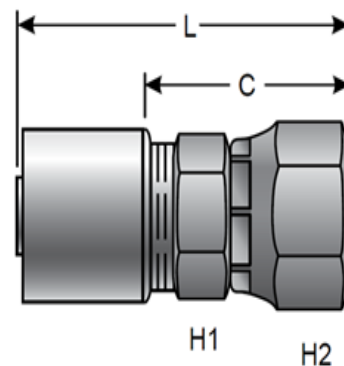


Part Number	Gates Code	JIC Female Thread	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Hex A/F - H2 (mm)	Cutoff - C (mm)	Drop - T (mm)
24GSM-24F JX90M	24GSM-24F JX90M	1 7/8 - 12	1 1/2	24	38.1	227.6	60	132.3	86.1

G4H-FJX (GL05)

JIC FEMALE STRAIGHT
GATES GL JIC 37° FLARE THRUST-WIRE NUT

- GATES GL RANGE



Part Number	Gates Code	JIC Female Thread - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - H1 (mm)	Hex A/F - H2 (mm)	Length - L (mm)	Cutoff - C (mm)
40G4H-40F JX	40GL-40FJ X	3-12	2 1/2	63.5	40	76.2	88.9	151.9	74.2

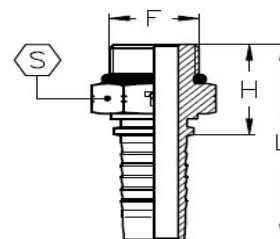
UNO

S20

UNO MALE STRAIGHT

UNO FIXED STUD STRAIGHT

- SAE J516



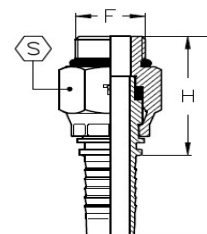
Part Number	Uno Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	O-Ring	Working Pressure (bar)
S20-0704	7/16-20	1/4	6.4	04	14	21.5	49.5	8.92x1.83	400
S20-0906	9/16-18	3/8	9.5	06	17	23.5	54	11.89x1.98	350
S20-1206	3/4-16	3/8	9.5	06	22	26	56.5	16.36x2.21	350
S20-1208	3/4-16	1/2	12.7	08	22	27	60	16.36x2.21	350
S20-1408	7/8-14	1/2	12.7	08	25	29.5	62.5	19.18x2.46	350
S20-1708	1.1/16-12	1/2	12.7	08	32	33.5	66.5	23.47x2.95	350

S19

UNO MALE STRAIGHT SWIVEL

UNF O-RING

- Do not use as a live swivel

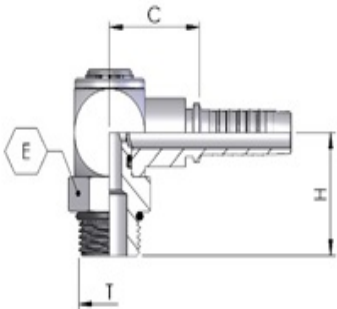


Part Number	Uno Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S19-0906	9/16-18	3/8	9.5	06	18	40	70	210	3000
S19-1206	3/4-16	3/8	9.5	06	22	42	72	210	3000

S32

UNO MALE STUD 90° COMPACT ELBOW SWIVEL

- Do not use as a live swivel



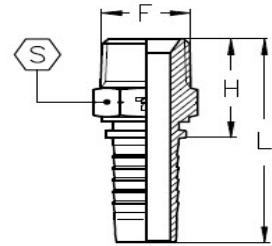
Part Number	Uno Male Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Drop - H (mm)	Cutoff - C (mm)	O-Ring	Working Pressure (bar)
S32-1408K	7/8-14	1/2	12.5	08	25.4	36	32	19.18x2.46	210

NPT

S16

NPTF MALE STRAIGHT
30° CONE

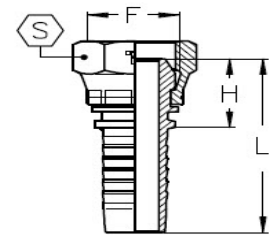
- SAE J516



Part Number	NPTF Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S16-0203	1/8-27	3/16	5	03	12	20.5	45.5	350	5000
S16-0204	1/8-27	1/4	6.4	04	12	21	49	350	5000
S16-0403	1/4-18	3/16	5	03	14	26.5	51.5	350	5000
S16-0404	1/4-18	1/4	6.4	04	14	27	55	350	5000
S16-0406	1/4-18	3/8	9.5	06	16	27.5	58	350	5000
S16-0604	3/8-18	1/4	6.4	04	19	28.5	56.5	280	4000
S16-0606	3/8-18	3/8	9.5	06	19	28.5	59	280	4000
S16-0608	3/8-18	1/2	12.7	08	22	30.5	63.5	280	4000
S16-0806	1/2-14	3/8	9.5	06	22	34	64.5	280	4000
S16-0808	1/2-14	1/2	12.7	08	22	35	68	280	4000
S16-0812	1/2-14	3/4	19	12	27	37.5	78	280	4000
S16-1208	3/4-14	1/2	12.7	08	27	37	70	280	4000
S16-1210	3/4-14	5/8	15.9	10	27	37	73	280	4000
S16-1212	3/4-14	3/4	19	12	27	38	78.5	280	4000
S16-1616	1-11.1/2	1	25.4	16	36	48.5	105	280	4000
S16-2016	1.1/4-11.1/2	1	25.4	16	46	53	109.5	210	3000
S16-2020	1 1/4-11.1/2	1 1/4	31.8	20	46	55	121.5	210	3000
S16-2424	1 1/2-11.1/2	1 1/2	38	24	50	61	143.5	185	2700
S16-3232	2-11.1/2	2	51	32	65	70.5	167	175	2500

S07

NPSM FEMALE STRAIGHT
60° CONE SWIVEL NUT

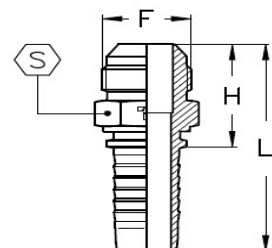


Part Number	NPSM Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S07C-0404	1/4-18	1/4	6.4	04	17	19	47	350	5000
S07C-0606	3/8-18	3/8	9.5	06	22	21	51	280	4000
S07C-0808	1/2-14	1/2	12.7	08	25	23	56	280	4000

SAE

S09

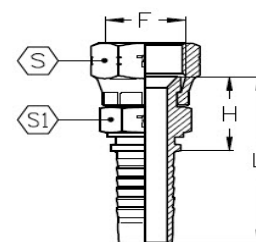
SAE MALE STRAIGHT
45° FLARE



Part Number	SAE Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S09-1006	5/8-18	3/8	9.5	06	16	28.2	58.7	350	5000

S03H

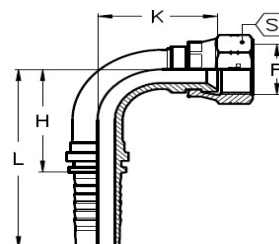
SAE FEMALE STRAIGHT
45° FLARE SWIVEL NUT - BACK HEX



Part Number	SAE Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Hex A/F - S1 (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S03H-0704	7/16 - 20	1/4	6.4	04	14	13	20	48	350
S03H-1004	5/8 - 18	1/4	6.4	04	19	16	23	51	350
S03H-1006	5/8 - 18	3/8	9.5	06	22	16	23.5	54	350
S03H-1208	3/4 - 16	1/2	12.7	08	22	22	26	59	350
S03H-1712	1 1/16 - 14	3/4	19	12	32	27	31.8	72.3	350

S41

SAE FEMALE 90° ELBOW
45° FLARE SWIVEL NUT



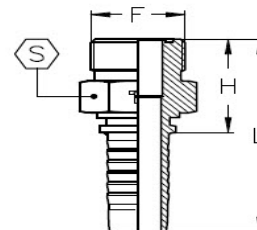
Part Number	SAE Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S41-1006	5/8 - 18	3/8	9.5	06	22	31	31	61	350

ORFS

S40

ORFS MALE STRAIGHT

- ISO 12151-1/SAE J516

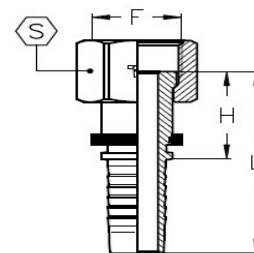


Part Number	ORFS Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	O-Ring	Working Pressure (bar)
S40-0904	9/16-18	1/4	6.4	04	17	23.5	51.5	7.65X1.78	450
S40-1104	11/16-16	1/4	6.4	04	19	25.5	53.5	9.25X1.78	450
S40-1106	11/16-16	3/8	9.5	06	19	25.5	56	9.25X1.78	450
S40-1306	13/16-16	3/8	9.5	06	22	28.5	59	12.42X1.78	450
S40-1308	13/16-16	1/2	12.7	08	22	29.5	62.5	12.42X1.78	420
S40-1608	1-14	1/2	12.7	08	27	34	67	15.6X1.78	420
S40-1610	1-14	5/8	15.9	10	27	34	70	15.6X1.78	350
S40-1910	1 3/16-12	5/8	15.9	10	32	37	73	18.77X1.78	350
S40-1912	1 3/16-12	3/4	19	12	32	38	78.5	18.77X1.78	350
S40-2312	1 7/16-12	3/4	19	12	41	42.5	83	23.52x1.78	350
S40-2316	1 7/16-12	1	25.4	16	41	41	97	23.52x1.78	420
S40-2720	1 11/16-12	1 1/4	31.8	20	46	44	111	29.87x1.78	345

S13C

ORFS FEMALE STRAIGHT
SLIP-ON NUT

- ISO 12151-1/SAE J516

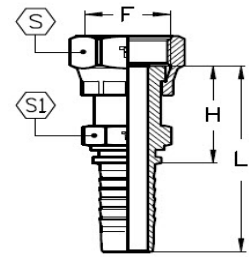


Part Number	ORFS Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Cutoff - C (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S13C-0904	9/16-18	1/4	6.4	04	17	22.5	55	450	6500
S13C-1104	11/16-16	1/4	6.4	04	22	25	53	450	6500
S13C-1106	11/16-16	3/8	9.5	06	22	24.5	55	450	6500
S13C-1306	13/16-16	3/8	9.5	06	24	28.5	59	450	6500
S13C-1308	13/16-16	1/2	12.7	08	24	28.5	61.5	420	6000
S13C-1608	1-14	1/2	12.7	08	30	33	66	420	6000
S13C-1610	1-14	5/8	15.9	10	30	33	68.5	350	5000
S13C-1910	1.3/16-12	5/8	15.9	10	36	35.5	71.5	350	5000
S13C-1912	1.3/16-12	3/4	19	12	36	37.5	78	350	5000
S13C-2312	1.7/16-12	3/4	19	12	41	39	79.5	350	5000

S13H

ORFS FEMALE STRAIGHT
SWIVEL NUT - BACK HEX

- ISO 12151-1/SAE J516

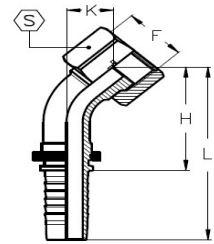


Part Number	ORFS Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Hex A/F - S1 (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S13H-0904	9/16-18	1/4	6.4	04	17	14	26.5	54.5	450
S13H-1104	11/16-16	1/4	6.4	04	22	16	28.5	56.5	450
S13H-1106	11/16-16	3/8	9.5	06	22	16	28.5	59	450
S13H-1306	13/16-16	3/8	9.5	06	24	19	32.5	63	450
S13H-1308	13/16-16	1/2	12.7	08	24	19	33.5	66.5	420
S13H-1608	1-14	1/2	12.7	08	30	24	39.5	72.5	420
S13H-1610	1-14	5/8	15.9	10	30	24	39.5	75.5	350
S13H-1612	1-14	3/4	19	12	30	27	41.5	82	350
S13H-1910	1 3/16-12	5/8	15.9	10	36	27	43.5	79.5	350
S13H-1912	1 3/16-12	3/4	19	12	36	27	44.5	85	350
S13H-2312	1 7/16-12	3/4	19	12	41	36	47.5	88	350
S13H-2316	1 7/16-12	1	25.4	16	41	36	51	107	420
S13H-2716	1 11/16-12	1	25.4	16	50	41	52	109	345
S13H-2720	1 11/16-12	1 1/4	31.8	20	50	41	55	121	345
S13H-3224	2-12	1 1/2	38	24	60	50	60	142	290

S63

ORFS FEMALE 45° ELBOW
SWIVEL NUT

- ISO 12151-1/SAE J516

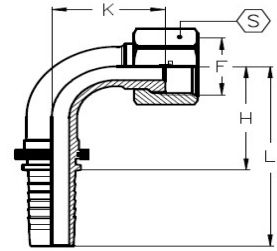


Part Number	ORFS Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S63-0904	9/16-18	1/4	6.4	04	17	10.5	32.5	60.5	450
S63-1104	11/16-16	1/4	6.4	04	22	12.5	34.5	62.5	450
S63-1106	11/16-16	3/8	9.5	06	22	12.5	36	66.5	450
S63-1306	13/16-16	3/8	9.5	06	24	15	38.5	69	450
S63-1308	13/16-16	1/2	12.7	08	24	15.5	42.5	75.5	420
S63-1608	1-14	1/2	12.7	08	30	17.5	45	78	420
S63-1610	1-14	5/8	15.9	10	30	18	49	85	350
S63-1910	1 3/16-12	5/8	15.9	10	36	20.5	51.5	87.5	350
S63-1912	1 3/16-12	3/4	19	12	36	21	58	99	350
S63-2312	1 7/16-12	3/4	19	12	41	23.5	60.5	101	350
S63-2316	1 7/16-12	1	25.4	16	41	29	78	134	420
S63-2720	1 11/16-12	1 1/4	31.8	20	50	34	93	159	345
S63-3224	2-12	1 1/2	38	24	60	41	113	195	290

S52

ORFS FEMALE 90° ELBOW
SWIVEL NUT

- ISO 12151-1/SAE J516

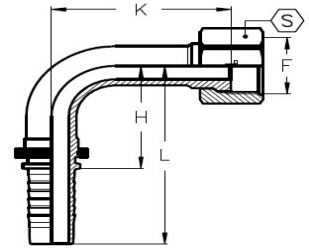


Part Number	ORFS Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S52-0904	9/16-18	1/4	6.4	04	17	21	27	55	450
S52-1104	11/16-16	1/4	6.4	04	22	24	27	55	450
S52-1106	11/16-16	3/8	9.5	06	22	24.5	31.5	62	450
S52-1306	13/16-16	3/8	9.5	06	24	30	31	61	450
S52-1308	13/16-16	1/2	12.7	08	24	31	39	72	420
S52-1608	1-14	1/2	12.7	08	30	34	39	72	420
S52-1610	1-14	5/8	15.9	10	30	35	45	81	350
S52-1910	1 3/16-12	5/8	15.9	10	36	42	45	81	350
S52-1912	1 3/16-12	3/4	19	12	36	45	55	95	350
S52-2312	1 7/16-12	3/4	19	12	41	49	55	95	350
S52-2316	1 7/16-12	1	25.4	16	41	62	71	127	420
S52-2720	1 11/16-12	1 1/4	31.8	20	50	75	87	153	345
S52-3224	2-12	1 1/2	38	24	60	90	105	187	290

S56

ORFS FEMALE 90° ELBOW - EXTENDED
SWIVEL NUT

- ISO 12151-1/SAE J516

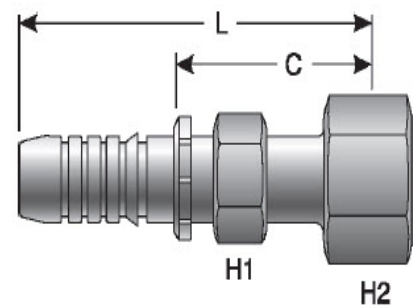


Part Number	ORFS Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S56-0904	9/16-18	1/4	6.4	04	17	46	29	57	450
S56-1104	11/16-16	1/4	6.4	04	22	54	27	55	450
S56-1106	11/16-16	3/8	9.5	06	22	54	34	64.5	450
S56-1306	13/16-16	3/8	9.5	06	24	64	34	64.5	450
S56-1308	13/16-16	1/2	12.7	08	24	64	39	72	420
S56-1608	1-14	1/2	12.7	08	30	70	39	72	420
S56-1610	1-14	5/8	15.9	10	30	70	45	81	350
S56-1912	1 3/16-12	3/4	19	12	36	96	55	95	350
S56-2316	1 7/16-12	1	25.4	16	41	114	71	127	420

GS-FFORX (GS13)

GATES GS ORFS FEMALE STRAIGHT
SWIVEL NUT - BACK HEX

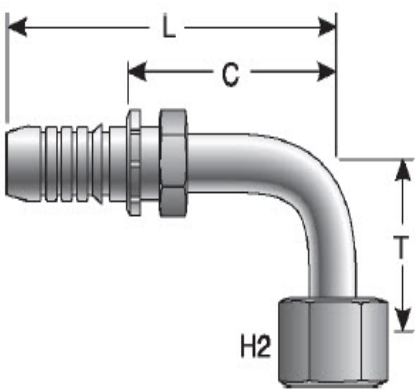
- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.



Part Number	Gates Code	ORFS Female Thread	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Hex A/F - H1 (mm)	Hex A/F - H2 (mm)
20GS-20FF ORX	20GS-20FF ORX	1 11/16-12	1 1/4	31.8	20	128	56.9	50	50

GS-FFORX90M (GS52)
GATES GS ORFS FEMALE 90° ELBOW
SWIVEL NUT - BACK HEX

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.



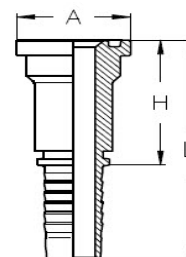
Part Number	Gates Code	ORFS Female Thread	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Hex A/F - H2 (mm)
20GS-20FF ORX90M	20GS-20FF ORX90M	1 11/16-12	1 1/4	31.8	20	172	100.8	78	50

SAE FLANGES CODE 61

S23

SAE CODE 61 STRAIGHT

- ISO 12151-3/SAE J516

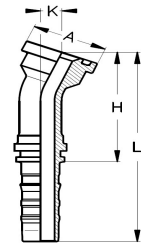


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S23-0808	1/2	1/2	12.7	08	30.2	47	80	350	5000
S23-1208	3/4	1/2	12.7	08	38.1	51	80	350	5000
S23-1210	3/4	5/8	15.9	10	38.1	55	84	350	5000
S23-1212	3/4	3/4	19	12	38.1	62	94.5	350	5000
S23-1612	1	3/4	19	12	44.5	64	94.5	350	5000
S23-1616	1	1	25.4	16	44.5	58	114.5	350	5000
S23-2016	1 1/4	1	25.4	16	50.8	63	119.5	280	4000
S23-2020	1 1/4	1 1/4	31.8	20	50.8	65	130.5	280	4000
S23-2420	1 1/2	1 1/4	31.8	20	60.4	68	134.5	210	3000
S23-2424	1 1/2	1 1/2	38	24	60.4	73	155.5	210	3000
S23-3224	2	1 1/2	38	24	71.4	76	158.5	210	3000
S23-3232	2	2	51	32	71.4	77	176.5	210	3000

S67

SAE CODE 61 22.5 ELBOW

- ISO 12151-3/SAE J516

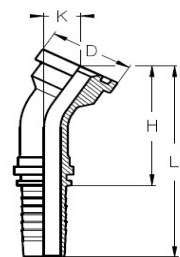


Part Number	Nominal SAE Flange size	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Flange O.D mm (A)	Drop mm (K)	Cutoff mm (H)	Length mm (L)	Working Pressure (bar)
S67-1212	3/4	3/4	19	12	38.1	11	69	110	350
S67-1612	1	3/4	19	12	44.5	12	72	112	350
S67-1616	1	1	25.4	16	44.5	12	86	142	350
S67-2016	1.1/4	1	25.4	16	50.8	12	86	142	280
S67-2020	1.1/4	1.1/4	31.8	20	50.8	13	100	166	280
S67-2420	1.1/2	1.1/4	31.8	20	60.4	13	100	166	280
S67-2424	1.1/2	1.1/2	38.1	24	60.4	15	118	201	210
S67-3224	2	1.1/2	38.1	24	71.4	14	116	199	210
S67-3232	2	2	50.8	32	71.4	22	165	262	210

S45

SAE CODE 61 30° ELBOW

- ISO 12151-3/SAE J516

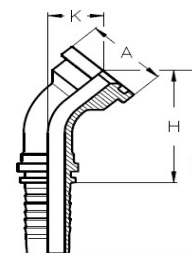


Part Number	Nominal SAE Flange size - D	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - D (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S45-1212	3/4	3/4	19	12	38.1	16	65	106	350
S45-1612	1	3/4	19	12	44.5	17	68	108	350
S45-1616	1	1	25.4	16	44.5	17	84	140	350
S45-2016	1 1/4	1	25.4	16	50.8	17	84	140	280
S45-2020	1 1/4	1 1/4	31.8	20	50.8	19	98	164	280
S45-2420	1 1/2	1 1/4	31.8	20	60.4	19	98	164	210
S45-2424	1 1/2	1 1/2	38	24	60.4	22	116	199	210
S45-3224	2	1 1/2	38	24	71.4	21	114	197	210
S45-3232	2	2	51	32	71.4	31	162	258	210

S68

SAE CODE 61 45° ELBOW

- ISO 12151-3/SAE J516

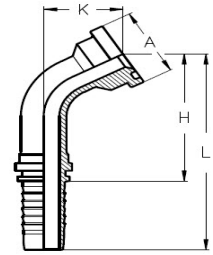


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S68-0808	1/2	1/2	12.7	08	30.2	20	47	80	350
S68-1208	3/4	1/2	12.7	08	38.1	24	51	84	350
S68-1212	3/4	3/4	19	12	38.1	25	62	102	350
S68-1612	1	3/4	19	12	44.5	27	64	104	350
S68-1616	1	1	25.4	16	44.5	28	78	134	350
S68-2016	1 1/4	1	25.4	16	50.8	28	78	134	280
S68-2020	1 1/4	1 1/4	31.8	20	50.8	32	91	157	280
S68-2420	1 1/2	1 1/4	31.8	20	60.4	32	91	157	210
S68-2424	1 1/2	1 1/2	38	24	60.4	36	108	191	210
S68-3224	2	1 1/2	38	24	71.4	35	107	189	210
S68-3232	2	2	51	32	71.4	57	151	245	210

S66

SAE CODE 61 60° ELBOW

- ISO 12151-3/SAE J516

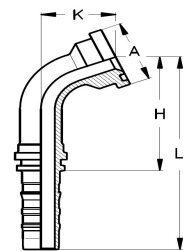


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S66-1212	3/4	3/4	19	12	38.1	34	73	113	350
S66-1612	1	3/4	19	12	44.5	36	74	114	350
S66-1616	1	1	25.4	16	44.5	40	98	154	350
S66-2016	1 1/4	1	25.4	16	50.8	40	98	154	280
S66-2020	1 1/4	1 1/4	31.8	20	50.8	45	118	184	280
S66-2420	1 1/2	1 1/4	31.8	20	60.4	45	118	184	210
S66-2424	1 1/2	1 1/2	38	24	60.4	52	140	223	210
S66-3224	2	1 1/2	38	24	71.4	50	139	222	210
S66-3232	2	2	51	32	71.4	73	192	289	210

S69

SAE CODE 61 67.5° ELBOW

- ISO 12151-3/SAE J516

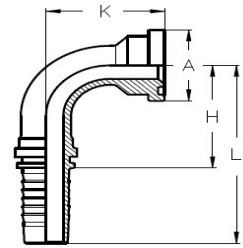


Part Number	Nominal SAE Flange size	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Flange O.D mm (A)	Drop mm (K)	Cutoff mm (H)	Length mm (L)	Working Pressure (bar)
S69-1212	3/4	3/4	19	12	38.1	38	68	108	350
S69-1612	1	3/4	19	12	44.5	41	69	109	350
S69-1616	1	1	25.4	16	44.5	45	92	148	350
S69-2016	1.1/4	1	25.4	16	50.8	45	92	148	280
S69-2020	1.1/4	1.1/4	31.8	20	50.8	52	111	178	280
S69-2420	1.1/2	1.1/4	31.8	20	60.4	52	111	178	210
S69-2424	1.1/2	1.1/2	38.1	24	60.4	60	133	216	210
S69-3232	2	2	50.8	32	71.4	84	181	278	210

S59

SAE CODE 61 90° ELBOW

- ISO 12151-3/SAE J516

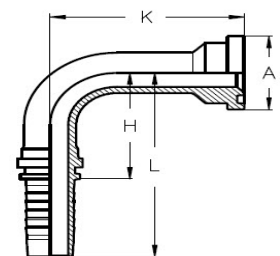


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S59-0808	1/2	1/2	12.7	08	30.2	40	38	71	350
S59-1208	3/4	1/2	12.7	08	38.1	45	38	71	350
S59-1212	3/4	3/4	19	12	38.1	51	55	95	350
S59-1612	1	3/4	19	12	44.5	54	55	95	280
S59-1616	1	1	25.4	16	44.5	61	71	128	350
S59-2016	1 1/4	1	25.4	16	50.8	61	71	128	280
S59-2020	1 1/4	1 1/4	31.8	20	50.8	71	87	154	280
S59-2420	1 1/2	1 1/4	31.8	20	60.4	71	87	154	210
S59-2424	1 1/2	1 1/2	38	24	60.4	83	105	188	210
S59-3224	2	1 1/2	38	24	71.4	81	105	188	210
S59-3232	2	2	51	32	71.4	122	140	237	210

S59L

SAE CODE 61 90° ELBOW - LONG DROP

- ISO 12151-3/SAE J516

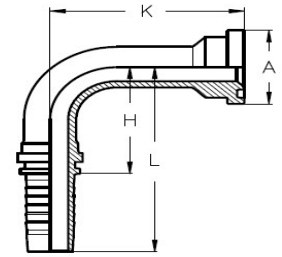


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S59L-0808	1/2	1/2	12.7	08	30.2	83	38	71	350
S59L-1212	3/4	3/4	19	12	38.1	127	55	95	350
S59L-1616	1	1	25.4	16	44.5	118	71	128	350

S59-X

SAE CODE 61 90° ELBOW - EXTENDED LONG DROP

- ISO 12151-3/SAE J516

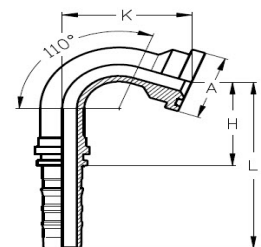


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S59-1616-X 150	1	1	25	16	44.5	150	71	128	350
S59-2020-X 168	1 1/4	1 1/4	31.5	20	50.8	168	87	154	280
S59-2424-X 172	1.1/2	1 1/2	38.1	24	60.4	172	105	188	210
S59-3232-X 203	2	2	51	32	71.4	203	140	237	210

S110

SAE CODE 61 110° ELBOW

- ISO 12151-3/SAE J516

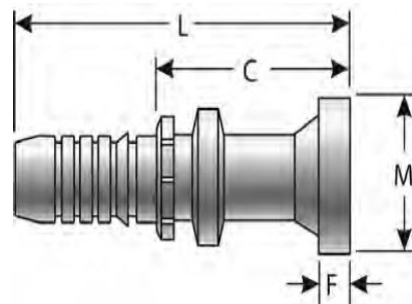


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - C (mm)	Length - L (mm)	Working Pressure (bar)
S110-1212	3/4	3/4	19	12	38.1	62	51	102	350
S110-1616	1	1	25.4	16	44.5	73	65	121	350
S110-2016	1 1/4	1	25.4	16	50.8	73	65	121	280
S110-2020	1 1/4	1 1/4	31.8	20	50.8	83	82	148	280
S110-2420	1 1/2	1 1/4	31.8	20	60.4	83	82	148	210
S110-2424	1.1/2	1 1/2	38.1	24	60.4	97	95	178	210

GS-FL (GS23)

GATES GS SAE CODE 61 STRAIGHT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

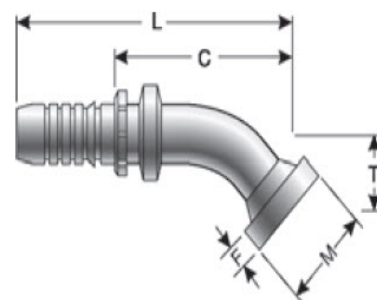


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Thickness - F (mm)
20GS-20FL	20GS-20FL	1 1/4	1 1/4	31.8	20	146.1	74.9	50.8	8.1
20GS-24FL	20GS-24FL	1 1/2	1 1/4	31.8	20	160	88.9	60.5	8.1

GS-FL22M (GS67)

GATES GS SAE CODE 61 22.5° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

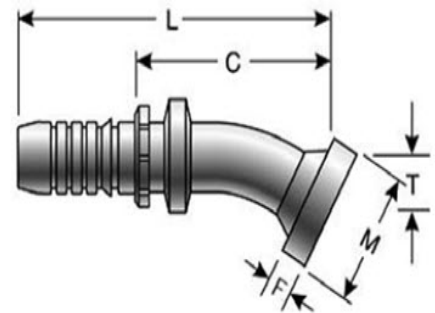


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL 22M	20GS-20FL 22M	1 1/4	1 1/4	31.8	20	178.1	106.9	50.8	15.0
20GS-24FL 22M	20GS-24FL 22M	1 1/2	1 1/4	31.8	20	185.9	114.8	60.5	18.0

GS-FL30M (GS45)

GATES GS SAE CODE 61 30° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

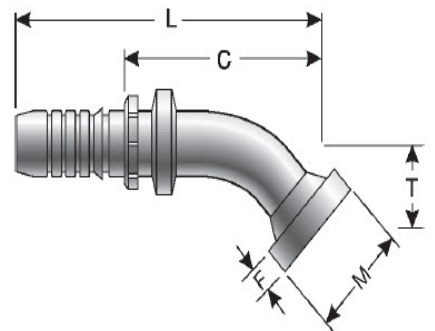


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL 30M	20GS-20FL 30M	1 1/4	1.1/4	32	20	176.0	176.0	50.8	22.1
20GS-24FL 30M	20GS-24FL 30M	1 1/2	1 1/4	31.8	20	182.1	111	60.5	30

GS-FL45S (GS68)

GATES GS SAE CODE 61 45° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

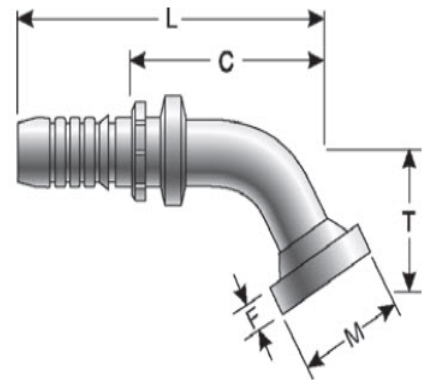


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL 45S	20GS-20FL 45S	1 1/4	1 1/4	31.8	20	169.9	98.8	50.8	30
20GS-24FL 45S	20GS-24FL 45S	1 1/2	1 1/4	31.8	20	176	104.9	60.5	38.1

GS-FL60M (GS66)

GATES GS SAE CODE 61 60° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

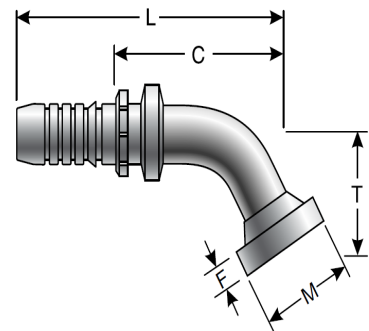


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL 60M	20GS-20FL 60M	1 1/4	1 1/4	31.8	20	186.9	115.8	50.8	55.1
20GS-24FL 60M	20GS-24FL 60M	1 1/2	1 1/4	31.8	20	195.1	124.0	60.5	64.0

GS-FL67M (GS69)

GATES GS SAE CODE 61 67.5° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

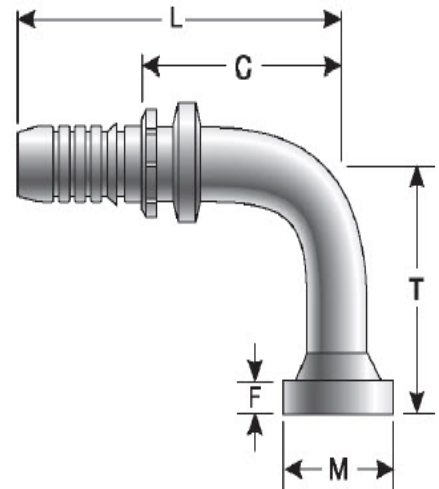


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL 67M	20GS-20FL 67M	1 1/4	1 1/4	31.8	20	178.1	106.9	50.8	64.0
20GS-24FL 67M	20GS-24FL 67M	1 1/2	1 1/4	31.8	20	164.1	93.0	60.5	51.1

GS-FL90M (GS59)

GATES GS SAE CODE 61 90° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

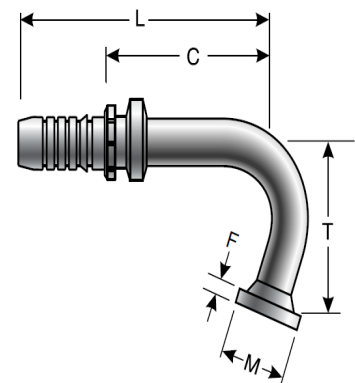


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL 90M	20GS-20FL 90M	1 1/4	1 1/4	31.8	20	165.1	94	50.8	89.9
20GS-24FL 90S	20GS-24FL 90S	1 1/2	1 1/4	31.8	20	165.1	94	60.5	81

GS-FL110 (GS110)

GATES GS SAE CODE 61 SWEPT 110°

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

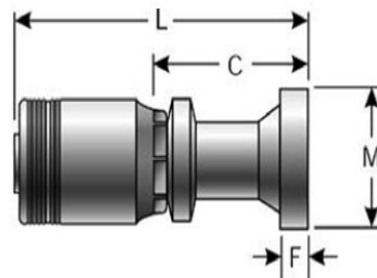


Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL 110	20GS-20FL 110-080	1 1/4	1 1/4	31.8	20	181.1	110.0	50.8	80.0
20GS-24FL 110	20GS-24FL 110-080	1 1/2	1 1/4	31.8	20	181.1	110.0	60.5	80.0

GSM-FL (GSM23)

GATES GSM SAE CODE 61 STRAIGHT
ONE PIECE

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.

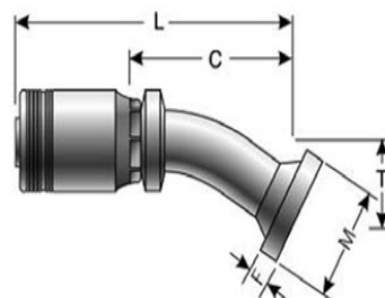


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Thickness - F (mm)
24GSM-24F L	24GSM-24F L	1 1/2	1 1/2	24	38.1	180.0	85.1	60.5	7.9
32GSM-32F L	32GSM-32F L	2	2	32	50.8	251.4	137.4	71.4	9.7

GSM-FL30M (GSM45)

GATES GSM SAE CODE 61 30° ELBOW
ONE PIECE

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.

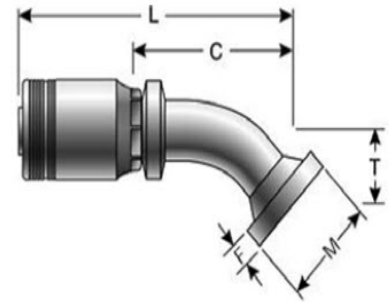


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
24GSM-24F L30M	24GSM-24F L30M	1 1/2	1 1/2	24	38.1	216.4	127	60.5	45

GSM-FL45M (GSM68)

GATES GSM SAE CODE 61 45° ELBOW
ONE PIECE

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.

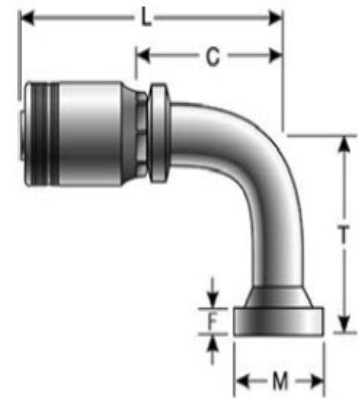


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
24GSM-24F L45M	24GSM-24F L45M	1 1/2	1 1/2	24	38.1	230.0	135.0	60.5	44.0
32GSM-32F L45M	32GSM-32F L45M	2	2	32	50.8	287.0	173.5	79.5	56.0

GSM-FL90S (GSM59)

GATES GSM SAE CODE 61 90° ELBOW
ONE PIECE

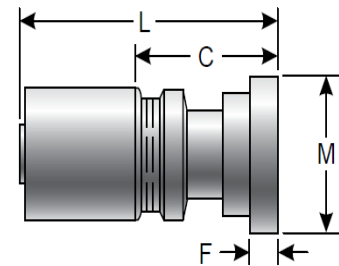
- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.



Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
24GSM-24F L90S	24GSM-24F L90S	1 1/2	1 1/2	24	38.1	214.9	119.9	60.5	81.0
32GSM-32F L90-130	32GSM-32F L90-130	2	2	32	50.8	264.0	150.5	71.4	130.0

G4H-FL (GL23)

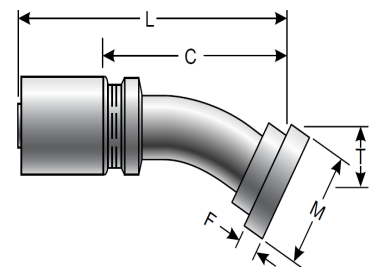
GATES MEGAVAC SAE CODE 61 STRAIGHT
SUCTION TAIL



Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Thickness - F (mm)
40G4H-40FL	40GL-40FL	2 1/2	2 1/2	63.5	40	143.8	80.0	84.1	9.7
40G4H-48FL	40GL-48FL	3	2 1/2	63.5	40	143.8	81.5	101.6	9.7
48G4H-48FL	48GL-48FL	3	3	76.2	48	166.1	87.9	101.6	8.1
56G4H-56FL	56GL-56FL	3 1/2	3 1/2	88.9	56	170.2	77.7	114.3	8.1

G4H-FL30 (GL45)

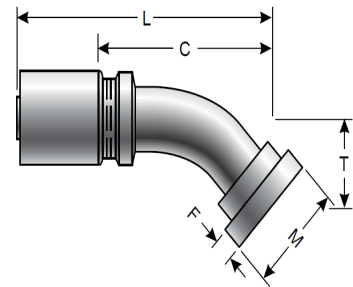
GATES MEGAVAC SAE CODE 61 30° ELBOW
SUCTION TAIL



Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
40G4H-40FL30	40GL-40FL30	2 1/2	2 1/2	63.5	40	185.4	123.2	27.4	84.1
48G4H-48FL30	48GL-48FL30	3	3	76.2	48	209.0	130.8	28.5	101.6

G4H-FL45 (GL68)

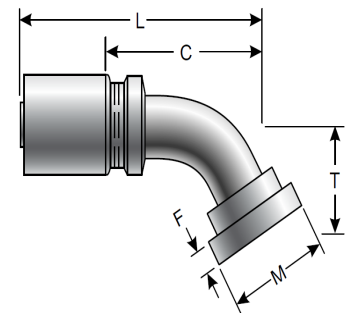
GATES MEGAVAC SAE CODE 61 45° ELBOW
SUCTION TAIL



Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
40G4H-40F L45	40GL-40FL 45	2 1/2	2 1/2	63.5	40	196.1	133.9	43.7	84.1
40G4H-48F L45	40GL-48FL 45	3	2 1/2	63.5	40	197.1	134.9	44.7	101.6
48G4H-48F L45	48GL-48FL 45	3	3	76.2	48	233.2	154.9	51.6	101.6
56G4H-56F L45	56GL-56FL 45	3 1/2	3 1/2	88.9	56	245.4	152.9	54.1	114.3

G4H-FL60 (GL66)

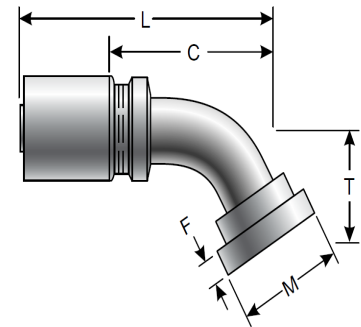
GATES MEGAVAC SAE CODE 61 60° ELBOW
SUCTION TAIL



Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
40G4H-40F L60	40GL-40FL 60	2 1/2	2 1/2	63.5	40	206.5	144.3	66.8	84.1
48G4H-48F L60	48GL-48FL 60	3	3	76.2	48	245.4	167.1	79.0	101.6

G4H-FL67 (GL69)

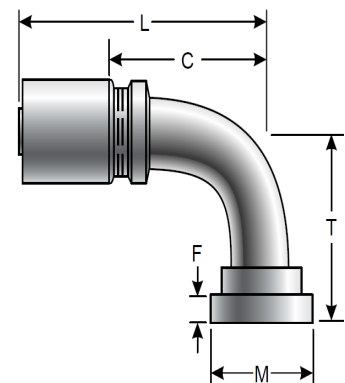
GATES MEGAVAC SAE CODE 61 67.5° ELBOW
SUCTION TAIL



Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
40G4H-40F L67	40GL-40FL 67	2 1/2	2 1/2	63.5	40	208.8	146.6	79.5	84.1
48G4H-48F L67	48GL-48FL 67	3	3	76.2	48	241.3	163.1	98.3	101.6

G4H-FL90 (GL59)

GATES MEGAVAC SAE CODE 61 90° ELBOW
SUCTION TAIL



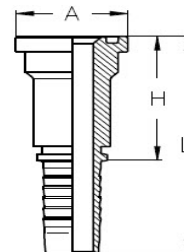
Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
40G4H-40F L90	40GL-40FL 90	2 1/2	2 1/2	63.5	40	204.7	142.5	117.4	84.1
40G4H-48F L90	40GL-48FL 90	3	2 1/2	63.5	40	206.3	144.0	117.4	101.6
48G4H-48F L90	48GL-48FL 90	3	3	76.2	48	246.4	168.2	139.7	101.6
56G4H-56F L90	56GL-56FL 90	3 1/2	3 1/2	88.9	56	258.3	165.9	143.0	114.3

SAE FLANGES CODE 62

S22

SAE CODE 62 STRAIGHT

- ISO 12151-3/SAE J516

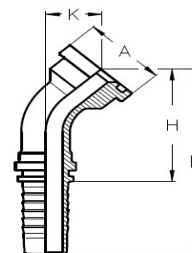


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S22-0808	1/2	1/2	12.7	08	31.8	47	80	420	6000
S22-1212	3/4	3/4	19	12	41.3	58	98.5	350	5000
S22-1612	1	3/4	19	12	47.6	58	98.5	350	5000
S22-1616	1	1	25.4	16	47.6	65	121.5	420	6000
S22-1620	1	1 1/4	31.8	20	47.6	70	136.5	420	6000
S22-2016	1 1/4	1	25.4	16	54	69	125.5	420	6000
S22-2020	1 1/4	1 1/4	31.8	20	54	70	136.5	420	6000
S22-2420	1 1/2	1 1/4	31.8	20	63.5	80	146.5	420	6000
S22-2424	1 1/2	1 1/2	38.0	24	63.5	84	116.5	420	6000
S22-3224	2	1 1/2	38.0	24	79.4	99	181.5	420	6000
S22-3232	2	2	51.0	32	79.4	100	196.5	420	6000

S62

SAE CODE 62 45° ELBOW

- ISO 12151-3/SAE J516

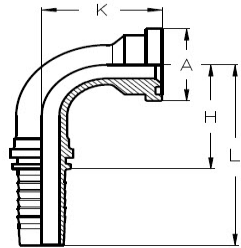


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S62-0808	1/2	1/2	12.7	08	31.8	20	47	80	420
S62-1210	3/4	5/8	15.9	10	41.3	26	57	93	350
S62-1212	3/4	3/4	19	12	41.3	26	64	104	350
S62-1612	1	3/4	19	12	47.6	31	68	108	350
S62-1616	1	1	25.4	16	47.6	30	80	136	420
S62-2016	1 1/4	1	25.4	16	54	30	80	136	420
S62-2020	1 1/4	1 1/4	31.8	20	54	34	93	160	420
S62-2420	1 1/2	1 1/4	31.8	20	63.5	35	94	161	420
S62-2424	1.1/2	1 1/2	38.1	24	63.5	40	112	195	420
S62-3224	2	1 1/2	38.1	24	79.4	43	115	198	420
S62-3232	2	2	50.8	32	79.4	56	150	247	350

S61

SAE CODE 62 90° ELBOW

- ISO 12151-3/SAE J516

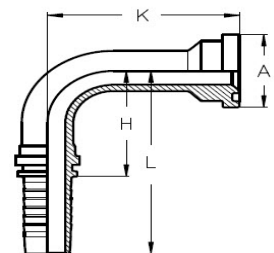


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S61-0808	1/2	1/2	12.7	08	31.8	40	38	71	420
S61-1208	3/4	1/2	12.7	08	41.3	47	38	71	420
S61-1210	3/4	5/8	15.9	10	41.3	50	45	81	350
S61-1212	3/4	3/4	19	12	41.3	54	55	95	350
S61-1612	1	3/4	19	12	47.6	60	55	95	350
S61-1616	1	1	25.4	16	47.6	64	71	128	420
S61-2016	1 1/4	1	25.4	16	54	64	71	128	420
S61-2020	1 1/4	1 1/4	31.8	20	54	74	87	154	420
S61-2420	1 1/2	1 1/4	31.8	20	63.5	76	87	154	420
S61-2424	1.1/2	1 1/2	38.1	24	63.5	88	105	188	420
S61-3224	2	1 1/2	38.1	24	79.4	93	105	188	420
S61-3232	2	2	50.8	32	79.4	123	140	237	350

S61L

SAE CODE 62 90° ELBOW - EXTENDED

- ISO 12151-3/SAE J516

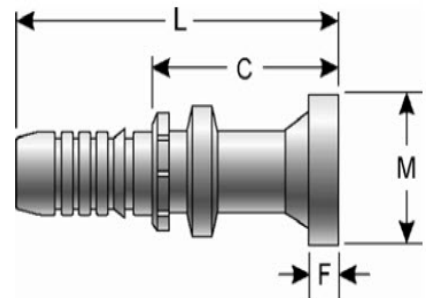


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S61L-0808	1/2	1/2	12.7	08	31.7	75	40	72	350
S61L-1212	3/4	3/4	19	12	41.3	100	55	95	350
S61L-1616	1	1	25.4	16	47.6	120	71	128	420
S61L-2020	1 1/4	1 1/4	31.8	20	54	120	87	154	420

GS-FLH (GS22)

GATES GS SAE CODE 62 STRAIGHT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

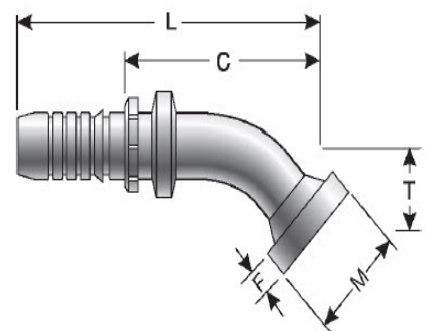


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Thickness - F (mm)
20GS-20FL H	20GS-20FL H	1 1/4	1 1/4	31.8	20	146.1	74.9	54.1	10.4
20GS-24FL H	20GS-24FL H	1 1/4	1 1/2	31.8	20	160	88.9	63.5	12.7

GS-FLH45M (GS62)

GATES GS SAE CODE 62 45° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

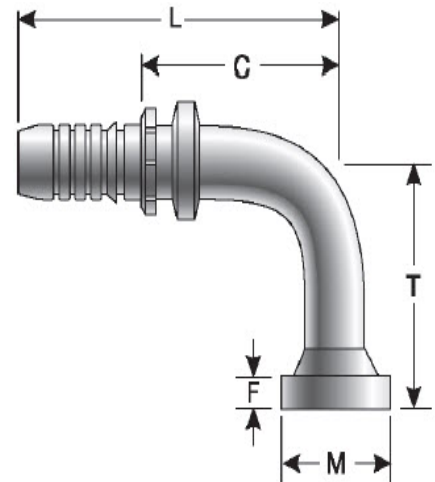


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL H45M	20GS-20FL H45M	1 1/4	1 1/4	31.8	20	176	104.9	54.1	38.1
20GS-24FL H45M	20GS-24FL H45M	1 1/2	1 1/4	31.8	20	176	104.9	63.5	43.9

GS-FLH90M (GS61)

GATES GS SAE CODE 62 90° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

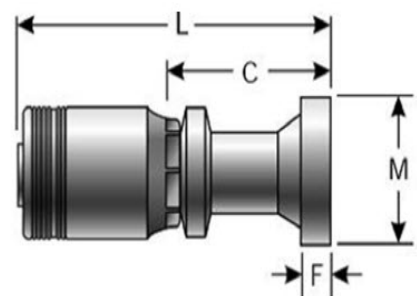


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
20GS-20FL H90M	20GS-20FL H90M	1 1/4	1 1/4	31.8	20	165.1	94	54.1	89.9
20GS-24FL H90S	20GS-24FL H90S	1 1/2	1 1/4	31.8	20	165.1	94	63.5	81

GSM-FLH (GSM22)

GATES GSM SAE CODE 62 STRAIGHT ONE PIECE

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.

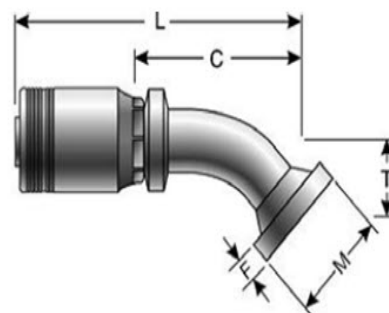


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Thickness - F (mm)
24GSM-24F LH	24GSM-24F LH	1 1/2	1 1/2	24	38.1	199.9	104.9	63.5	12.7
24GSM-32F LH	24GSM-32F LH	2	1 1/2	24	38.1	199.9	104.9	79.5	12.7
32GSM-32F LH	32GSM-32F LH	2	2	32	50.8	251.4	137.4	79.5	12.7

GSM-FLH45M (GSM62)

GATES GSM SAE CODE 62 45° ELBOW
ONE PIECE

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.

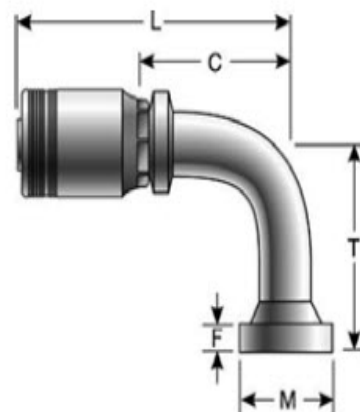


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
24GSM-24F LH45M	24GSM-24F LH45M	1 1/2	1 1/2	24	38.1	232	137	63.5	43.9
24GSM-32F LH45M	24GSM-24F LH45M	2	1 1/2	24	38.1	240.8	146	79.5	55.9

GSM-FLH90 (GSM61)

GATES GSM SAE CODE 62 90° ELBOW
ONE PIECE

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.

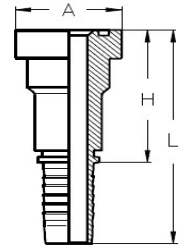


Part Number	Gates Code	Nominal SAE Flange size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Drop - T (mm)
24GSM-32F LH90S	24GSM-32F LH90S	2	1 1/2	24	38.1	213.9	118.9	79.5	119.9
32GSM-32F LH90S	32GSM-32F LH90M	2	2	32	50.8	264	150	79.5	120

SUPERCAT FLANGE

S225

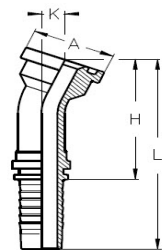
SUPERCAT STRAIGHT



Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S225-1212	3/4	3/4	19	12	41.3	66	106.5	350	5000
S225-1612	1	3/4	19	16	47.6	68	108.5	350	5000
S225-1616	1	1	25.4	16	47.6	90	146.5	420	6000
S225-2016	1 1/4	1	25.4	16	54	90	146.5	420	6000
S225-2020	1 1/4	1 1/4	31.8	20	54	88	154.4	420	6000
S225-2420	1 1/2	1 1/4	31.8	20	63.5	88	154.4	420	6000
S225-2424	1 1/2	1 1/2	38.1	24	63.5	84	166.5	420	6000
S225-3224	2	1 1/2	38.1	24	79.4	110	192.5	420	6000
S225-3232	2	2	50.8	32	79.4	130	226.5	350	5000

S675

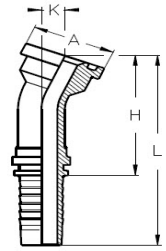
SUPERCAT 22.5° ELBOW



Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S675-1212	3/4	3/4	19	12	41.3	16	82	118	420
S675-1612	1	3/4	19	12	47.6	17	82	118	420
S675-1616	1	1	25.4	16	47.6	17	97	153	420
S675-2016	1 1/4	1	25.4	16	54	17	97	153	420
S675-2020	1 1/4	1 1/4	31.8	20	54	16	406	172	420
S675-2420	1 1/2	1 1/4	31.8	20	63.5	16	406	174	420
S675-2424	1 1/2	1 1/2	38.1	24	63.5	18	125	208	420
S675-3224	2	1 1/2	38.1	24	79.4	19	129	211	420

S465

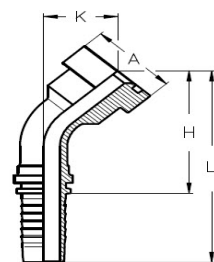
SUPERCAT 30° ELBOW



Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S465-1212	3/4	3/4	19	12	41.3	22	79	130	420
S465-1612	1	3/4	19	12	47.6	23	79	130	420
S465-1616	1	1	25.4	16	47.6	23	94	151	420
S465-2016	1 1/4	1	25.4	16	54	23	94	151	420
S465-2020	1 1/4	1 1/4	31.8	20	54	22	103	170	420
S465-2420	1 1/2	1 1/4	31.8	20	63.5	23	104	170	420
S465-2424	1 1/2	1 1/2	38.1	24	63.5	25	123	205	420
S465-3224	2	1 1/2	38.1	24	79.4	27	126	208	420
S465-3232	2	2	50.8	32	79.4	35	164	264	350

S625

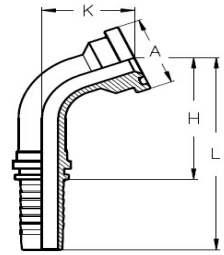
SUPERCAT 45° ELBOW



Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S625-1212	3/4	3/4	19	12	41.3	34	71	112	350
S625-1612	1	3/4	19	12	47.6	36	71	112	350
S625-1616	1	1	25.4	16	47.6	36	86	143	420
S625-2016	1 1/4	1	25.4	20	54	36	86	143	420
S625-2020	1 1/4	1 1/4	31.8	20	54	36	96	162	420
S625-2420	1 1/2	1 1/4	31.8	20	63.5	36	96	162	420
S625-2424	1 1/2	1 1/2	38.1	24	63.5	41	114	196	420
S625-3224	2	1 1/2	38.1	24	79.4	44	116	199	420
S625-3232	2	2	50.8	32	79.4	57	152	250	350

S545

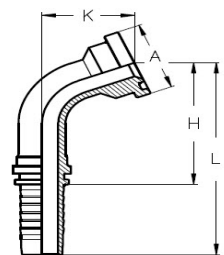
SUPERCAT 60° ELBOW



Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S545-1212	3/4	3/4	19	12	41.3	45	76	117	420
S545-1612	1	3/4	19	12	47.6	48	76	117	420
S545-1616	1	1	25.4	16	47.6	50	103	160	420
S545-2016	1 1/4	1	25.4	16	54	50	103	160	420
S545-2020	1 1/4	1 1/4	31.8	20	54	50	121	187	420
S545-2420	1 1/2	1 1/4	31.8	20	63.5	51	121	187	420
S545-2424	1 1/2	1 1/2	38.1	24	63.5	58	144	226	420
S545-3224	2	1 1/2	38.1	24	79.4	61	146	228	420
S545-3232	2	2	50.8	32	79.4	81	194	290	420

S695

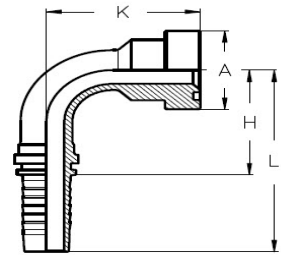
SUPERCAT 67.5° ELBOW



Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S695-1212	3/4	3/4	19	12	41.3	50	74	115	420
S695-1612	1	3/4	19	12	47.6	53	74	115	420
S695-1616	1	1	25.4	16	47.6	56	97	153	420
S695-2016	1 1/4	1	25.4	16	54	56	97	153	420
S695-2020	1 1/4	1 1/4	31.8	20	54	57	114	181	420
S695-2420	1 1/2	1 1/4	31.8	20	63.5	58	114	181	420

S615

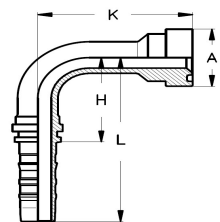
SUPERCAT 90° ELBOW



Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S615-1212	3/4	3/4	19	12	41.3	64	55	106	420
S615-1612	1	3/4	19	12	47.6	64	55	106	420
S615-1616	1	1	25.4	16	47.6	73	71	128	420
S615-2016	1 1/4	1	25.4	16	54	73	71	128	420
S615-2020	1 1/4	1 1/4	31.8	20	54	77	87	154	420
S615-2420	1 1/2	1 1/4	31.8	20	63.5	78	87	154	420
S615-2424	1 1/2	1 1/2	38.1	24	63.5	90	105	188	420
S615-3224	2	1 1/2	38.1	24	79.4	94	105	188	420
S615-3232	2	2	50.8	32	79.4	125	140	237	350

S615-X

SUPERCAT 90° ELBOW - EXTENDED

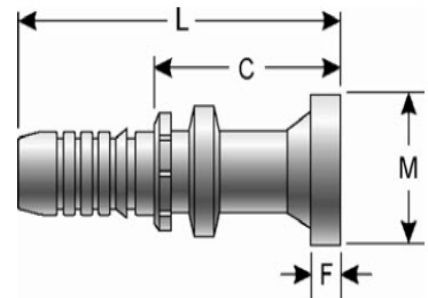


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S615-1616-X132	1	1	25.4	16	47.6	132	71	128	420
S615-2020-X150	1 1/4	1 1/4	31.8	20	54	150	87	154	420

GS-FLC (GS225)

GATES GS SUPERCAT STRAIGHT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

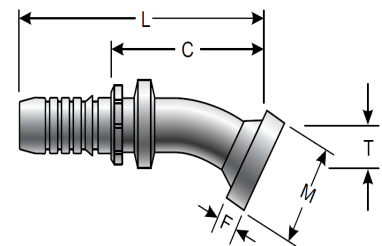


Part Number	Gates Code	Flange Size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Thickness - F (mm)
20GS-20FL C	20GS-20FL C	1 1/4	1 1/4	31.8	20	186.9	115.8	54.1	14.2
20GS-24FL C	20GS-24FL C	1 1/2	1 1/4	31.8	20	186.9	115.8	63.5	14.2

GS-FLC22 (GS675)

GATES GS SUPERCAT 22.5° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

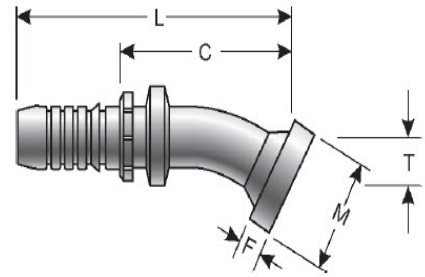


Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
20GS-20FL C22	20GS-20FL C22-017	1 1/4	1 1/4	31.8	20	184.9	113.8	17.0	54.1
20GS-24FL C22	20GS-24FL C22-017	1 1/2	1 1/4	31.8	20	184.9	113.8	17.0	63.5

GS-FLC30 (GS465)

GATES GS SUPERCAT 30° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

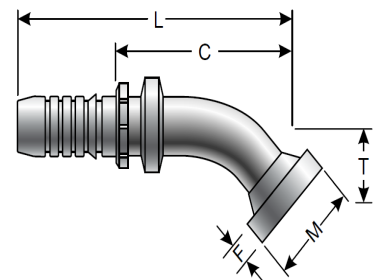


Part Number	Gates Code	Flange Size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
20GS-20FL C30	20GS-20FL C30	1 1/4	1 1/4	31.8	20	182.9	112	23.9	54.1
20GS-24FL C30	20GS-24FL C30	1 1/2	1 1/4	31.8	20	182.9	112	23.9	63.5

GS-FLC45 (GS625)

GATES GS SUPERCAT 45° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

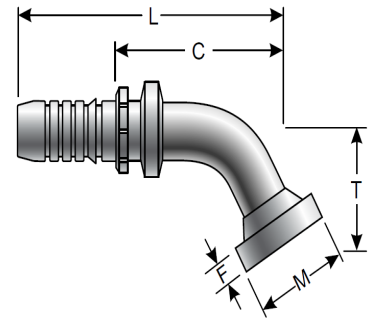


Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
20GS-20FL C45	20GS-20FL C45-037	1 1/4	1 1/4	31.8	20	176.0	104.9	37.1	54.1
20GS-24FL C45	20GS-24FL C45-037	1 1/2	1 1/4	31.8	20	176.0	104.9	37.1	63.5

GS-FLC60 (GS545)

GATES GS SUPERCAT 60° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

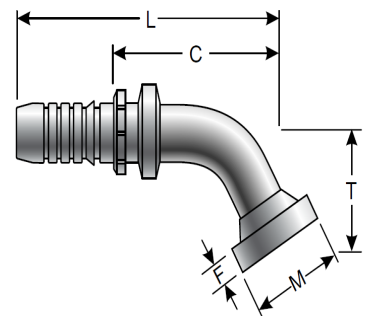


Part Number	Gates Code	Flange Size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	T (mm)	Flange O.D - M (mm)
20GS-20FL C60	20GS-20FL C60	1 1/4	1 1/4	31.8	20	198.1	127.0	52.1	54.1

GS-FLC67 (GS695)

GATES GS SUPERCAT 67.5° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

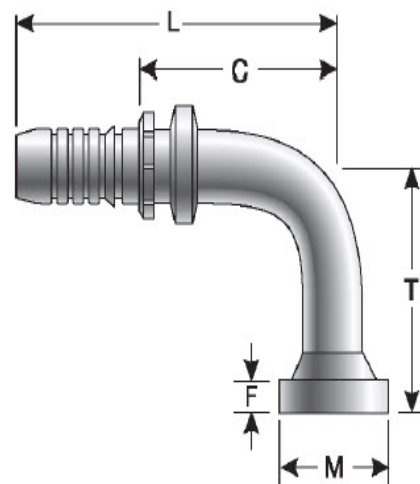


Part Number	Gates Code	Nominal Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
20GS-20FL C67	20GS-20FL C67-059	1 1/4	1 1/4	31.8	20	191.0	119.9	58.9	54.1
20GS-24FL C67	20GS-24FL C67-059	1 1/2	1 1/4	31.8	20	191.0	119.9	58.9	63.5

GS-FLC90 (GS615)

GATES GS SUPERCAT 90° ELBOW

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

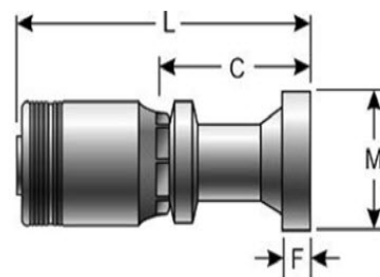


Part Number	Gates Code	Flange Size - M	Hose I.D (in)	Hose I.D (mm)	Dash size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
20GS-20FL C90	20GS-20FL C90	1 1/4	1 1/4	31.8	20	166.1	95	77	54.1
20GS-24FL C90	20GS-24FL C90	1 1/2	1 1/4	31.8	20	166.1	95	77	63.5

GSM-FLC (GSM225)

GATES GSM SUPERCAT STRAIGHT ONE PIECE

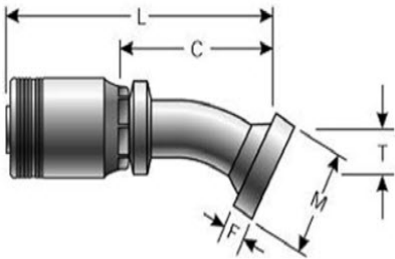
- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.



Part Number	Gates Code	Flange Size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Flange O.D - M (mm)	Thickness - F (mm)
24GSM-24F LC	24GSM-24F LC	1 1/2	1 1/2	24	38.1	189.0	94.2	63.5	14.2
32GSM-32F LC	32GSM-32F LC	2	2	32	50.8	227.7	113.8	79.5	14.2

GSM-FLC22 (GSM675)
GATES GSM SUPERCAT 22° ELBOW
ONE PIECE

- FOR GATES 24 AND 32 EFG5K OR EFG6K HOSE ONLY.



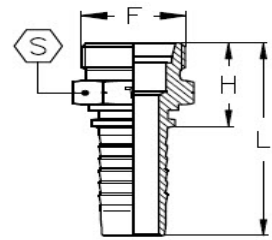
Part Number	Gates Code	Flange Size - M	Hose I.D (in)	Dash Size	Hose I.D (mm)	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)	Flange O.D - M (mm)
24GSM-24F LC22	24GSM-24F LC22	1 1/2	1 1/2	24	38.1	236	141.5	16.8	63.5

METRIC 24°

S80

METRIC LIGHT MALE STRAIGHT
24° CONE

- ISO 12151-5

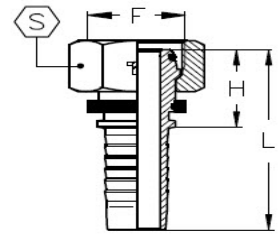


Part Number	Metric Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S80-M1203	M12-1.5	3/16	4.8	03	6	12	21	46	280
S80-M1204	M12x1.5	1/4	6.4	04	6	12	21	49	280
S80-M1404	M14x1.5	1/4	6.4	04	8	14	21	49	280
S80-M1604	M16x1.5	1/4	6.4	04	10	17	23	51	280
S80-M1605	M16x1.5	5/16	7.9	05	10	17	23	51	280
S80-M1606	M16x1.5	3/8	9.5	06	10	17	23	53	280
S80-M1806	M18x1.5	3/8	9.5	06	12	19	23	53	280
S80-M1808	M18x1.5	1/2	12.7	08	12	19	25	56.3	280
S80-M2206	M22x1.5	3/8	9.5	06	15	22	25	56	280
S80-M2208	M22x1.5	1/2	12.7	08	15	22	26	59	280
S80-M2608	M26x1.5	1/2	12.7	08	18	27	28	61	210
S80-M2610	M26x1.5	5/8	15.9	10	18	27	28	64	210
S80-M2612	M26x1.5	3/4	19	12	18	27	29	70	210
S80-M3012	M30x2	3/4	19	12	22	30	31	72	210
S80-M3616	M36x2	1	25.4	16	28	41	36	92	210
S80-M4520	M45x2	1 1/4	31.8	20	35	48	42	108	210
S80-M5224	M52x2	1 1/2	38.1	24	42	55	47	130	210

S81C

METRIC LIGHT FEMALE STRAIGHT
24° CONE SWIVEL NUT

- ISO 12151-5

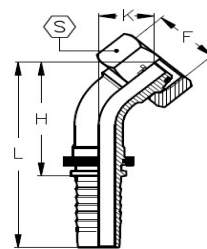


Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S81C-M1203	M12x1.5	3/16	5	03	6	14	21	46	280
S81C-M1204	M12x1.5	1/4	6.4	04	6	17	23	51	280
S81C-M1404	M14x1.5	1/4	6.4	04	8	17	22	50	280
S81C-M1604	M16x1.5	1/4	6.4	04	10	19	24	52	280
S81C-M1605	M16x1.5	5/16	7.9	05	10	19	24	52	280
S81C-M1606	M16x1.5	3/8	9.5	06	10	19	23	54	280
S81C-M1804	M18x1.5	1/4	6.4	04	12	22	24	52	280
S81C-M1806	M18x1.5	3/8	9.5	06	12	22	24	54	280
S81C-M1808	M18x1.5	1/2	12.7	08	12	22	28	61	280
S81C-M2206	M22x1.5	3/8	9.5	06	15	27	24	54	280
S81C-M2208	M22x1.5	1/2	12.7	08	15	27	24	57	280
S81C-M2608	M26x1.5	1/2	12.7	08	18	32	26	59	210
S81C-M2610	M26x1.5	5/8	15.9	10	18	32	27	62	210
S81C-M2612	M26x1.5	3/4	19	12	18	32	34	75	210
S81C-M3010	M30x2	5/8	15.9	10	22	36	28	64	210
S81C-M3012	M30x2	3/4	19	12	22	36	31	71	210
S81C-M3612	M36x2	3/4	6.3	12	28	41	28	69	100
S81C-M3616	M36x2	1	25.4	16	28	41	34	90	100
S81C-M4520	M45x2	1 1/4	31.8	20	35	50	40	106	100

S87

METRIC LIGHT FEMALE 45° ELBOW
24° CONE SWIVEL NUT

- ISO 12151-5

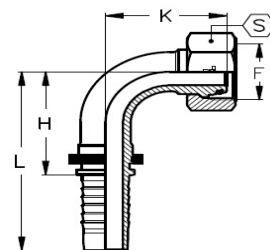


Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)
S87-M1204	M12x1.5	1/4	6.4	04	6	17	14	35	63
S87-M1404	M14x1.5	1/4	6.4	04	8	17	14	36	64
S87-M1604	M16x1.5	1/4	6.4	04	10	19	16	38	66
S87-M1606	M16x1.5	3/8	9.5	06	10	19	16	39	69
S87-M1806	M18x1.5	3/8	9.5	06	12	22	18	40	71
S87-M2208	M22x1.5	1/2	12.7	08	15	27	19	46	79
S87-M2610	M26x1.5	5/8	15.9	10	18	32	22	53	89
S87-M3012	M30x2	3/4	19	12	22	36	25	62	103
S87-M3616	M36x2	1	25.4	16	28	41	32	80	136
S87-M4520	M45x2	1 1/4	31.8	20	28	50	34	102	167

S86

METRIC LIGHT FEMALE 90° ELBOW
24° CONE SWIVEL NUT

- ISO 12151-5

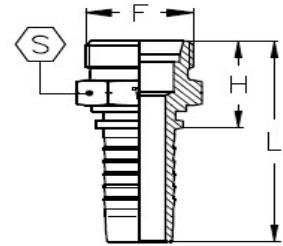


Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)
S86-M1204	M12x1.5	1/4	6.4	04	6	17	26	26	53
S86-M1404	M14x1.5	1/4	6.4	04	8	17	29	29	57
S86-M1406	M14x1.5	3/8	9.5	06	8	19	42	30	61
S86-M1604	M16x1.5	1/4	6.4	04	10	19	30	29	57
S86-M1605	M16x1.5	5/16	7.9	05	10	19	33	31	59
S86-M1606	M16x1.5	3/8	9.5	06	10	19	31	31	61
S86-M1806	M18x1.5	3/8	9.5	06	12	22	33	31	61
S86-M1808	M18x1.5	1/2	12.7	08	12	22	71	41	47
S86-M2208	M22x1.5	1/2	12.7	08	15	27	38	37	70
S86-M2608	M26x1.5	1/2	12.7	08	18	32	40	37	70
S86-M2610	M26x1.5	5/8	15.9	10	18	32	45	44	80
S86-M2612	M26x1.5	3/4	19	12	18	32	57	54	94
S86-M3012	M30x2	3/4	19	12	22	36	52	54	94
S86-M3612	M36x2	3/4	19	12	28	41	51	56	95
S86-M3616	M36x2	1	25.4	16	28	41	63	72	128
S86-M4520	M45x2	1 1/4	31.8	20	38	50	73	93	159
S86-M5224	M52-2	1 1/2	38.1	24	42	60	83	93	175

S78

METRIC HEAVY MALE STRAIGHT
24° CONE

- ISO 12151-5

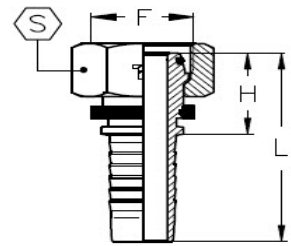


Part Number	Metric Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S78-M1404	M14x1.5	1/4	6.4	04	6	14	23	51	450
S78-M1604	M16x1.5	1/4	6.4	04	8	17	23	51	450
S78-M1606	M16x1.5	3/8	9.5	06	8	17	28	56	450
S78-M1804	M18x1.5	1/4	6.4	04	10	19	24	52	450
S78-M1806	M18x1.5	3/8	9.5	06	10	19	24	55	450
S78-M2005	M20x1.5	5/16	7.9	05	12	22	25	53	350
S78-M2006	M20x1.5	3/8	9.5	06	12	22	25	56	450
S78-M2008	M20x1.5	1/2	12.5	08	12	22	27	60	415
S78-M2206	M22x1.5	3/8	9.5	06	14	22	27	58	450
S78-M2208	M22x1.5	1/2	12.7	08	14	22	28	61	420
S78-M2408	M24x1.5	1/2	12.7	08	16	24	29	62	420
S78-M3010	M30x2	5/8	15.9	10	20	30	32	68	350
S78-M3012	M30x2	3/4	19	12	20	30	33	74	350
S78-M3612	M36x2	3/4	19	12	25	36	37	78	350
S78-M4216	M42x2	1	25.4	16	30	46	44	101	380
S78-M5220	M52x2	1 1/4	31.8	20	38	55	51	117	325

S79C

METRIC HEAVY FEMALE STRAIGHT
24° CONE SWIVEL NUT

- ISO 12151-5

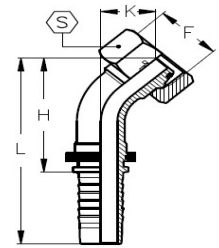


Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S79C-M1404	M14x1.5	1/4	6.4	04	6	17	23	51	450
S79C-M1604	M16x1.5	1/4	6.4	04	8	19	22	50	450
S79C-M1606	M16x1.5	3/8	9.5	06	8	19	26	56	450
S79C-M1804	M18x1.5	1/4	6.4	04	10	22	24	52	450
S79C-M1806	M18x1.5	3/8	9.5	06	10	22	25	55	450
S79C-M2005	M20x1.5	5/16	7.9	05	12	24	24	52	350
S79C-M2006	M20x1.5	3/8	9.5	06	12	24	24	54	450
S79C-M2008	M20x1.5	1/2	12.5	08	12	22	28	61	415
S79C-M2206	M22x1.5	3/8	9.5	06	14	27	28	58	450
S79C-M2208	M22x1.5	1/2	12.7	08	14	27	28	61	420
S79C-M2408	M24x1.5	1/2	12.7	08	16	30	29	62	420
S79C-M3010	M30x2	5/8	15.9	10	20	36	33	69	350
S79C-M3012	M30x2	3/4	19	12	20	36	36	76	350
S79C-M3612	M36x2	3/4	19	12	25	46	38	78	350
S79C-M3616	M36x2	1	25.4	16	25	46	41	97	380
S79C-M4216	M42x2	1	25.4	16	30	50	42	98	380
S79C-M4220	M42x2	1 1/4	31.8	20	30	50	43	109	325
S79C-M5220	M52x2	1 1/4	31.8	20	38	60	48	115	325

S84

METRIC HEAVY FEMALE 45° ELBOW
24° CONE SWIVEL NUT

- ISO 12151-5

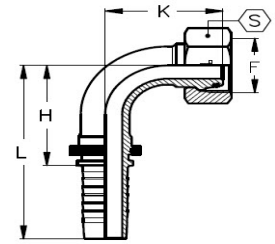


Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)
S84-M1404	M14x1.5	1/4	6.4	04	6	17	14	35	63
S84-M1604	M16x1.5	1/4	6.4	04	8	19	14	36	64
S84-M1804	M18x1.5	1/4	6.4	04	10	22	16	38	66
S84-M1806	M18x1.5	3/8	9.5	06	10	22	17	40	70
S84-M2006	M20x1.5	3/8	9.5	06	12	24	18	40	71
S84-M2206	M22x1.5	3/8	9.5	06	14	27	19	42	72
S84-M2208	M22x1.5	1/2	12.7	08	14	27	20	46	79
S84-M2408	M24x1.5	1/2	12.7	08	16	30	21	47	80
S84-M3010	M30x2	5/8	15.9	10	20	36	25	56	92
S84-M3012	M30x2	3/4	19	12	20	36	27	64	105
S84-M3612	M36x2	3/4	19	12	25	46	28	64	105
S84-M3616	M36x2	1	25.4	16	25	46	34	83	140
S84-M4216	M42x2	1	25.4	16	30	50	32	82	138
S84-M5220	M52x2	1 1/4	31.8	20	38	60	38	97	164

S83

METRIC HEAVY FEMALE 90° ELBOW
24° CONE SWIVEL NUT

- ISO 12151-5

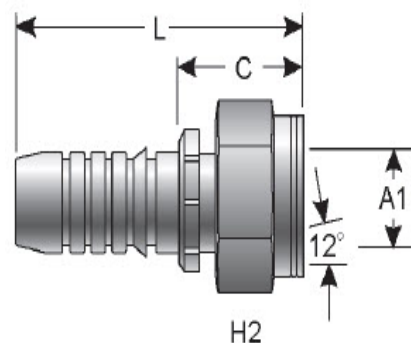


Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F - S (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)
S83-M1404	M14x1.5	1/4	6.4	04	6	17	26	25	53
S83-M1604	M16x1.5	1/4	6.4	04	8	19	29	29	57
S83-M1804	M18x1.5	1/4	6.4	04	10	22	30	29	57
S83-M1806	M18x1.5	3/8	9.5	06	10	22	33	30	61
S83-M1808	M18x1.5	1/2	12.7	08	12	24	48	35	70.3
S83-M2005	M20x1.5	5/16	7.9	05	12	24	32	28	56
S83-M2006	M20x1.5	3/8	9.5	06	12	24	33	31	61
S83-M2008	M20x1.5	1/2	12.7	08	12	25	52	37	67
S83-M2206	M22x1.5	3/8	9.5	06	14	27	37	34	64
S83-M2208	M22x1.5	1/2	12.7	08	14	27	41	39	71
S83-M2408	M24x1.5	1/2	12.7	08	16	30	42	39	71
S83-M3010	M30x2	5/8	15.9	10	20	36	50	44	80
S83-M3012	M30x2	3/4	19	12	20	36	55	54	94
S83-M3612	M36x2	3/4	19	12	25	46	57	54	94
S83-M3616	M36x2	1	25.4	16	25	46	69	71	128
S83-M4216	M42x2	1	25.4	16	30	50	67	71	128
S83-M5220	M52x2	1 1/4	31.8	20	38	60	80	87	154

GS-FDHORX (GS79)

GATES GS METRIC HEAVY FEMALE STRAIGHT
24° CONE SWIVEL NUT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

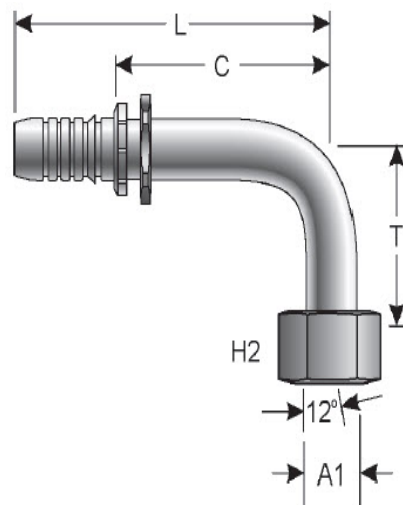


Part Number	Gates Code	Metric Female Thread	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Length - L (mm)	Cutoff - C (mm)	Hex A/F - H2 (mm)
20GS-38FD HORX	20GS-38FD HORX	M52x2	1 1/4	31.8	20	28	145	73.9	60

GS-FDHORX90 (GS83)

GATES GS METRIC HEAVY FEMALE 90° ELBOW
24° CONE SWIVEL NUT

- FOR GATES 20EFG4K, 20EFG5K, OR 20EFG6K HOSE ONLY.
- USE WITH GATES GSF4N OR GSF6N FERRULES ONLY.

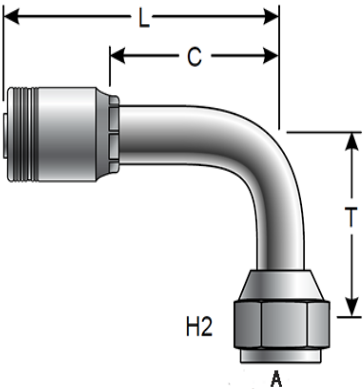


Part Number	Gates Code	Metric Female Thread	Hose I.D (in)	Hose I.D (mm)	Dash size	Tube Size	Length - L (mm)	Cutoff - C (mm)	Drop - T (mm)
20GS-38FD HORX90	20GS-38FD HORX90	M52x2	1 1/4	31.8	20	28	180.6	109.5	87.1

GS-FDHORX (GSM79)

GATES GSM HEAVY METRIC FEMALE
24° CONE SWIVEL NUT ONE PIECE

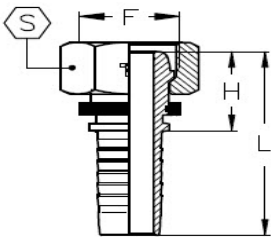
- FOR GATES 32 EFG5K OR EFG6K HOSE ONLY.



Part Number	Gates Code	Metric Female Thread	Hose I.D (in)	Hose I.D (mm)	Hose I.D (mm)	Dash Size	Hex A/F - H2 (mm)	Length - L (mm)	Cutoff - C (mm)
24GSM-38F DHORX	24GSM-38F DHORX	M52X2.0	1 1/2	1.5	38.1	24	60	180.1	85.1

METRIC MULTI SEAL

S77C
METRIC MULTI-SEAL CONE FEMALE STRAIGHT
SWIVEL NUT

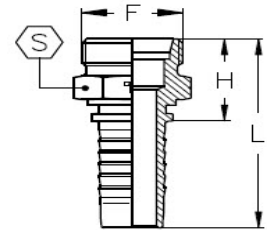


Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S77C-M1404	M14-1.5	1/4	6.4	04	17	20	48	280	4000
S77C-M1606	M16-1.5	3/8	9.5	06	19	21	53	280	4000
S77C-M1806	M18-1.5	3/8	9.5	06	22	20	50	280	4000

METRIC FRENCH GAZ

S47

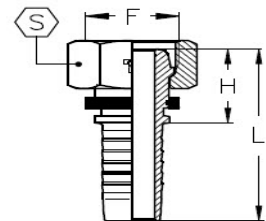
METRIC FRENCH GAZ MALE STRAIGHT
24° CONE



Part Number	Metric Male Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S47-M2006	M20x1.5	3/8	9.5	06	22	25	55.5	330	4800
S47-M2408	M24x1.5	1/2	12.7	08	24	27	60	280	4000
S47-M3010	M30x1.5	5/8	15.9	10	30	30	66	280	4000
S47-M3612	M36x1.5	3/4	19	12	36	33	73.5	210	3000
S47-M4516	M45x1.5	1	25.4	16	46	38.5	89.5	210	3000

S74C

METRIC FRENCH GAZ FEMALE STRAIGHT
24° CONE SLIP NUT



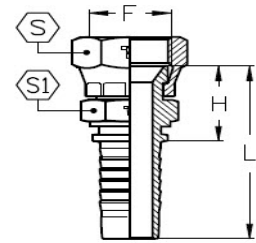
Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S74C-M2006	M20-1.5	3/8	9.5	06	24	21.5	52	330	4800
S74C-M2408	M24-1.5	1/2	12.7	08	30	25.5	58.5	280	4000
S74C-M3010	M30-1.5	5/8	15.9	10	36	26.5	62	280	4000
S74C-M3612	M36x1.5	3/4	19	12	41	29	68.5	210	3000
S74C-M4516	M45x1.5	1	25.4	16	51	34	90	210	3000

JIS

S75H

JIS BSP FEMALE STRAIGHT
30° FLARE SWIVEL NUT - BACK HEX

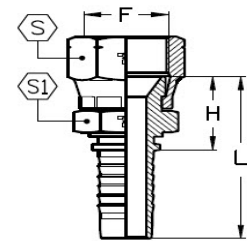
- JIS B 8363



Part Number	JIS (BSP) Female Thread - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Hex A/F - S1 (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S75H-0404	1/4-19	1/4	6.4	04	19	17	21.5	49.5	350
S75H-0606	3/8-19	3/8	9.5	06	22	19	22.5	53	350
S75H-0808	1/2-14	1/2	12.7	08	27	22	26	59	350
S75H-1212	3/4-14	3/4	19	12	32	27	31	71.5	280
S75H-1616	1-11	1	25.4	16	41	36	38	94	210
S75H-2020	1 1/4-11	1 1/4	31.8	20	51	47.6	44	110	170

S70H

JIS METRIC FEMALE STRAIGHT
KOMATSU STYLE 30° FLARE SWIVEL NUT

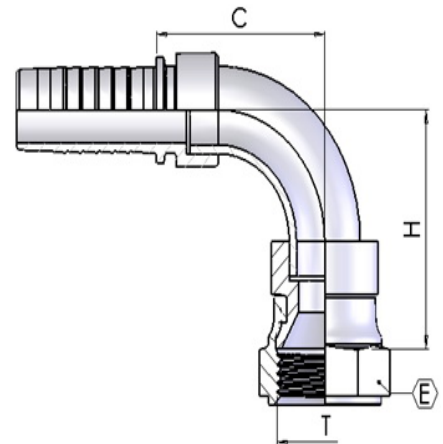


Part Number	JIS Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - S (mm)	Hex A/F - S1 (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S70H-M1204	M12x1.5	1/4	6.4	04	16	16	21	49	350
S70H-M1404	M14x1.5	1/4	6.4	04	19	17	21.5	49.5	350
S70H-M1406	M14x1.5	3/8	9.5	06	19	17	21.5	52	350
S70H-M1605	M16x1.5	5/16	7.9	05	22	17	22	50	350
S70H-M1606	M16x1.5	3/8	9.5	06	22	17	22	52.5	350
S70H-M1804	M18x1.5	1/4	6.4	04	24	19	25	53	350
S70H-M1806	M18x1.5	3/8	9.5	06	24	19	22.5	53	350
S70H-M18x1.5	M18x1.5	1/2	12.7	08	24	22	27	60	350

M1808									
S70H-M2006	M20x1.5	3/8	9.5	06	25	19	26	56	350
S70H-M2008	M20x1.5	1/2	12.7	08	25	22	27	60	350
S70H-M2206	M22x1.5	3/8	9.5	06	27	22	27	57	350
S70H-M2208	M22x1.5	1/2	12.7	08	27	22	26	59	350
S70H-M2212	M22x1.5	3/4	19	12	27	27	31	71	350
S70H-M2408	M24x1.5	1/2	12.7	08	32	27	30	63	350
S70H-M2410	M24x1.5	5/8	15.9	10	32	27	60	66	280
S70H-M2412	M24x1.5	3/4	19	12	32	27	31	71	280
S70H-M3012	M30x1.5	3/4	19	12	36	32	33.5	74	280
S70H-M3312	M33x1.5	3/4	19	12	41	32	36	76	210
S70H-M3316	M33x1.5	1	25.4	16	41	36	39	95	210
S70H-M3612	M36x1.5	3/4	19.0	12	44.5	36	36	76	170
S70H-M3616	M36x1.5	1	25.4	16	44.5	36	39	95	170
S70H-M3620	M36x1.5	1 1/4	31.8	20	44.5	41	43	109	170
S70H-M4220	M42x1.5	1 1/4	31.8	20	51	48	46	112	170
S70H-M4224	M42x1.5	1 1/2	38.1	24	51	48	48	130	170

S89

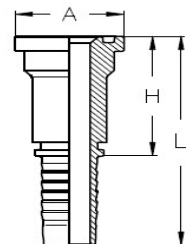
JIS METRIC FEMALE 90° ELBOW
KOMATSU STYLE 30° FLARE SWIVEL NUT



Part Number	JIS Female Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Drop - H (mm)	Cutoff - C (mm)	Working Pressure (bar)	Working Pressure (psi)
S89-M1404	M14-1.5	1/4	6.4	04	19	35	38	350	5000
S89-M1406	M14-1.5	3/8	9.5	06	19	33	31	350	5000
S89-M1606	M16x1.5	3/8	9.5	06	22	34	30	350	5000
S89-M1806	M18x1.5	3/8	9.5	06	24	33	31	350	5000
S89-M2208	M22x1.5	1/2	12.7	08	27	39	33	350	5000
S89-M3012	M30x1.5	3/4	19	12	36	43	48	280	4000

S71

JIS FLANGE STRAIGHT
KOMATSU STYLE FLANGE STRAIGHT

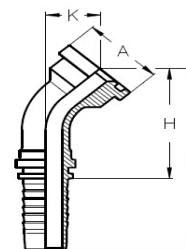


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S71-1010	5/8	5/8	15.9	10	34 x 6.7	48	84	350	5000

S73

JIS FLANGE 45° ELBOW

KOMATSU STYLE FLANGE 45° ELBOW

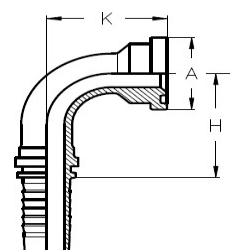


Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S73-1010	5/8	5/8	15.9	10	34	22	53	89	350

S72

JIS FLANGE 90° ELBOW

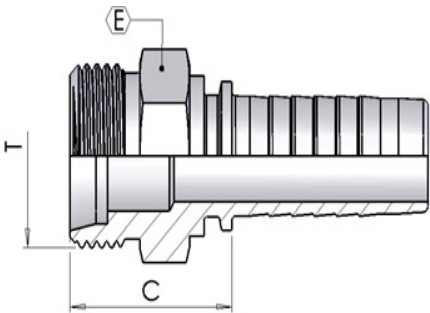
KOMATSU STYLE FLANGE 90° ELBOW



Part Number	Nominal SAE Flange size - A	Hose I.D (in)	Hose I.D (mm)	Dash size	Flange O.D - A (mm)	Drop - K (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S72-1010	5/8	5/8	15.9	10	34	44	45	81	350

METRIC KOBELCO

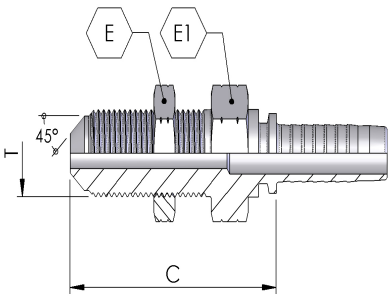
S44
METRIC KOBELCO STYLE MALE STRAIGHT
24° CONE



Part Number	Metric Male Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size
S44-M3010	M30x1.5	5/8	15.9	10
S44-M3612	M36x1.5	3/4	19	12
S44-M3616	M36-1.5	1	25.4	16

METRIC 45° FLARE

S109
METRIC MALE BULKHEAD
45° FLARE GB/T 5626



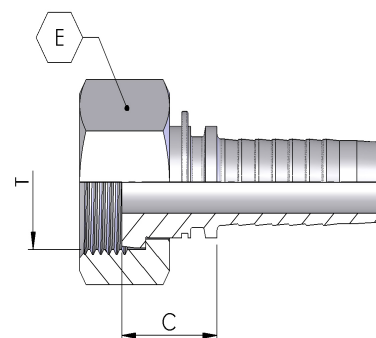
Part Number	Metric Male Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Hex A/F - E1 (mm)	Cutoff - C (mm)
S109-M1606	M16x1.5	3/8	9.5	06	22	19	48.5
S109-M2006	M20x1.5	3/8	9.5	06	27	27	56.5
S109-M2008	M20x1.5	1/2	12.7	08	27	27	58.5

METRIC FLAT FACE

S131

METRIC FLAT FACE STRAIGHT SWIVEL NUT

- GB/T 9065.3

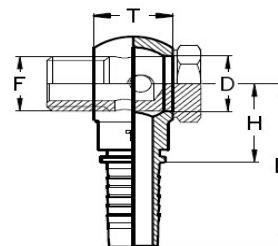


Part Number	Metric Female Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Hex A/F - E (mm)	Cutoff - C (mm)
S131-M1604	M16x1.5	1/4	6.4	04	19	16.5
S131-M1606	M16x1.5	3/8	9.5	06	19	17
S131-M1806	M18x1.5	3/8	9.5	06	22	17.5
S131-M2006	M20x1.5	3/8	9.5	06	24	17.5
S131-M2206	M22x1.5	3/8	9.5	06	27	17.5
S131-M2208	M22x1.5	1/2	12.7	08	27	18
S131-M2408	M24x1.5	1/2	12.7	08	30	18
S131-M2710	M27x1.5	5/8	15.9	10	32	19.5
S131-M3012	M30x2	3/4	19	12	36	21.5
S131-M3312	M33x2	3/4	19	12	41	21.5
S131-M3616	M36x2	1	25.4	16	41	22.5

BANJO TAIL

S38

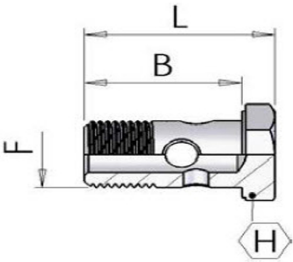
BSP BANJO TAIL
TO SUIT BSP BOLT



Part Number	Banjo ID - D (mm)	Hose I.D (in)	Hose I.D (mm)	Dash size	Suits BSP Bolt - F	Thickness - T (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S38-0404	13.3	1/4	6.4	04	1/4-19	14	23	51	280
S38-0604	16.8	1/4	6.4	04	3/8-19	17.5	26.5	54.5	280
S38-0605	16.8	5/16	7.9	05	3/8-19	17.5	26.5	54.5	280
S38-0606	16.8	3/8	9.5	06	3/8-19	17.5	24	54.5	280
S38-0806	21	3/8	9.5	06	1/2-14	23	32	62.5	250
S38-0808	21	1/2	21.5	08	1/2-14	23	28.5	61.5	250
S38-1010	23.1	5/8	15.9	10	5/8-14	23.5	28.2	64	210
S38-1212	26.5	3/4	19	12	3/4-14	29.5	37.5	78	210

BANJO BOLT

BJ-B
BSP BANJO BOLT

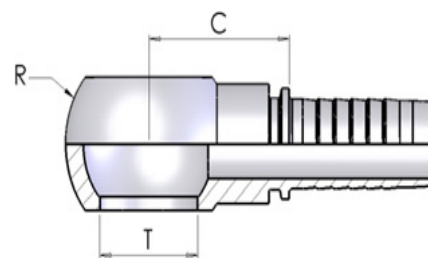


Part Number	BSPP Thread - F	Bolt Length mm (B)	Overall Length - L (mm)	Hex A/F (H)
BJ-B04	1/4-19	29	34	19
BJ-B06	3/8-19	33	41	22
BJ-B08	1/2-14	38	46	27
BJ-B10	5/8-14	44	54	30
BJ-B12	3/4-14	47	56	32

METRIC BANJO TAIL

S38-M

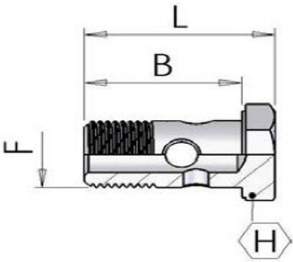
METRIC BANJO TAIL
TO SUIT METRIC BOLT



Part Number	Banjo ID - D (mm)	Hose I.D (in)	Hose I.D (mm)	Dash size	Suits Bolt - F	Thickness - T (mm)	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)
S38-M1003	10.2	3/16	5	03	M10x1	10	20	45	200
S38-M1004	10.2	1/4	6.4	04	M10x1	10	23	51	200
S38-M1204	12.1	1/4	6.4	04	M12x1.5	12	23	51	200
S38-M1404	14.2	1/4	6.4	04	M14x1.5	14	23	51	200
S38-M1405	14.2	5/16	7.9	05	M14x1.5	14	25	52	200
S38-M1406	14.2	3/8	9.5	06	M14x1.5	14	24	54.5	200
S38-M1604	16.2	1/4	6.4	04	M16x1.5	17.5	26.5	54.5	200
S38-M1606	16.2	3/8	9.5	06	M16X1.5	17.5	24	54.5	200
S38-M1806	18.2	3/8	9.5	06	M18X1.5	20.5	27	57.5	200
S38-M1808	18.2	1/2	12.7	08	M18X1.5	20.5	28.1	61.1	200
S38-M2208	22.2	1/2	12.7	08	M22X1.5	22.2	28.5	61.5	200
S38-M2210	22.2	5/8	15.9	10	M22X1.5	22.2	31	63	200
S38-M2612	26	3/4	19	12	M26X1.5	26	38	78	200

METRIC BANJO BOLT

BJ-M
METRIC BANJO BOLT

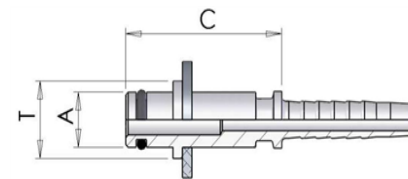


Part Number	BSPP Thread - F	Bolt Length mm (B)	Overall Length - L (mm)	Hex A/F (H)
BJ-M10	M10x1.0	19	24	14
BJ-M12	M12x1.5	26	31	17
BJ-M14	M14-1.5	29	34	19
BJ-M16	M16x1.5	33	41	22
BJ-M18	M18x1.5	37	44	24
BJ-M22	M22x1.5	38	46	27
BJ-M26	M26-1.5	47	56	32

KARCHER

KARCHER

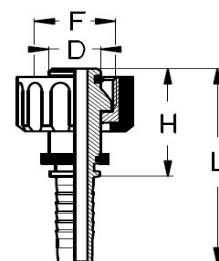
METRIC KARCHER MALE STRAIGHT



Part Number	Metric Male Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Spigot Diameter - A (mm)	Cutoff - C (mm)
KARCHER-04	M22x1.5	1/4	6.4	04	10	33
KARCHER-05	M22-1.5	5/16	7.9	05	10	33
KARCHER-06	M22-1.5	3/8	9.5	06	10	33

S30

METRIC KARCHER FEMALE STRAIGHT

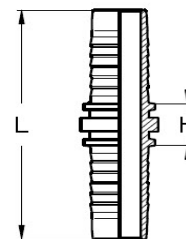


Part Number	Metric Female Thread - F	Hose I.D (in)	Hose I.D (mm)	Dash size	Cutoff - H (mm)	Length - L (mm)	O-Ring size
S30-M2204	M22x1.5	1/4	6.4	04	34.8	62.8	10x2
S30-M2205	M22x1.5	5/16	7.9	05	37.8	65.8	10x2
S30-M2206	M22x1.5	3/8	9.5	06	37.8	68.9	10x2

HOSE JOINER

S90

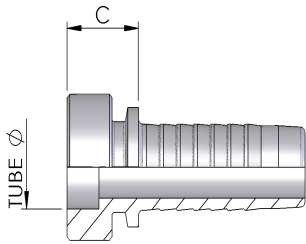
HOSE JOINER STRAIGHT



Part Number	Hose I.D (in)	Hose I.D (mm)	Dash size	Cutoff - H (mm)	Length - L (mm)	Working Pressure (bar)	Working Pressure (psi)
S90-0404	1/4	6.3	04	13	69	450	6500
S90-0505	5/16	8	05	13	69	350	5000
S90-0606	3/8	10	06	13	74	450	6500
S90-0808	1/2	12.5	08	15	81	420	6000
S90-1010	5/8	16	10	16	88	350	5000
S90-1212	3/4	19	12	18	99	350	5000
S90-1616	1	25.4	16	21	137	350	5000
S90-2020	1 1/4	31.8	20	24	162	350	5000

BRAZE SOCKET

S96
IMPERIAL BRAZE SOCKET STRAIGHT

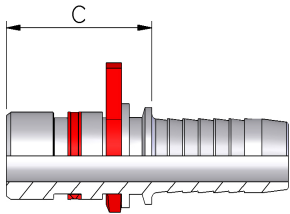


Part Number	Socket I.D (mm)	Hose I.D (in)	Hose I.D (mm)	Dash size	Cutoff - C (mm)
S96-0404	1/4	1/4	6.4	04	12
S96-0505	5/16	5/16	7.9	05	12
S96-0606	3/8	3/8	9.5	06	13
S96-0808	1/2	1/2	12.7	08	14
S96-1010	5/8	5/8	15.9	10	15
S96-1212	3/4	3/4	19	12	22
S96-1616	1	1	25.4	16	25
S96-2020	1 1/4	1 1/4	31.8	20	29
S96-2424	1 1/2	1 1/2	38.1	24	33
S96-3232	2	2	50.8	32	34

CEJN CONNECTOR STRAIGHT

S97

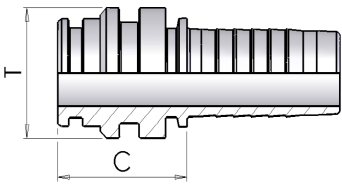
WEO PUSH CONNECT STRAIGHT
TO SUIT WEO PUSH CONNECT ADAPTORS



Part Number	Hose I.D (in)	Hose I.D (mm)	Dash size	O.D - C (mm)	Cutoff - C (mm)
S97-0404	1/4	6.4	04	10	30
S97-0606	3/8	9.5	06	13	33
S97-0808	1/2	12.7	08	16	33

STAPLELOCK

S50
STAPLELOCK MALE
STAPLELOCK MALE STRAIGHT



Part Number	Staplelock Male Thread - T	Hose I.D (in)	Hose I.D (mm)	Dash size	Cutoff - C (mm)
S50-0404	1/4	1/4	6.4	04	32
S50-0606	3/8	3/8	9.5	06	35
S50-0808	1/2	1/2	12.7	08	33
S50-1212	3/4	3/4	19	12	33



GENERAL INFORMATION

The swage ferrules listed in this section are specifically designed for use with the relevant hose types and swage hosetails listed in sections two and three of this catalogue respectively. Use of component combinations other than those specified may result in reduced service life or premature failure of the hose assembly. In such cases no warranty will apply.

Hydraulink swage ferrules are of a proprietary design, and have all been comprehensively tested within the performance parameters of the relevant hose types. To obtain maximum performance from swage hose assemblies, ferrules must be swaged to the final swage diameters recommended by Hydraulink. These diameters are subject to regular review as part of ongoing product development, and are published as a swage chart listing all final dimensions. If in doubt, please contact Hydraulink to confirm final dimensions or request a copy of the latest swage chart.

All dimensions shown are nominal, and subject to change due to ongoing product development. For critical applications, please contact Hydraulink to confirm dimensions.

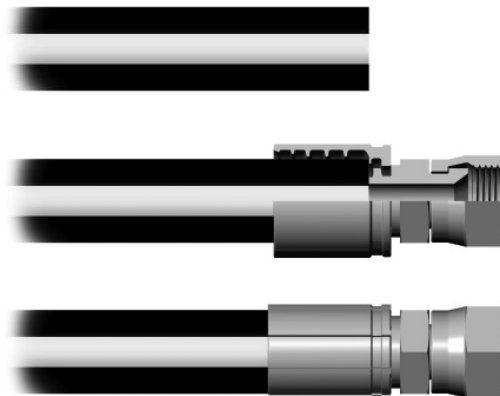
Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

ASSEMBLY INSTRUCTIONS**Non-Skive Swage Couplings**

Ensure hose is cut square, with minimal end "flaring".

Insert hose into ferrule, ensuring sufficient clearance for location of tail locking collar between hose end and ferrule shoulder. Lightly lubricate tailpiece and insert into hose until collar abuts the ferrule. Check alignment of ferrule shoulder and tailpiece locking collar before swaging.

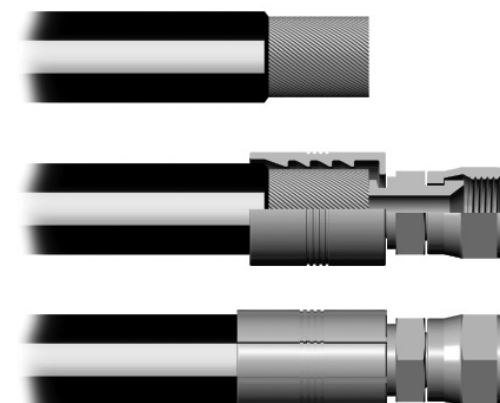
Select correct die set, and swage to diameter nominated on latest Hydraulink Crimp Chart. Check final swage diameter with verniers, and adjust crimp dimensions if necessary.

**Skive Swage Couplings**

Ensure hose is cut square, and refer to latest Hydraulink Crimp Chart for skive dimension. Mark dimension from cut end, then cut and strip the rubber cover, exposing the wire.

Insert hose into ferrule, ensuring sufficient clearance for location of tail locking collar between hose end and ferrule shoulder. Lightly lubricate tailpiece and insert into hose until collar abuts the ferrule. Check alignment of ferrule shoulder and tailpiece locking collar before swaging.

Select correct die set, and swage to diameter nominated on latest Hydraulink Crimp Chart. Check final swage diameter with verniers, and adjust crimp dimensions if necessary.



Please refer to training manual for more detailed assembly instructions.

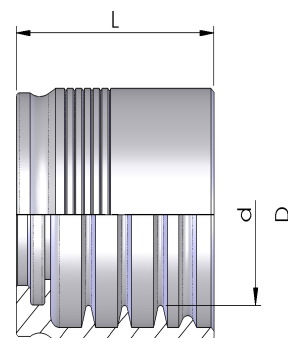
Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

MULTISPIRAL FERRULES

S6KXN

SPIRAL HOSE SWAGE FERRULE

NON-SKIVE SWAGE FERRULE FOR MULTI SPIRAL 4
WIRE HOSE

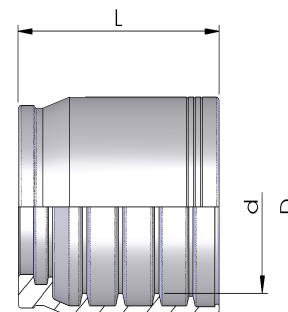


Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
S6KXN-06	3/8	9.5	06	30.8	21.4	30.0
S6KXN-08	1/2	12.7	08	34.0	25.1	34.9
S6KXN-10	5/8	15.9	10	36.9	29.0	40.0
S6KXN-12	3/4	19	12	42.0	32.7	44.5

SFM4N

SPIRAL HOSE SWAGE FERRULE

NON-SKIVE SWAGE FERRULE FOR MULTI SPIRAL 4
WIRE HOSE

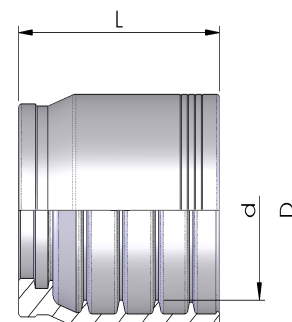


Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SFM4N-16	1	25	16	57	39.5	50.0
SFM4N-20	1 1/4	31.5	20	68	47.2	60.0
SFM4N-24	1 1/2	38.0	24	86.0	55.5	70.0
SFM4N-32	2	51.0	32	100.0	70	86.0

SFM5N

SPIRAL HOSE SWAGE FERRULE
NON-SKIVE SWAGE FERRULE FOR MULTI SPIRAL 4
WIRE HOSE

- FOR ENDURO5000 HOSE ONLY

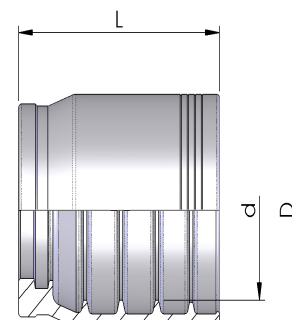


Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SFM5N-20	1 1/4	31.5	20	68	49.4	62.0

SFM6N

SPIRAL HOSE SWAGE FERRULE
NON-SKIVE SWAGE FERRULE FOR MULTI SPIRAL 6
WIRE HOSE

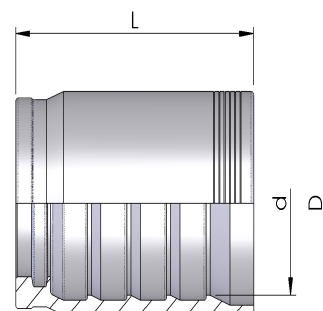
- FOR HYDRAULINK HX6K-20 HOSE ONLY.



Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SFM6N-20	1 1/4	31.5	20	70.0	51.4	65.0

SFM6S

SPIRAL HOSE SWAGE FERRULE
SKIVE SWAGE FERRULE FOR MULTI SPIRAL 6 WIRE
HOSE

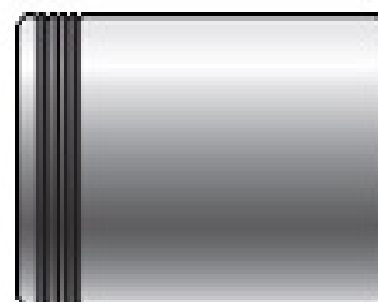


Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SFM6S-24	1 1/2	38.0	24	90.0	57.5	68.0
SFM6S-32	2	51.0	32	102.0	70	84.0

20GS1F-4 (GSF4N)

SPIRAL HOSE SWAGE FERRULE
GATES GS NON SKIVE SWAGE FERRULE FOR
GATES SPIRAL 4 WIRE HOSE

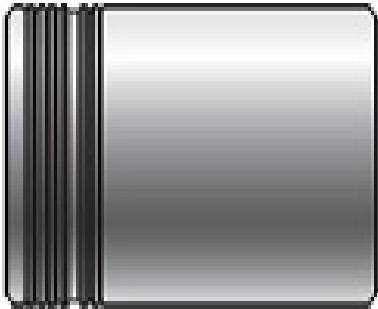
- FOR GATES EFG4K HOSE ONLY.
- USE WITH GATES GS SERIES HOSETAILS ONLY.



Part Number	Gates Code	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	O.D - D (mm)
20GS1F-4	20GS1F-4	1 1/4	31.8	20	67.8	61.5

20GS1F-6 (GSF6N)
SPIRAL HOSE SWAGE FERRULE
GATES GS NON SKIVE SWAGE FERRULE FOR
GATES SPIRAL 6 WIRE HOSE

- FOR GATES 20EFG5K & 20EFG6K HOSE ONLY.
- USE WITH GATES GS SERIES HOSETAILS ONLY.

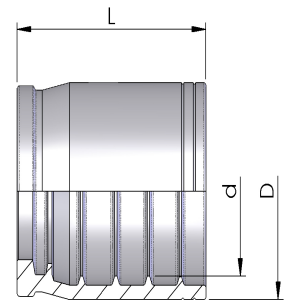


Part Number	Gates Code	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	O.D - D (mm)
20GS1F-6	20GS1F-6	1 1/4	31.8	20	72.9	67.8

BRAIDED FERRULES

SFBN

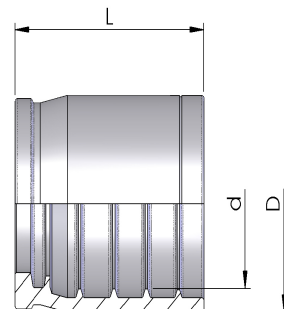
BRAIDED HOSE SWAGE FERRULE
NON-SKIVE SWAGE FERRULE FOR ONE & TWO-
WIRE HOSE



Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SFBN-04	1/4	6.3	04	26.0	15.7	22.0
SFBN-05	5/16	8.0	05	27.5	17.5	24.0
SFBN-06	3/8	10.0	06	30.0	19.8	25.0
SFBN-08	1/2	12.5	08	32.5	23.1	30.0
SFBN-10	5/8	16.0	10	35.0	26.5	34.0
SFBN-12	3/4	19.0	12	40.0	30.2	38.0
SFBN-16	1	25.4	16	55.0	39.0	48.0
SFBN-20	1 1/4	31.8	20	65.0	49.5	60.0
SFBN-24	1 1/2	38.0	24	75.0	56.0	67.0
SFBN-32	2	51.0	32	86.0	69.0	80.0

SFKN

BRAIDED HOSE SWAGE FERRULE
NON-SKIVE SWAGE FERRULE FOR ONE-WIRE &
COMPACT HOSE

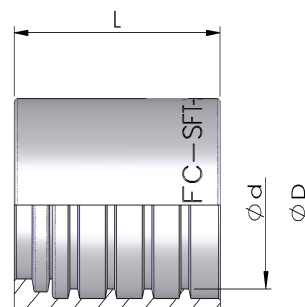


Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SFKN-03	3/16	4.8	03	24.0	13.5	18.5
SFKN-04	1/4	6.3	04	26.0	14.3	20.5
SFKN-05	5/16	7.9	05	27.5	16.2	22.0
SFKN-06	3/8	10.0	06	26.5	18.3	24.5

THERMOPLASTIC FERRULES

SFT

THERMOPLASTIC HOSE FERRULE
NON-SKIVE SWAGE FERRULE FOR
THERMOPLASTIC HOSE

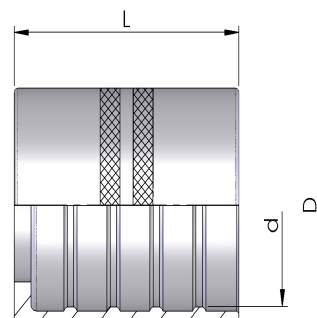


Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SFT-03	3/16	4.8	03	26	11.5	15
SFT-04	1/4	6.3	04	29	12.9	17
SFT-05	5/16	7.9	05	30.5	15.8	20
SFT-06	3/8	9.5	06	32	17.5	22
SFT-08	1/2	12.7	08	32.5	21.3	27
SCNT-10	5/8	15.9	10	36	27.3	34
SFT-12	3/4	19.0	12	41	28.2	34.5

R5 FERRULES

SNV

R5 SWAGE FERRULE
FOR GATES C5 HOSE



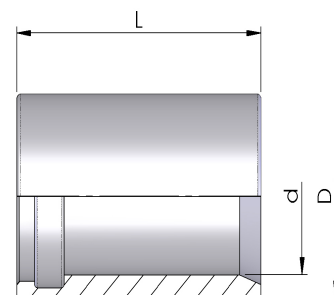
Part Number	Hose I.D inches (Nominal Bore)	Suits Hose Dash Size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SNV-04	1/4	05	29.0	15.2	19.0
SNV-05	5/16	06	30.0	18.4	22.0
SNV-06	13/32	08	31.0	19.9	24.0
SNV-08	1/2	10	34.0	24.7	28.5
SNV-10	5/8	12	36.0	28.0	32.0
SNV-12	3/4	19	42	32.6	38

PTFE FERRULES

SP1

PTFE SWAGE FERRULE

SWAGE FERRULE FOR PTFE SMOOTH TRUE BORE
HOSE



Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Length - L (mm)	I.D - d (mm)	O.D - D (mm)
SP1-03	3/16	4.8	03	26.0	10.1	14.0
SP1-04	1/4	6.4	04	29.0	11.3	17.5
SP1-05	5/16	8.0	05	29.0	12.0	17.5
SP1-06	3/8	9.5	06	30.0	14.5	19.1
SP1-08	1/2	12.7	08	33.0	17.1	22.2
SP1-10	5/8	15.9	10	36.0	22.0	28.6
SP1-12	3/4	19	12	42.0	24.0	31.8
SFP1B-16	1	25.4	16	60.0	35.2	41.3



FIELD ATTACHABLE HOSE TAILS



GENERAL INFORMATION

The Hydraulink range of hose couplings are available in three main series; Swage, Field Attachable (often referred to as reusable) and Push-on.

The field attachable series hosetail is designed for use with SAE 100R1AT and SAE 100R2AT hose. The field attachable ferrule is selected to match the relevant hose. Please note that Hydraulink field attachable hosetails should only be used with the field attachable ferrules listed in section six of this catalogue.

Hydraulink thread forms and sealing methods are manufactured to the relevant international standards where applicable. All dimensions shown are nominal, and subject to change due to ongoing product development. For critical applications, please contact Hydraulink to confirm dimensions.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

PART NUMBERING SYSTEM – FIELD ATTACHABLE COUPLINGS

The Hydraulink part numbering system is a concise product description in coded form. The part number consists of four modules as follows:

Module 1. Prefix letter; denotes coupling type.

S = Swage

F = Field Attachable (Reusable)

P = Push-on

R5 = Field Attachable (Reusable) to suit SAE 100R5 hose

SU = Suction tail.

Module 2. Series Numbers; denotes the thread form or sealing method (coupling end) and the configuration of the hosetail.

E.g.; series code #51 denotes a BSPP swivel nut female in a swept 90° configuration,
series code #29 denotes a JIC female swivel nut in a compact 90° configuration.

Please refer to the following “Series Codes and Descriptions” for further information regarding coupling ends and configurations.

Module 3. Coupling end size; denotes the size of the thread form or sealing method of the hosetail. Sizes are expressed as follows;

English/American threads; expressed in 1/16th inch increments denoting the key diameter.
For example; 08 = $8/16 = 1/2$ " and 19 = $19/16 = 1\ 3/16$ ".

Metric threads; expressed in millimetres with prefix M, denoting the key diameter.
For example; M10 = 10mm O.D. thread.

Flanges; express the nominal size of the flange head. Nominal sizing refers to the maximum internal bore.

For example a 12 flange head would have a maximum internal bore of $12/16 = 3/4$ ".

Please refer technical section for further information regarding coupling ends, thread forms and sealing methods.

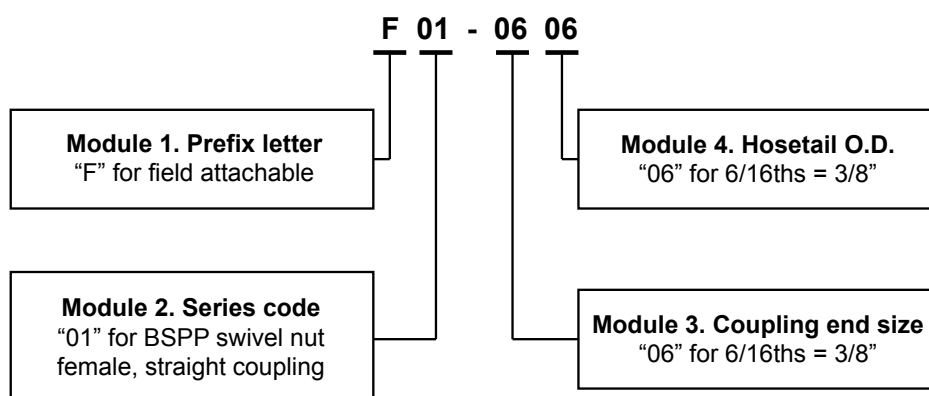
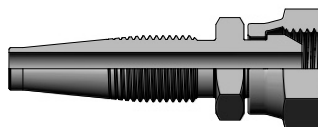
Module 4. Hosetail outside diameter; denotes both the nominal O.D. of the hosetail and the I.D. of the hose it would suit. Sizes are expressed in 1/16th inch increments.

For example; 06 = $6/16 = 3/8$ " and 20 = $20/16 = 1\ 1/4$ ".

PART NUMBERING SYSTEM – EXAMPLES

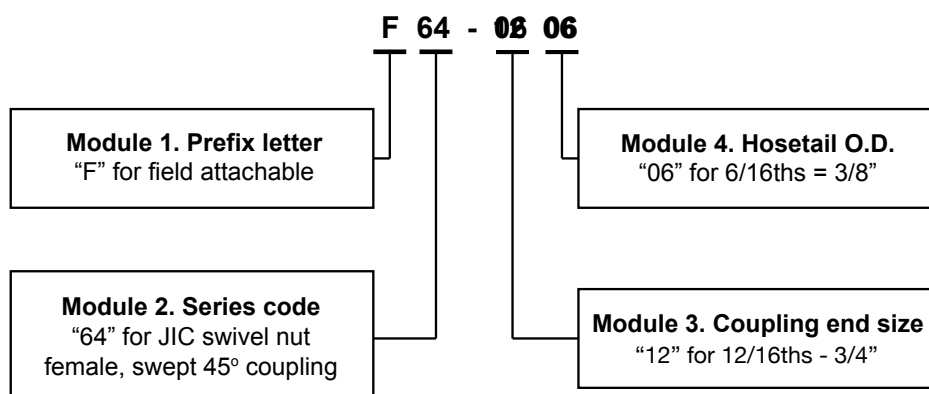
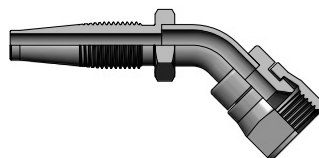
Part number: F01-0606

Complete description: 3/8" BSPP swivel nut female x 3/8" hose tail, straight field attachable coupling.



Part number: F64-1206

Complete description: 3/4" JIC swivel nut female x 3/8" hose tail, swept 45° field attachable coupling.



SERIES CODES AND DESCRIPTIONS - HOSETAILS

CODE	DESCRIPTION	CODE	DESCRIPTION
01	BSP PARALLEL SWIVEL NUT FEMALE	51	BSPP SWIVEL NUT FEMALE 90° SWEPT BEND
02	BSP PARALLEL SWIVEL NUT FEMALE FLATFACE	52	ORFS SWIVEL NUT FEMALE 90° SWEPT BEND
03	SAE SWIVEL NUT FEMALE	53	METRIC ISO/GAZ SWIVEL NUT FEMALE 90° SWEPT BEND
04	JIC SOLID (FIXED) FEMALE	54	SAE CODE 62 FLANGE 60° SWEPT BEND
05	JIC SWIVEL NUT FEMALE	545	CAT XT5 FLANGE 60° SWEPT BEND
06	BSPT SOLID (FIXED) FEMALE	55	JIC SWIVEL NUT FEMALE 90° SWEPT BEND
07	NPSM SWIVEL NUT FEMALE	56	ORFS SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
08	BSP PARALLEL SOLID (FIXED) FEMALE	57	BSPP SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
09	SAE MALE	58	JIC SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
10	SAE INVERTED FLARE MALE	59	SAE CODE 61 FLANGE 90° SWEPT BEND
11	NPTF SOLID (FIXED) FEMALE	60	BSPP SWIVEL NUT FEMALE 45° SWEPT BEND
110	SAE CODE 61 FLANGE 110° SWEPT BEND	61	SAE CODE 62 FLANGE 90° SWEPT BEND
12	BSP PARALLEL MALE	615	CAT XT5 FLANGE 90° SWEPT BEND
13	ORFS SWIVEL NUT FEMALE	616	O&K SAE CODE 62 FLANGE 90° SWEPT BEND
13R	ORFS SWIVEL NUT FEMALE, SHORT STEM	62	SAE CODE 62 FLANGE 45° SWEPT BEND
133	ORFS SWIVEL NUT FEMALE 30° SWEPT BEND	625	CAT XT5 FLANGE 45° SWEPT BEND
135	SAE CODE 61 FLANGE 135° SWEPT BEND	626	O&K SAE CODE 62 FLANGE 45° SWEPT BEND
14	BSP TAPER MALE SWIVEL	63	ORFS SWIVEL NUT FEMALE 45° SWEPT BEND
15	BSP TAPER MALE	64	JIC SWIVEL NUT FEMALE 45° SWEPT BEND
16	NPTF MALE	65	MINI-CHECK TEST POINT METRIC FEMALE/SPIGOT
17	METRIC MALE (STUD END)	66	SAE CODE 61 FLANGE 60° SWEPT BEND
18	JIC MALE	67	SAE CODE 61 FLANGE 22.5° SWEPT BEND
19	UNO MALE SWIVEL	674	SAE CODE 62 FLANGE 22.5° SWEPT BEND
20	UNO MALE	675	CAT XT5 FLANGE 22.5° SWEPT BEND
21	POCLAIN FLANGE	68	SAE CODE 61 FLANGE 45° SWEPT BEND
22	SAE CODE 62 FLANGE STRAIGHT	69	SAE CODE 61 FLANGE 67.5° SWEPT BEND
225	CAT XT5 FLANGE STRAIGHT	695	CAT XT5 FLANGE 67.5° SWEPT BEND
226	O&K SAE CODE 62 FLANGE STRAIGHT	70	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE
23	SAE CODE 61 FLANGE STRAIGHT	71	JIS (KOMATSU) FLANGE STRAIGHT
236	O&K SAE CODE 61 FLANGE STRAIGHT	72	JIS (KOMATSU) FLANGE 90° SWEPT BEND
24	BSPT MALE SWIVEL 90°	73	JIS (KOMATSU) FLANGE 45° SWEPT BEND
25	BSP PARALLEL SWIVEL NUT FEMALE 90° COMPACT	74	FRENCH GAZ METRIC SWIVEL NUT FEMALE
26	BSPT MALE 90° COMPACT	75	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEMALE
27	SAE SWIVEL NUT FEMALE 90° COMPACT	76	DIN METRIC 60° CONE SWIVEL NUT FEMALE
28	JIC MALE SWIVEL 90° COMPACT	77	METRIC GLOBESEAL SWIVEL NUT FEMALE
29	JIC SWIVEL NUT FEMALE 90° COMPACT	78	HEAVY DIN METRIC MALE
30	WATERBLAST SWIVEL NUT FEMALE	79	HEAVY DIN METRIC SWIVEL NUT FEMALE
31	DIN METRIC 60° CONE MALE STRAIGHT	80	LIGHT DIN METRIC MALE
32	UNO MALE SWIVEL 90° COMPACT	81	LIGHT DIN METRIC SWIVEL NUT FEMALE
33	JIC MALE 90° COMPACT	82	METRIC STANDPIPE
34	JIS (KOMATSU) METRIC MALE	83	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
35	JIS 30° FLARE (MITSUBISHI) MALE	84	HEAVY DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
36	BSP TAPER MALE 45°	85	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
37	SAE SWIVEL NUT FEMALE 45° SWEPT BEND	86	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
38	BANJO	87	LIGHT DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
39	POCLAIN FLANGE	88	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
39N	POCLAIN FLANGE 90°	89	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
39F	POCLAIN FLANGE 45°	90	HOSE JOINER
40	ORFS MALE	91	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEM. 90° SWEPT BEND
S40N	ORFS MALE 90° SWEPT BEND	92	IMPERIAL STANDPIPE
41	SAE SWIVEL NUT FEMALE 90° SWEPT BEND	93	METRIC 90° STANDPIPE
42	SAE INVERTED FLARE MALE 45° SWEPT BEND	94	SAE IMPERIAL TUBE CONNECTOR
43	SAE INVERTED FLARE MALE 90 SWEPT BEND	95	DIN 60° METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
44	KOBELCO METRIC MALE	96	LIFESAVER
45	SAE CODE 61 FLANGE 30° SWEPT BEND	97	WEO (CEJN) STRAIGHT STANDPIPE
456	O&K SAE CODE 61 FLANGE 30° SWEPT BEND	109	METRIC 45° FLARE BULKHEAD
46	SAE CODE 62 FLANGE 30° SWEPT BEND	131	CHINESE FLAT FACE STRAIGHT FEMALE
465	CAT XT5 FLANGE 30° SWEPT BEND		
466	O&K SAE CODE 62 FLANGE 30° SWEPT BEND		
47	FRENCH GAZ METRIC MALE		
48	JIS (KOMATSU) METRIC MALE		
49	STAPLELOCK FEMALE		
50	STAPLELOCK MALE		

SUFFIX CODES FOR SERIES CODES

N	NINETY DEGREE	e.g. S40N
F	FORTY FIVE DEGREE	e.g. S40F
S	SWIVEL MALE	e.g. S18S
K	COMPACT BLOCK 45°	e.g. S64K, S60K
C	CYLINDRICAL/ROUND BAR TAIL STYLE	e.g. S01C
H	HEXAGONAL BAR TAIL STYLE	e.g. S05H

SUFFIX CODES FOR PART NUMBERS

X	EXTENDED DROP LENGTH IN MM e.g S615-1616-X132
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PREFIX CODES FOR SERIES

GS	GATES GLOBAL SPIRAL NON-SKIVE e.g. GS01-2020
GSM	GATES GLOBAL SPIRAL MAXIMUM NON-SKIVE e.g. GSM01-3232

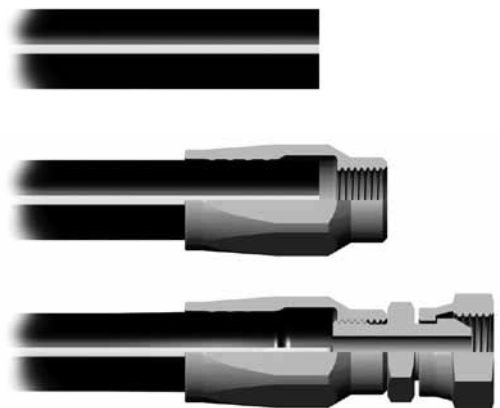
ASSEMBLY INSTRUCTIONS

Non-Skive Field Attachable Couplings

Ensure hose is cut square, with minimal end “flaring”.

Screw ferrule body onto hose in an anti-clockwise direction until hose is 3 to 5mm clear of inside body.

Lightly lubricate the tailpiece and the female thread of the ferrule body, then screw the tailpiece into the ferrule body in a clockwise direction until the hex on the tailpiece abuts the ferrule body.



Please refer to training manual for more detailed assembly instructions.

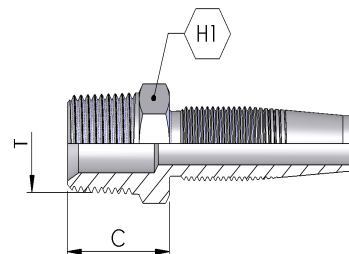
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BSP

F15

BSPT MALE STRAIGHT

BSP TAPERED MALE STRAIGHT

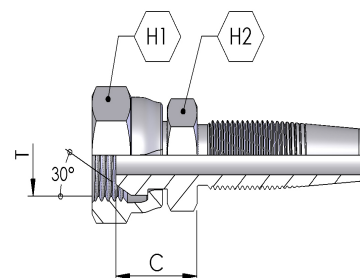


Part Number	BSPT Male Thread (T)	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	C (mm)
F15-0404	1/4-19	1/4	6.4	04	16	20
F15-0604	3/8-19	1/4	6.4	04	19	23
F15-0606	3/8-19	3/8	9.5	06	19	23
F15-0806	1/2-14	3/8	9.5	06	22	27
F15-0808	1/2-14	1/2	12.7	08	22	27
F15-1010	5/8-14	5/8	15.9	10	25	27
F15-1212	3/4-14	3/4	19	12	29	32
F15-1616	1-11	1	25.4	16	35	36

F01

BSP FEMALE STRAIGHT

BSP 60° CONE FEMALE SWIVEL NUT STRAIGHT

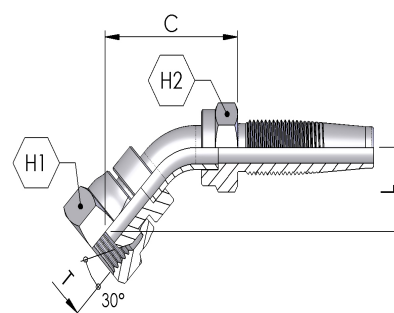


Part Number	BSP Female Thread (T)	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	H2 (mm)	C (mm)
F01-0404	1/4-19	1/4	6.4	04	19	16	17
F01-0604	3/8-19	1/4	6.4	04	22	19	19
F01-0606	3/8-19	3/8	9.5	06	22	19	19
F01-0806	1/2-14	3/8	9.5	06	27	22	23
F01-0808	1/2-14	1/2	12.7	08	27	22	23
F01-1010	5/8-14	5/8	15.9	10	30	25	24
F01-1212	3/4-14	3/4	19	12	32	32	29
F01-1616	1-11	1	25.4	16	38	38	30

F60

BSP FEMALE 45° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT 45° ELBOW



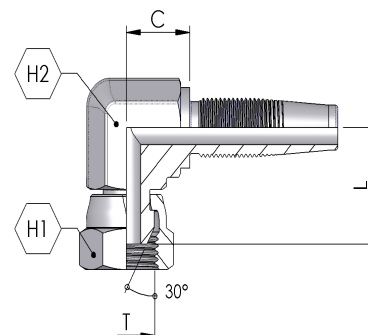
Part Number	BSP Female Thread (T)	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	L (mm)	C (mm)
F60-0404	1/4-19	1/4	6.4	04	19	22	39
F60-0606	3/8-19	3/8	9.5	06	22	24	41
F60-0808	1/2-14	1/2	12.7	08	27	28	50
F60-1212	3/4-14	3/4	19	12	32	30	61
F60-1616	1-11	1	25.4	16	38	37	74

F25

BSP FEMALE 90° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT 90° ELBOW

COMPACT

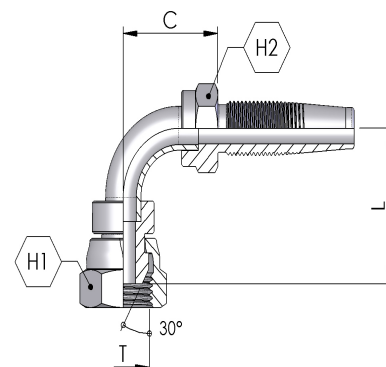


Part Number	BSPP Female Thread (T)	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	L (mm)	C (mm)
F25-0404	1/4-19	1/4	6.4	04	19	20	11
F25-0606	3/8-19	3/8	9.5	06	22	27	15
F25-0808	1/2-14	1/2	12.7	08	27	30	19
F25-1212	3/4-14	3/4	19	12	32	34	21
F25-1616	1-11	1	25.4	16	38	42	28

F51

BSP FEMALE 90° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT 90° ELBOW

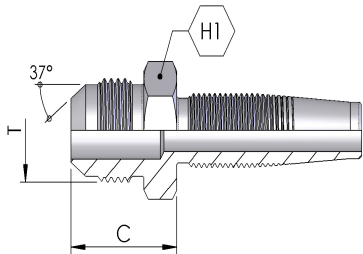


Part Number	BSPP Female Thread (T)	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	L (mm)	C (mm)
F51-0404	1/4-19	1/4	6.4	04	19	32	23
F51-0606	3/8-19	3/8	9.5	06	22	40	30
F51-0806	1/2-14	3/8	9.5	06	27	40	30
F51-0808	1/2-14	1/2	12.7	08	27	46	36
F51-1212	3/4-14	3/4	19	12	32	55	47
F51-1616	1-11	1	25.4	16	38	71	58

JIC

F18

JIC MALE STRAIGHT
JIC MALE 37° CONE



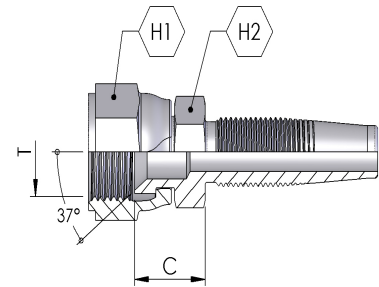
Part Number	JIC THREAD	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	C (mm)
F18-0704	7/16-20	1/4	6.4	04	16	20.5
F18-0904	9/16-18	1/4	6.4	04	16	20.5
F18-0906	9/16-18	3/8	9.5	06	19	22.5
F18-1206	3/4-16	3/8	9.5	06	22	24.8
F18-1208	3/4-16	1/2	12.7	08	22	24.8
F18-1408	7/8-14	1/2	12.7	08	25	27.5
F18-1410	7/8-14	5/8	15.9	10	25	27.5
F18-1712	1.1/16-12	3/4	19	12	28	31.9
F18-2116	1.5/16-12	1	25.4	16	35	24

F05

JIC FEMALE STRAIGHT

JIC 37° FLARE FEMALE SWIVEL NUT STRAIGHT

BACK HEX

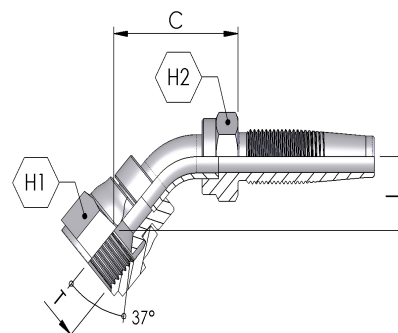


Part Number	JIC THREAD	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	H2 (mm)	C (mm)
F05-0704	7/16-20	1/4	6.4	04	15	14	13
F05-0904	9/16-18	1/4	6.4	04	19	17	17
F05-0906	9/16-18	3/8	9.5	06	19	17	17
F05-1206	3/4-16	3/8	9.5	06	24	19	18
F05-1208	3/4-16	1/2	12.7	08	24	22	18
F05-1408	7/8-14	1/2	12.7	08	27	22	19
F05-1410	7/8-14	5/8	15.9	10	27	25	19
F05-1712	1.1/16-12	3/4	19	12	32	30	24
F05-2116	1.5/16-12	1	25.4	16	38	38	27

F64

JIC FEMALE 45° ELBOW

JIC 37° FLARE FEMALE SWIVEL NUT 45° ELBOW

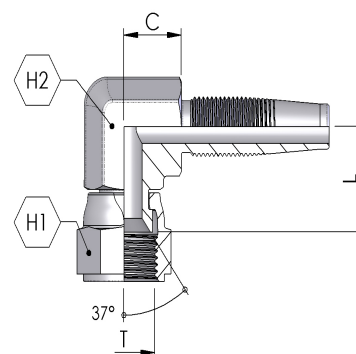


Part Number	JIC THREAD	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	L (mm)	C (mm)
F64-0704	7/16-20	1/4	6.4	04	15	17	33
F64-0904	9/16-18	1/4	6.4	04	19	19	34
F64-0906	9/16-18	3/8	9.5	06	19	21	41
F64-1206	3/4-16	3/8	9.5	06	24	21	41
F64-1208	3/4-16	1/2	12.7	08	24	23	47
F64-1408	7/8-14	1/2	12.7	08	27	23	47
F64-1410	7/8-14	5/8	15.9	10	27	25	49
F64-1712	1.1/16-12	3/4	19	12	32	29	58
F64-2116	1 5/16-12	1	19	12	27	32	68

F29

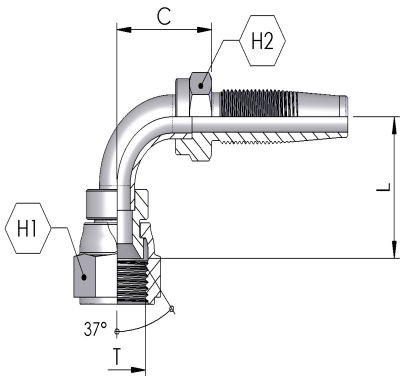
JIC FEMALE 90° ELBOW

JIC 37° FLARE FEMALE SWIVEL NUT 90° ELBOW
COMPACT



Part Number	JIC THREAD	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	L (mm)	C (mm)
F29-0704	7/16-20	1/4	6.4	04	15	19	12
F29-0904	9/16-18	1/4	6.4	04	19	21	12
F29-0906	9/16-18	3/8	9.5	06	19	26	16
F29-1206	3/4-16	3/8	9.5	06	24	27	17
F29-1208	3/4-16	1/2	12.7	08	24	29	19
F29-1408	7/8-14	1/2	12.7	08	27	30	19

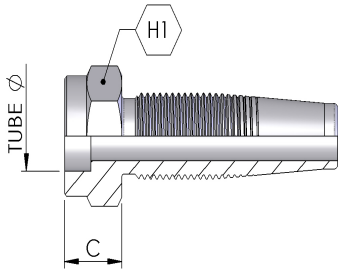
F55
JIC FEMALE 90° ELBOW
JIC 37° FLARE FEMALE SWIVEL NUT 90° ELBOW



Part Number	JIC THREAD	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	L (mm)	C (mm)
F55-0704	7/16-20	1/4	6.4	04	15	27	23
F55-0904	9/16-18	1/4	6.4	04	19	29	23
F55-0906	9/16-18	3/8	9.5	06	19	34	30
F55-1206	3/4-16	3/8	9.5	06	24	35	30
F55-1208	3/4-16	1/2	12.7	08	24	39	36
F55-1408	7/8-14	1/2	12.7	08	27	45	36
F55-1410	7/8-14	5/8	15.9	10	27	50	42
F55-1712	1.1/16-12	3/4	19	12	32	55	47
F55-2116	1.5/16-12	1	25.4	16	41	68	58

BRAZE SOCKET

F96
IMPERIAL BRAZE SOCKET
IMPERIAL TUBE (LIFESAVER) BRAZE SOCKET
STRAIGHT



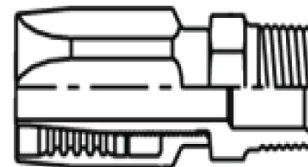
Part Number	Socket I.D (in)	Hose I.D (in)	Hose I.D (mm)	Dash size	H1 (mm)	C (mm)
F96-0404	1/4	1/4	6.4	04	16	9
F96-0606	3/8	3/8	9.5	06	19	12
F96-0808	1/2	1/2	12.7	08	22	13
F96-1212	3/4	3/4	19	12	29	15
F96-1616	1	1	25.4	16	35	19

LPG HOSE FITTINGS

A14-1NPT

NPT MALE

NPT MALE HOSE TAIL TO SUIT 5LPG GAS HOSE

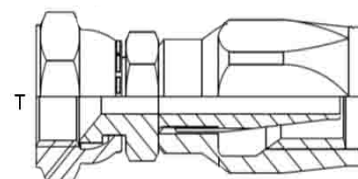


Part Number	NPTF Male Thread (T)	Suits	Hex (1)	Hex (2)	Overall Length -mm
A14-1NPT	1/4-18	5LPG	15.8	20.6	51.6

A380-1

SAE FEMALE STRAIGHT

SAE FEMALE HOSE TAIL TO SUIT 5LPG HOSE

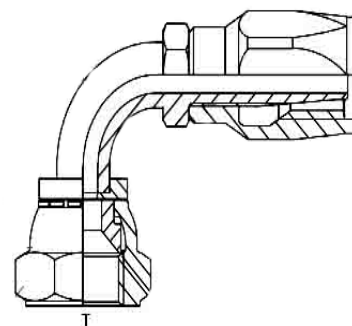


Part Number	SAE Female Thread (T)	Suits	Hex (1)	Hex (2)	Overall Length -mm
A380-1	5/8 - 18	5LPG	19	20.6	55

A380-9

SAE FEMALE SWEPT 90°

SAE FEMALE SWEPT 90° TO SUIT 5LPG HOSE



Part Number	SAE Female Thread (T)	Suits	Hex (1)	Hex (2)	Overall Length -mm	Drop Length
A380-90	5/8 - 18	5LPG	19	20.6	63.5	37.8



FIELD ATTACHABLE FERRULES



GENERAL INFORMATION

The field attachable ferrules listed in this section are specifically designed for use with SAE 100R1AT and SAE100R2AT hose and the field attachable ferrules listed in section five of this catalogue. Use of component combinations other than those specified may result in reduced service life or premature failure of the hose assembly. In such cases no warranty will apply.

Hydraulink field attachable ferrules are of a proprietary design, and have all been comprehensively tested within the performance parameters of the relevant hose types. To obtain maximum performance from hose assemblies, field attachable ferrules must be assembled as per Hydraulink's following assembly instructions.

All dimensions shown are nominal, and subject to change due to ongoing product development. For critical applications, please contact Hydraulink to confirm dimensions.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

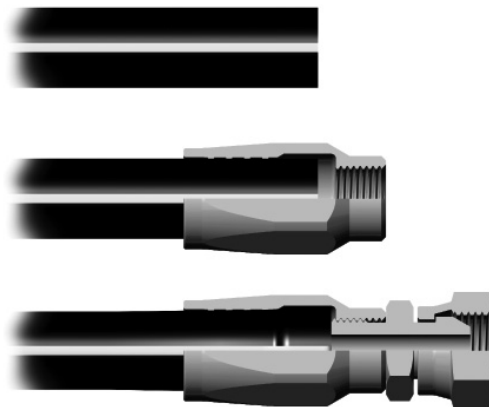
ASSEMBLY INSTRUCTIONS

Non-Skive Field Attachable Couplings

Ensure hose is cut square, with minimal end “flaring”.

Screw ferrule body onto hose in an anti-clockwise direction until hose is 3 to 5mm clear of inside body.

Lightly lubricate the tailpiece and the female thread of the ferrule body, then screw the tailpiece into the ferrule body in a clockwise direction until the hex on the tailpiece abuts the ferrule body.



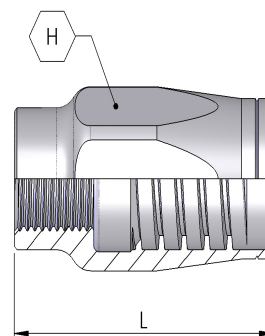
Please refer to training manual for more detailed assembly instructions.

Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

FIELD ATTACHABLE FERRULE

FN1

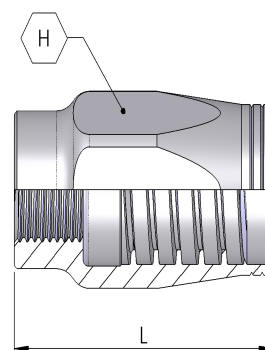
FIELD ATTACHABLE FERRULE
NON-SKIVE FIELD ATTACHABLE FERRULE FOR H1T
& G1 HOSE



Part Number	Hose I.D (in)	Hose I.D (mm)	Dash size	L (mm)	H (mm)
FN1-04	1/4	6.5	04	38	19
FN1-06	3/8	9.5	06	45	22
FN1-08	1/2	12.7	08	49	25
FN1-10	5/8	16.0	10	50	29
FN1-12	3/4	19.0	12	59	32
FN1-16	1	25.4	16	70	41

FN2

FIELD ATTACHABLE FERRULE
NON-SKIVE FIELD ATTACHABLE FERRULE FOR H2T
& G2 HOSE



Part Number	Hose I.D (in)	Hose I.D (mm)	Dash size	L (mm)	H (mm)
FN2-04	1/4	6.5	04	38	19
FN2-06	3/8	9.5	06	45	22
FN2-08	1/2	12.7	08	49	25
FN2-10	5/8	16.0	10	50	32
FN2-12	3/4	19.0	12	59	32
FN2-16	1	25.4	16	70	45



GENERAL INFORMATION

The Hydraulink range of hose couplings are available in three main series; Swage, Field Attachable (often referred to as reusable) and Push-on.

The push-on series hosetail (also described as push-lock) is designed to be suitable for use with low pressure hose such as SAE 100R6 or equivalent (e.g. Gates LOLA or GTH hoses). Use of hoseclips or hose clamps to secure the hosetail is not recommended and will cause premature damage to the internal tube.

Hydraulink thread forms and sealing methods are manufactured to the relevant international standards where applicable. All dimensions shown are nominal, and subject to change due to ongoing product development. For critical applications, please contact Hydraulink to confirm dimensions.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

PART NUMBERING SYSTEM – STEEL PUSH-ON COUPLINGS

The Hydraulink part numbering system is a concise product description in coded form. The part number consists of four modules as follows:

Module 1. Prefix letter; denotes coupling type.

S = Swage

F = Field Attachable (Reusable)

P = Push-on

R5 = Field Attachable (Reusable) to suit SAE 100R5 hose

SU = Suction tail.

Module 2. Series Numbers; denotes the thread form or sealing method (coupling end) and the configuration of the hosetail.

E.g.; series code #51 denotes a BSPP swivel nut female in a swept 90° configuration,
series code #29 denotes a JIC female swivel nut in a compact 90° configuration.

Please refer to the following "Series Codes and Descriptions" for further information regarding coupling ends and configurations.

Module 3. Coupling end size; denotes the size of the thread form or sealing method of the hosetail. Sizes are expressed as follows;

English/American threads; expressed in 1/16th inch increments denoting the key diameter.
For example; 08 = $8/16 = 1/2$ " and 19 = $19/16 = 1\ 3/16$ ".

Metric threads; expressed in millimetres with prefix M, denoting the key diameter.
For example; M10 = 10mm O.D. thread.

Flanges; express the nominal size of the flange head. Nominal sizing refers to the maximum internal bore.
For example a 12 flange head would have a maximum internal bore of $12/16 = 3/4$ ".

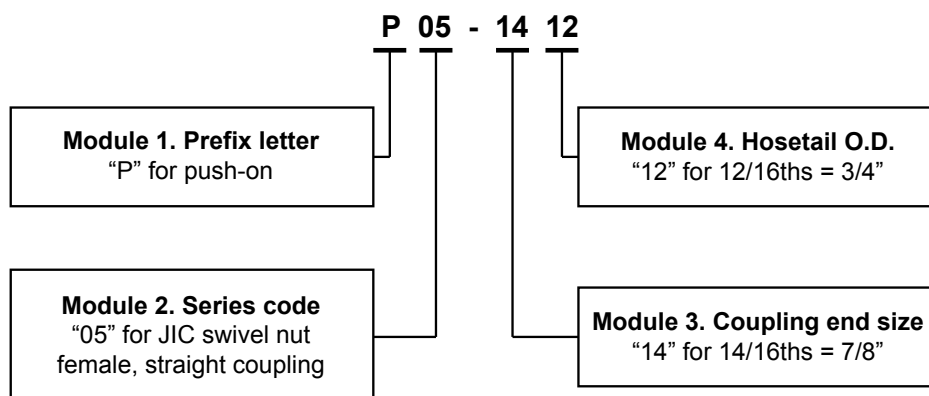
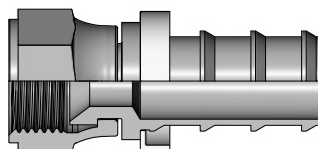
Please refer technical section for further information regarding coupling ends, thread forms and sealing methods.

Module 4. Hosetail outside diameter; denotes both the nominal O.D. of the hosetail and the I.D. of the hose it would suit. Sizes are expressed in 1/16th inch increments.
For example; 06 = $6/16 = 3/8$ " and 20 = $20/16 = 1\ 1/4$ ".

PART NUMBERING SYSTEM – EXAMPLES

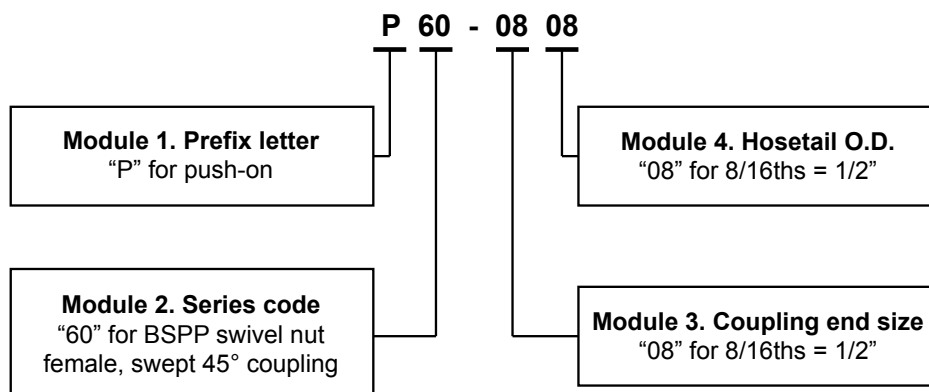
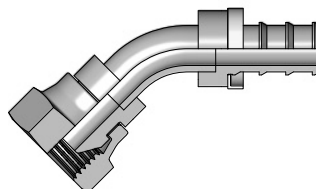
Part number: P05-1412

Complete description: 7/8" JIC swivel nut female x 3/4" hose tail, straight push-on coupling.



Part number: P60-0808

Complete description: 1/2" BSPP swivel nut female x 1/2" hose tail, swept 45° push-on coupling.



SERIES CODES AND DESCRIPTIONS - HOSETAILS

CODE	DESCRIPTION	CODE	DESCRIPTION
01	BSP PARALLEL SWIVEL NUT FEMALE	51	BSPP SWIVEL NUT FEMALE 90° SWEPT BEND
02	BSP PARALLEL SWIVEL NUT FEMALE FLATFACE	52	ORFS SWIVEL NUT FEMALE 90° SWEPT BEND
03	SAE SWIVEL NUT FEMALE	53	METRIC ISO/GAZ SWIVEL NUT FEMALE 90° SWEPT BEND
04	JIC SOLID (FIXED) FEMALE	54	SAE CODE 62 FLANGE 60° SWEPT BEND
05	JIC SWIVEL NUT FEMALE	545	CAT XT5 FLANGE 60° SWEPT BEND
06	BSPT SOLID (FIXED) FEMALE	55	JIC SWIVEL NUT FEMALE 90° SWEPT BEND
07	NPSM SWIVEL NUT FEMALE	56	ORFS SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
08	BSP PARALLEL SOLID (FIXED) FEMALE	57	BSPP SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
09	SAE MALE	58	JIC SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
10	SAE INVERTED FLARE MALE	59	SAE CODE 61 FLANGE 90° SWEPT BEND
11	NPTF SOLID (FIXED) FEMALE	60	BSPP SWIVEL NUT FEMALE 45° SWEPT BEND
110	SAE CODE 61 FLANGE 110° SWEPT BEND	61	SAE CODE 62 FLANGE 90° SWEPT BEND
12	BSP PARALLEL MALE	615	CAT XT5 FLANGE 90° SWEPT BEND
13	ORFS SWIVEL NUT FEMALE	616	O&K SAE CODE 62 FLANGE 90° SWEPT BEND
13R	ORFS SWIVEL NUT FEMALE, SHORT STEM	62	SAE CODE 62 FLANGE 45° SWEPT BEND
133	ORFS SWIVEL NUT FEMALE 30° SWEPT BEND	625	CAT XT5 FLANGE 45° SWEPT BEND
135	SAE CODE 61 FLANGE 135° SWEPT BEND	626	O&K SAE CODE 62 FLANGE 45° SWEPT BEND
14	BSP TAPER MALE SWIVEL	63	ORFS SWIVEL NUT FEMALE 45° SWEPT BEND
15	BSP TAPER MALE	64	JIC SWIVEL NUT FEMALE 45° SWEPT BEND
16	NPTF MALE	65	MINI-CHECK TEST POINT METRIC FEMALE/SPIGOT
17	METRIC MALE (STUD END)	66	SAE CODE 61 FLANGE 60° SWEPT BEND
18	JIC MALE	67	SAE CODE 61 FLANGE 22.5° SWEPT BEND
19	UNO MALE SWIVEL	674	SAE CODE 62 FLANGE 22.5° SWEPT BEND
20	UNO MALE	675	CAT XT5 FLANGE 22.5° SWEPT BEND
21	POCLAIN FLANGE	68	SAE CODE 61 FLANGE 45° SWEPT BEND
22	SAE CODE 62 FLANGE STRAIGHT	69	SAE CODE 61 FLANGE 67.5° SWEPT BEND
225	CAT XT5 FLANGE STRAIGHT	695	CAT XT5 FLANGE 67.5° SWEPT BEND
226	O&K SAE CODE 62 FLANGE STRAIGHT	70	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE
23	SAE CODE 61 FLANGE STRAIGHT	71	JIS (KOMATSU) FLANGE STRAIGHT
236	O&K SAE CODE 61 FLANGE STRAIGHT	72	JIS (KOMATSU) FLANGE 90° SWEPT BEND
24	BSPT MALE SWIVEL 90°	73	JIS (KOMATSU) FLANGE 45° SWEPT BEND
25	BSP PARALLEL SWIVEL NUT FEMALE 90° COMPACT	74	FRENCH GAZ METRIC SWIVEL NUT FEMALE
26	BSPT MALE 90° COMPACT	75	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEMALE
27	SAE SWIVEL NUT FEMALE 90° COMPACT	76	DIN METRIC 60° CONE SWIVEL NUT FEMALE
28	JIC MALE SWIVEL 90° COMPACT	77	METRIC GLOBESEAL SWIVEL NUT FEMALE
29	JIC SWIVEL NUT FEMALE 90° COMPACT	78	HEAVY DIN METRIC MALE
30	WATERBLAST SWIVEL NUT FEMALE	79	HEAVY DIN METRIC SWIVEL NUT FEMALE
31	DIN METRIC 60° CONE MALE STRAIGHT	80	LIGHT DIN METRIC MALE
32	UNO MALE SWIVEL 90° COMPACT	81	LIGHT DIN METRIC SWIVEL NUT FEMALE
33	JIC MALE 90° COMPACT	82	METRIC STANDPIPE
34	JIS (KOMATSU) METRIC MALE	83	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
35	JIS 30° FLARE (MITSUBISHI) MALE	84	HEAVY DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
36	BSP TAPER MALE 45°	85	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
37	SAE SWIVEL NUT FEMALE 45° SWEPT BEND	86	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
38	BANJO	87	LIGHT DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
39	POCLAIN FLANGE	88	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
39N	POCLAIN FLANGE 90°	89	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
39F	POCLAIN FLANGE 45°	90	HOSE JOINER
40	ORFS MALE	91	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEM. 90° SWEPT BEND
S40N	ORFS MALE 90° SWEPT BEND	92	IMPERIAL STANDPIPE
41	SAE SWIVEL NUT FEMALE 90° SWEPT BEND	93	METRIC 90° STANDPIPE
42	SAE INVERTED FLARE MALE 45° SWEPT BEND	94	SAE IMPERIAL TUBE CONNECTOR
43	SAE INVERTED FLARE MALE 90 SWEPT BEND	95	DIN 60° METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
44	KOBELCO METRIC MALE	96	LIFESAVER
45	SAE CODE 61 FLANGE 30° SWEPT BEND	97	WEO (CEJN) STRAIGHT STANDPIPE
456	O&K SAE CODE 61 FLANGE 30° SWEPT BEND	109	METRIC 45° FLARE BULKHEAD
46	SAE CODE 62 FLANGE 30° SWEPT BEND	131	CHINESE FLAT FACE STRAIGHT FEMALE
465	CAT XT5 FLANGE 30° SWEPT BEND		
466	O&K SAE CODE 62 FLANGE 30° SWEPT BEND		
47	FRENCH GAZ METRIC MALE		
48	JIS (KOMATSU) METRIC MALE		
49	STAPLELOCK FEMALE		
50	STAPLELOCK MALE		

SUFFIX CODES FOR SERIES CODES

N	NINETY DEGREE	e.g. S40N
F	FORTY FIVE DEGREE	e.g. S40F
S	SWIVEL MALE	e.g. S18S
K	COMPACT BLOCK 45°	e.g. S64K, S60K
C	CYLINDRICAL/ROUND BAR TAIL STYLE	e.g. S01C
H	HEXAGONAL BAR TAIL STYLE	e.g. S05H

SUFFIX CODES FOR PART NUMBERS

X	EXTENDED DROP LENGTH IN MM e.g S615-1616-X132
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PREFIX CODES FOR SERIES

GS	GATES GLOBAL SPIRAL NON-SKIVE e.g. GS01-2020
GSM	GATES GLOBAL SPIRAL MAXIMUM NON-SKIVE e.g. GSM01-3232

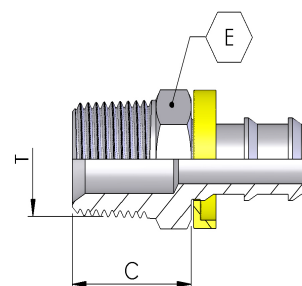
Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

BSP TAPER

P15

BSPT MALE STRAIGHT

BSP TAPERED MALE STRAIGHT



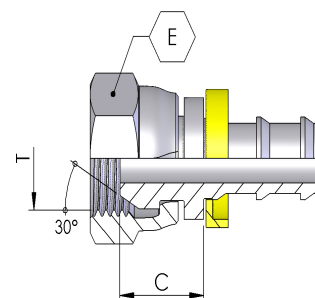
Part Number	BSPT Male Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
P15-0204	1/8-28	1/4	6.4	04	16	18
P15-0404	1/4-19	1/4	6.4	04	16	20
P15-0406	1/4-19	3/8	9.5	06	16	23
P15-0604	3/8-19	1/4	6.4	04	19	18
P15-0606	3/8-19	3/8	9.5	06	19	21
P15-0608	3/8-19	1/2	12.7	08	19	21
P15-0806	1/2-14	3/8	9.5	06	22	27
P15-0808	1/2-14	1/2	12.7	08	22	27
P15-1212	3/4-14	3/4	19	12	32	32

BSP PARALLEL

P01

BSP FEMALE STRAIGHT

BSP 60° CONE FEMALE SWIVEL NUT STRAIGHT



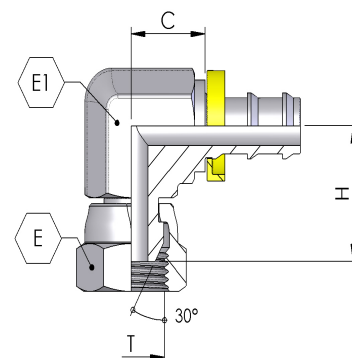
Part Number	BSPP Female Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
P01-0204	1/8-28	1/4	6.4	04	14	14
P01-0404	1/4-19	1/4	6.4	04	19	14
P01-0406	1/4-19	3/8	9.5	06	19	14
P01-0604	3/8-19	1/4	6.4	04	22	16
P01-0606	3/8-19	3/8	9.5	06	22	16
P01-0608	3/8-19	1/2	12.7	08	22	17
P01-0806	1/2-14	3/8	9.5	06	27	18
P01-0808	1/2-14	1/2	12.7	08	27	19
P01-0810	1/2-14	5/8	15.9	10	27	19
P01-1010	5/8-14	5/8	15.9	10	28	18
P01-1212	3/4-14	3/4	19	12	32	21

P25

BSP FEMALE 90° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT 90° ELBOW

COMPACT

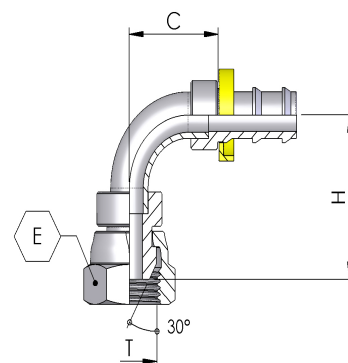


Part Number	BSPP Female Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Hex A/F (E1)	Drop (H)	Cutoff - C
P25-0404	1/4-19	1/4	6.4	04	19	14	23	11
P25-0606	3/8-19	3/8	9.5	06	22	19	27	15
P25-0808	1/2-14	1/2	12.7	08	27	22	30	18
P25-1212	3/4-14	3/4	19	12	32	27	34	21

P51

BSP FEMALE 90° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT 90° ELBOW

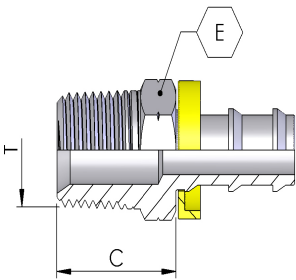


Part Number	BSPP Female Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
P51-0404	1/4-19	1/4	6.4	04	19	31	21
P51-0606	3/8-19	3/8	9.5	06	22	37	26
P51-0808	1/2-14	1/2	12.7	08	27	45	31
P51-1212	3/4-14	3/4	19	12	32	58	45

NPT

P16

NPTF MALE STRAIGHT
NPTF MALE 30° CONE



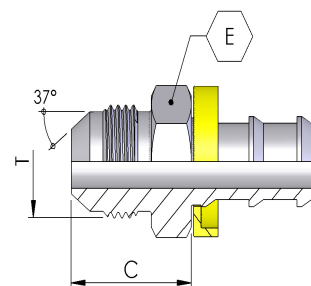
Part Number	NPTF Male Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
P16-0404	1/4-18	1/4	6.4	04	16	20
P16-0606	3/8-18	3/8	9.5	06	19	23
P16-0808	1/2-14	1/2	12.7	08	22	27

JIC

P18

JIC MALE STRAIGHT

JIC 37° FLARE MALE STRAIGHT

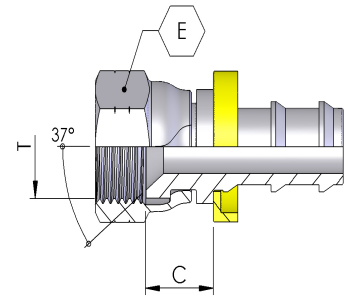


Part Number	JIC Male Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (H)	Cutoff - C
P18-0704	7/16-20	1/4	6.4	04	16	21
P18-0804	1/2-20	1/4	6.4	04	16	21
P18-0904	9/16-18	1/4	6.4	04	16	21
P18-0906	9/16-18	3/8	9.5	06	16	21
P18-1206	3/4-16	3/8	9.5	06	22	25
P18-1208	3/4-16	1/2	12.7	08	22	25
P18-1408	7/8-14	1/2	12.7	08	25	30
P18-1712	1.1/16-12	3/4	19	12	29	34

P05

JIC FEMALE STRAIGHT

JIC 37° FLARE FEMALE SWIVEL NUT STRAIGHT



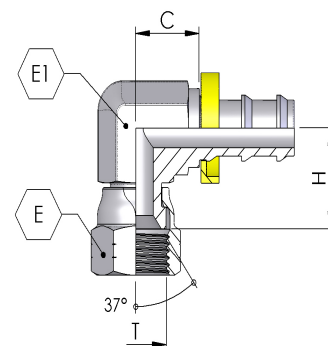
Part Number	JIC Female Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
P05-0704	7/16 - 20	1/4	6.4	04	15	10
P05-0804	1/2 - 20	1/4	6.4	04	17	12
P05-0904	9/16-18	1/4	6.4	04	19	12
P05-0906	9/16-18	3/8	9.5	06	19	12
P05-1206	3/4-16	3/8	9.5	06	24	14
P05-1208	3/4-16	1/2	12.7	08	24	14
P05-1408	7/8-14	1/2	12.7	08	27	15
P05-1410	7/8-14	5/8	15.9	10	27	15
P05-1712	1.1/16-12	3/4	19	12	32	17

P29

JIC FEMALE 90° ELBOW

JIC 37° FLARE FEMALE SWIVEL NUT 90° ELBOW

COMPACT

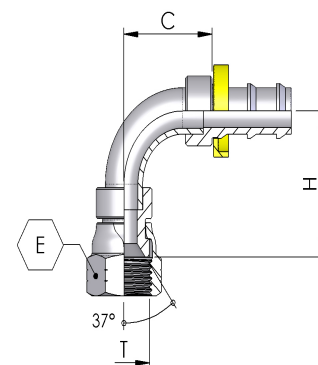


Part Number	JIC Female Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Hex A/F (E1)	Drop (H)	Cutoff - C
P29-0704	7/16-20	1/4	6.4	04	15	14	19	14
P29-0804	1/2-20	1/4	6.4	04	16	14	21	14
P29-0904	9/16-18	1/4	6.4	04	19	14	21	14
P29-0906	9/16-18	3/8	9.5	06	19	14	21	15
P29-1206	3/4-16	3/8	9.5	06	24	19	27	20
P29-1208	3/4-16	1/2	12.7	08	24	19	27	19
P29-1408	7/8-14	1/2	12.7	08	27	22	28	19
P29-1712	1.1/16-12	3/4	19	12	32	27	36	27

P55

JIC FEMALE 90° ELBOW

JIC 37° FLARE FEMALE SWIVEL NUT 90° ELBOW



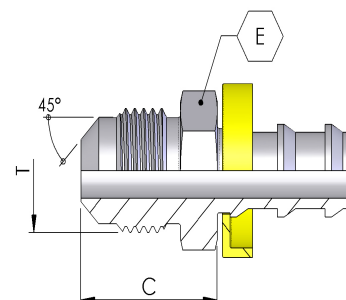
Part Number	JIC Female Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Drop - H	Cutoff - C
P55-0704	7/16-20	1/4	6.4	04	15	28	21
P55-0804	1/2-20	1/4	6.4	04	17	28	21
P55-0906	9/16-18	3/8	9.5	06	19	36	26
P55-1208	3/4-16	1/2	12.7	08	24	42	31
P55-1408	7/8-14	1/2	12.7	08	27	43	31
P55-1712	1.1/16-12	3/4	19	12	32	54	43

SAE

P09

SAE MALE STRAIGHT

SAE 45° FLARE MALE STRAIGHT

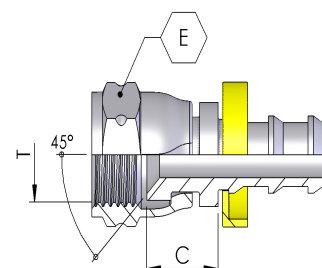


Part Number	SAE Male Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
P09-1006	5/8 - 18	3/8	9.5	06	17	22

P03

SAE FEMALE STRAIGHT

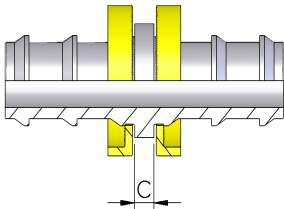
SAE 45° FLARE FEMALE SWIVEL NUT STRAIGHT



Part Number	SAE Female Thread (T)	Hose I.D inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
P03-1006	5/8 - 18	3/8	9.5	06	19	13
P03-1710	1.1/16 - 14	5/8	15.9	10	32	17
P03-1712	1.1/16 - 14	3/4	19	12	32	17

HOSE JOINER

P90
HOSE JOINER STRAIGHT

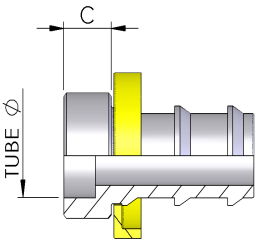


Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	Cutoff - C
P90-0404	1/4	6.4	04	5
P90-0606	3/8	9.5	06	5
P90-0808	1/2	12.7	08	6
P90-1010	5/8	15.9	10	5
P90-1212	3/4	19	12	5

BRAZE SOCKET

P96

IMPERIAL BRAZE SOCKET
IMPERIAL TUBE (LIFESAVER) BRAZE SOCKET
STRAIGHT



Part Number	Socket I.D inches	Hose I.D (Inches)	Hose I.D (mm)	Dash size	O.D mm	Cutoff - C
P96-0404	1/4	1/4	6.4	04	13	7
P96-0606	3/8	3/8	9.5	06	16	7
P96-0808	1/2	1/2	12.7	08	19	9
P96-1010	5/8	5/8	15.9	10	25	10
P96-1212	3/4	3/4	19	12	25	10



R5 FIELD ATTACHABLES



GENERAL INFORMATION

The Hydraulink range of hose couplings are available in three main series; Swage, Field Attachable (often referred to as reusable) and Push-on.

The R5 field attachable series coupling is a specialised type of field attachable, designed for use with Gates C5C, C5D and C5M hoses (SAE 100R5). The hosetail is supplied complete with ferrule to ensure compatibility of hosetail and ferrule.

NOTE: Please contact Hydraulink for further details and availability of hose couplings to suit Gates C5E hose.

Hydraulink thread forms and sealing methods are manufactured to the relevant international standards where applicable. All dimensions shown are nominal, and subject to change due to ongoing product development. For critical applications, please contact Hydraulink to confirm dimensions.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

PART NUMBERING SYSTEM – R5 FIELD ATTACHABLE COUPLINGS

The Hydraulink part numbering system is a concise product description in coded form. The part number consists of four modules as follows:

Module 1. Prefix letter; denotes coupling type.

S = Swage

F = Field Attachable (Reusable)

P = Push-on

R5 = Field Attachable (Reusable) to suit SAE 100R5 hose

SU = Suction tail.

Module 2. Series Numbers; denotes the thread form or sealing method (coupling end) and the configuration of the hosetail.

E.g.; series code #51 denotes a BSPP swivel nut female in a swept 90° configuration,
series code #29 denotes a JIC female swivel nut in a compact 90° configuration.

Please refer to the following “Series Codes and Descriptions” for further information regarding coupling ends and configurations.

Module 3. Coupling end size; denotes the size of the thread form or sealing method of the hosetail. Sizes are expressed as follows;

English/American threads; expressed in 1/16th inch increments denoting the key diameter.
For example; 08 = $8/16 = 1/2$ " and 19 = $19/16 = 1\ 3/16$ ".

Metric threads; expressed in millimetres with prefix M, denoting the key diameter.
For example; M10 = 10mm O.D. thread.

Flanges; express the nominal size of the flange head. Nominal sizing refers to the maximum internal bore.

For example a 12 flange head would have a maximum internal bore of $12/16 = 3/4$ ".

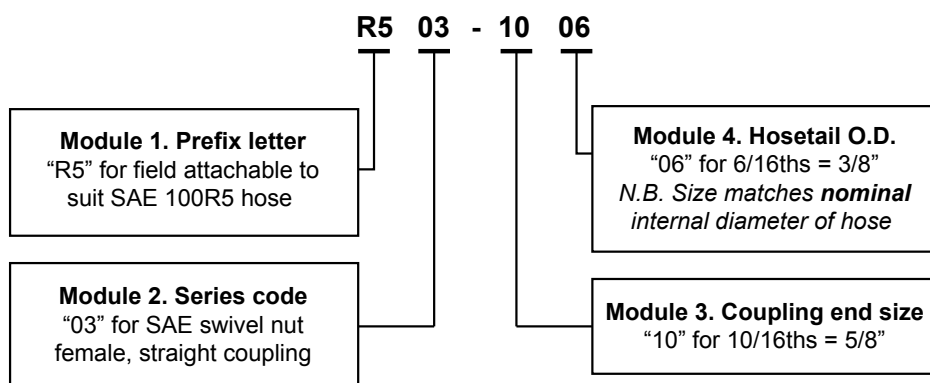
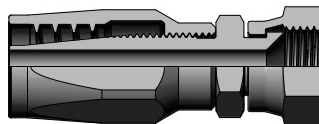
Please refer technical section for further information regarding coupling ends, thread forms and sealing methods.

Module 4. Hosetail outside diameter; denotes both the nominal O.D. of the hosetail and the I.D. of the hose it would suit. Sizes are expressed in 1/16th inch increments.
For example; 06 = $6/16 = 3/8$ " and 20 = $20/16 = 1\ 1/4$ ".

PART NUMBERING SYSTEM – R5 FIELD ATTACHABLE COUPLINGS

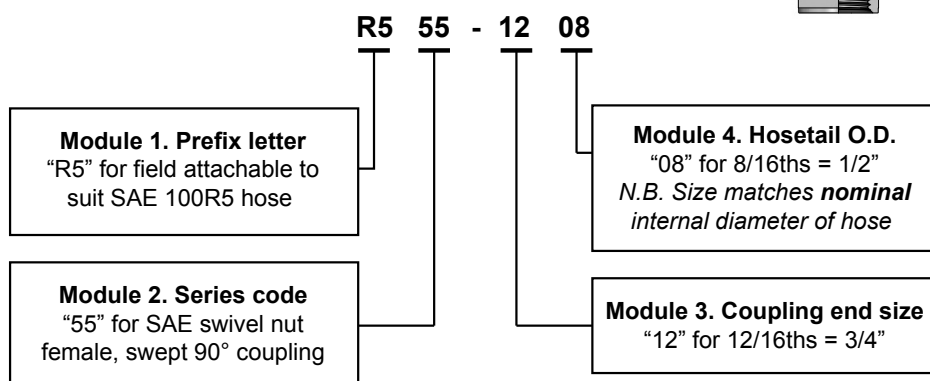
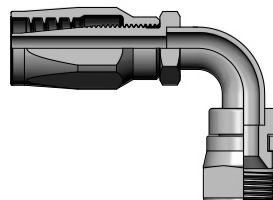
Part number: R503-1006

Complete description: 5/8" SAE swivel nut female x hose tail to suit 3/8" nominal bore SAE 100R5 hose (true bore 5/16"), straight field attachable coupling.



Part number: R555-1208

Complete description: 3/4" JIC swivel nut female x hose tail to suit 1/2" nominal bore SAE 100R5 hose (true bore 13/32"), swept 90° field attachable coupling.



SERIES CODES AND DESCRIPTIONS - HOSETAILS

CODE	DESCRIPTION	CODE	DESCRIPTION
01	BSP PARALLEL SWIVEL NUT FEMALE	51	BSPP SWIVEL NUT FEMALE 90° SWEPT BEND
02	BSP PARALLEL SWIVEL NUT FEMALE FLATFACE	52	ORFS SWIVEL NUT FEMALE 90° SWEPT BEND
03	SAE SWIVEL NUT FEMALE	53	METRIC ISO/GAZ SWIVEL NUT FEMALE 90° SWEPT BEND
04	JIC SOLID (FIXED) FEMALE	54	SAE CODE 62 FLANGE 60° SWEPT BEND
05	JIC SWIVEL NUT FEMALE	545	CAT XT5 FLANGE 60° SWEPT BEND
06	BSPT SOLID (FIXED) FEMALE	55	JIC SWIVEL NUT FEMALE 90° SWEPT BEND
07	NPSM SWIVEL NUT FEMALE	56	ORFS SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
08	BSP PARALLEL SOLID (FIXED) FEMALE	57	BSPP SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
09	SAE MALE	58	JIC SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
10	SAE INVERTED FLARE MALE	59	SAE CODE 61 FLANGE 90° SWEPT BEND
11	NPTF SOLID (FIXED) FEMALE	60	BSPP SWIVEL NUT FEMALE 45° SWEPT BEND
110	SAE CODE 61 FLANGE 110° SWEPT BEND	61	SAE CODE 62 FLANGE 90° SWEPT BEND
12	BSP PARALLEL MALE	615	CAT XT5 FLANGE 90° SWEPT BEND
13	ORFS SWIVEL NUT FEMALE	616	O&K SAE CODE 62 FLANGE 90° SWEPT BEND
13R	ORFS SWIVEL NUT FEMALE, SHORT STEM	62	SAE CODE 62 FLANGE 45° SWEPT BEND
133	ORFS SWIVEL NUT FEMALE 30° SWEPT BEND	625	CAT XT5 FLANGE 45° SWEPT BEND
135	SAE CODE 61 FLANGE 135° SWEPT BEND	626	O&K SAE CODE 62 FLANGE 45° SWEPT BEND
14	BSP TAPER MALE SWIVEL	63	ORFS SWIVEL NUT FEMALE 45° SWEPT BEND
15	BSP TAPER MALE	64	JIC SWIVEL NUT FEMALE 45° SWEPT BEND
16	NPTF MALE	65	MINI-CHECK TEST POINT METRIC FEMALE/SPIGOT
17	METRIC MALE (STUD END)	66	SAE CODE 61 FLANGE 60° SWEPT BEND
18	JIC MALE	67	SAE CODE 61 FLANGE 22.5° SWEPT BEND
19	UNO MALE SWIVEL	674	SAE CODE 62 FLANGE 22.5° SWEPT BEND
20	UNO MALE	675	CAT XT5 FLANGE 22.5° SWEPT BEND
21	POCLAIN FLANGE	68	SAE CODE 61 FLANGE 45° SWEPT BEND
22	SAE CODE 62 FLANGE STRAIGHT	69	SAE CODE 61 FLANGE 67.5° SWEPT BEND
225	CAT XT5 FLANGE STRAIGHT	695	CAT XT5 FLANGE 67.5° SWEPT BEND
226	O&K SAE CODE 62 FLANGE STRAIGHT	70	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE
23	SAE CODE 61 FLANGE STRAIGHT	71	JIS (KOMATSU) FLANGE STRAIGHT
236	O&K SAE CODE 61 FLANGE STRAIGHT	72	JIS (KOMATSU) FLANGE 90° SWEPT BEND
24	BSPT MALE SWIVEL 90°	73	JIS (KOMATSU) FLANGE 45° SWEPT BEND
25	BSP PARALLEL SWIVEL NUT FEMALE 90° COMPACT	74	FRENCH GAZ METRIC SWIVEL NUT FEMALE
26	BSPT MALE 90° COMPACT	75	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEMALE
27	SAE SWIVEL NUT FEMALE 90° COMPACT	76	DIN METRIC 60° CONE SWIVEL NUT FEMALE
28	JIC MALE SWIVEL 90° COMPACT	77	METRIC GLOBE SEAL SWIVEL NUT FEMALE
29	JIC SWIVEL NUT FEMALE 90° COMPACT	78	HEAVY DIN METRIC MALE
30	WATERBLAST SWIVEL NUT FEMALE	79	HEAVY DIN METRIC SWIVEL NUT FEMALE
31	DIN METRIC 60° CONE MALE STRAIGHT	80	LIGHT DIN METRIC MALE
32	UNO MALE SWIVEL 90° COMPACT	81	LIGHT DIN METRIC SWIVEL NUT FEMALE
33	JIC MALE 90° COMPACT	82	METRIC STANDPIPE
34	JIS (KOMATSU) METRIC MALE	83	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
35	JIS 30° FLARE (MITSUBISHI) MALE	84	HEAVY DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
36	BSP TAPER MALE 45°	85	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
37	SAE SWIVEL NUT FEMALE 45° SWEPT BEND	86	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
38	BANJO	87	LIGHT DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
39	POCLAIN FLANGE	88	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
39N	POCLAIN FLANGE 90°	89	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
39F	POCLAIN FLANGE 45°	90	HOSE JOINER
40	ORFS MALE	91	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEM. 90° SWEPT BEND
S40N	ORFS MALE 90° SWEPT BEND	92	IMPERIAL STANDPIPE
41	SAE SWIVEL NUT FEMALE 90° SWEPT BEND	93	METRIC 90° STANDPIPE
42	SAE INVERTED FLARE MALE 45° SWEPT BEND	94	SAE IMPERIAL TUBE CONNECTOR
43	SAE INVERTED FLARE MALE 90 SWEPT BEND	95	DIN 60° METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
44	KOBELCO METRIC MALE	96	LIFESAVER
45	SAE CODE 61 FLANGE 30° SWEPT BEND	97	WEO (CEJN) STRAIGHT STANDPIPE
456	O&K SAE CODE 61 FLANGE 30° SWEPT BEND		
46	SAE CODE 62 FLANGE 30° SWEPT BEND		
465	CAT XT5 FLANGE 30° SWEPT BEND		
466	O&K SAE CODE 62 FLANGE 30° SWEPT BEND		
47	FRENCH GAZ METRIC MALE		
48	JIS (KOMATSU) METRIC MALE		
49	STAPLELOCK FEMALE		
50	STAPLELOCK MALE		

SUFFIX CODES FOR SERIES CODES

N	NINETY DEGREE	e.g. S40N
F	FORTY FIVE DEGREE	e.g. S40F
S	SWIVEL MALE	e.g. SI8S
K	COMPACT BLOCK 45°	e.g. S64K, S60K
C	CYLINDRICAL/ROUND BAR TAIL STYLE	e.g. S01C
H	HEXAGONAL BAR TAIL STYLE	e.g. S05H

SUFFIX CODES FOR PART NUMBERS

GS	GATES GLOBAL SPIRAL NON-SKIVE	e.g. S66-2020GS
PCM	GATES SPIRAL SKIVE TYPE	e.g. SMS15-24PCM

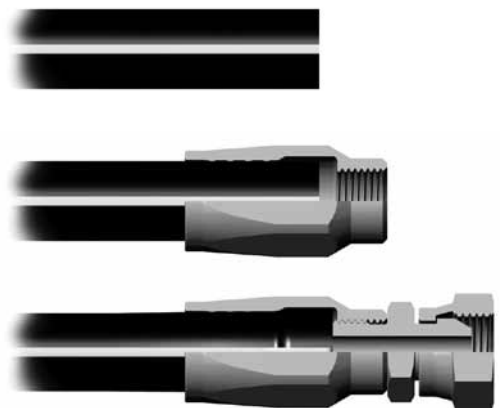
ASSEMBLY INSTRUCTIONS

Non-Skive Field Attachable Couplings

Ensure hose is cut square, with minimal end "flaring".

Screw ferrule body onto hose in an anti-clockwise direction until hose is 3 to 5mm clear of inside body.

Lightly lubricate the tailpiece and the female thread of the ferrule body, then screw the tailpiece into the ferrule body in a clockwise direction until the hex on the tailpiece abuts the ferrule body.



Please refer to training manual for more detailed assembly instructions.

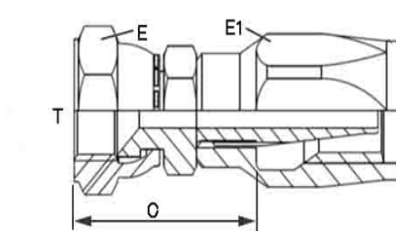
Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

JIC

R505

JIC FEMALE STRAIGHT

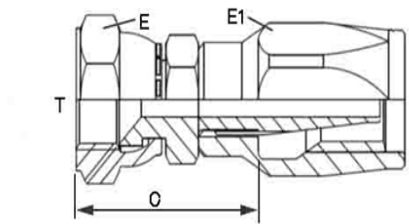
JIC 37° FLARE FEMALE SWIVEL NUT STRAIGHT



Part Number	JIC Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Hex A/F (E1)	Cutoff - C
R505-0704	7/16-20	1/4	6.5	3/16	4.8	04	14	14	31
R505-0805	1/2-20	5/16	8	1/4	6.4	05	17.5	17.5	34
R505-0906	9/16-18	3/8	9.5	5/16	8.0	06	19	19	37
R505-1206	3/4-16	3/8	9.5	5/16	8.0	06	22	22	39
R505-1208	3/4-16	1/2	12.7	13/32	10.3	08	22	22	41
R505-1410	7/8-14	5/8	15.9	1/2	12.7	10	27	27	46
R505-1712	1.1/16-12	3/4	19	5/8	15.9	12	32	32	49
R505-2116	1.5/16-12	1	25.4	7/8	22.2	16	38	38	49
R505-2620	1.5/8-12	1.1/4	31.8	1.1/8	28.6	20	51	51	56
R505-3024	1.7/8-12	1.1/2	38.1	1.3/8	34.9	24	57.2	57.2	60.2
R505-4032	2.1/2-12	2	50.8	1.13/16	46	32	73	63.5	69.1

R5E05

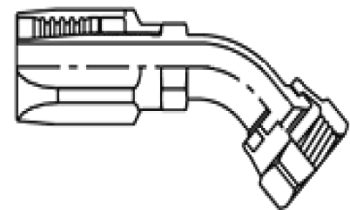
JIC FEMALE STRAIGHT FOR C5E
JIC FEMALE 37° CONE CRIMPED NUT



Part Number	JIC Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Hex A/F (E1)	Cutoff - C
R5E05-0704	7/16-20	1/4	6.4	3/16	4.8	04	14.3	12.7	27.9
R5E05-0805	1/2-20	5/16	8	1/4	6.4	05	17.5	12.7	30.7
R5E05-0906	9/16-18	3/8	9.5	5/16	8	06	19	19	30.2
R5E05-1208	3/4-16	1/2	12.7	13/32	10.3	08	22.2	22.2	36.8
R5E05-1410	7/8-14	5/8	15.9	1/2	12.7	10	27	27	41.9
R5E05-1712	1.1/16-12	3/4	19	5/8	15.9	12	31.8	31.8	45.2
R5E05-2116	1.5/16-12	1	25.4	7/8	22.2	16	38.1	38.1	46.7
R5E05-2620	1.5/8-12	1.1/4	31.8	1.1/8	28.6	20	50.8	39.7	55.9

R564

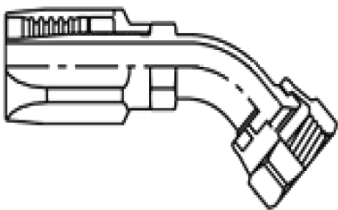
JIC FEM. SWEPT 45°
JIC 45° SWEPT ELBOW 37° CONE ROLLED NUT



Part Number	JIC Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop - H	Cutoff - C
R564-0704	7/16-20	1/4	6.4	3/16	4.8	04	14.3	8.6	30.5
R564-0906	9/16-18	3/8	9.5	5/16	8	06	17.5	10.4	37.6
R564-1208	3/4-16	1/2	12.7	13/32	10.3	08	22.2	14.2	43.9
R564-1410	7/8-14	5/8	15.9	1/2	12.7	10	25.4	16	53.6
R564-1712	1.1/16-12	3/4	19	5/8	15.9	12	31.8	19.8	63.3

R5E64

JIC FEM. SWEPT 45° FOR C5E
JIC 45° SWEPT ELBOW 37° CONE ROLLED NUT

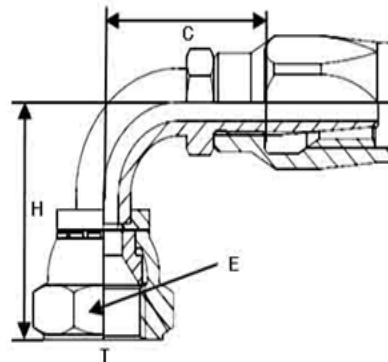


Part Number	JIC Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop - H	Cutoff - C
R5E64-0704	7/16-20	1/4	6.4	3/16	4.8	04	14.3	8.6	30.5
R5E64-0906	9/16-18	3/8	9.5	5/16	8	06	17.5	10.4	37.6
R5E64-1208	3/4-16	1/2	12.7	13/32	10.3	08	22.2	14.2	43.9
R5E64-1410	7/8-14	5/8	15.9	1/2	12.7	10	25.4	16	53.6
R5E64-1712	1.1/16-12	3/4	19	5/8	15.9	12	31.8	19.8	63.3

R555

JIC FEMALE 90° ELBOW

JIC 37° FLARE FEMALE SWIVEL NUT 90° ELBOW

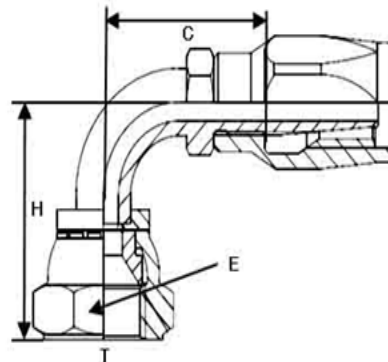


Part Number	JIC Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R555-0704	7/16-20	1/4	6.5	3/16	4.8	04	14	18	27
R555-0906	9/16-18	3/8	9.5	5/16	8.0	06	18	21	34
R555-1208	3/4-16	1/2	12.7	13/32	10.3	08	22	28	42
R555-1410	7/8-14	5/8	15.9	1/2	12.7	10	25	32	54
R555-1712	1.1/16-12	3/4	19	5/8	15.9	12	32	46	68
R555-0805	1/2-20	5/16	8	1/4	6.4	05	15.9	19.8	31.8
R555-2116	1.5/16-12	1	25.4	7/8	22.2	16	38.1	54.9	70.1

R5E55

JIC FEM. SWEPT 90° FOR C5E

JIC FEMALE 37° CONE CRIMPED NUT



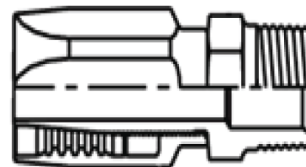
Part Number	JIC Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R5E55-070 4	7/16-20	1/4	6.4	3/16	4.8	04	14.3	17.5	25.4
R5E55-090 6	9/16-18	3/8	9.5	5/16	8	06	17.5	21.3	34.5
R5E55-120 8	3/4-16	1/2	12.7	13/32	10.3	08	22.2	27.7	39.1
R5E55-141 0	7/8-14	5/8	15.9	1/2	12.7	10	25.4	31.8	48.5
R5E55-171 2	1.1/16-12	3/4	19	5/8	15.9	12	31.8	46	62
R5E55-211 6	1.5/16-12	1	25.4	7/8	22.2	16	38.1	54.9	67.6

NPTF

R516

NPTF MALE STRAIGHT

NPTF MALE 60° CONE

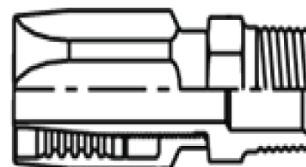


Part Number	BSPT Male Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Cutoff - C
R516-0204	1/8-27	1/4	6.4	3/16	4.8	04	12.7	23.9
R516-0404	1/4-18	1/4	6.4	3/16	4.8	04	14.3	28.7
R516-0606	3/8-18	3/8	9.5	5/16	8	06	17.5	31
R516-0808	1/2-14	1/2	12.7	13/32	10.3	08	22.2	40.4
R516-1212	3/4-14	3/4	19	5/8	15.9	12	27	42.9
R516-1616	1-11.1/2	1	25.4	7/8	22.2	16	34.9	43.7

R5E16

NPTF MALE STRAIGHT FOR C5E

NPTF MALE 60° CONE SUIT C5E HOSE



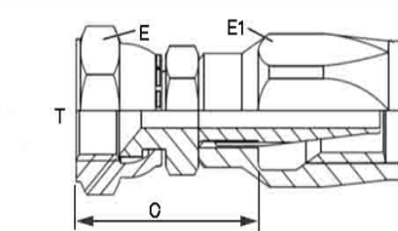
Part Number	BSPT Male Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Cutoff - C
R5E16-0204	1/8-27	1/4	6.4	3/16	4.8	04	12.7	20.6
R5E16-0404	1/4-18	1/4	6.4	3/16	4.8	04	14.3	26.2
R5E16-0606	3/8-18	3/8	9.5	5/16	8	06	17.5	26.4
R5E16-0808	1/2-14	1/2	12.7	13/32	10.3	08	22.2	32.8
R5E16-1212	3/4-14	3/4	19	5/8	15.9	12	27	36.6
R5E16-1616	1-11.1/2	1	25.4	7/8	22.2	16	34.9	44.2

SAE

R503

SAE FEMALE STRAIGHT

SAE 45° FLARE FEMALE SWIVEL NUT STRAIGHT

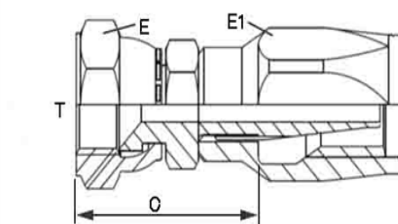


Part Number	SAE Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Hex A/F (E1)	Cutoff - C
R503-1006	5/8-18	3/8	9.5	5/16	8.0	06	19	19	37
R503-1712	1.1/16-14	3/4	19	5/8	15.9	12	31.8	31.8	49.3

R5E03

SAE FEMALE STRAIGHT FOR C5E

SAE FEMALE 45° CONE CRIMPED NUT

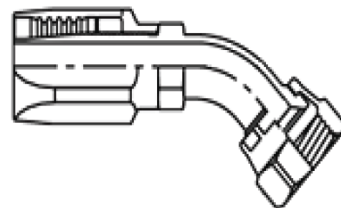


Part Number	SAE Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Hex A/F (E1)	Cutoff - C
R5E03-1006	5/8-18	3/8	9.5	5/16	8	06	19	19	32.5
R5E03-1712	1.1/16-14	3/4	19	5/8	15.9	12	31.8	31.8	45.7

R537

SAE FEMALE SWEPT 45°

SAE FEMALE SWEPT 45° CRIMPED NUT

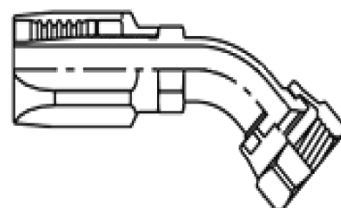


Part Number	SAE Female Thread (T)	Nominal Hose I.D. - inches	Nominal Hose I.D. - mm	True Hose I.D. - inches	True Hose I.D. - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R537-1006	5/8-18	3/8	9.5	5/16	8	06	19	10.4	37.3
R537-1712	1.1/16-14	3/4	19	5/8	15.9	12	31.8	18.8	68.8

R5E37

SAE FEMALE SWEPT 45° FOR C5E

SAE FEMALE SWEPT 45° CRIMPED NUT

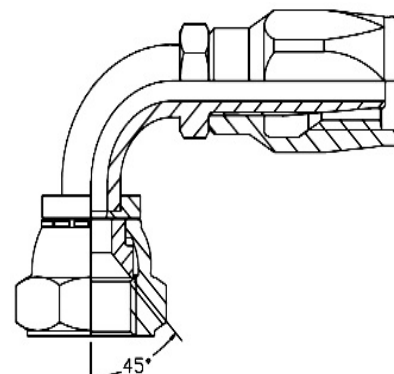


Part Number	SAE Female Thread (T)	Nominal Hose I.D. - inches	Nominal Hose I.D. - mm	True Hose I.D. - inches	True Hose I.D. - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R5E37-1006	5/8-18	3/8	9.5	5/16	8	06	19	10.4	37.6
R5E37-1712	1.1/16-14	3/4	19	5/8	15.9	12	31.8	19.8	63.3

R541

SAE FEMALE SWEPT 90°

SAE FEMALE SWEPT 90° CRIMPED NUT

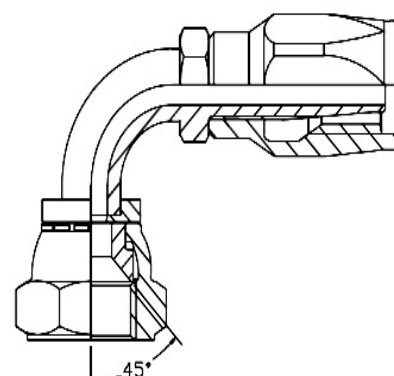


Part Number	SAE Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R541-1006	5/8-18	3/8	9.5	5/16	8	06	19	21.3	33.8
R541-1712	1.1/16-14	3/4	19	5/8	15.9	12	31.8	46	67.6

R5E41

SAE FEMALE SWEPT 90° FOR C5E

SAE FEMALE 45° CONE CRIMPED NUT



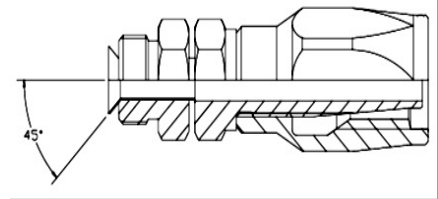
Part Number	SAE Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R5E41-1006	5/8-18	3/8	9.5	5/16	8	06	19	21.3	34.5
R5E41-1712	1.1/16-14	3/4	19	5/8	15.9	12	31.8	46	62

INVERTED SAE

R510

SAE MALE SWIVEL STRAIGHT

SAE MALE 45° INVERTED FLARE SWIVEL STRAIGHT

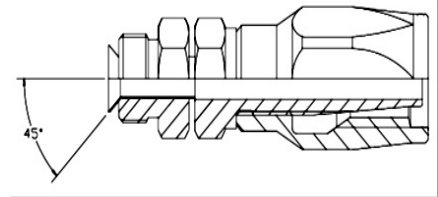


Part Number	SAE Male Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Hex A/F (E1)	Cutoff - C
R510-0704	7/16-20	1/4	6.4	3/16	4.8	04	11.1	11.1	43.7
R510-0805	1/2-20	5/16	8	1/4	6.4	05	12.7	11.1	46.7
R510-0806	1/2-20	3/8	8	1/4	6.4	05	12.7	12.7	41.9
R510-1006	5/8-18	3/8	9.5	5/16	8	06	15.9	12.7	48.5
R510-1208	3/4-16	1/2	12.7	13/32	10.3	08	19	15.9	60.2

R5E10

SAE MALE SWIVEL STRAIGHT FOR C5E

SAE MALE 45° INVERTED FLARE SWIVEL

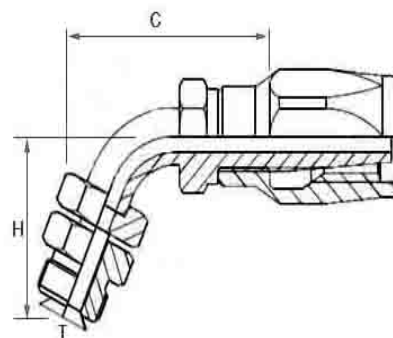


Part Number	SAE Male Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Hex A/F (E1)	Cutoff - C
R5E10-0704	7/16-20	1/4	6.4	3/16	4.8	04	11.1	12.7	33.8
R5E10-0805	1/2-20	5/16	8	1/4	6.4	05	12.7	12.7	36.8
R5E10-1006	5/8-18	3/8	9.5	5/16	8	06	15.9	12.7	47.2
R5E10-1208	3/4-16	1/2	12.7	13/32	10.3	08	19	17.5	56.9

R542

SAE INVERTED FLARE 45° SWEPT

SAE MALE 45° INVERTED FLARE SWIVEL SWEPT
45°

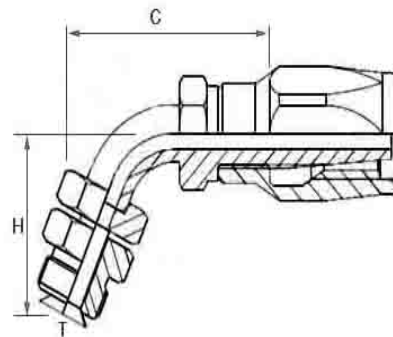


Part Number	SAE Female Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R542-1006	5/8-18	3/8	9.5	5/16	8	06	16	23.9	53.1
R542-1208	3/4-16	1/2	12.7	13/32	10.3	08	19	27.7	58.9

R5E42

SAE INVERTED FLARE 45° SWEPT FOR C5E

SAE MALE 45° INVERTED FLARE SWIVEL SWEPT
45°

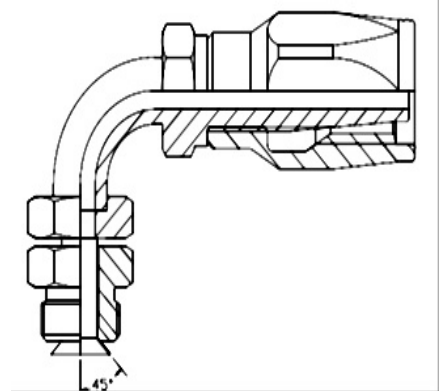


Part Number	SAE Male Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R5E42-1006	5/8-18	3/8	9.5	5/16	8	06	16	21.3	74.7
R5E42-1208	3/4-16	1/2	12.7	13/32	10.3	08	19	27.7	82.3

R543

SAE MALE SWIVEL SWEPT 90°

SAE MALE 45° INVERTED FLARE SWIVEL SWEPT 90°

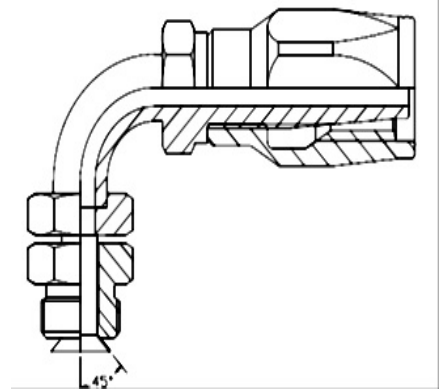


Part Number	SAE Male Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R543-0704	7/16-20	1/4	6.4	3/16	4.8	04	11.1	39.6	37.3
R543-0805	1/2-20	5/16	8	1/4	6.4	05	12.7	42.2	42.2
R543-1006	5/8-18	3/8	9.5	5/16	8	06	15.9	42.9	42.9
R543-1208	3/4-16	1/2	12.7	13/32	10.3	08	19	45.2	45.2

R5E43

SAE MALE SWIVEL SWEPT 90° FOR C5E

SAE MALE 45° INVERTED FLARE SWIVEL



Part Number	SAE Male Thread (T)	Nominal Hose I.D - inches	Nominal Hose I.D - mm	True Hose I.D - inches	True Hose I.D - mm	Dash size	Hex A/F (E)	Drop (H)	Cutoff - C
R5E43-0704	7/16-20	1/4	6.4	3/16	4.8	04	11.1	31.8	33.8
R5E43-0805	1/2-20	5/16	8	1/4	6.4	05	12.7	38.1	37.1
R5E43-0806	1/2-20	3/8	9.5	5/16	8	05	12.7	38.1	39.1
R5E43-1006	5/8-18	3/8	9.5	5/16	8	06	15.9	41.4	47.2
R5E43-1208	3/4-16	1/2	12.7	13/32	10.3	08	19	50.8	56.9



GENERAL INFORMATION

The Hydraulink range of hose couplings are available in three main series; Swage, Field Attachable (often referred to as reusable) and Push-on.

The SU series hosetail complements the push-on series, providing a non-swage option for larger internal diameter hoses. Typically used on suction and delivery hoses, such as SAE 100R4 or Gates . This simple form of attachment makes the SU series hosetails suitable for a wide range of hoses, including many for industrial or chemical use.

Hydraulink thread forms and sealing methods are manufactured to the relevant international standards where applicable. All dimensions shown are nominal, and subject to change due to ongoing product development. For critical applications, please contact Hydraulink to confirm dimensions.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

PART NUMBERING SYSTEM – STEEL SUCTION COUPLINGS

The Hydraulink part numbering system is a concise product description in coded form. The part number consists of four modules as follows:

Module 1. Prefix letter; denotes coupling type.

S = Swage

F = Field Attachable (Reusable)

P = Push-on

R5 = Field Attachable (Reusable) to suit SAE 100R5 hose

SU = Suction tail.

Module 2. Series Numbers; denotes the thread form or sealing method (coupling end) and the configuration of the hosetail.

E.g.; series code #51 denotes a BSPP swivel nut female in a swept 90° configuration,
series code #29 denotes a JIC female swivel nut in a compact 90° configuration.

Please refer to the following “Series Codes and Descriptions” for further information regarding coupling ends and configurations.

Module 3. Coupling end size; denotes the size of the thread form or sealing method of the hosetail. Sizes are expressed as follows;

English/American threads; expressed in 1/16th inch increments denoting the key diameter.
For example; 08 = $8/16 = 1/2$ " and 19 = $19/16 = 1\ 3/16$ ".

Metric threads; expressed in millimetres with prefix M, denoting the key diameter.
For example; M10 = 10mm O.D. thread.

Flanges; express the nominal size of the flange head. Nominal sizing refers to the maximum internal bore.

For example a 12 flange head would have a maximum internal bore of $12/16 = 3/4$ ".

Please refer technical section for further information regarding coupling ends, thread forms and sealing methods.

Module 4. Hosetail outside diameter; denotes both the nominal O.D. of the hosetail and the I.D. of the hose it would suit. Sizes are expressed in 1/16th inch increments.
For example; 06 = $6/16 = 3/8$ " and 20 = $20/16 = 1\ 1/4$ ".

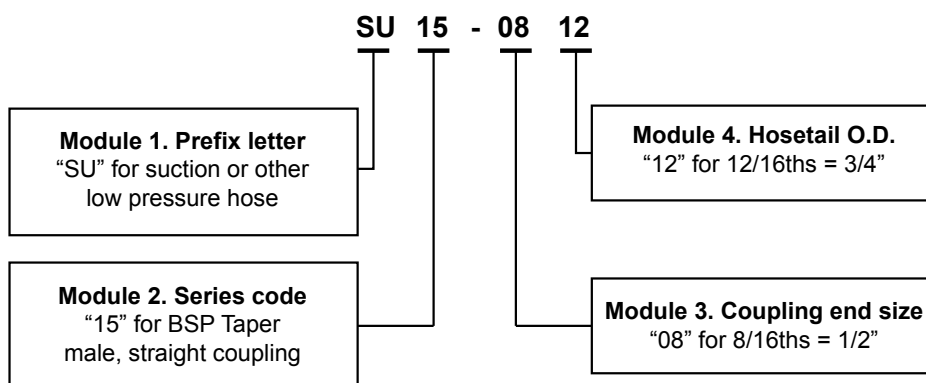
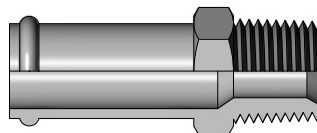
Module 5. Special configuration; some series of hosetail are only available as SU series. For ease of recognition, these special configurations use the conventional part numbering system with a suffix.

For example; SU12-1216-90 denotes a BSP parallel male (#12) size $3/4$ " ($12/16$) with a 1 " ($16/16$) hosetail in a compact 90° configuration.

PART NUMBERING SYSTEM – STEEL SUCTION COUPLINGS

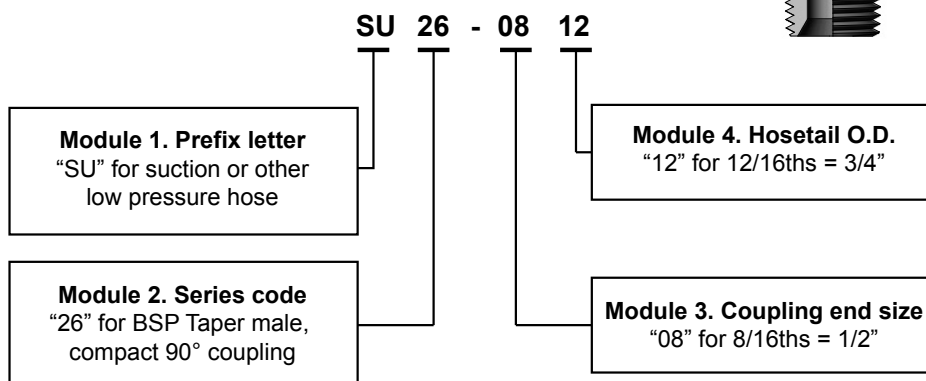
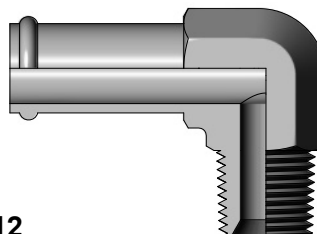
Part number: SU15-1208

Complete description: 1/2" BSPT male x 3/4" hose tail, straight suction coupling.



Part number: SU26-0812

Complete description: 1/2" BSPT male x 3/4" hose tail, compact 90° suction coupling.



SERIES CODES AND DESCRIPTIONS - HOSETAILS

CODE	DESCRIPTION	CODE	DESCRIPTION
01	BSP PARALLEL SWIVEL NUT FEMALE	51	BSPP SWIVEL NUT FEMALE 90° SWEPT BEND
02	BSP PARALLEL SWIVEL NUT FEMALE FLATFACE	52	ORFS SWIVEL NUT FEMALE 90° SWEPT BEND
03	SAE SWIVEL NUT FEMALE	53	METRIC ISO/GAZ SWIVEL NUT FEMALE 90° SWEPT BEND
04	JIC SOLID (FIXED) FEMALE	54	SAE CODE 62 FLANGE 60° SWEPT BEND
05	JIC SWIVEL NUT FEMALE	545	CAT XT5 FLANGE 60° SWEPT BEND
06	BSPT SOLID (FIXED) FEMALE	55	JIC SWIVEL NUT FEMALE 90° SWEPT BEND
07	NPSM SWIVEL NUT FEMALE	56	ORFS SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
08	BSP PARALLEL SOLID (FIXED) FEMALE	57	BSPP SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
09	SAE MALE	58	JIC SWIVEL NUT FEMALE 90° LONG LEG SWEPT BEND
10	SAE INVERTED FLARE MALE	59	SAE CODE 61 FLANGE 90° SWEPT BEND
11	NPTF SOLID (FIXED) FEMALE	60	BSPP SWIVEL NUT FEMALE 45° SWEPT BEND
110	SAE CODE 61 FLANGE 110° SWEPT BEND	61	SAE CODE 62 FLANGE 90° SWEPT BEND
12	BSP PARALLEL MALE	615	CAT XT5 FLANGE 90° SWEPT BEND
13	ORFS SWIVEL NUT FEMALE	616	O&K SAE CODE 62 FLANGE 90° SWEPT BEND
13R	ORFS SWIVEL NUT FEMALE, SHORT STEM	62	SAE CODE 62 FLANGE 45° SWEPT BEND
133	ORFS SWIVEL NUT FEMALE 30° SWEPT BEND	625	CAT XT5 FLANGE 45° SWEPT BEND
135	SAE CODE 61 FLANGE 135° SWEPT BEND	626	O&K SAE CODE 62 FLANGE 45° SWEPT BEND
14	BSP TAPER MALE SWIVEL	63	ORFS SWIVEL NUT FEMALE 45° SWEPT BEND
15	BSP TAPER MALE	64	JIC SWIVEL NUT FEMALE 45° SWEPT BEND
16	NPTF MALE	65	MINI-CHECK TEST POINT METRIC FEMALE/SPIGOT
17	METRIC MALE (STUD END)	66	SAE CODE 61 FLANGE 60° SWEPT BEND
18	JIC MALE	67	SAE CODE 61 FLANGE 22.5° SWEPT BEND
19	UNO MALE SWIVEL	674	SAE CODE 62 FLANGE 22.5° SWEPT BEND
20	UNO MALE	675	CAT XT5 FLANGE 22.5° SWEPT BEND
21	POCLAIN FLANGE	68	SAE CODE 61 FLANGE 45° SWEPT BEND
22	SAE CODE 62 FLANGE STRAIGHT	69	SAE CODE 61 FLANGE 67.5° SWEPT BEND
225	CAT XT5 FLANGE STRAIGHT	695	CAT XT5 FLANGE 67.5° SWEPT BEND
226	O&K SAE CODE 62 FLANGE STRAIGHT	70	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE
23	SAE CODE 61 FLANGE STRAIGHT	71	JIS (KOMATSU) FLANGE STRAIGHT
236	O&K SAE CODE 61 FLANGE STRAIGHT	72	JIS (KOMATSU) FLANGE 90° SWEPT BEND
24	BSPT MALE SWIVEL 90°	73	JIS (KOMATSU) FLANGE 45° SWEPT BEND
25	BSP PARALLEL SWIVEL NUT FEMALE 90° COMPACT	74	FRENCH GAZ METRIC SWIVEL NUT FEMALE
26	BSPT MALE 90° COMPACT	75	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEMALE
27	SAE SWIVEL NUT FEMALE 90° COMPACT	76	DIN METRIC 60° CONE SWIVEL NUT FEMALE
28	JIC MALE SWIVEL 90° COMPACT	77	METRIC GLOBE SEAL SWIVEL NUT FEMALE
29	JIC SWIVEL NUT FEMALE 90° COMPACT	78	HEAVY DIN METRIC MALE
30	WATERBLAST SWIVEL NUT FEMALE	79	HEAVY DIN METRIC SWIVEL NUT FEMALE
31	DIN METRIC 60° CONE MALE STRAIGHT	80	LIGHT DIN METRIC MALE
32	UNO MALE SWIVEL 90° COMPACT	81	LIGHT DIN METRIC SWIVEL NUT FEMALE
33	JIC MALE 90° COMPACT	82	METRIC STANDPIPE
34	JIS (KOMATSU) METRIC MALE	83	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
35	JIS 30° FLARE (MITSUBISHI) MALE	84	HEAVY DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
36	BSP TAPER MALE 45°	85	HEAVY DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
37	SAE SWIVEL NUT FEMALE 45° SWEPT BEND	86	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
38	BANJO	87	LIGHT DIN METRIC SWIVEL NUT FEMALE 45° SWEPT BEND
39	POCLAIN FLANGE	88	LIGHT DIN METRIC SWIVEL NUT FEMALE 90° COMPACT
39N	POCLAIN FLANGE 90°	89	JIS (KOMATSU) METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
39F	POCLAIN FLANGE 45°	90	HOSE JOINER
40	ORFS MALE	91	JIS 30° FLARE (MITSUBISHI) SWIVEL NUT FEM. 90° SWEPT BEND
S40N	ORFS MALE 90° SWEPT BEND	92	IMPERIAL STANDPIPE
41	SAE SWIVEL NUT FEMALE 90° SWEPT BEND	93	METRIC 90° STANDPIPE
42	SAE INVERTED FLARE MALE 45° SWEPT BEND	94	SAE IMPERIAL TUBE CONNECTOR
43	SAE INVERTED FLARE MALE 90 SWEPT BEND	95	DIN 60° METRIC SWIVEL NUT FEMALE 90° SWEPT BEND
44	KOBELCO METRIC MALE	96	LIFESAVER
45	SAE CODE 61 FLANGE 30° SWEPT BEND	97	WEO (CEJN) STRAIGHT STANDPIPE
456	O&K SAE CODE 61 FLANGE 30° SWEPT BEND		
46	SAE CODE 62 FLANGE 30° SWEPT BEND		
465	CAT XT5 FLANGE 30° SWEPT BEND		
466	O&K SAE CODE 62 FLANGE 30° SWEPT BEND		
47	FRENCH GAZ METRIC MALE		
48	JIS (KOMATSU) METRIC MALE		
49	STAPLELOCK FEMALE		
50	STAPLELOCK MALE		

SUFFIX CODES FOR SERIES CODES

N	NINETY DEGREE	e.g. S40N
F	FORTY FIVE DEGREE	e.g. S40F
S	SWIVEL MALE	e.g. S18S
K	COMPACT BLOCK 45°	e.g. S64K, S60K
C	CYLINDRICAL/ROUND BAR TAIL STYLE	e.g. S01C
H	HEXAGONAL BAR TAIL STYLE	e.g. S05H

SUFFIX CODES FOR PART NUMBERS

GS	GATES GLOBAL SPIRAL NON-SKIVE	e.g. S66-2020GS
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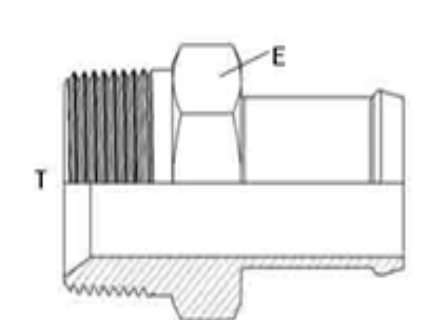
Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

BSP TAPER

SU15

BSPT MALE STRAIGHT

BSP TAPERED MALE STRAIGHT

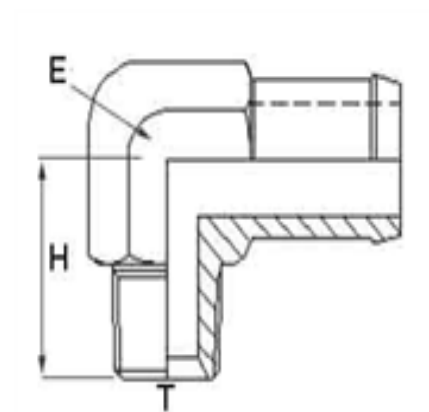


Part Number	BSPT Male Thread (T)	Hose I.D - inches	Hose I.D (mm)	Dash size	Hex A/F (E)
SU15-0812	1/2-14	3/4	19	12	22
SU15-1212	3/4-14	3/4	19	12	29
SU15-1216	3/4-14	1	25.4	16	30
SU15-1220	3/4-14	1.1/4	31.8	20	35
SU15-1612	1-11	3/4	19	12	35
SU15-1616	1-11	1	25.4	16	35
SU15-1620	1-11	1.1/4	31.8	20	36
SU15-1624	1-11	1.1/2	38.1	24	46
SU15-2016	1.1/4-11	1	25.4	16	44
SU15-2020	1.1/4-11	1.1/4	31.8	20	46
SU15-2024	1.1/4-11	1.1/2	38.1	24	46
SU15-2420	1.1/2-11	1.1/4	31.8	20	51
SU15-2424	1.1/2-11	1.1/2	38.1	24	51
SU15-3232	2-11	2	50.8	32	65

SU26

BSPT MALE 90° ELBOW

BSP TAPERED MALE 90° ELBOW COMPACT



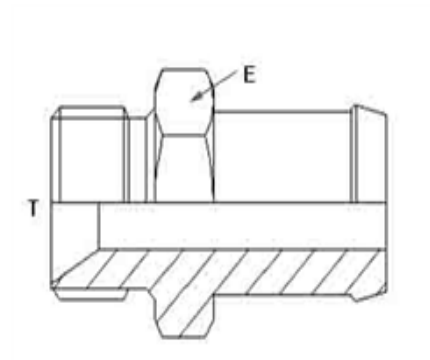
Part Number	BSPT Male Thread (T)	Hose I.D - inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Drop - H
SU26-1212	3/4-14	3/4	19	12	27	44
SU26-1216	3/4-11	1	25.4	16	27	43.5
SU26-1220	3/4-11	1.1/4	31.8	20	33	56.5
SU26-1612	1-11	3/4	19	12	33	46
SU26-1616	1-11	1	25.4	16	36	50
SU26-1620	1-11	1.1/4	31.8	20	36	50
SU26-1624	1-11	1.1/2	38.1	24	41	49
SU26-2016	1.1/4-11	1	25.4	16	41	56.5
SU26-2020	1.1/4-11	1.1/4	31.8	20	41	49
SU26-2024	1.1/4-11	1.1/2	38.1	24	41	50
SU26-2420	1.1/2-11	1.1/4	31.8	20	48	62.5
SU26-2424	1.1/2-11	1.1/2	38.1	24	50	60
SU26-3232	2-11	2	50.8	32	63	85

BSP PARALLEL

SU12

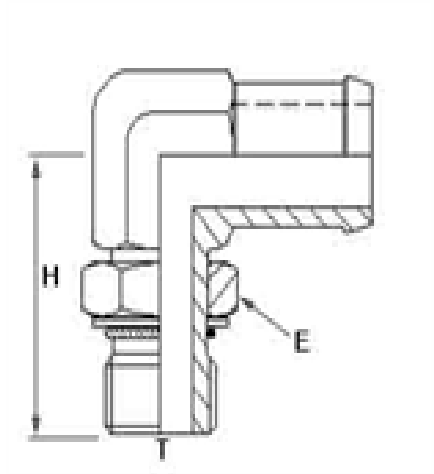
BSP MALE STRAIGHT

BSP 60° CONE MALE STRAIGHT



Part Number	BSP Male Thread (T)	Hose I.D - inches	Hose I.D (mm)	Dash size	Hex A/F (E)
SU12-1212	3/4-14	3/4	19	12	32
SU12-1216	3/4-14	1	25.4	16	32
SU12-1220	3/4-14	1.1/4	38.1	20	50
SU12-1616	1-11	1	25.4	16	41
SU12-1620	1-11	1.1/4	31.8	20	50
SU12-2020	1.1/4-11	1.1/4	31.8	20	50
SU12-2024	1.1/4-11	1.1/2	38.1	24	50
SU12-2424	1.1/2-11	1.1/2	38.1	24	55

SU12-90
BSP MALE 90° ELBOW
BSP STUD ADJUSTABLE 90° ELBOW COMPACT



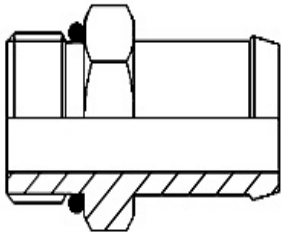
Part Number	BSPP Male Thread (T)	Hose I.D - inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Drop - H
SU12-1212-90	3/4-14	3/4	19	12	27	50.5
SU12-1216-90	3/4-14	1	25.4	16	27	50.5
SU12-1220-90	3/4-14	1.1/4	31.8	20	33	54.5
SU12-1616-90	1-11	1	25.4	16	33	54.5
SU12-1620-90	1-11	1.1/4	31.8	20	33	56
SU12-1624-90	1-11	1.1/2	38.1	24	41	66
SU12-2020-90	1.1/4-11	1.1/4	31.8	20	41	61
SU12-2024-90	1.1/4-11	1.1/2	38.1	24	41	58
SU12-2424-90	1.1/2-11	1.1/2	38.1	24	48	63

UNO

SU20

UNO MALE STRAIGHT

UN O-RING STUD STRAIGHT



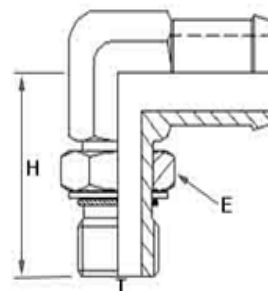
Part Number	UNF Male Thread (T)	Hose I.D - inches	Hose I.D (mm)	Dash size	Hex A/F (E)
SU20-1412	7/8-14	3/4	19	12	27
SU20-1420	7/8-14	1.1/4	31.8	20	36
SU20-1712	1.1/16-12	3/4	19	12	32
SU20-1716	1.1/16-12	1	25.4	16	32
SU20-1720	1.1/16-12	1.1/4	31.8	20	35
SU20-2116	1.5/16-12	1	25.4	16	38
SU20-2120	1.5/16-12	1.1/4	31.8	20	38
SU20-2124	1.5/16-12	1.1/2	38.1	24	44.5
SU20-2620	1.5/8-12	1.1/4	31.8	20	48
SU20-2624	1.5/8-12	1.1/2	38.1	24	50
SU20-3024	1.7/8-12	1 1/2	38.1	24	54

SU20-90

UNO MALE 90° ELBOW

UN O-RING STUD ADJUSTABLE 90° ELBOW

COMPACT



Part Number	UNF Male Thread (T)	Hose I.D - inches	Hose I.D (mm)	Dash size	Hex A/F (E)	Hex A/F (E1)	Drop (H)
SU20-1712-90	1.1/16-12	3/4	19	12	31.8	27	46
SU20-1716-90	1.1/16-12	1	25.4	16	32	27	53
SU20-1720-90	1.1/16-12	1.1/4	31.8	20	35	33	56.5
SU20-2116-90	1.5/16-12	1	25.4	16	38	33	56.5
SU20-2120-90	1.5/16-12	1.1/4	31.8	20	38	33	56.5
SU20-2124-90	1.5/16-12	1 1/2	38.1	24	38	41	66.5
SU20-2620-90	1.5/8-12	1.1/4	31.8	20	47	41	61
SU20-2624-90	1.5/8-12	1.1/2	38.1	24	47	41	66.5
SU20-3024-90	1.7/8-12	1 1/2	38.1	24	53.4	48	71



GENERAL INFORMATION

The Hydraulink adaptor range is designed to provide the hydraulic systems designer with a wide range of thread options and combinations when used in conjunction with the Hydraulink range of hoesetails.

Hydraulink adaptors are designed and manufactured to conform to the functional requirements specified in the relevant international standards. However it should be noted that the envelope dimensions in this catalogue are for reference only. Dimensions may vary from those catalogued or specified due to ongoing product development, varying tolerances and variation in manufacturing methods. For critical application, please contact Hydraulink to confirm dimensions.

Hydraulink adaptors are typically manufactured from high quality steel and finished with a silver trivalent chromium plating and clear sealant to further increase protection against corrosion. Other material types (such as AISI 316 stainless steel) and finishes are available on request.

For adaptor types or configurations not listed in this catalogue, please contact Hydraulink for further information or special product design.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

PART NUMBERING SYSTEM – ADAPTORS

The Hydraulink adaptor part numbering system is a concise product description in coded form. The part number consists of a minimum of two modules as follows:

Module 1. Code letter denoting the thread form or sealing method (end type).
For example; A denotes BSP taper male and F denotes BSP parallel fixed female socket.

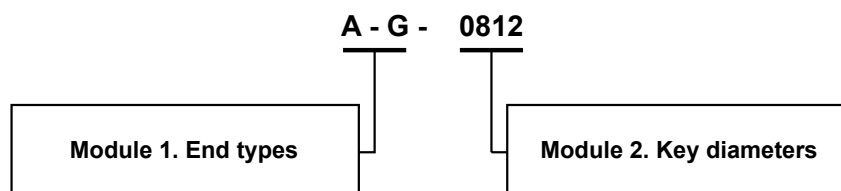
Please refer to the following “Series codes and descriptions” for further information regarding coupling ends and configurations.

Module 2. Number denoting the size of end type. Sizes are expressed as follows;
English/American threads; expressed in 1/16th inch increments denoting the key diameter.
For example; 08 = $8/16 = 1/2$ " and 19 = $19/16 = 1 \frac{3}{16}$ ".

Metric threads; expressed in millimetres with prefix M, denoting the key diameter.
For example; M10 = 10mm O.D. thread.

Flanges; express the nominal size of the flange head. Sizing refers to the maximum internal bore. For example a 12 flange head would have a maximum internal bore of $12/16 = 3/4$ ".

Please refer technical section for further information regarding coupling ends, thread forms and sealing methods.

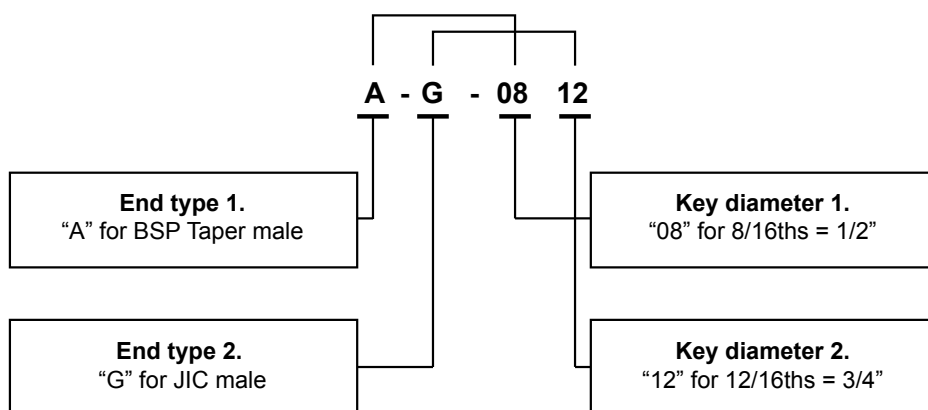
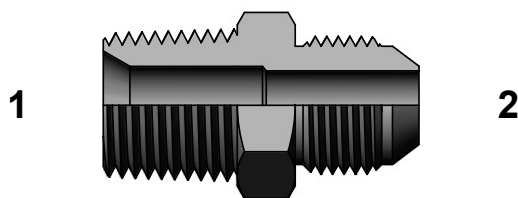


PART NUMBERING SYSTEM – ADAPTORS

Straight Adaptors

End types are nearly always sequenced in alphabetical order, and each code letter in a part number refers to a discrete size in the part number; the first code letter refers to the first size, the second part number to the second size etc. For example; A-G-0812 denotes a BSP taper male (A) size 1/2" (8/16) by JIC male (G) size 3/4" (12/16) straight adaptor.

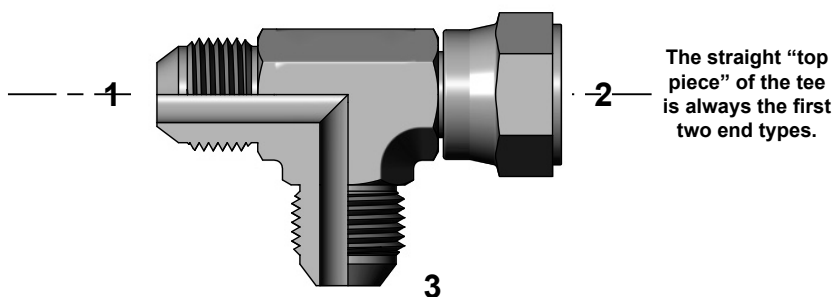
NOTE: In Hydraulink's alphanumeric system, single letters (A, B, C etc.) come before double letters (AA, AC, AG etc.). For example; the correct notation for a SAE male (AA) by BSP parallel male (B) would be B-AA- followed by the corresponding sizes of BSP parallel male then SAE male.



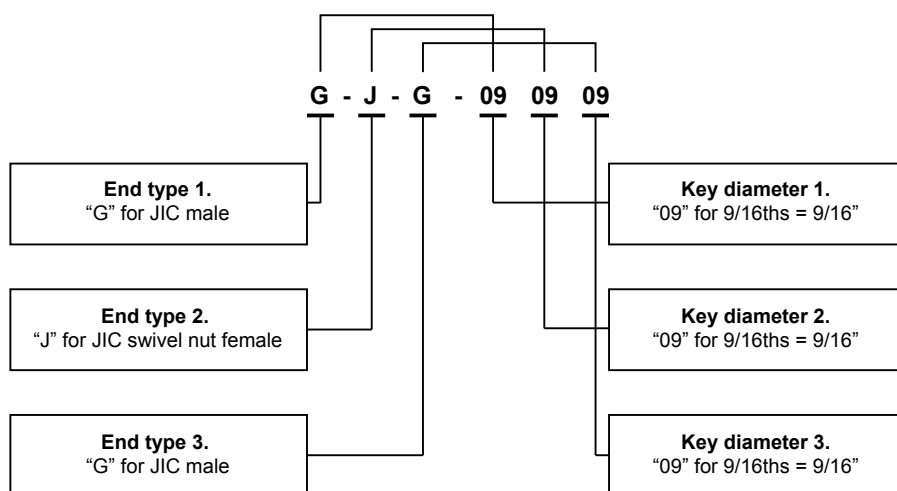
PART NUMBERING SYSTEM – ADAPTORS

Tee Adaptors

An exception to the alphabetical sequencing of end types is the “tee” adaptor. Tee adaptors’ part numbers always denote the end types in a particular order; the two end types on the straight “top piece” and their respective sizes are denoted first in an alphabetical order, but the third end type, the branch or leg of the tee is always denoted third regardless of alphabetical order (and its respective size). This is to clarify between variations; G-G-J-090909 denotes a JIC male (G) size 9/16” by JIC male (G) size 9/16” with a JIC swivel nut female (J) size 9/16” on the leg or branch. However, an G-J-G-090909 denotes a JIC male (G) size 9/16” by JIC swivel nut female (J) size 9/16” with a JIC male (G) size 9/16” on the leg or branch.



The straight “top piece” of the tee is always the first two end types.



SERIES CODES AND DESCRIPTIONS - ADAPTORS

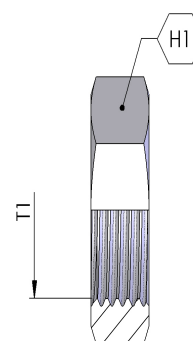
Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

LOCKNUTS

AK

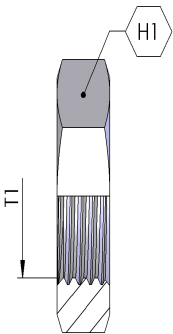
BSP LOCK NUT

BSPP LOCKNUT TO SUIT BSP BULKHEADS



Part Number	T1	H1 (mm)
AK-04	1/4-19	19
AK-06	3/8-19	22
AK-08	1/2-14	27
AK-12	3/4-14	32
AK-16	1-11	41
AK-20	1.1/4-11	50
AK-24	1.1/2-11	55

AL
UNF LOCK NUT
UNF LOCKNUT TO SUIT JIC BULKHEADS



Part Number	T1	H1 (mm)
AL-07	7/16-20	17.5
AL-08	1/2-20	19.1
AL-09	9/16-18	20.6
AL-12	3/4-16	25.4
AL-14	7/8-14	28.6
AL-17	1.1/16-12	34.9
AL-19	1.3/16-12	38.1
AL-21	1.5/16-12	41.3
AL-26	1.5/8-12	47.6
AL-30	1.7/8-12	54.0

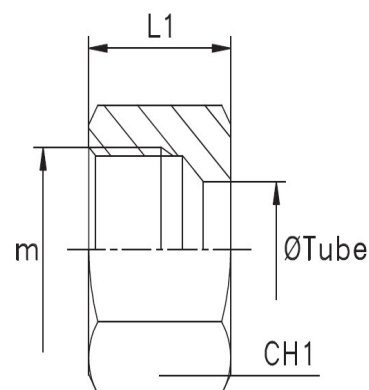
NUTS AND CUTTING RINGS

MLLN

MET EXTRA LIGHT TUBE NUT

METRIC 24° CONE EXTRA LIGHT TUBE NUT

- ISO 8434-1



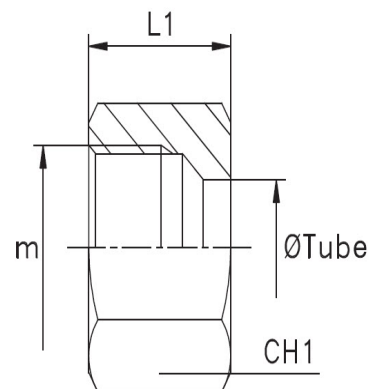
Part Number	Metric Female Thread (m)	Suits Tube Diameter (mm)	L1 (mm)	CH1 (mm)
MLLN-10	M10-1	6	11.5	12
MLLN-12	M12-1	8	12	14

MLN

MET LIGHT TUBE NUT

METRIC 24° CONE LIGHT TUBE NUT

- ISO 8434-1



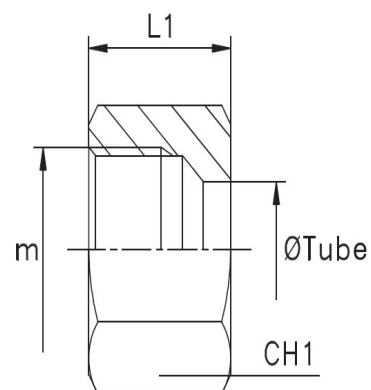
Part Number	Metric Female Thread (m)	Suits Tube Diameter (mm)	L1 (mm)	CH1 (mm)
MLN-12	M12-1.5	6	15	14
MLN-14	M14-1.5	8	15	17
MLN-16	M16-1.5	10	16	19
MLN-18	M18-1.5	12	16	22
MLN-22	M22-1.5	15	17	27
MLN-26	M26-1.5	18	18	32
MLN-30	M30-2	22	20	36
MLN-36	M36-2	28	21	41
MLN-45	M45-2	35	24	50
MLN-52	M52-2	42	24	60

MSN

MET HEAVY TUBE NUT

METRIC 24° CONE HEAVY TUBE NUT

- ISO 8434-1



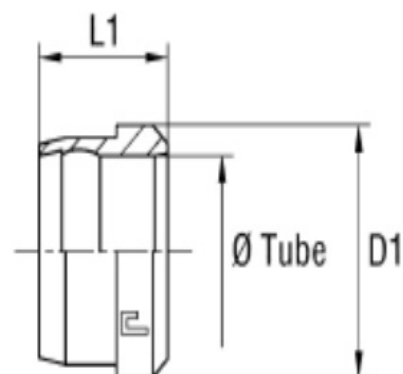
Part Number	Metric Female Thread (m)	Suits Tube Diameter (mm)	L1 (mm)	CH1 (mm)
MSN-14	M14-1.5	6	17	17
MSN-16	M16-1.5	8	17	19
MSN-18	M18-1.5	10	18	22
MSN-20	M20-1.5	12	18	24
MSN-22	M22-1.5	14	21	27
MSN-24	M24-1.5	16	21	30
MSN-30	M30-2	20	24	36
MSN-36	M36-2	25	27	46
MSN-42	M42-2	30	29	50
MSN-52	M52-2	38	33	60

TCM

MET TUBE CUTTING RING

METRIC TUBE 24° CONE CUTTING RING

- ISO 8434-1



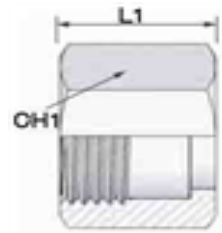
Part Number	Suits Light DIN Metric Male	Suits Heavy DIN Metric Male	Suits Tube Diameter (mm)	L1 (mm)	D1 (mm)
TCM-6LL	M10-1		6	6	8
TCM-6L/S	M12-1.5	M14-1.5	6	10	10
TCM-8L/S	M14-1.5	M16-1.5	8	9.5	12
TCM-10L/S	M16-1.5	M18-1.5	10	10	14
TCM-12L/S	M18-1.5	M20-1.5	12	10	16
TCM-15L	M22-1.5		15	10	19
TCM-18L	M26-1.5		18	10	23
TCM-22L	M30-2		22	11	27
TCM-28L	M36-2		28	11	33
TCM-35L	M45-2		35	13	41
TCM-42L	M52-2		42	13	48
TCM-14S		M22-1.5	14	10	19
TCM-16S		M24-1.5	16	11	21
TCM-20S		M30-2.0	20	12	26
TCM-25S		M36-2.0	25	12	32
TCM-30S		M42-2.0	30	13	36
TCM-38S		M52-2.0	38	13	44

TJN

JIC TUBE NUT

JIC 37° FLARE TUBE NUT

- USE WITH TJS TUBE SLEEVE



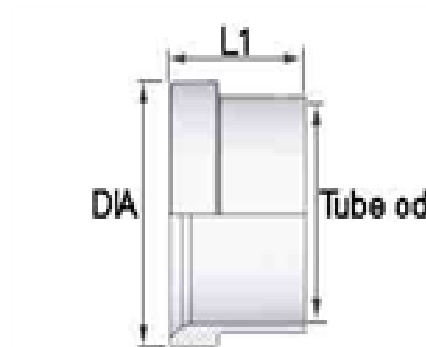
Part Number	suits tube	JIC Female Thread	L1 - mm	Hex A/F (CH1)
TJN-07	1/4	7/16-20	15	14
TJN-08	5/16	1/2-20	17	16
TJN-09	3/8	9/16-18	18	18
TJN-12	1/2	3/4-16	21	22
TJN-14	5/8	7/8-14	25	25
TJN-17	3/4	1.1/16-12	26	32
TJN-19	7/8	1.3/16-12	27	35
TJN-21	1	1.5/16-12	28	38
TJN-26	1.1/4	1.5/8-12	31	51
TJN-30	1.1/2	1.7/8-12	36	32

TJS

JIC FEMALE TUBE SLEEVE

JIC 37° FLARE IMPERIAL TUBE SUPPORT SLEEVE

- USE WITH TJN TUBE NUT



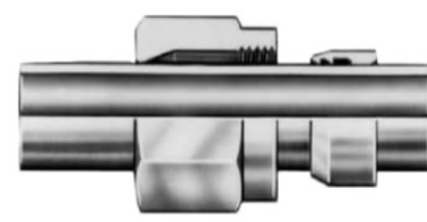
Part Number	suits tube	L1 - mm	Diameter - mm
TJS-04	1/4	10	10
TJS-05	5/16	11	11
TJS-06	3/8	13	13
TJS-08	1/2	14	17
TJS-10	5/8	17	20
TJS-12	3/4	17	25
TJS-14	7/8	19	28
TJS-16	1	20	31
TJS-20	1.1/4	23	39
TJS-24	1.1/2	28	45

TJNV

JIC TUBE NUT

JIC 37° FEMALE FLARELESS TUBE NUT

- USE WITH TJSV TUBE SLEEVE



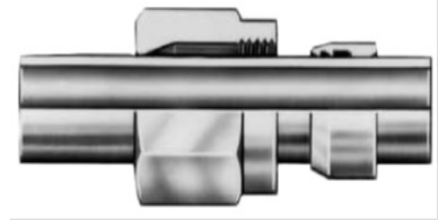
Part Number	suits tube	JIC Female Thread	L1 - mm	Hex A/F (CH1)
TJNV-07	1/4	7/16-20	21	14
TJNV-09	3/8	9/16-18	22	17
TJNV-12	1/2	3/4-16	27	22
TJNV-14	5/8	7/8-14	29	25
TJNV-17	3/4	1.1/16-12	35	32
TJNV-21	1	1.5/16-12	36	38

TJSV

JIC FEMALE COMPRESSION SLEEVE

JIC 37° FEMALE FLARELESS TUBE COMPRESSION
(BITE TYPE) SLEEVE

- USE WITH TJNV TUBE NUT



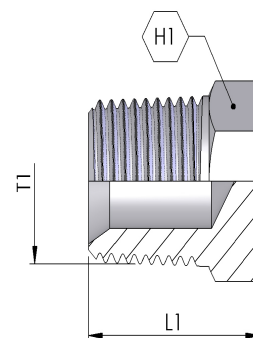
Part Number	suits tube	Overall Length	Diameter - mm
TJSV-04	1/4	11	9
TJSV-06	3/8	12	12
TJSV-08	1/2	14	17
TJSV-10	5/8	15	20
TJSV-12	3/4	17	25
TJSV-16	1	20	31

PLUGS AND CAPS

A

BSPT MALE

BSPT MALE PLUG

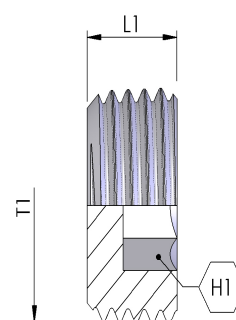


Part Number	T1	H1 (mm)	L1 (mm)	PN (bar)
A-02	1/8-28	12	15	345
A-04	1/4-19	14	21	275
A-06	3/8-19	19	22	210
A-08	1/2-14	22	27	210
A-12	3/4-14	27	30	170
A-16	1-11	36	35	140
A-20	1.1/4-11	46	38	80
A-24	1.1/2-11	50	40	70
A-32	2-11	65	45	70

A-INT

BSPT MALE

BSPT MALE PLUG INTERNAL HEX

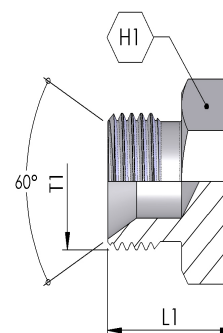


Part Number	T1	L1 (mm)	H1 (mm)	PN (bar)
A-04INT	1/4-19	10	7	275
A-06INT	3/8-19	10	8	210
A-08INT	1/2-14	10	10	210
A-12INT	3/4-14	12	12	170
A-16INT	1-11	12	17	140

B

BSP MALE

BSP 60° CONE MALE PLUG

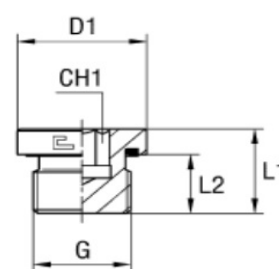


Part Number	T1	H1 (mm)	L1 (mm)	PN (bar)
B-02	1/8-28	14	14	400
B-04	1/4-19	19	19	400
B-06	3/8-19	22	20	400
B-08	1/2-14	27	24	350
B-12	3/4-14	32	28	315
B-16	1-11	41	32	250
B-20	1.1/4-11	50	35	200
B-24	1.1/2-11	55	40	160
B-32	2-11	70	45	125

B-INT

BSP MALE

BSP MALE CAPTIVE SEAL PLUG INTERNAL HEX

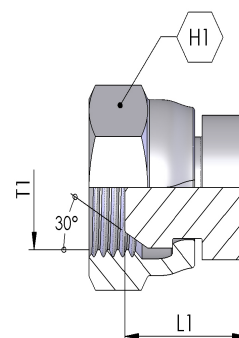


Part Number	G	D1 (mm)	L1 (mm)	L2 (mm)	CH1 (mm)	PN (bar)
B-02INT	1/8-28	14	8	12	5	400
B-04INT	1/4-19	19	12	17	6	400
B-06INT	3/8-19	22	12	17	8	400
B-08INT	1/2-14	27	14	19	10	350
B-12INT	3/4-14	32	16	21	12	315
B-16INT	1-11	40	16	23	17	250

C

BSP FEMALE

BSP FEMALE SWIVEL NUT CAP



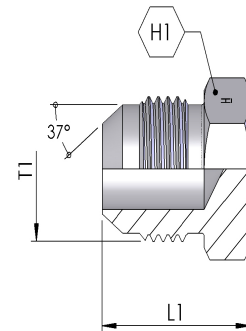
Part Number	T1	H1 (mm)	L1 (mm)	PN (bar)
C-02	1/8-28	14	17	400
C-04	1/4-19	19	18	400
C-06	3/8-19	22	20	400
C-08	1/2-14	27	23	350
C-12	3/4-14	32	25	315
C-16	1-11	41	27	250
C-20	1.1/4-11	50	30	200
C-24	1.1/2-11	55	32	160
C-32	2-11	70	33	125

G

JIC MALE

JIC 37° FLARE MALE PLUG

- ISO 8434-2



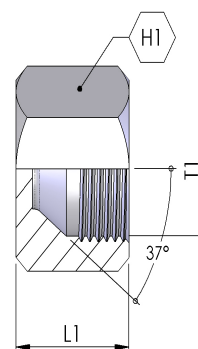
Part Number	T1	H1 (mm)	L1 (mm)	PN (bar)
G-07	7/16-20	12	21	350
G-08	1/2-20	14	14	350
G-09	9/16-18	17	22	350
G-12	3/4-16	22	24	310
G-14	7/8-14	24	28	240
G-17	1.1/16-12	30	33	240
G-19	1.3/16-12	32	23	210
G-21	1.5/16-12	36	34	210
G-26	1.5/8-12	46	37	170
G-30	1.7/8-12	50	42	140
G-40	2.1/2-12	67	52	105

AG

JIC FEMALE

JIC 37° FLARE FIXED FEMALE CAP

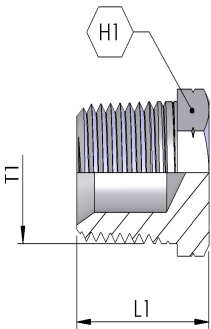
- ISO 8434-2



Part Number	T1	H1 (mm)	L1 (mm)	PN (bar)
AG-07	7/16-20	14	15	350
AG-08	1/2-20	16	15	350
AG-09	9/16-18	19	16	350
AG-12	3/4-16	22	19	310
AG-14	7/8-14	27	21	240
AG-17	1.1/16-12	32	23	240
AG-19	1.3/16-12	35	25	210
AG-21	1.5/16-12	41	26	210
AG-26	1.5/8-12	50	27	170
AG-30	1.7/8-12	60	30	140
AG-40	2.1/2-12	73	37	105

L
NPTF MALE
NPTF MALE PLUG

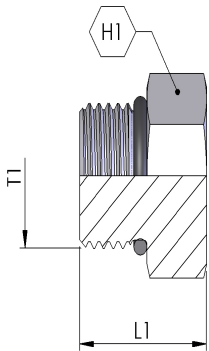
- SAE J531



Part Number	T1	H1 (mm)	L1 (mm)	PN (bar)
L-02	1/8-27	12	15	345
L-04	1/4-18	14	19	275
L-06	3/8-18	19	20	210
L-08	1/2-14	22	25	210
L-12	3/4-14	27	27	170
L-16	1-11.1/2	36	32	140
L-20	1.1/4-11.1/2	46	37	80
L-24	1.1/2-11.1/2	50	40	70
L-32	2-11.1/2	65	45	70

N
UNO MALE
UNO MALE PLUG

- SAE J514

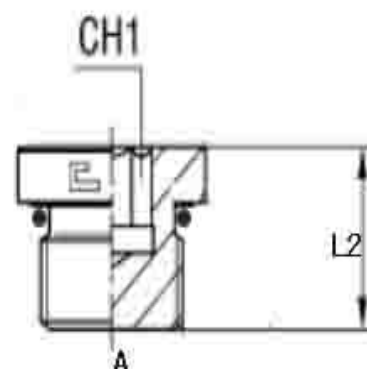


Part Number	T1	H1 (mm)	L1 (mm)	PN (bar)
N-07	7/16-20	14	17	315
N-08	1/2-20	17	17	315
N-09	9/16-18	17	19	315
N-12	3/4-16	22	20	315
N-14	7/8-14	27	24	250
N-17	1.1/16-12	32	28	250
N-19	1.3/16-12	36	28	200
N-21	1.5/16-12	41	29	200
N-26	1.5/8-12	50	31	160
N-30	1.7/8-12	55	32	160

N-INT

UNO MALE

UNO MALE PLUG INTERNAL HEX

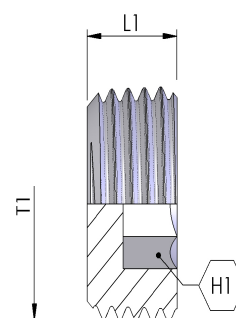


Part Number	A	L2 (mm)	Internal Hex A/F (mm)	PN (bar)
N-07INT	7/16-20	12.2	4.8	315
N-09INT	9/16-18	13	6.4	315
N-12INT	3/4-16	15	7.9	315
N-14INT	7/8-14	16.8	9.5	250
N-17INT	1.1/16-12	19.8	14.3	250
N-21INT	1.5/16-12	19.8	15.9	200

L-INT

NPTF MALE PLUG

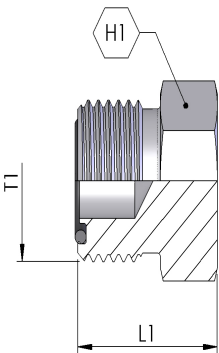
NPTF MALE PLUG INTERNAL HEX



Part Number	T1	L1 (mm)	H1 (mm)	PN (bar)
L-04INT	1/4-18	10.2	6.4	275
L-06INT	3/8-18	11.7	7.9	210
L-08INT	1/2-14	15.5	9.5	210
L-12INT	3/4-14	15.7	14.3	170
L-16INT	1-11.1/2	19.8	15.9	140

R
ORFS MALE
ORFS MALE PLUG

- ISO 8434-3



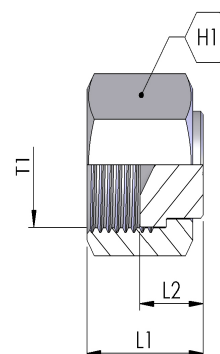
Part Number	T1	H1 (mm)	L1 (mm)	PN (bar)
R-09	9/16-18	17	16.5	630
R-11	11/16-16	19	19	630
R-13	13/16-16	22	22	630
R-16	1-14	27	26	400
R-19	1.3/16-12	32	28	400
R-23	1.7/16-12	41	28	400
R-27	1.11/16-12	46	28	250
R-32	2-12	54	28	250

T

ORFS FEMALE

ORFS FEMALE SWIVEL NUT CAP

- ISO 8434-3



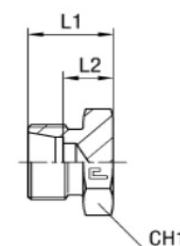
Part Number	T1	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
T-09	9/16-18	17	17	9	630
T-11	11/16-16	22	19	11	630
T-13	13/16-16	24	22	12	630
T-16	1-14	30	26	14	400
T-19	1.3/16-12	36	29	15	400
T-23	1.7/16-12	41	30	16	400
T-27	1.11/16-12	50	30	16	250
T-32	2-12	57	30	16	250

MLL

MET LIGHT MALE TUBE PLUG

METRIC 24° CONE EXTRA LIGHT MALE TUBE END PLUG

- ISO 8434-1



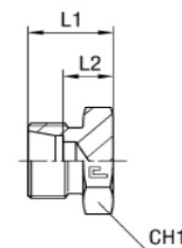
Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm)	CH1 (mm)	PN (bar)
MLL-10	M10-1	6	12	6	10	315

ML

MET LIGHT MALE TUBE PLUG

METRIC 24° CONE LIGHT MALE TUBE END PLUG

- ISO 8434-1



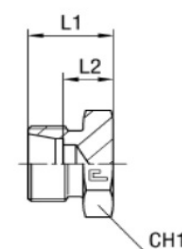
Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm)	CH1 (mm)	PN (bar)
ML-12	M12-1.5	6	14	7	12	315
ML-14	M14-1.5	8	15	8	14	315
ML-16	M16-1.5	10	16	9	17	315
ML-18	M18-1.5	12	17	10	19	315
ML-22	M22-1.5	15	18	11	24	315
ML-26	M26-1.5	18	19	12	27	315
ML-30	M30-2	22	21	14	32	160
ML-36	M36-2	28	22	15	41	160
ML-45	M45-2	35	25	15	46	160
ML-52	M52-2	42	27	16	55	160

MS

MET HEAVY MALE TUBE PLUG

METRIC 24° CONE HEAVY MALE TUBE END PLUG

- ISO 8434-1

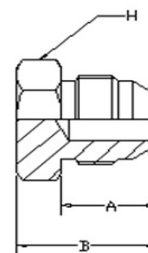


Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm)	CH1 (mm)	PN (bar)
MS-14	M14-1.5	6	18	11	14	630
MS-16	M16-1.5	8	20	13	17	630
MS-18	M18-1.5	10	20	13	19	630
MS-20	M20-1.5	12	22	15	22	630
MS-22	M22-1.5	14	24	16	24	630
MS-24	M24-1.5	16	24	16	27	400
MS-30	M30-2	20	28	18	32	400
MS-36	M36-2	25	32	20	41	400
MS-42	M42-2	30	34	21	46	400
MS-52	M52-2	38	39	23	55	315

MY

JIS MET MALE

JIS MET KOMATSU STYLE 30° FLARE MALE PLUG

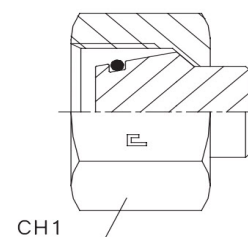


Part Number	Metric Male Thread	A	B	H (mm)	PN (bar)
MY-14	M14-1.5	15	22	16	350
MY-16	M16-1.5	16	24	19	350
MY-18	M18-1.5	18	26	22	350
MY-20	M20-1.5	20	28	22	350
MY-22	M22-1.5	20	29	25	350
MY-24	M24-1.5	22	32	27	275
MY-30	M30-1.5	26	37	32	200
MY-33	M33-1.5	30	41	36	200

UL

MET LIGHT FEMALE PLUG/CAP

METRIC 24° CONE LIGHT BLANKING PLUG/CAP
WITH O RING AND NUT



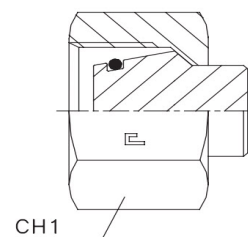
- ISO 8434-1

Part Number	Metric Female Thread	Suits Tube Diameter (mm)	CH1 (mm)	PN (bar)
UL-12	M12-1.5	6	14	500
UL-14	M14-1.5	8	17	500
UL-16	M16-1.5	10	19	500
UL-18	M18-1.5	12	22	400
UL-22	M22-1.5	15	27	400
UL-26	M26-1.5	18	32	400
UL-30	M30-2	22	36	250
UL-36	M36-2	28	41	250
UL-45	M45-2	35	50	250
UL-52	M52-2	42	60	250

US

MET HEAVY FEMALE PLUG/CAP
METRIC 24° CONE HEAVY BLANKING PLUG/CAP
WITH O RING AND NUT

- ISO 8434-1

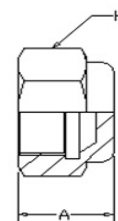


Part Number	Metric Female Thread	Suits Tube Diameter (mm)	CH1 (mm)	PN (bar)
US-14	M14-1.5	6	19	800
US-16	M16-1.5	8	19	800
US-18	M18-1.5	10	22	800
US-20	M20-1.5	12	24	630
US-22	M22-1.5	14	27	630
US-24	M24-1.5	16	30	630
US-30	M30-2	20	36	420
US-36	M36-2	25	46	420
US-42	M42-2	30	50	420
US-52	M52-2	38	50	420

UY

JIS MET FEMALE
JIS MET KOMATSU STYLE 30° FLARE FEMALE CAP

- JIS B 8363



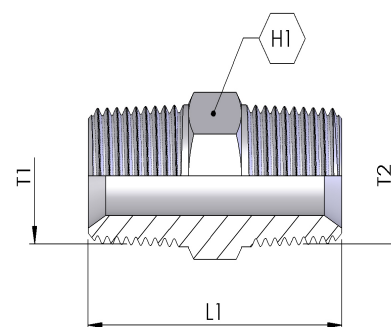
Part Number	Metric Female Thread	A	H (mm)	PN (bar)
UY-20	M20-1.5	30	26	350
UY-22	M22-1.5	35	27	350
UY-24	M24-1.5	37	32	275
UY-30	M30-1.5	43	36	200
UY-33	M33-1.5	47	41	200
UY-14	M14-1.5	25	19	350
UY-16	M16-1.5	27	22	350
UY-18	M18-1.5	30	24	350

STRAIGHT ADAPTORS

A-A

BSPT MALE X BSPT MALE

BSPT MALE X BSPT MALE STRAIGHT

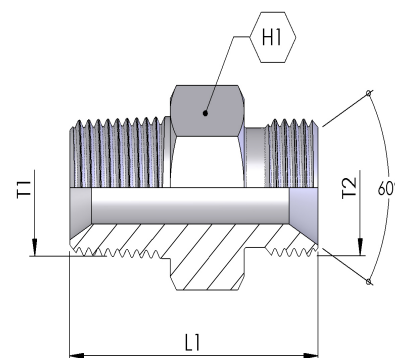


Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
A-A-0202	1/8-28	1/8-28	12	27	345
A-A-0204	1/8-28	1/4-19	14	32	275
A-A-0404	1/4-19	1/4-19	14	37	275
A-A-0406	1/4-19	3/8-19	19	37	210
A-A-0408	1/4-19	1/2-14	22	43	210
A-A-0412	1/4-19	3/4-14	27	45	170
A-A-0606	3/8-19	3/8-19	19	37	210
A-A-0608	3/8-19	1/2-14	22	43	210
A-A-0612	3/8-19	3/4-14	27	45	170
A-A-0616	3/8-19	1-11	36	55	140
A-A-0808	1/2-14	1/2-14	22	48	210
A-A-0812	1/2-14	3/4-14	27	50	170
A-A-0816	1/2-14	1-11	36	55	140
A-A-1010	5/8-14	5/8-14	29	50	170
A-A-1212	3/4-14	3/4-14	27	50	170
A-A-1216	3/4-14	1-11	36	55	140
A-A-1220	3/4-14	1.1/4-11	46	57	80
A-A-1616	1-11	1-11	36	59	140
A-A-1620	1-11	1.1/4-11	46	62	80
A-A-1624	1-11	1.1/2-11	50	65	70
A-A-2020	1.1/4-11	1.1/4-11	46	63	80
A-A-2024	1.1/4-11	1.1/2-11	50	65	70
A-A-2424	1.1/2-11	1.1/2-11	50	66	70
A-A-2432	1.1/2-11	2-11	65	71	70
A-A-3232	2-11	2-11	65	72	70

A-B

BSPT MALE X BSP MALE

BSPT MALE X BSP 60° CONE MALE STRAIGHT



Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
A-B-0202	1/8-28	1/8-28	14	23	345
A-B-0204	1/8-28	1/4-19	19	29	345
A-B-0402	1/4-19	1/8-28	14	28	275
A-B-0404	1/4-19	1/4-19	19	33	275
A-B-0406	1/4-19	3/8-19	22	37	275
A-B-0408	1/4-19	1/2-14	27	42	275
A-B-0604	3/8-19	1/4-19	19	33	210
A-B-0606	3/8-19	3/8-19	22	37	210
A-B-0608	3/8-19	1/2-14	27	42	210
A-B-0612	3/8-19	3/4-14	32	45	210
A-B-0804	1/2-14	1/4-19	22	41	210
A-B-0806	1/2-14	3/8-19	22	42	210
A-B-0808	1/2-14	1/2-14	27	47	210
A-B-0812	1/2-14	3/4-14	32	50	210
A-B-0816	1/2-14	1-11	41	53	210
A-B-1206	3/4-14	3/8-19	27	45	170
A-B-1208	3/4-14	1/2-14	27	47	170
A-B-1212	3/4-14	3/4-14	32	50	170
A-B-1216	3/4-14	1-11	41	53	170
A-B-1220	3/4-14	1.1/4-11	50	57	170
A-B-1608	1-11	1/2-14	36	53	140
A-B-1612	1-11	3/4-14	36	55	140
A-B-1616	1-11	1-11	41	58	140
A-B-1620	1-11	1.1/4-11	50	62	140
A-B-1624	1-11	1.1/2-11	55	62	140
A-B-2012	1.1/4-11	3/4-14	46	59	80
A-B-2016	1.1/4-11	1-11	46	62	80
A-B-2020	1.1/4-11	1.1/4-11	50	63	80
A-B-2024	1.1/4-11	1.1/2-11	55	65	80
A-B-2416	1.1/2-11	1-11	50	62	70

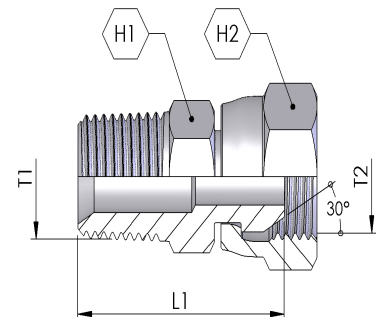
A-B-2420	1.1/2-11	1.1/4-11	50	63	70
A-B-2424	1.1/2-11	1.1/2-11	55	65	70
A-B-3232	2-11	2-11	70	71	70

A-C

BSPT MALE X BSP FEMALE

BSPT MALE X BSP 60° CONE FEMALE SWIVEL NUT

STRAIGHT

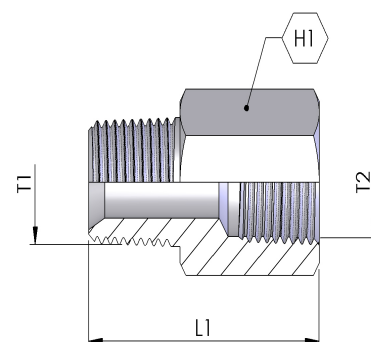


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	PN (bar)
A-C-0202	1/8-28	1/8-28	12	14	26	345
A-C-0204	1/8-28	1/4-19	17	19	28	345
A-C-0404	1/4-19	1/4-19	17	19	32	275
A-C-0406	1/4-19	3/8-19	19	22	34	275
A-C-0408	1/4-19	1/2-14	22	27	38	275
A-C-0604	3/8-19	1/4-19	19	19	33	210
A-C-0606	3/8-19	3/8-19	19	22	34	210
A-C-0608	3/8-19	1/2-14	22	27	38	210
A-C-0806	1/2-14	3/8-19	22	22	41	210
A-C-0808	1/2-14	1/2-14	22	27	43	210
A-C-0812	1/2-14	3/4-14	30	32	46	210
A-C-1208	3/4-14	1/2-14	27	27	43	170
A-C-1212	3/4-14	3/4-14	30	32	46	170
A-C-1216	3/4-14	1-11	36	41	48	170
A-C-1612	1-11	3/4-14	36	32	52	140
A-C-1616	1-11	1-11	36	41	53	140
A-C-1620	1-11	1.1/4-11	46	50	56	140
A-C-2016	1.1/4-11	1-11	41	46	55	80
A-C-2020	1.1/4-11	1.1/4-11	46	50	57	80
A-C-2024	1.1/4-11	1.1/2-11	50	55	58	80
A-C-2420	1.1/2-11	1.1/4-11	50	50	58	70
A-C-2424	1.1/2-11	1.1/2-11	50	55	59	70
A-C-3232	2-11	2-11	65	70	63	70

A-E

BSPT MALE X BSPT FEMALE

BSPT MALE X BSPT FIXED FEMALE STRAIGHT



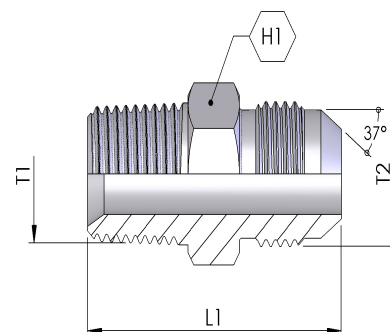
Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
A-E-0202	1/8-28	1/8-28	14	26	345
A-E-0204	1/8-28	1/4-19	19	10	275
A-E-0402	1/4-19	1/8-28	14	22	275
A-E-0404	1/4-19	1/4-19	19	35	275
A-E-0406	1/4-19	3/8-19	22	37	210
A-E-0602	3/8-19	1/8-28	19	22	210
A-E-0604	3/8-19	1/4-19	19	22	210
A-E-0606	3/8-19	3/8-19	22	37	210
A-E-0608	3/8-19	1/2-14	27	43	210
A-E-0802	1/2-14	1/8-28	22	28	210
A-E-0804	1/2-14	1/4-19	22	28	210
A-E-0806	1/2-14	3/8-19	22	28	210
A-E-0808	1/2-14	1/2-14	27	48	210
A-E-0812	1/2-14	3/4-14	36	51	170
A-E-1204	3/4-14	1/4-19	27	30	170
A-E-1206	3/4-14	3/8-19	27	30	170
A-E-1208	3/4-14	1/2-14	27	30	170
A-E-1212	3/4-14	3/4-14	36	49	170
A-E-1606	1-11	3/8-19	36	35	140
A-E-1608	1-11	1/2-14	36	35	140
A-E-1612	1-11	3/4-14	36	35	140
A-E-1616	1-11	1-11	41	60	140
A-E-2008	1.1/4-11	1/2-14	46	38	80
A-E-2012	1.1/4-11	3/4-14	46	38	80
A-E-2016	1.1/4-11	1-11	46	38	80
A-E-2412	1.1/2-11	3/4-14	50	40	70
A-E-2416	1.1/2-11	1-11	50	40	70
A-E-2420	1.1/2-11	1.1/4-11	50	40	70
A-E-3216	2-11	1-11	65	45	70
A-E-3220	2-11	1.1/4-11	65	45	70

A-E-3224	2-11	1.1/2-11	65	45	70
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A-G

BSPT MALE X JIC MALE

BSPT MALE X JIC 37° FLARE MALE STRAIGHT



Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
A-G-0207	1/8-28	7/16-20	12	31	345
A-G-0208	1/8-28	1/2-20	14	31	345
A-G-0209	1/8-28	9/16-18	17	32	345
A-G-0407	1/4-19	7/16-20	14	36	275
A-G-0408	1/4-19	1/2-20	14	36	275
A-G-0409	1/4-19	9/16-18	17	36	275
A-G-0412	1/4-19	3/4-16	22	39	275
A-G-0607	3/8-19	7/16-20	19	36	210
A-G-0608	3/8-19	1/2-20	19	36	210
A-G-0609	3/8-19	9/16-18	19	36	210
A-G-0612	3/8-19	3/4-16	22	39	210
A-G-0614	3/8-19	7/8-14	24	43	210
A-G-0617	3/8-19	1.1/16-12	30	48	210
A-G-0807	1/2-14	7/16-20	22	43	210
A-G-0809	1/2-14	9/16-18	22	43	210
A-G-0812	1/2-14	3/4-16	22	45	210
A-G-0814	1/2-14	7/8-14	24	48	210
A-G-0817	1/2-14	1.1/16-12	30	52	210
A-G-1209	3/4-14	9/16-18	27	45	170
A-G-1212	3/4-14	3/4-16	27	47	170
A-G-1214	3/4-14	7/8-14	27	50	170
A-G-1217	3/4-14	1.1/16-12	30	52	170
A-G-1219	3/4-14	1.3/16-12	32	55	170
A-G-1221	3/4-14	1.5/16-12	36	54	170
A-G-1612	1-11	3/4-16	36	52	140
A-G-1614	1-11	7/8-14	36	55	140
A-G-1617	1-11	1.1/16-12	36	57	140

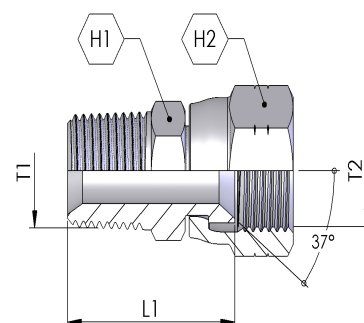
A-G-1619	1-11	1.3/16-12	36	58	140
A-G-1621	1-11	1.5/16-12	36	58	140
A-G-1626	1-11	1.5/8-12	46	61	140
A-G-2017	1.1/4-11	1.1/16-12	46	60	80
A-G-2021	1.1/4-11	1.5/16-12	46	61	80
A-G-2026	1.1/4-11	1.5/8-12	46	62	80
A-G-2030	1.1/4-11	1.7/8-12	50	67	80
A-G-2421	1.1/2-11	1.5/16-12	50	64	70
A-G-2426	1.1/2-11	1.5/8-12	50	65	70
A-G-2430	1.1/2-11	1.7/8-12	50	71	70
A-G-3230	2-11	1.7/8-12	65	73	70
A-G-3240	2-11	2.1/2-12	65	79	70

A-J

BSPT MALE X JIC FEMALE

BSPT MALE X JIC 37° FLARE FEMALE SWIVEL NUT

STRAIGHT

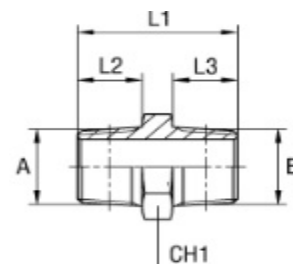


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	PN (bar)
A-J-0207	1/8-28	7/16-20	12	14	23	345
A-J-0407	1/4-19	7/16-20	14	14	28	275
A-J-0409	1/4-19	9/16-18	14	19	29	275
A-J-0609	3/8-19	9/16-18	19	19	30	210
A-J-0612	3/8-19	3/4-16	19	22	32	210
A-J-0614	3/8-19	7/8-14	22	27	34	210
A-J-0812	1/2-14	3/4-16	22	22	38	210
A-J-0814	1/2-14	7/8-14	22	27	38	210
A-J-0817	1/2-14	1.1/16-12	27	32	43	170
A-J-1217	3/4-14	1.1/16-12	27	32	43	170
A-J-1621	1-11	1.5/16-12	36	41	51	140
A-J-2026	1.1/4-11	1.5/8-12	46	50	57	80

A-L

BSPT MALE X NPTF MALE

BSPT MALE X NPTF MALE STRAIGHT

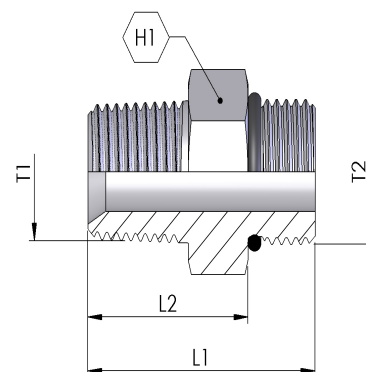


Part Number	A	B	L1 (mm)	L2 (mm)	L3 (mm)	CH1 (mm)	PN (bar)
A-L-0404	1/4-19	1/4-18	35	15	15	17	275
A-L-0606	3/8-19	3/8-18	36	16	15	19	210
A-L-0808	1/2-14	1/2-14	48	20	20	22	210
A-L-1212	3/4-16	3/4-16	50	20	20	27	170
A-L-1616	1-11	1-11.1/2	62	26	26	36	140

A-N

BSPT MALE X UNO MALE

BSPT MALE X UNO MALE STRAIGHT

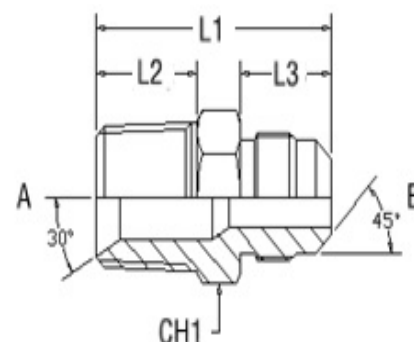


Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-N-0407	1/4-19	7/16-20	14	31	22	275
A-N-0409	1/4-19	9/16-18	17	33	23	275
A-N-0412	1/4-19	3/4-16	22	35	24	275
A-N-0414	1/4-19	7/8-14	27	38	25	250
A-N-0609	3/8-19	9/16-18	19	33	23	210
A-N-0612	3/8-19	3/4-16	22	35	24	210
A-N-0614	3/8-19	7/8-14	27	38	25	210
A-N-0809	1/2-14	9/16-18	22	39	19	210
A-N-0812	1/2-14	3/4-16	22	40	29	210
A-N-0814	1/2-14	7/8-14	27	43	30	210
A-N-0817	1/2-14	1.1/16-12	32	47	32	210
A-N-1212	3/4-14	3/4-16	32	43	29	170
A-N-1214	3/4-14	7/8-14	27	43	30	170
A-N-1217	3/4-14	1.1/16-12	32	47	32	170
A-N-1221	3/4-14	1.5/16-12	41	48	33	170
A-N-1617	1-11	1.1/16-12	36	54	39	140
A-N-1621	1-11	1.5/16-12	41	53	38	140
A-N-1626	1-11	1.5/8-12	50	55	40	140
A-N-2026	1.1/4-11	1.5/8-12	50	55	40	80

A-AA

BSPT MALE X SAE MALE

BSPT MALE X SAE 45° FLARE MALE STRAIGHT

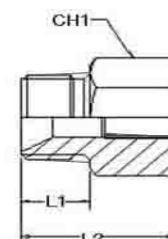


Part Number	A	B	L1 (mm)	L2 (mm)	L3 (mm)	CH1 (mm)	PN (bar)
A-AA-0410	1/4-19	5/8-18	36	14	16	19	275
A-AA-0610	3/8-19	5/8-18	38	15	16	19	210

A-AC

MALE BSPT x NPT FEMALE

BSPT MALE WITH 60° CONE X NPTF FEMALE FIXED UNION

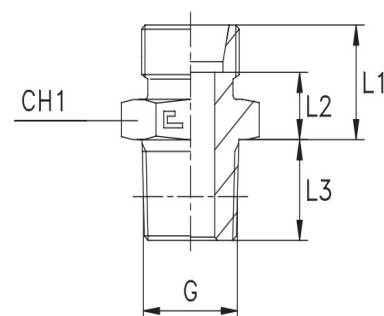


Part Number	BSPT Male Thread	NPTF Female Thread	Overall Length mm - L1 (mm)	Thread Length - mm (L2)	Hex A/F - CH1 (mm)	PN (bar)
A-AC-0404	1/4-19	1/4-18	34.5	14.5	19	275
A-AC-0606	3/8-19	3/8-18	36.5	15	24	210
A-AC-0808	1/2-14	1/2-14	47	20	30	210
A-AC-1212	3/4-14	3/4-14	49	20	36	170
A-AC-1616	1-11	1-11.1/2	60	25.5	41	140

A-ML

BSPT MALE X MET LIGHT MALE

BSPT MALE X METRIC 24° CONE LIGHT MALE STRAIGHT



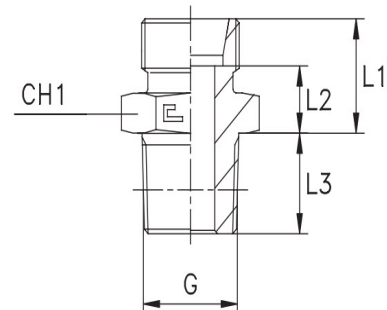
Part Number	BSPT Male Thread (G)	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm)	L3 (mm)	CH1 (mm)	PN (bar)
A-ML-0212	1/8-28	M12-1.5	6	14	7	8	12	315
A-ML-0214	1/8-28	M14-1.5	8	15	8	8	14	315
A-ML-0216	1/8-28	M16-1.5	10	16	9	8	17	315
A-ML-0412	1/4-19	M12-1.5	6	15	8	12	14	315
A-ML-0414	1/4-19	M14-1.5	8	15	8	12	17	315
A-ML-0416	1/4-19	M16-1.5	10	16	9	12	17	315
A-ML-0418	1/4-19	M18-1.5	12	17	10	12	19	315
A-ML-0614	3/8-19	M14-1.5	8	16	9	12	19	315
A-ML-0616	3/8-19	M16-1.5	10	17	10	12	19	315
A-ML-0618	3/8-19	M18-1.5	12	17	10	12	19	315
A-ML-0622	3/8-19	M22-1.5	15	18	11	12	24	315
A-ML-0814	1/2-14	M14-1.5	8	16	9	14	22	315
A-ML-0816	1/2-14	M16-1.5	10	17	10	14	22	315
A-ML-0818	1/2-14	M18-1.5	12	17	10	14	22	315
A-ML-0822	1/2-14	M22-1.5	15	18	11	14	24	315
A-ML-0826	1/2-14	M26-1.5	18	19	12	14	27	315
A-ML-0830	1/2-14	M30-2	22					315
A-ML-1222	3/4-14	M22-1.5	15					315
A-ML-1226	3/4-14	M26-1.5	18	19	12	16	32	315
A-ML-1230	3/4-14	M30-2	22	21	14	16	32	160
A-ML-1236	3/4-14	M36-2	28					160
A-ML-1636	1-11	M36-2	28	22	15	18	41	160
A-ML-2045	1.1/4-11	M42-2	35	25	14.5	20	46	160
A-ML-2452	1.1/2-11	M52-2	42	27	16	22	55	160

A-MS

BSPT MALE X MET HEAVY MALE

BSPT MALE X METRIC 24° CONE HEAVY MALE

STRAIGHT



Part Number	BSPT Male Thread (G)	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm)	L3 (mm)	CH1 (mm)	PN (bar)
A-MS-0414	1/4-19	M14-1.5	6	18	11	12	17	630
A-MS-0416	1/4-19	M16-1.5	8	20	13	12	17	630
A-MS-0418	1/4-19	M18-1.5	10					630
A-MS-0618	3/8-19	M18-1.5	10	20	13	12	19	630
A-MS-0620	3/8-19	M20-1.5	12	22	15	12	22	630
A-MS-0622	3/8-19	M22-1.5	14	24	16	12	24	630
A-MS-0624	3/8-19	M24-1.5	16	24	16	12	27	630
A-MS-0816	1/2-14	M16-1.5	8	20	13	17	22	630
A-MS-0818	1/2-14	M18-1.5	10	20	13	18	22	630
A-MS-0820	1/2-14	M20-1.5	12	22	15	14	22	630
A-MS-0822	1/2-14	M22-1.5	14	24	16	14	24	630
A-MS-0824	1/2-14	M24-1.5	16	24	16	14	27	400
A-MS-0830	1/2-14	M30-2	20	28	18	14	32	400
A-MS-1224	3/4-14	M24-1.5	16					400
A-MS-1230	3/4-14	M30-2	20	28	18	16	32	400
A-MS-1236	3/4-14	M36-2	25	32	20	16	41	400
A-MS-1636	1-11	M36-2	25	32	20	18	41	400
A-MS-1642	1-11	M42-2	30	34	20.5	18	46	400
A-MS-2042	1.1/4-11	M42-2	30	34	20.5	20	46	400

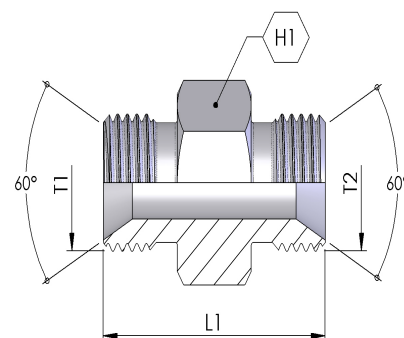
B-B

BSP MALE X BSP MALE

BSP 60° CONE MALE X BSP 60° CONE MALE

STRAIGHT

- ISO 8434-6



Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
B-B-0202	1/8-28	1/8-28	14	21	400
B-B-0204	1/8-28	1/4-19	19	27	400
B-B-0404	1/4-19	1/4-19	19	30	400
B-B-0406	1/4-19	3/8-19	22	34	400
B-B-0408	1/4-19	1/2-14	27	39	350
B-B-0606	3/8-19	3/8-19	22	35	400
B-B-0608	3/8-19	1/2-14	27	40	350
B-B-0612	3/8-19	3/4-14	32	43	315
B-B-0808	1/2-14	1/2-14	27	42	350
B-B-0812	1/2-14	3/4-14	32	45	315
B-B-0816	1/2-14	1-11	41	48	250
B-B-1212	3/4-14	3/4-14	32	47	315
B-B-1216	3/4-14	1-11	41	50	250
B-B-1220	3/4-14	1.1/4-11	50	54	200
B-B-1616	1-11	1-11	41	53	250
B-B-1620	1-11	1.1/4-11	50	57	200
B-B-1624	1-11	1.1/2-11	55	59	160
B-B-2020	1.1/4-11	1.1/4-11	50	58	200
B-B-2024	1.1/4-11	1.1/2-11	55	60	160
B-B-2424	1.1/2-11	1.1/2-11	55	62	160
B-B-2432	1.1/2-11	2-11	70	67	125
B-B-3232	2-11	2-11	70	70	125

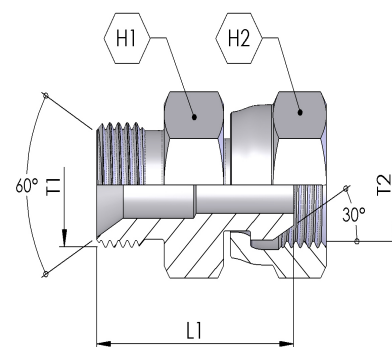
B-C

BSP MALE X BSP FEMALE

BSP 60° CONE MALE X BSP 60° CONE FEMALE

SWIVEL NUT STRAIGHT

- ISO 8434-6



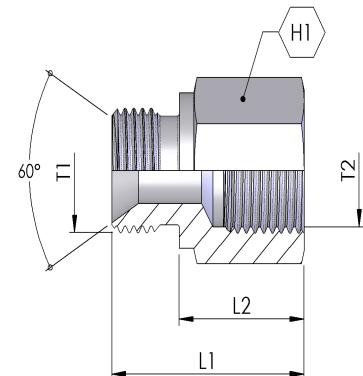
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	PN (bar)
B-C-0404	1/4-19	1/4-19	19	19	31	400
B-C-0606	3/8-19	3/8-19	22	22	35	400
B-C-0608	3/8-19	1/2-14	22	27	42	350
B-C-0806	1/2-14	3/8-19	27	22	42	350
B-C-0808	1/2-14	1/2-14	27	27	41	350
B-C-0812	1/2-14	3/4-14	27	32	49	315
B-C-1212	3/4-14	3/4-14	32	32	45	315
B-C-1216	3/4-14	1-11	32	41	46	250
B-C-1612	1-11	3/4-14	41	32	49	250
B-C-1616	1-11	1-11	41	41	51	250
B-C-1620	1-11	1.1/4-11	41	50	53	200
B-C-2016	1.1/4-11	1-11	50	41	52	200
B-C-2020	1.1/4-11	1.1/4-11	50	50	55	200
B-C-2424	1.1/2-11	1.1/2-11	55	55	64	160

B-F

BSP MALE X BSP FEMALE

BSP 60° CONE MALE X BSP FIXED FEMALE

STRAIGHT



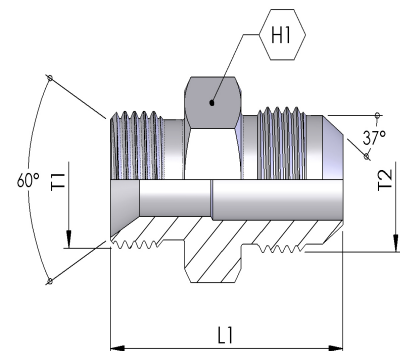
Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
B-F-0402	1/4-19	1/8-28	19	27	16	400
B-F-0604	3/8-19	1/4-19	22	33	21	400
B-F-0608	3/8-19	1/2-14	27	14	43	350
B-F-0804	1/2-14	1/4-19	27	36	22	350
B-F-0806	1/2-14	3/8-19	27	36	22	350
B-F-1204	3/4-14	1/4-19	32	31	15	350
B-F-1206	3/4-14	3/8-19	32	31	15	315
B-F-1208	3/4-14	1/2-14	32	42	26	315
B-F-1608	1-11	1/2-14	41	34	15	250
B-F-1612	1-11	3/4-14	41	47	28	250
B-F-2012	1.1/4-11	3/4-14	50	38	18	200
B-F-2016	1.1/4-11	1-11	50	50	30	200
B-F-2416	1.1/2-11	1-11	55	40	18	160
B-F-2420	1.1/2-11	1.1/4-11	55	58	36	160
B-F-3224	2-11	1.1/2-11	70	54	29	125

B-G

BSP MALE X JIC MALE

BSP 60° CONE MALE X JIC 37° FLARE MALE

STRAIGHT

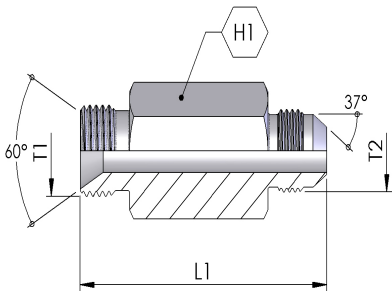


Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
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B-G-0207	1/8-28	7/16-20	14	29	350
B-G-0208	1/8-28	1/2-20	14	29	350
B-G-0209	1/8-28	9/16-18	17	29	350
B-G-0407	1/4-19	7/16-20	19	32	350
B-G-0408	1/4-19	1/2-20	19	32	350
B-G-0409	1/4-19	9/16-18	19	32	350
B-G-0412	1/4-19	3/4-16	22	35	310
B-G-0607	3/8-19	7/16-20	22	34	350
B-G-0609	3/8-19	9/16-18	22	34	350
B-G-0612	3/8-19	3/4-16	22	36	310
B-G-0614	3/8-19	7/8-14	24	42	240
B-G-0807	1/2-14	7/16-20	27	38	350
B-G-0809	1/2-14	9/16-18	27	39	350
B-G-0809-1MM	1/2-14	9/16-18	27	39	350
B-G-0812	1/2-14	3/4-16	27	42	310
B-G-0814	1/2-14	7/8-14	27	44	240
B-G-0817	1/2-14	1.1/16-12	30	46	240
B-G-1209	3/4-14	9/16-18	32	40	315
B-G-1212	3/4-14	3/4-16	32	44	310
B-G-1214	3/4-14	7/8-14	32	46	240
B-G-1217	3/4-14	1.1/16-12	32	49	240
B-G-1219	3/4-14	1.3/16-12	32	52	210
B-G-1221	3/4-14	1.5/16-12	36	50	210
B-G-1612	1-11	3/4-16	41	53	250
B-G-1614	1-11	7/8-14	41	53	240
B-G-1617	1-11	1.1/16-12	41	52	240
B-G-1621	1-11	1.5/16-12	41	54	210
B-G-1626	1-11	1.5/8-12	46	56	170
B-G-2017	1.1/4-11	1.1/16-12	50	56	200
B-G-2021	1.1/4-11	1.5/16-12	50	57	200
B-G-2026	1.1/4-11	1.5/8-12	50	58	170
B-G-2030	1.1/4-11	1.7/8-12	50	61	140
B-G-2417	1.1/2-11	1.1/16-12	55	61	160
B-G-2421	1.1/2-11	1.5/16-12	55	60	160
B-G-2426	1.1/2-11	1.5/8-12	55	61	160
B-G-2430	1.1/2-11	1.7/8-12	55	65	140
B-G-3226	2-11	1.5/8-12	70	67	125
B-G-3230	2-11	1.7/8-12	70	70	125
B-G-3240	2-11	2.1/2-12	70	78	105

B-G-EXT

MALE BSP X JIC STRAIGHT
BSPP MALE WITH 60° CONE X JIC 37° MALE
FLARED - EXTENDED



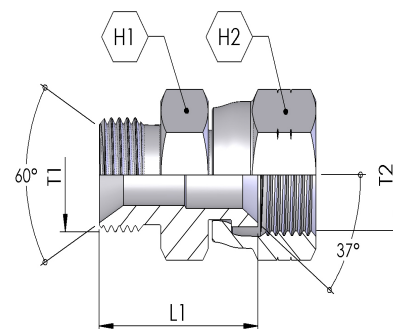
Part Number	T1	T2	L1 (mm)	H1 (mm)	PN (bar)
B-G-0409EX090	1/4-19	9/16-18	90	19	350
B-G-0612EX070	3/8-19	3/4-16	70	22	310

B-J

BSP MALE X JIC FEMALE

BSP 60° CONE MALE X JIC 37° FLARE FEMALE

SWIVEL NUT STRAIGHT

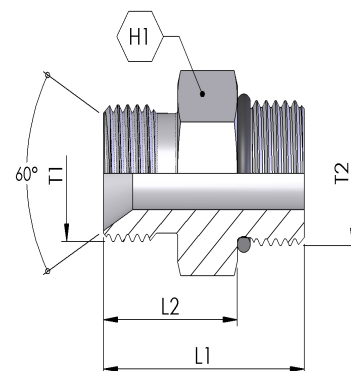


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	PN (bar)
B-J-0407	1/4-19	7/16-20	19	14	26	350
B-J-0409	1/4-19	9/16-18	19	19	27	350
B-J-0609	3/8-19	9/16-18	22	19	29	350
B-J-0612	3/8-19	3/4-16	22	22	31	310
B-J-0614	3/8-19	7/8-14	22	27	33	240
B-J-0809	1/2-14	9/16-18	27	19	35	350
B-J-0812	1/2-14	3/4-16	27	22	36	310
B-J-0814	1/2-14	7/8-14	27	27	36	240
B-J-0817	1/2-14	1.1/16-12	27	32	38	240
B-J-1214	3/4-14	7/8-14	32	27	41	240
B-J-1217	3/4-14	1.1/16-12	32	32	41	240
B-J-1617	1-11	1.1/16-12	41	41	32	240
B-J-1621	1-11	1.5/16-12	41	41	48	210
B-J-2026	1.1/4-11	1.5/8-12	50	50	52	170

B-N

BSP MALE X UNO MALE

BSP 60° CONE MALE X UNO MALE STRAIGHT

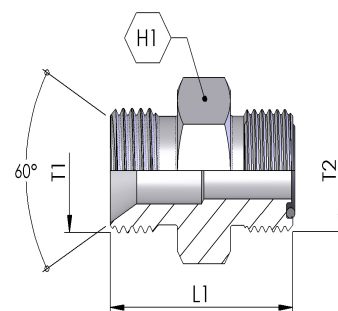


Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
B-N-0407	1/4-19	7/16-20	19	29	20	315
B-N-0409	1/4-19	9/16-18	19	30	20	315
B-N-0609	3/8-19	9/16-18	22	32	22	315
B-N-0612	3/8-19	3/4-16	22	33	22	315
B-N-0812	1/2-14	3/4-16	27	37	25	315
B-N-0814	1/2-14	7/8-14	27	38	25	250
B-N-1214	3/4-14	7/8-14	32	42	29	250
B-N-1217	3/4-14	1.1/16-12	32	44	29	250
B-N-1617	1-11	1.1/16-12	41	48	33	250
B-N-1621	1-11	1.5/16-12	41	48	33	200

B-R

BSP MALE X ORFS MALE

BSP 60° CONE MALE X ORFS MALE STRAIGHT



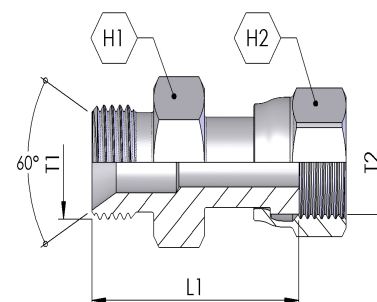
Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
B-R-0409	1/4-19	9/16-18	19	28	400
B-R-0411	1/4-19	11/16-16	19	29	400
B-R-0609	3/8-19	9/16-18	22	30	400
B-R-0611	3/8-19	11/16-16	22	31	400
B-R-0613	3/8-19	13/16-16	22	33	400
B-R-0811	1/2-14	11/16-16	12	24	350
B-R-0813	1/2-14	13/16-16	27	38	350
B-R-0816	1/2-14	1-14	27	41	350
B-R-0819	1/2-14	1.3/16-12	32	43	350
B-R-1216	3/4-14	1-14	32	44	315
B-R-1219	3/4-14	1.3/16-12	32	45	315
B-R-1223	3/4-14	1.7/16-12	41	47	315
B-R-1623	1-11	1.7/16-12	41	50	250
B-R-2027	1.1/4-11	1.11/16-12	50	53	200

B-T

BSP MALE X ORFS FEMALE

BSP 60° CONE MALE X ORFS FEMALE SWIVEL NUT

STRAIGHT



Part Number	T1	T2	L1 (mm)	H1 (mm)	H2 (mm)	PN (bar)
B-T-0409	1/4-19	9/16-18	34	19	19	400
B-T-0411	1/4-19	11/16-16	37	17	22	400
B-T-0611	3/8-19	11/16-16	39	17	22	400
B-T-0613	3/8-19	13/16-16	43	19	24	400
B-T-0813	1/2-14	13/16-16	45	22	24	350
B-T-0816	1/2-14	1-14	51	24	30	350
B-T-1219	3/4-14	1.3/16-12	57	30	36	315
B-T-1623	1-11	1.7/16-12	62	36	41	250
B-T-2027	1.1/4-11	1.11/16-12	99.3	50	50	200

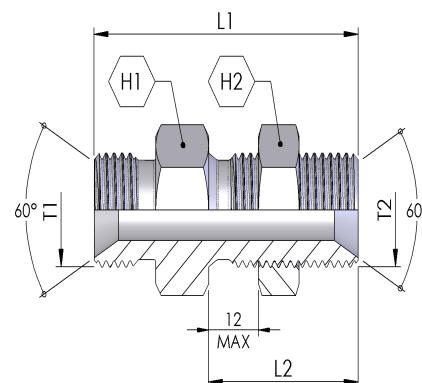
B-BK

BSP MALE X BSP BULKHEAD

BSP 60° CONE MALE X BSP 60° CONE BULKHEAD

STRAIGHT

- ISO 8434-6



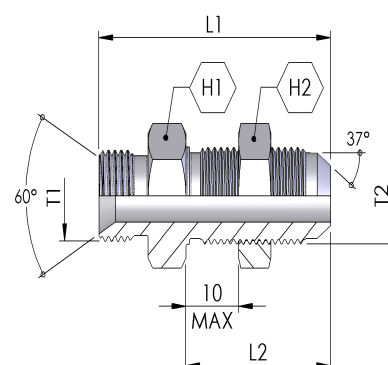
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
B-BK-0404	1/4-19	1/4-19	19	19	47	29	400
B-BK-0606	3/8-19	3/8-19	22	22	52	31	400
B-BK-0808	1/2-14	1/2-14	27	27	60	34	350
B-BK-1212	3/4-14	3/4-14	32	32	66	37	315
B-BK-1616	1-11	1-11	41	41	74	41	250
B-BK-2020	1.1/4-11	1.1/4-11	50	50	81	45	200
B-BK-2424	1.1/2-11	1.1/2-11	55	55	88	49	160

B-GK

BSP MALE X JIC BULKHEAD

BSP 60° CONE MALE X JIC 37° FLARE BULKHEAD

STRAIGHT



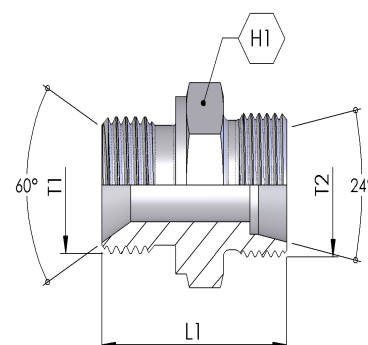
Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	H2 (mm)	PN (bar)
B-GK-0609	3/8-19	9/16-18	53	33	22	19	350
B-GK-0812	1/2-14	3/4-16	59	37	27	22	310
B-GK-0814	1/2-14	7/8-14	64	40	27	27	240

B-ML

BSP MALE X MET LIGHT MALE

BSP 60° CONE MALE X METRIC 24° CONE LIGHT
MALE STRAIGHT

- For BSP Stud Ends Refer BX-ML series



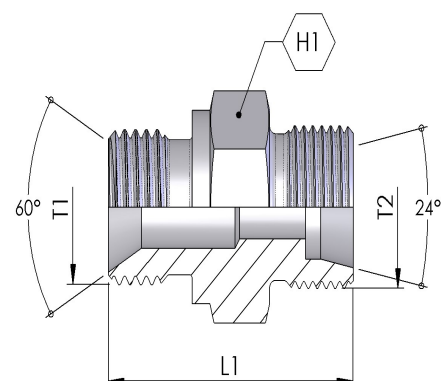
Part Number	BSPP Male Thread - T1	Metric Male Thread - T2	Suits Tube Diameter (mm)	L1 (mm)	H1 (mm)	PN (bar)
B-ML-0412	1/4-19	M12-1.5	6	29	19	315
B-ML-0414	1/4-19	M14-1.5	8	29	19	315
B-ML-0416	1/4-19	M16-1.5	10	30	19	315
B-ML-0614	3/8-19	M14-1.5	8	30.5	22	315
B-ML-0616	3/8-19	M16-1.5	10	31.5	22	315
B-ML-0618	3/8-19	M18-1.5	12	31.5	22	315
B-ML-0622	3/8-19	M22-1.5	15	31.5	22	315
B-ML-0814	1/2-14	M14-1.5	8	33	27	315
B-ML-0816	1/2-14	M16-1.5	10	34	27	315
B-ML-0818	1/2-14	M18-1.5	12	34	27	315
B-ML-0822	1/2-14	M22-1.5	15	35	27	315
B-ML-0826	1/2-14	M26-1.5	18	36	27	315
B-ML-1222	3/4-14	M22-1.5	15	38	32	315
B-ML-1226	3/4-14	M26-1.5	18	38	32	315
B-ML-1230	3/4-14	M30-2	22	40	32	160
B-ML-1636	1-11	M36-2	28	43	41	160

B-MS

BSP MALE X MET HEAVY MALE

BSP 60° CONE MALE X METRIC 24° CONE HEAVY
MALE STRAIGHT

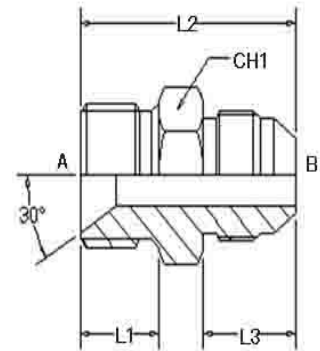
- For BSP Stud Ends Refer BX-MS series



Part Number	BSPP Male Thread - T1	Metric Male Thread - T2	Suits Tube Diameter (mm)	L1 (mm)	H1 (mm)	PN (bar)
B-MS-0414	1/4-19	M14-1.5	6	32	19	630
B-MS-0416	1/4-19	M16-1.5	8	34	19	630
B-MS-0616	3/8-19	M18-1.5	8	34.5	22	630
B-MS-0618	3/8-19	M18-1.5	10	34.5	22	630
B-MS-0620	3/8-19	M20-1.5	12	36.5	22	630
B-MS-0818	1/2-14	M18-1.5	10	39	27	630
B-MS-0820	1/2-14	M20-1.5	12	39	27	630
B-MS-0822	1/2-14	M22-1.5	14	41	27	630
B-MS-0824	1/2-14	M24-1.5	16	41	27	400
B-MS-1230	3/4-14	M30-2	20	47	32	400
B-MS-1236	3/4-14	M36-2	25	51	41	400
B-MS-1636	1-11	M36-2	25	53	41	400
B-MS-1642	1-11	M36-2	30	55	41	400

B-MY

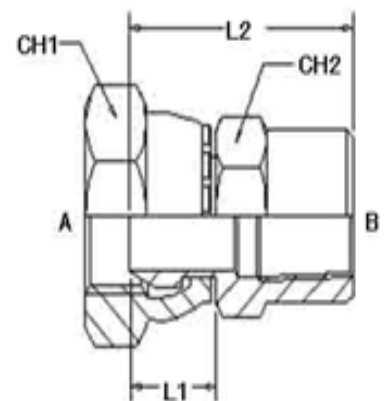
MALE BSPP X JIS METRIC MALE
BSPP MALE X JIS METRIC KOMATSU STYLE 30°
MALE



Part Number	BSPP Male Thread (A)	Metric Male Thread (B)	L1 (mm)	Overall Length - L2 (mm)	L3 (mm)	Hex A/F - CH2 (mm)	PN (bar)
B-MY-0414	1/4-19	M14-1.5	12	33.5	15.5	19	345
B-MY-0618	3/8-19	M18-1.5	13.5	39.5	18	22	345
B-MY-0622	3/8-19	M22-1.5	13.5	41.5	20	24	345
B-MY-0822	1/2-14	M22-1.5	16	46	20	27	345
B-MY-0824	1/2-14	M24-1.5	16	48	22	27	275
B-MY-1230	3/4-14	M30-2	18.5	52.5	23	32	200
B-MY-1633	1-11	M33-2	20.5	60.5	27	41	200

C-E

BSP FEMALE X BSPT FEMALE
BSP 60° CONE FEMALE SWIVEL NUT X BSPT FIXED
FEMALE STRAIGHT



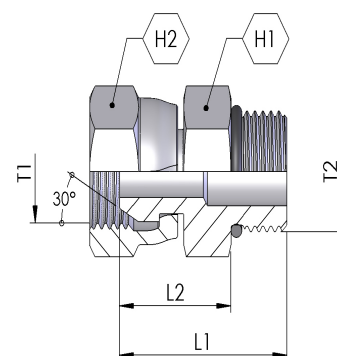
Part Number	A	B	L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
C-E-0404	1/4-19	1/4-19	11	29	10	19	19	275
C-E-0606	3/8-19	3/8-19	13	32	11	25	22	210
C-E-0808	1/2-14	1/2-14	15	41	16	27	27	210
C-E-1212	3/4-14	3/4-14	17	45	16	35	32	170
C-E-1616	1-11	1-11	18	51	19	41	41	140

C-N

BSP FEMALE X UNO MALE

BSP 60° CONE FEMALE SWIVEL NUT X UNO FIXED

STUD STRAIGHT



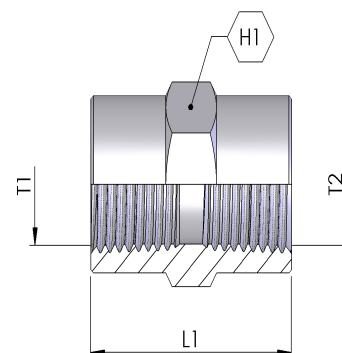
Part Number	T1	T2	H1 (mm)	H2 (mm)	L2 (mm)	PN (bar)
C-N-0407	1/4-19	7/16-20	19	14	26	315
C-N-0409	1/4-19	9/16-18	19	17	27	315
C-N-0609	3/8-19	9/16-18	22	17	28	315
C-N-0612	3/8-19	3/4-16	22	22	31	315
C-N-0812	1/2-14	3/4-16	27	22	33	315
C-N-0814	1/2-14	7/8-14	27	27	37	250
C-N-1217	3/4-14	1.1/16-12	32	32	41	250
C-N-1621	1-11	1.5/16-12	41	38	42	200

E-E

BSPT FEMALE X BSPT FEMALE

BSPT FIXED FEMALE X BSPT FIXED FEMALE

STRAIGHT



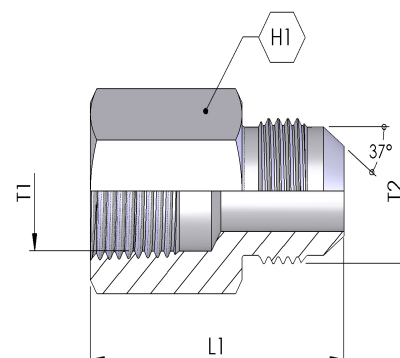
Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
E-E-0202	1/8-28	1/8-28	14	20	345
E-E-0204	1/8-28	1/4-19	19	24	275
E-E-0404	1/4-19	1/4-19	19	30	275
E-E-0406	1/4-19	3/8-19	22	30	210
E-E-0408	1/4-19	1/2-14	27	34	210
E-E-0606	3/8-19	3/8-19	22	30	210
E-E-0608	3/8-19	1/2-14	27	35	210
E-E-0808	1/2-14	1/2-14	27	38	210
E-E-0812	1/2-14	3/4-14	36	40	170
E-E-1212	3/4-14	3/4-14	36	40	170
E-E-1216	3/4-14	1-11	41	45	140
E-E-1616	1-11	1-11	41	48	140
E-E-2020	1.1/4-11	1.1/4-11	50	50	80
E-E-2424	1.1/2-11	1.1/2-11	60	50	70
E-E-3232	2-11	2-11	74	60	70

E-G

BSPT FEMALE X JIC MALE

BSPT FIXED FEMALE X JIC 37° FLARE MALE

STRAIGHT

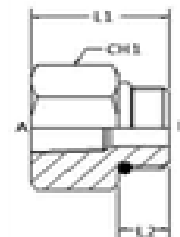


Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
E-G-0207	1/8-28	7/16-20	14	30	345
E-G-0407	1/4-19	7/16-20	19	35	275
E-G-0409	1/4-19	9/16-18	19	35	275
E-G-0609	3/8-19	9/16-18	22	37	210
E-G-0612	3/8-19	3/4-16	22	39	210
E-G-0809	1/2-14	9/16-18	27	43	210
E-G-0812	1/2-14	3/4-16	27	46	210
E-G-0814	1/2-14	7/8-14	27	48	210
E-G-0817	1/2-14	1.1/16-12	52	52	210
E-G-1217	3/4-14	1.1/16-12	36	52	170
E-G-1621	1-11	1.5/16-12	41	60	140

E-N

BSPT FEMALE X UNO MALE

BSPT FIXED FEMALE X UNO MALE STRAIGHT



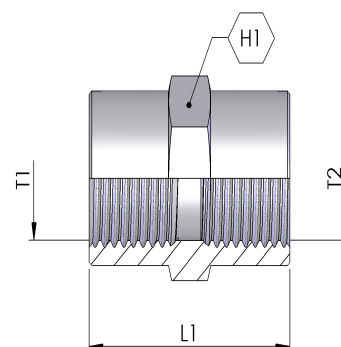
Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	PN (bar)
E-N-0212	1/8-28	3/4-16	19	11	22	315
E-N-0409	1/4-19	9/16-18	28	10	19	275
E-N-0412	1/4-19	3/4-16	27	11	22	275
E-N-0414	1/4-19	7/8-14	25	13	25	250
E-N-0417	1/4-19	1.1/16-12	29	15	32	250
E-N-0617	3/8-19	1.1/16-12	33	15	32	210
E-N-0814	1/2-14	7/8-14	33	13	27	210
E-N-0817	1/2-14	1.1/16-12	41.5	15.1	30	210
E-N-0821	1/2-14	1.5/16-12	35	15	38	200
E-N-1217	3/4-14	1.1/16-12	45	15.1	36	170
E-N-1221	3/4-14	1.5/16-12	42	15.1	36	170
E-N-1226	3/4-14	1.5/8-12	35.1	15.1	48	160
E-N-1626	1-11	1.5/8-12	35.1	15.1	48	140

F-F

BSP FEMALE X BSP FEMALE

BSP FIXED FEMALE X BSP FIXED FEMALE

STRAIGHT

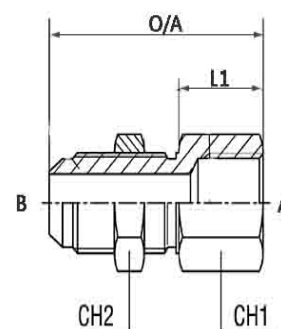


Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
F-F-0202	1/8-28	1/8-28	14	22	400
F-F-0404	1/4-19	1/4-19	19	30	400
F-F-0606	3/8-19	3/8-19	24	30	400
F-F-0808	1/2-14	1/2-14	27	38	350
F-F-1212	3/4-14	3/4-14	36	40	315
F-F-1616	1-11	1-11	41	48	250
F-F-2020	1.1/4-11	1.1/4-11	55	50	200
F-F-2424	1.1/2-11	1.1/2-11	60	50	160
F-F-3232	2-11	2-11	70	54	125

F-GK

BSPFEMALE X JIC MALE

FEMALE BSPP X MALE WITH 37° CONE

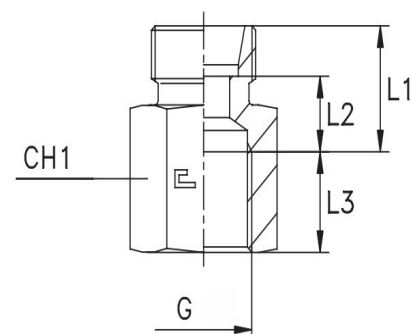


Part Number	BSPP Female Thread (A)	JIC Male Thread (B)	Overall Length (mm)	L1 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
F-GK-0207	1/8-28	7/16-20	47.5	31.6	17	17	350

F-ML

BSP FEMALE X MET LIGHT MALE

BSP SOLID FEMALE X METRIC 24° CONE LIGHT
MALE STRAIGHT



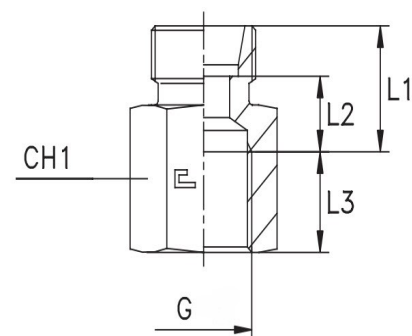
Part Number	BSPP Male Thread - G	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (bar)
F-ML-0212	1/8-28	M12-1.5	6	16	9	10	14	315
F-ML-0414	1/4-19	M14-1.5	8	17	10	14	19	315
F-ML-0416	1/4-19	M16-1.5	10	18	11	14	19	315
F-ML-0418	1/4-19	M18-1.5	12	18	12	14	19	315
F-ML-0618	3/8-19	M18-1.5	12	19	12	14	24	315
F-ML-0822	1/2-14	M22-1.5	15	21	14	17	27	315
F-ML-0826	1/2-14	M26-1.5	18	21	13.5	17	27	315
F-ML-1230	3/4-14	M30-2	22	24	16	19	36	160
F-ML-1636	1-11	M36-2	28	23.5	16	21.5	41	160
F-ML-2045	1.1/4-11	M45-2	35	28.5	18	23.5	55	160
F-ML-2452	1.1/2-11	M52-2	42	28.5	17.5	25.5	60	160

F-MS

BSP FEMALE X MET HEAVY MALE

BSP SOLID FEMALE X METRIC 24° CONE HEAVY

MALE STRAIGHT



Part Number	BSPP Male Thread - G	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (bar)
F-MS-0414	1/4-19	M14-1.5	6	19	12	14	19	400
F-MS-0416	1/4-19	M16-1.5	8	19	12	14	19	400
F-MS-0618	3/8-19	M18-1.5	10	20	12.5	14	24	400
F-MS-0620	3/8-19	M20-1.5	12	20	13	14	24	400
F-MS-0822	1/2-14	M22-1.5	14	23	15	17	30	400
F-MS-0824	1/2-14	M24-1.5	16	23	15	17	30	400
F-MS-1230	3/4-12	M30-2	20	26	16	19	36	315
F-MS-1636	1-11	M36-2	25	27.5	16	21.5	41	315
F-MS-2042	1.1/4-11	M42-2	30	32.5	19	23.5	55	315
F-MS-2452	1.1/2-11	M52-2	38	34.5	19	25.5	60	250

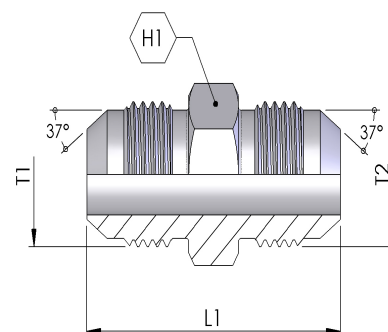
G-G

JIC MALE X JIC MALE

JIC 37° FLARE MALE X JIC 37° FLARE MALE

STRAIGHT

- ISO 8434-2



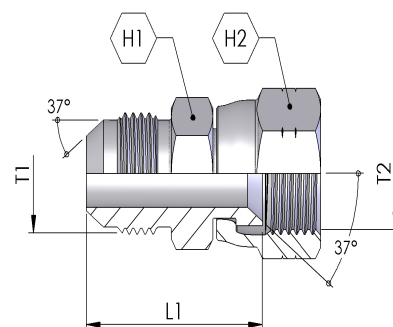
Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
G-G-0707	7/16-20	7/16-20	12	35	350
G-G-0709	7/16-20	9/16-18	17	36	350
G-G-0808	1/2-20	1/2-20	14	35	350
G-G-0909	9/16-18	9/16-18	17	36	350
G-G-0912	9/16-18	3/4-16	22	39	310
G-G-1212	3/4-16	3/4-16	22	41	310
G-G-1214	3/4-16	7/8-14	24	46	240
G-G-1217	3/4-16	1.1/16-12	30	50	240
G-G-1414	7/8-14	7/8-14	24	48	240
G-G-1417	7/8-14	1.1/16-12	30	53	240
G-G-1717	1.1/16-12	1.1/16-12	30	55	240
G-G-1719	1.1/16-12	1.3/16-12	32	56	210
G-G-1721	1.1/16-12	1.5/16-12	36	56	210
G-G-1919	1.3/16-12	1.3/16-12	32	56	210
G-G-2121	1.5/16-12	1.5/16-12	36	57	210
G-G-2126	1.5/16-12	1.5/8-12	46	61	170
G-G-2626	1.5/8-12	1.5/8-12	46	62	170
G-G-3030	1.7/8-12	1.7/8-12	50	70	140
G-G-4040	2.1/2-12	2.1/2-12	65	87	105

G-J

JIC MALE X JIC FEMALE

JIC MALE X JIC 37° FLARE FEMALE SWIVEL NUT

STRAIGHT



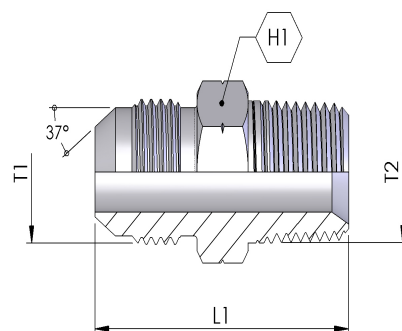
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	PN (bar)
G-J-0707	7/16-20	7/16-20	12	14	29	350
G-J-0909	9/16-18	9/16-18	17	19	31	350
G-J-1212	3/4-16	3/4-16	22	22	35	310
G-J-1414	7/8-14	7/8-14	24	27	40	240
G-J-1717	1.1/16-12	1.1/16-12	30	32	46	240
G-J-2121	1.5/16-12	1.5/16-12	35	38	48	210

G-L

JIC MALE X NPTF MALE

JIC 37° MALE X NPTF MALE STRAIGHT

- SAE J514

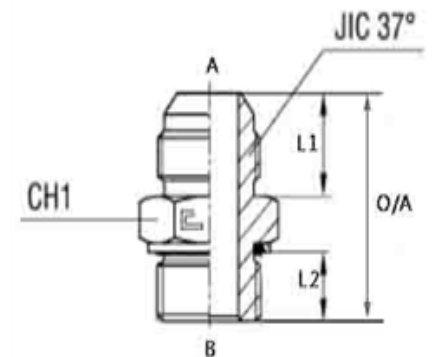


Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
G-L-0702	7/16-20	1/8-27	12	31	345
G-L-0704	7/16-20	1/4-18	14	36	275
G-L-0706	7/16-20	3/8-18	19	36	210
G-L-0708	7/16-20	1/2-14	22	43	210
G-L-0802	1/2-20	1/8-27	14	31	345
G-L-0804	1/2-20	1/4-18	14	36	275
G-L-0806	1/2-20	3/8-18	19	36	210
G-L-0902	9/16-18	1/8-27	17	32	345
G-L-0904	9/16-18	1/4-18	17	36	275

G-L-0906	9/16-18	3/8-18	19	37	210
G-L-0908	9/16-18	1/2-14	22	43	210
G-L-0912	9/16-18	3/4-14	22	39	170
G-L-1204	3/4-16	1/4-18	22	39	275
G-L-1206	3/4-16	3/8-18	22	39	210
G-L-1208	3/4-16	1/2-14	22	46	210
G-L-1212	3/4-16	3/4-14	27	47	170
G-L-1406	7/8-14	3/8-18	24	43	210
G-L-1408	7/8-14	1/2-14	24	48	210
G-L-1412	7/8-14	3/4-14	27	50	170
G-L-1416	7/8-14	1-11.1/2	36	55	140
G-L-1706	1.1/16-12	3/8-18	30	57	210
G-L-1708	1.1/16-12	1/2-14	30	52	210
G-L-1712	1.1/16-12	3/4-14	30	52	170
G-L-1716	1.1/16-12	1-11.1/2	36	57	140
G-L-2112	1.5/16-12	3/4-14	36	54	170
G-L-2116	1.5/16-12	1-11.1/2	36	58	140
G-L-2120	1.5/16-12	1.1/4-11.1/2	46	61	80
G-L-2616	1.5/8-12	1-11.1/2	46	61	140
G-L-2620	1.5/8-12	1.1/4-11.1/2	46	62	80
G-L-2624	1.5/8-12	1.1/2-11.1/2	50	65	70
G-L-3020	1.7/8-12	1.1/4-11.1/2	50	67	80
G-L-3024	1.7/8-12	1.1/2-11.1/2	50	68	70
G-L-3032	1.7/8-12	2-11.1/2	65	73	70
G-L-4032	2-1/2-12	2-11.1/2	65	79	70

G-M

MALE JIC X METRIC STRAIGHT
JIC MALE X METRIC MALE



Part Number	JIC Male Thread (A)	Metric Male Thread (B)	L1 (mm)	L2 (mm)	O/A - mm	Hex A/F - CH1 (mm)	PN (bar)
G-M-0710	7/16-20	M10-1	8	14	23	14	350
G-M-0712	7/16-20	M12-1.5	14	11	31	17	350

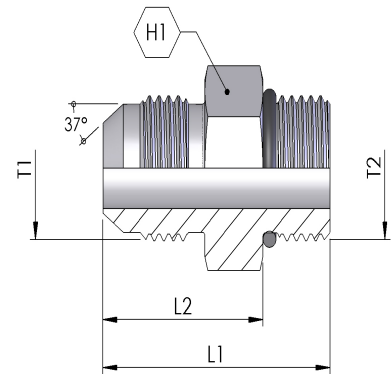
G-M-0912	9/16-18	M12-1.5	12	14	21	17	350
G-M-0914	9/16-18	M14-1.5	10	14	22	19	350
G-M-0916	9/16-18	M16-1.5	11	14	24	22	350
G-M-0918	9/16-18	M18-1.5	12	15	23	22	350
G-M-0920	9/16-18	M20-1.5	14.2	12.6	34.5	27	350
G-M-0922	9/16-18	M22-1.5	14	17	24	27	350
G-M-1212	3/4-16	M12-1.5	16.7	11	38	22	310
G-M-1214	3/4-16	M14-1.5	16.7	11	38	22	310
G-M-1216	3/4-16	M16-1.5	16.7	11.5	36	22	310
G-M-1218	3/4-16	M18-1.5	13	17	27	24	310
G-M-1220	3/4-16	M20-1.5	14.2	12.6	34.5	27	310
G-M-1222	3/4-16	M22-1.5	14	17	24	27	310
G-M-1416	7/8-14	M16-1.5	19.3	11.5	41	24	240
G-M-1418	7/8-14	M18-1.5	19.3	12.5	40	24	240
G-M-1420	7/8-14	M20-1.5	19.3	12.6	42	27	240
G-M-1422	7/8-14	M22-1.5	14	19	31	27	240
G-M-1426	1.1/16-12	M26-1.5	19.3	16	45	32	240
G-M-1718	1.1/16-12	M18-1.5	21.9	12.5	45	30	240
G-M-1720	1.1/16-12	M20-1.5	21.9	12.6	46.5	30	240
G-M-1722	1.1/16-12	M22-1.5	21.9	13	47.5	30	240
G-M-1726	1.1/16-12	M26-1.5	21.9	16	50	32	240
G-M-1727	1.1/16-12	M27-2	21.9	16	49	32	240
G-M-1733	1.1/16-12	M33-2	21.9	16	50	41	240
G-M-2126	1.5/16-12	M26-1.5	23.1	16	50	36	210
G-M-2127	1.5/16-12	M27-2	23.1	16	52.5	36	210
G-M-2133	1.5/16-12	M33-2	23.1	16	52	41	210
G-M-2633	1.5/8-12	M33-2	24.2	16	58	47	170
G-M-2642	1.5/8-12	M42-2	24.2	16	58	50	170
G-M-2648	1.5/8-12	M48-2	24.2	17.5	59.5	57	170
G-M-3048	1.7/8-12	M48-2	27.5	17.5	63	55	140

G-N

JIC MALE X UNO MALE

JIC MALE X UNO FIXED STUD STRAIGHT

- ISO 8434-2



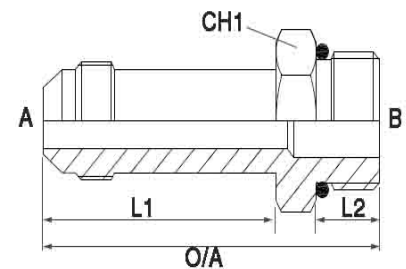
Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-N-0707	7/16-20	7/16-20	14	31	22	350
G-N-0707-1MM	7/16-20	7/16-20	31.2	14	9.1	350
G-N-0709	7/16-20	9/16-18	17	33	23	350
G-N-0712	7/16-20	3/4-16	22	35	14	350
G-N-0714	7/16-20	7/8-14	37.8	14	12.7	350
G-N-0717	7/16-20	1.1/16-12	42.2	14	15.1	350
G-N-0807	1/2-20	7/16-20	14	33	14	350
G-N-0808	1/2-20	1/2-20	16	33	14	350
G-N-0809	1/2-20	9/16-18	18	33	14	350
G-N-0812	1/2-20	3/4-16	22	33	14	350
G-N-0907	9/16-18	7/16-20	16	32	14	350
G-N-0908	9/16-18	1/2-20	16	32	14	350
G-N-0909	9/16-18	9/16-18	17	33	23	350
G-N-0909-1.15MM	9/16-18	9/16-18	17	33	23	350
G-N-0912	9/16-18	3/4-16	22	35	24	350
G-N-0912-1MM	9/16-18	3/4-16	35.1	14.2	11.1	350
G-N-0914	9/16-18	7/8-14	25	38	14	350
G-N-0914-1MM	9/16-18	7/8-14	38.1	14.2	12.7	350
G-N-0917	9/16-18	1.1/16-12	32	42	14	350
G-N-1207	3/4-14	7/16-20	37.8	16.7	9.1	310
G-N-1209	3/4-14	9/16-18	21	37	17	310
G-N-1212	3/4-16	3/4-16	22	38	27	310
G-N-1212-1.5MM	3/4-14	3/4-16	37.6	16.7	11.1	310
G-N-1214	3/4-16	7/8-14	27	41	28	310
G-N-1217	3/4-14	1.1/16-12	32	45	17	310
G-N-1221	3/4-14	1.5/16-12	38	45	17	310
G-N-1409	7/8-14	9/16-18	25	42	19	240
G-N-1412	7/8-14	3/4-16	24	42	19	240
G-N-1414	7/8-14	7/8-14	27	43	30	240
G-N-1417	7/8-14	1.1/16-12	32	47	19	240

G-N-1421	7/8-14	1.5/16-12	38	48	19	240
G-N-1712	1.1/16-12	3/4-16	29	49	22	240
G-N-1714	1.1/16-12	7/8-14	29	48	22	240
G-N-1717	1.1/16-12	1.1/16-12	32	50	35	240
G-N-1719	1.1/16-12	1.3/16-12	35	50	35	240
G-N-1721	1.1/16-12	1.5/16-12	38	51	22	240
G-N-1726	1.1/16-12	1.5/8-12	48	53	22	240
G-N-2112	1.5/16-12	3/4-16	52	23	11.1	210
G-N-2114	1.5/16-12	7/8-14	52	23	12.7	210
G-N-2117	1.5/16-12	1.1/16-12	35	52	23	210
G-N-2121	1.5/16-12	1.5/16-12	38	52	23	210
G-N-2126	1.5/16-12	1.5/8-12	48	54	23	210
G-N-2130	1.5/16-12	1.7/8-12	55.9	23	15.1	210
G-N-2617	1.5/8-12	1.1/16-12	58.4	24	15.1	170
G-N-2621	1.5/8-12	1.5/16-12	43	59	24	170
G-N-2626	1.5/8-12	1.5/8-12	48	55	24	170
G-N-2630	1.5/8-12	1.7/8-12	54	57	24	170
G-N-3026	1.7/8-12	1.5/8-12	51	64	28	140
G-N-3030	1.7/8-12	1.7/8-12	54	64	24	140

G-N X1

EXTENDED MALE JIC X UNO

JIC MALE X UNF MALE WITH O-RING

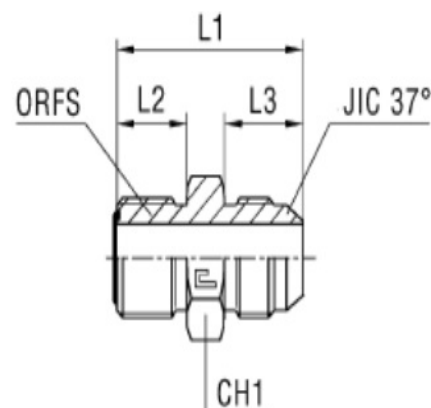


Part Number	JIC Male Thread (A)	UNO Male Thread (B)	O/A (mm)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
G-N-0707X1	7/16-20	7/16-20	52.8	36.6	9.1	14.3	350
G-N-0909X1	9/16-18	9/16-18	58.7	39.6	9.9	17.5	350
G-N-1212X1	3/4-16	3/4-16	68.6	47.8	11.1	22.2	310
G-N-1414X1	7/8-14	7/8-14	77.2	53.1	12.7	25.4	240
G-N-1717X1	1.1/16-12	1.1/16-12	91.7	63.5	15.1	31.8	240
G-N-2121X1	1.5/16-12	1.5/16-12	101.1	72.1	15.1	38.1	210

G-R

MALE JIC X ORFS STRAIGHT

JIC MALE X ORFS MALE WITH O-RING

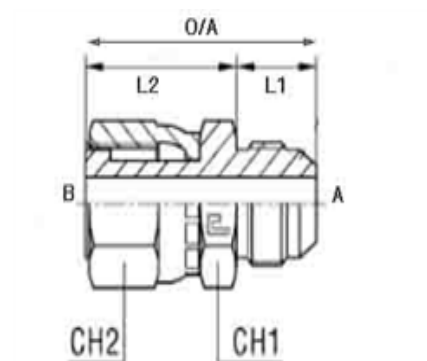


Part Number	JIC Male Thread	ORFS Male Thread	L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	PN (bar)
G-R-0709	7/16-20	9/16-18	31.8	14	10	15.9	350
G-R-0911	9/16-18	11/16-16	34.3	14.2	11.2	19.1	350
G-R-1213	3/4-16	13/16-16	39.4	17	12.8	22.2	310
G-R-1413	7/8-14	13/16-16	40.5	19.3	12.8	24	240
G-R-1416	7/8-14	1-14	46.5	19.3	15.5	27	240
G-R-1716	1.1/16-12	1-14	48	21.9	15.5	30	240
G-R-1719	1.1/16-12	1.3/16-12	52.1	21.9	17	31.8	240
G-R-2119	1.5/16-12	1.3/16-12	51	23.1	17	36	210
G-R-2123	1.5/16-12	1.7/16-12	54.9	23.1	17.5	38.1	210
G-R-2623	1.5/8-12	1.7/16-12	54.5	24.2	17.5	46	170
G-R-2627	1.5/8-12	1.11/16-12	57.2	24.2	17.5	44.5	170

G-T

JIC MALE X ORFS FEMALE

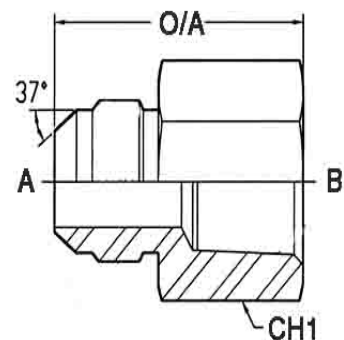
JIC MALE X ORFS FEMALE SWIVEL NUT STRAIGHT



Part Number	JIC Male Thread (A)	ORFS Female Thread (B)	O/A (mm)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
G-T-0709	7/16-20	9/16-18	32	10	14	17	17	350
G-T-0909	9/16-18	9/16-18	32	14	22	22	17	350
G-T-0911	9/16-18	11/16-16	27	14	22	22	21	350
G-T-1211	3/4-16	11/16-16	51.5	16.7	27.0	22.2	25.4	310
G-T-1213	3/4-16	13/16-16	30	17	24	24	27	310
G-T-1413	7/8-14	13/16-16	58.6	19.3	31.3	25.0	27.0	240
G-T-1416	7/8-14	1-14	65.0	19.3	38.1	27.0	28.6	240
G-T-1716	1.1/16-12	1-14	63.4	21.9	32.5	30.0	32.0	240
G-T-1719	1.1/16-12	1.3/16-12	41	22	36	36	37.1	240
G-T-2119	1.5/16-12	1.3/16-12	71.7	23.1	38.1	37.8	37.1	210
G-T-2123	1.5/16-12	1.7/16-12	77.0	23.1	44.8	38.1	41.3	210
G-T-2623	1.5/8-12	1.7/16-12	79.5	24.3	43.5	42.9	47.6	170
G-T-2627	1.5/8-12	1.11/16-12	79.5	24.3	43.5	42.9	47.6	170

G-AC

JIC MALE X NPT FEMALE FIXED
JIC MALE X NPTF FEMALE FIXED



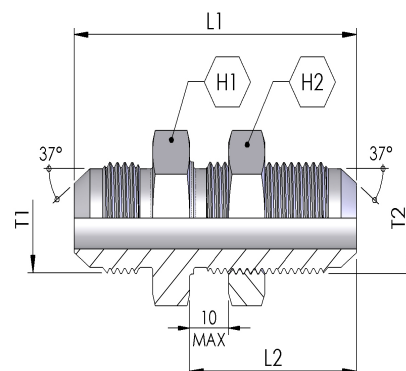
Part Number	JIC Male Thread (A)	NPTF Female Thread (B)	L1 (mm)	Overall Length (mm)	Hex A/F - CH1 (mm)	PN (bar)
G-AC-0702	7/16-20	1/8-27	14	30.2	14.3	345
G-AC-0704	7/16-20	1/4-18	14	36.1	19.1	275
G-AC-0804	1/2-20	1/4-18	14	35.6	19.1	275
G-AC-0904	9/16-18	1/4-18	14.2	35.6	19.1	275
G-AC-0906	9/16-18	3/8-18	14.2	37.1	22.2	210
G-AC-1206	3/4-16	3/8-18	16.7	39.6	22.2	210
G-AC-1208	3/4-16	1/2-14	16.7	45.7	28.6	210
G-AC-1408	7/8-14	1/2-14	19.3	48	28.6	210
G-AC-1712	1.5/16-12	3/4-14	21.9	52.3	34.9	170
G-AC-2116	1.5/16-12	1-11.1/2	23.1	59.7	41.3	140

G-GK

JIC MALE X JIC BULKHEAD

JIC MALE X JIC BULKHEAD STRAIGHT

- ISO 8434-2

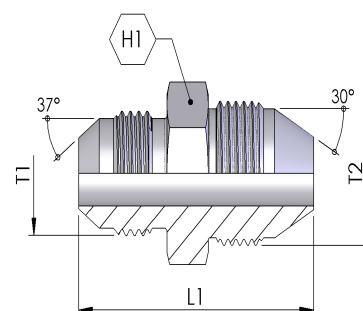


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-GK-0707	7/16-20	7/16-20	17	17	53	22	350
G-GK-0808	1/2-20	1/2-20	19	19	53	22	350
G-GK-0909	9/16-18	9/16-18	22	22	56	34	350
G-GK-1212	3/4-16	3/4-16	24	24	62	38	310
G-GK-1414	7/8-14	7/8-14	30	30	70	41	240
G-GK-1717	1.1/16-12	1.1/16-12	36	36	79	45	240
G-GK-2121	1.5/16-12	1.5/16-12	41	41	80	45	210
G-GK-2626	1.5/8-12	1.5/8-12	50	50	84	47	170
G-GK-3030	1.7/8-12	1.7/8-12	89.4	54	89	47	140

G-MY

JIC MALE X JIS MALE

JIC MALE X JIS METRIC 30° FLARE MALE
(KOMATSU STYLE)

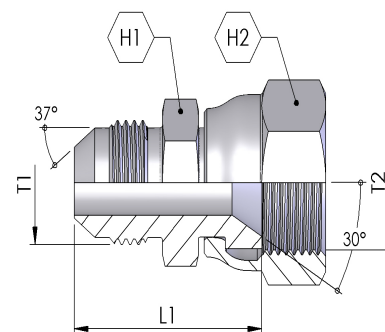


Part Number	T1	T2	L1 (mm)	H1 (mm)	PN (bar)
G-MY-0714	7/16-20	M14-1.5	37	17	350
G-MY-0918	9/16-18	M18-1.5	38	19	350
G-MY-1222	3/4-16	M22-1.5	44.5	24	310
G-MY-1424	7/8-14	M24-1.5	38.5	27	240
G-MY-1730	1.1/16-12	M30-1.5	59	32	240
G-MY-2133	1.5/16-12	M33-1.5	64	36	210

G-UY

JIC MALE X JIS FEMALE

JIC MALE X JIS METRIC 30° FLARE FEMALE
(KOMATSU STYLE)

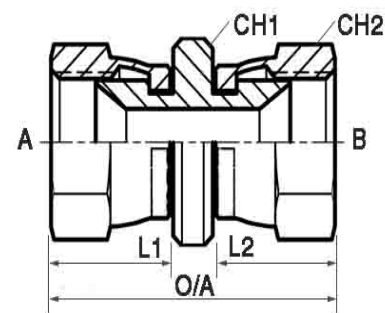


Part Number	T1	T2	L1 (mm)	H1 (mm)	H2 (mm)	PN (bar)
G-UY-0714	7/16-20	M14-1.5	39	14	19	350
G-UY-0918	9/16-18	M18-1.5	42	17	24	350
G-UY-1222	3/4-16	M22-1.5	49.5	22	27	310
G-UY-1424	7/8-14	M24-1.5	53.6	24	32	240
G-UY-1730	1.1/16-12	M30-1.5	62.8	30	36	240
G-UY-2133	1.5/16-12	M33-1.5	67.8	36	41	210

J-J

JIC FEMALE X JIC FEMALE

JIC FEMALE SWIVEL NUT 37° CONE X JIC FEMALE
SWIVEL NUT 37° CONE



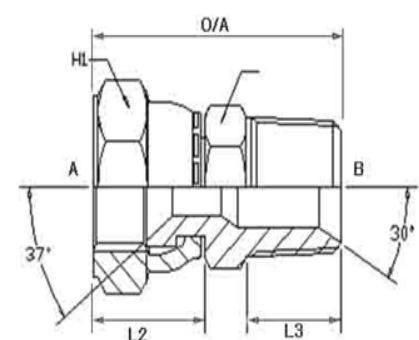
Part Number	JIC Female Thread (A)	JIC Female Thread (B)	Overall Length (mm)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
J-J-0707	7/16-20	7/16-20	40.6	17.5	17.5	12.7	14.3	350
J-J-0909	9/16-18	9/16-18	46.7	20	20	14.3	15.9	350
J-J-1212	3/4-16	3/4-16	52.6	22.7	22.7	20.6	22.2	310
J-J-1717	1.1/16-12	1.1/16-12	66.3	27.8	27.8	28.6	31.8	240
J-J-2121	1.5/16-12	1.5/16-12	69.6	30.6	30.6	38.1	38.1	210

J-L

JIC FEMALE X NPTF MALE

JIC 37° FLARE FEMALE SWIVEL NUT X NPTF MALE

STRAIGHT

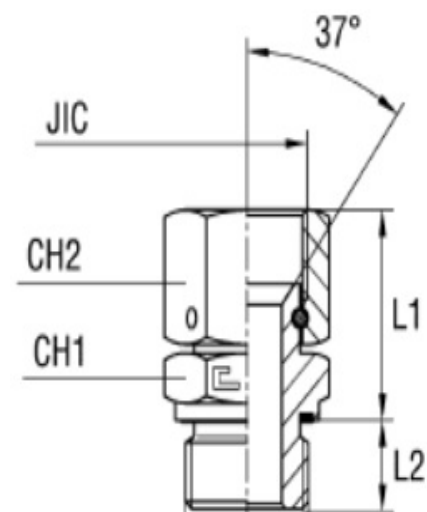


Part Number	A	B	O/A (mm)	L1 (mm)	L2 (mm)	H1 (mm)	H2 (mm)	PN (bar)
J-L-0702	7/16-20	1/8-27	34.3	8	14	11.1	14.3	345
J-L-0704	7/16-20	1/4-18	30	8	14	14	14	275
J-L-0804	1/2-20	1/4-18	39.9	8	14	14.3	15.9	275
J-L-0904	9/16-18	1/4-18	34	10	14	14	18	275
J-L-0906	9/16-18	3/8-18	34	10	14	19	18	210
J-L-1206	3/4-16	3/8-18	33	13	14	21	22	210
J-L-1208	3/4-16	1/2-14	50	13	19	22.2	22.2	210
J-L-1408	7/8-14	1/2-14	45	13	19	24	25	210
J-L-1708	1.1/16-12	1/2-14	43	13	19	29	32	210
J-L-1712	1.1/16-12	3/4-14	54.1	13	19	28.6	31.8	170
J-L-2112	1.5/16-12	3/4-14	44	15	19	32	40	170
J-L-2116	1.5/16-12	1-11.5	50	15	24	35	38	140

J-N

FEMALE JIC X MALE UNO

JIC FEMALE WITH 37° CONE X UNO MALE

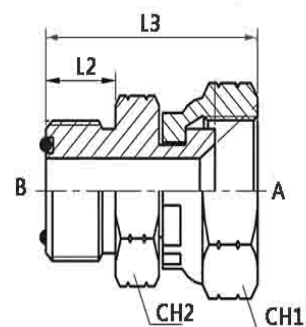


Part Number	JIC Female Thread	UNO Male Thread	Overall Length (mm)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
J-N-0707	7/16-20	7/16-20	33.5	17.5	9.1	14.3	14.3	350
J-N-0909	9/16-18	9/16-18	38.1	20	9.9	14.5	17.5	350
J-N-0912	9/16-18	9/16-18	39.9	20	11.1	22.2	17.5	350
J-N-1209	3/4-16	9/16-18	43.4	22.7	9.9	22.2	22.2	310
J-N-1212	3/4-16	3/4-16	42.2	22.7	11.1	22.2	22.2	310
J-N-1214	3/4-16	7/8-14	44.7	22.7	12.7	25.4	22.2	310
J-N-1414	7/8-14	7/8-14	50.5	24.3	12.7	25.4	25.4	240
J-N-1717	1.1/16-12	1.1/16-12	52.6	27.8	15.1	31.8	31.8	240
J-N-2121	1.5/16-12	1.5/16-12	56.4	30.6	15.1	38.1	38.1	210
J-N-2626	1.5/8-12	1.5/8-12	66.5	32	15.1	47.6	50.8	170

J-R

FEMALE JIC X MALE ORFS

JIC FEMALE WITH 37° CONE X ORFS MALE



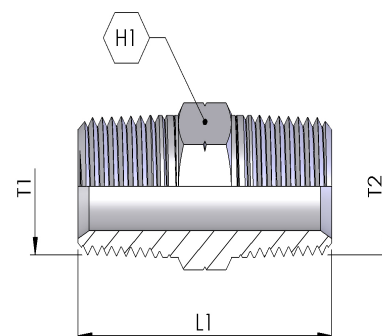
Part Number	JIC Female Thread (A)	ORFS Male Thread (B)	Overall Length (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
J-R-0709	7/16-20	9/16-18	26.4	17.5	10	15.9	14.3	350
J-R-0911	9/16-18	11/16-16	40.1	20	11.2	17.5	17.5	350
J-R-1213	3/4-16	13/16-16	29.5	22.7	12.8	22.2	22.2	310
J-R-1416	7/8-14	1-14	26.9	24.3	15.5	27	25.4	240
J-R-1719	1.1/16-12	1.3/16-12	43.9	27.8	17	31.8	31.8	240
J-R-2123	1.5/16-12	1.7/16-12	42.812	30.6	17.5	38.1	41	210

L-L

NPTF MALE X NPTF MALE

NPTF MALE X NPTF MALE STRAIGHT

- SAE J514

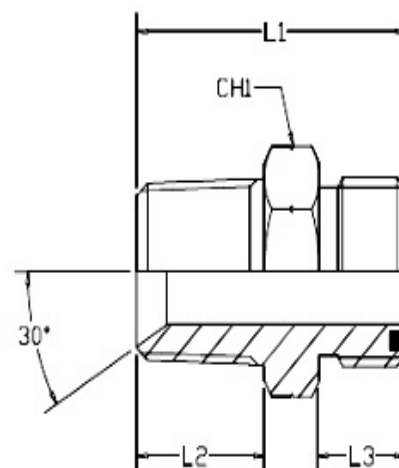


Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
L-L-0202	1/8-27	1/8-27	12	27	345
L-L-0204	1/8-27	1/4-18	14	32	275
L-L-0404	1/4-18	1/4-18	14	37	275
L-L-0406	1/4-18	3/8-18	19	37	210
L-L-0408	1/4-18	1/2-14	22	43	210
L-L-0606	3/8-18	3/8-18	19	37	210
L-L-0608	3/8-18	1/2-14	22	43	210
L-L-0612	3/8-18	3/4-14	45	16	170
L-L-0808	1/2-14	1/2-14	22	48	210
L-L-0812	1/2-14	3/4-14	27	50	170
L-L-1212	3/4-14	3/4-14	27	50	170
L-L-1216	3/4-14	1-11.1/2	36	54	140
L-L-1616	1-11.1/2	1-11.1/2	36	59	140
L-L-1620	1-11.1/2	1.1/4-11.1/2	46	62	80
L-L-2020	1.1/4-11.1/2	1.1/4-11.1/2	46	63	80
L-L-2024	1.1/4-11.1/2	1.1/2-11.1/2	50	66	70
L-L-2424	1.1/2-11.1/2	1.1/2-11.1/2	66.3	27.5	70
L-L-3232	2-11.1/2	2-11.1/2	65	72	70

L-R

NPTF MALE X ORFS MALE

NPTF MALE X ORFS MALE



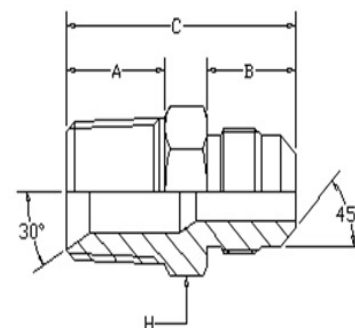
Part Number	NPTF Male Thread	ORFS Male Thread	L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	PN (bar)
L-R-0209	1/8-27	9/16-18	27.2	10.5	10	15.9	345
L-R-0409	1/4-18	9/16-18	30	15	10	15.9	275
L-R-0411	1/4-18	11/16-16	34	15	11.2	19.1	275
L-R-0609	3/8-18	9/16-18	34	16	11.2	19.1	210
L-R-0611	3/8-18	11/16-16	34	16	11.2	19.1	210
L-R-0813	1/2-14	13/16-16	41.7	19.5	12.8	22.2	210
L-R-0816	1/2-14	1-14	46.3	19.5	15.5	27	210
L-R-1219	3/4-14	1.3/16-12	49	19.5	17	31.8	170
L-R-1623	1-11.1/2	1.7/16-12	55.6	25.5	17.5	38.1	140

L-AA

NPTF MALE X SAE MALE

NPTF MALE X SAE 45° FLARE MALE STRAIGHT

- SAE J513



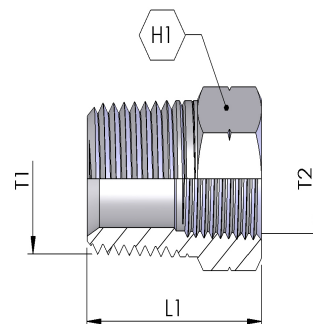
Part Number	NPTF Male Thread	SAE Male Thread	A (mm)	B (mm)	C (mm)	H (mm)
L-AA-0410	1/4-18	5/8-16	36.7	15	15.7	17
L-AA-0610	3/8-18	5/8-16	37.5	16	15.7	19
L-AA-1217	3/4-14	1.1/16-14	57	19	25	29

L-AC

NPTF MALE X NPTF FEMALE

NPTF MALE X NPTF FIXED FEMALE STRAIGHT

- SAE J514

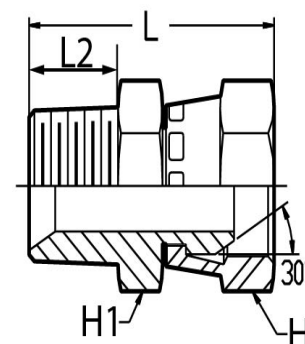


Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
L-AC-0202	1/8-27	1/8-27	16	16	345
L-AC-0204	1/8-27	1/4-18	31.5	10.5	275
L-AC-0402	1/4-18	1/8-27	14	22	275
L-AC-0404	1/4-18	1/4-18	36.6	15	275
L-AC-0406	1/4-18	3/8-18	36.6	15	210
L-AC-0602	3/8-18	1/8-27	19	22	210
L-AC-0604	3/8-18	1/4-18	19	22	210
L-AC-0606	3/8-18	3/8-18	22	36	210
L-AC-0608	3/8-18	1/2-14	42.7	16	210
L-AC-0802	1/2-14	1/8-27	22	30	210
L-AC-0804	1/2-14	1/4-18	22	30	210
L-AC-0806	1/2-14	3/8-18	22	30	210
L-AC-0808	1/2-14	1/2-14	29	47	210
L-AC-0812	1/2-14	3/4-14	49	19.5	170
L-AC-1204	3/4-14	1/4-18	27	30	170
L-AC-1206	3/4-14	3/8-18	27	30	170
L-AC-1208	3/4-14	1/2-14	27	30	170
L-AC-1212	3/4-14	3/4-14	55.4	19.5	170
L-AC-1606	1-11.1/2	3/8-18	36	35	140
L-AC-1608	1-11.1/2	1/2-14	36	35	140
L-AC-1612	1-11.1/2	3/4-14	36	35	140
L-AC-1616	1-11.1/2	1-11.1/2	62.5	25.5	140
L-AC-2012	1.1/4-11.1/2	3/4-14	46	37	80
L-AC-2016	1.1/4-11.1/2	1-11.1/2	46	37	80
L-AC-2412	1.1/2-11.1/2	3/4-14	39.9	27.5	70
L-AC-2416	1.1/2-11.1/2	1-11.1/2	50	40	70
L-AC-2420	1.1/2-11.1/2	1.1/4-11.1/2	50	40	70
L-AC-3216	2-11.1/2	1-11.1/2	44.5	27.5	70
L-AC-3220	2-11.1/2	1.1/4-11.1/2	44.5	27.5	70
L-AC-3224	2-11.1/2	1.1/2-11.1/2	65	45	70

L-AD

NPT MALE X NPSM FEMALE

NPT MALE X NPSM FEMALE SWIVEL NUT

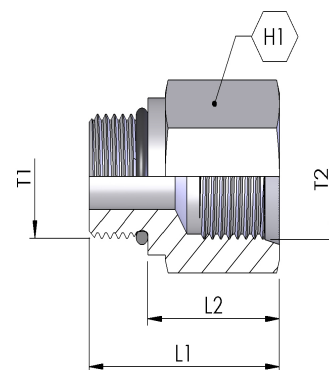


Part Number	NPTF Male Thread	NPTF Female Thread	O/A (mm)	Hex A/F - H (mm)	Hex A/F - H (mm)	PN (bar)
L-AD-0202	1/8-27	1/8-27	26.4	14.3	14.3	345
L-AD-0404	1/4-18	1/4-18	36	17.5	17.5	275
L-AD-0606	3/8-18	3/8-18	40.9	22.3	22.3	210
L-AD-0808	1/2-14	1/2-14	48	25.4	25.4	210
L-AD-1212	3/4-14	3/4-14	52.8	31.8	31.8	155
L-AD-1616	1-11.1/2	1-11.1/2	59.7	38.1	38.1	138

N-Q

UNO REDUCING BUSH

UNO MALE X UNO FIXED FEMALE BUSH



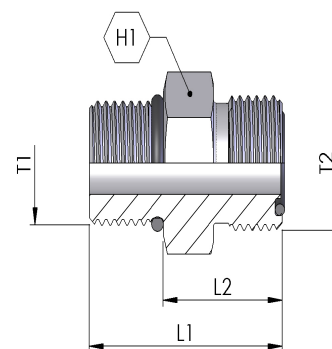
Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	PN (bar)
N-Q-0707	7/16-20	7/16-20	27.4	18.3	17.5	315
N-Q-0709	7/16-20	9/16-18	30	20.9	19.1	315
N-Q-0907	9/16-18	7/16-20	26.7	16.8	17.5	315
N-Q-0909	9/16-18	9/16-18	29.5	19.6	20.6	315
N-Q-0912	9/16-18	3/4-16	32.5	22.6	25.4	315
N-Q-1209	3/4-16	9/16-18	30.2	19.1	22.2	315
N-Q-1212	3/4-16	3/4-16	35.6	24.5	25.4	315
N-Q-1214	3/4-16	7/8-14	38.1	27	28.6	250
N-Q-1217	3/4-16	1.1/16-12	43.2	32.1	34.9	250
N-Q-1412	7/8-14	3/4-16	34.5	21.8	25.4	250
N-Q-1417	7/8-14	1.1/16-12	43.4	30.7	34.9	250
N-Q-1712	1.1/16-12	3/4-16	27.7	12.6	31.8	250
N-Q-1714	1.1/16-12	7/8-14	39.6	24.5	31.8	250
N-Q-1721	1.1/16-12	1.5/16-12	46.5	31.4	41.3	200
N-Q-2117	1.5/16-12	1.1/16-12	43.7	28.6	38.1	200
N-Q-2126	1.5/16-12	1.5/8-12	54.1	39	54	160
N-Q-2621	1.5/8-12	1.5/16-12	25.4	10.3	47.6	160

N-R

UNO MALE X ORFS MALE

UNO FIXED STUD X ORFS MALE STRAIGHT

- SAE J1453



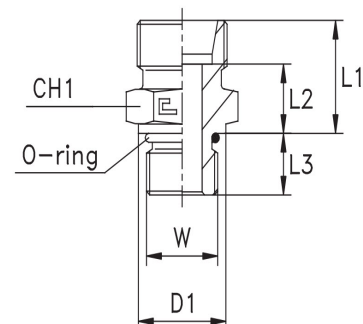
Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
N-R-0709	7/16-20	9/16-18	17	29	18	315
N-R-0711	7/16-20	11/16-16	19	34	9	315
N-R-0909	9/16-18	9/16-18	19	31	19	315
N-R-0911	9/16-18	11/16-16	19	32	20	315
N-R-0913	9/16-18	13/16-16	22	38	26	315
N-R-1209	3/4-16	9/16-18	22	29	11	315
N-R-1211	3/4-16	11/16-16	24	35	21	315
N-R-1213	3/4-16	13/16-16	24	37	23	315
N-R-1216	3/4-16	1-14	27	45	31	315
N-R-1413	7/8-14	13/16-16	27	41	25	250
N-R-1416	7/8-14	1-14	27	43	27	250
N-R-1419	7/8-14	1.3/16-12	32	43	30	250
N-R-1716	1.1/16-12	1-14	32	47	29	250
N-R-1719	1.1/16-12	1.3/16-12	32	49	30	250
N-R-1723	1.1/16-12	1.7/16-12	38	49	32	250
N-R-2119	1.5/16-12	1.3/16-12	38	50	32	200
N-R-2123	1.5/16-12	1.7/16-12	41	50	32	200
N-R-2623	1.5/8-12	1.7/16-12	48	53	32	160
N-R-2627	1.5/8-12	1.11/16-12	50	53	34	160

N-ML

UNO MALE X METRIC LIGHT MALE

UNO FIXED STUD X METRIC 24° CONE LIGHT MALE

STRAIGHT



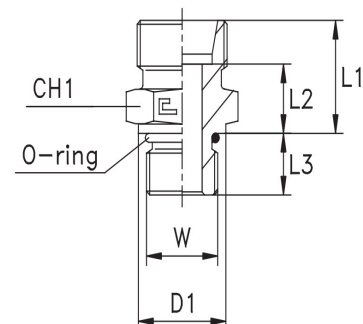
Part Number	UNO Male Thread - W	Metric Male Thread	Suits Tube Diameter (mm)	D1 (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (bar)
N-ML-0716	7/16-20	M16-1.5	10	13.8	17.9	10.9	9.1	17	315
N-ML-0914	9/16-18	M14-1.5	8						315
N-ML-0916	9/16-18	M16-1.5	10						315
N-ML-0918	9/16-18	M18-1.5	12	18.8	18	11	10	19	315
N-ML-1218	3/4-16	M18-1.5	12	21.8	19.9	12.9	11.1	22	315
N-ML-1222	3/4-16	M22-1.5	15	21.8	20.9	13.9	11.1	24	315
N-ML-1226	3/4-16	M26-1.5	18	21.8	21.9	14.4	11.1	27	315
N-ML-1418	7/8-14	M18-1.5	12	26.8	21.3	14.3	12.7	27	315
N-ML-1422	7/8-14	M22-1.5	15						315
N-ML-1726	1.1/16-12	M26-1.5	18						315
N-ML-2136	1.5/16-12	M36-2	28	40.8	24.9	17.4	15.1	41	160

N-MS

UNO MALE X METRIC HEAVY MALE

UNO FIXED STUD X METRIC 24° CONE HEAVY

MALE STRAIGHT

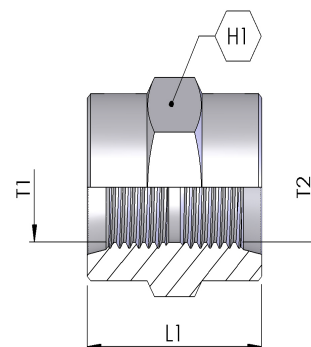


Part Number	UNO Male Thread - W	Metric Male Thread	Suits Tube Diameter (mm)	D1 (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (bar)
N-MS-0714	7/16-20	M14-1.5	6						630
N-MS-0716	7/16-20	M16-1.5	8	13.8	21.9	14.9	9.1	17	630
N-MS-0914	9/16-18	M14-1.5	6						630
N-MS-0916	9/16-18	M16-1.5	8						630
N-MS-0918	9/16-18	M18-1.5	10	18.8	22	14.5	10	19	630
N-MS-1220	3/4-16	M20-1.5	12	21.8	24.9	17.4	11.1	22	630
N-MS-1222	3/4-16	M22-1.5	14	21.8	23.9	15.9	11.1	24	630
N-MS-1224	3/4-16	M24-1.5	16	21.8	23.9	15.4	11.1	27	400
N-MS-1424	7/8-14	M24-1.5	16	26.8	27.3	18.8	12.7	27	400
N-MS-1430	7/8-14	M30-2	20	26.8	31.3	20.8	12.7	32	400
N-MS-1730	1.1/16-12	M30-2	20	31.8	30.9	20.4	15.1	32	400
N-MS-2136	1.5/16-12	M36-2	25	40.8	34.9	22.9	15.1	41	400
N-MS-2642	1.5/8-12	M42-2	30	49.8	36.9	23.4	15.1	50	400

Q-Q

UNO SOCKET

UNO FEMALE X UNO FEMALE FIXED SOCKET



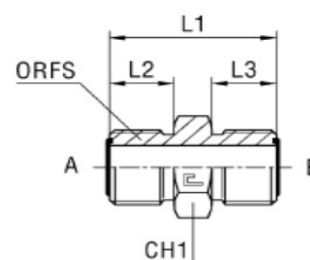
Part Number	UNF Female Thread (T1)	UNF Female Thread (T2)	Overall Length mm - L1 (mm)	Hex A/F - CH1 (mm)	PN (bar)
Q-Q-0909	9/16-18	9/16-18	25.4	22.2	315

R-R

ORFS MALE X ORFS MALE

ORFS MALE X ORFS MALE STRAIGHT

- ISO 8434-3



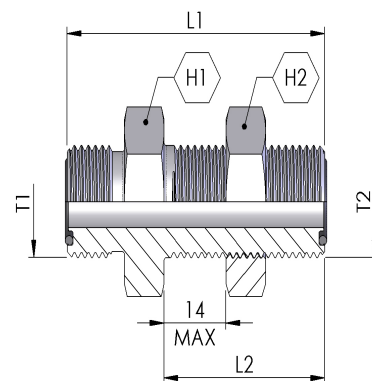
Part Number	ORFS Male Thread (A)	ORFS Male Thread (B)	Overall Length mm - L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	PN (bar)
R-R-0909	9/16-18	9/16-18	28	10	10	17	630
R-R-0911	9/16-18	11/16-16	29.7	10	11.2	19.1	630
R-R-1111	11/16-16	11/16-16	31	11	11	19	630
R-R-1113	11/16-16	13/16-16	33.8	11.2	12.8	22.2	630
R-R-1313	13/16-16	13/16-16	36	13	13	22	630
R-R-1316	13/16-16	1-14	39.9	12.8	15.5	27	400
R-R-1616	1-14	1-14	43	16	16	27	400
R-R-1619	1-14	1.3/16-12	46	17	16	32	400
R-R-1919	1.3/16-12	1.3/16-12	47	17	17	32	400
R-R-1923	1.3/16-12	1.7/16-12	48.8	17	17.5	38.1	400
R-R-2323	1.7/16-12	1.7/16-12	50	18	18	41	400
R-R-2727	1.11/16-12	1.11/16-12	52	18	18	46	250
R-R-3232	2-12	2-12	53.1	17.5	17.5	54	250

R-RK

ORFS MALE X ORFS BULKHEAD

ORFS MALE X ORFS BULKHEAD STRAIGHT

- ISO 8434-3



Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	H2 (mm)	PN (bar)
R-RK-0909	9/16-18	9/16-18	32	10	22	22	630
R-RK-1111	11/16-16	11/16-16	34	11	27	27	630
R-RK-1313	13/16-16	13/16-16	37	13	30	30	630
R-RK-1616	1-14	1-14	41	16	36	36	400
R-RK-1919	1.3/16-12	1.3/16-12	42	17	41	41	400
R-RK-2323	1.7/16-12	1.7/16-12	42	18	46	46	400
R-RK-2727	1.11/16-12	1.11/16-12	42	18	50	50	250
R-RK-3232	2-12	2-12	42	18	60	60	250

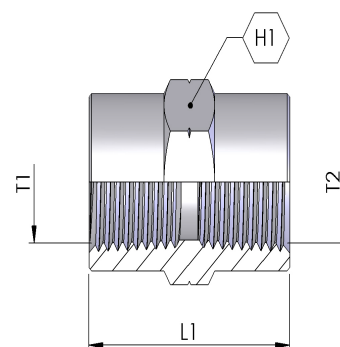
AC-AC

NPTF FEMALE X NPTF FEMALE

NPTF FIXED FEMALE X NPTF FIXED FEMALE

STRAIGHT

- SAE J514

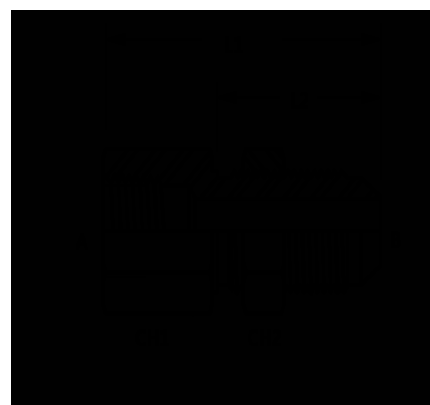


Part Number	T1	T2	H1 (mm)	L1 (mm)	PN (bar)
AC-AC-0202	1/8-27	1/8-27	14	19	345
AC-AC-0404	1/4-18	1/4-18	19	29	275
AC-AC-0606	3/8-18	3/8-18	22	29	210
AC-AC-0808	1/2-14	1/2-14	27	38	210
AC-AC-1212	3/4-14	3/4-14	36	39	170
AC-AC-1616	1-11.1/2	1-11.1/2	41	48	140
AC-AC-2020	1.1/4-11.1/2	1.1/4-11.1/2	50	49	80
AC-AC-2424	1.1/2-11.1/2	1.1/2-11.1/2	60	49	70
AC-AC-3232	2-11	2-11	73	50	70

AC-GK

NPT FEMALE X JIC BULKHEAD

NPT FEMALE SOCKET X MALE JIC BULKHEAD WITH
37° CONE



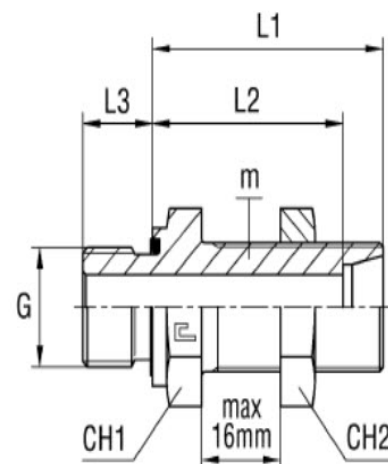
Part Number	NPTF Female Thread (A)	UNF Male Thread (B)	Overall Length mm - L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
AC-GK-0207	1/8-27	7/16-20	46.7	30.5	17.5	17.5	345
AC-GK-0407	1/4-18	7/16-20	53.1	30.5	19.1	17.5	275
AC-GK-0409	1/4-18	9/16-18	53.8	32.5	20.6	20.6	275

BX-MLK

BSP MALE X MET LIGHT BULKHEAD

BSP STUD CAPTIVE SEAL X METRIC 24° CONE

LIGHT BULKHEAD STRAIGHT



Part Number	BSPP Male Thread - G	Metric Male Thread	Suits Tube OD (mm)	L1 (mm)	L2 (mm)	L3 (mm)	CH1 (mm)	CH2 (mm)	PN (bar)
BX-MLK-0618	3/8	M18 - 1.5	12	44.5	37.5	12	24	24	315
BX-MLK-0818	1/2	M18 - 1.5	12	43	36	14	27	23.8	315
BX-MLK-0822	1/2	M22 - 1.5	15	48	41	14	27	30	315
BX-MLK-0826	1/2	M26 - 1.5	18	52	44.5	14	32	36	315
BX-MLK-1230	3/4	M30-2	22	55	47.5	16	36	41	160

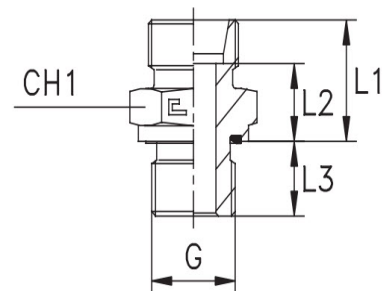
BX-ML

BSP STUD X MET LIGHT MALE

BSP STUD CAPTIVE SEAL X METRIC 24° CONE

LIGHT MALE STRAIGHT

- ISO 8434-1



Part Number	BSPP Male Thread - G	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (bar)
BX-ML-0212	1/8-28	M12-1.5	6	15.5	8.5	8	14	500
BX-ML-0214	1/8-28	M14-1.5	8	16.5	9.5	8	14	500
BX-ML-0216	1/8-28	M16-1.5	10	17.5	10.5	8	17	500
BX-ML-0412	1/4-19	M12-1.5	6	18	11	12	19	500
BX-ML-0414	1/4-19	M14-1.5	8	17	10	12	19	500
BX-ML-0416	1/4-19	M16-1.5	10	18	11	12	19	500
BX-ML-0418	1/4-19	M18-1.5	12	19	12	12	19	400
BX-ML-0612	3/8-19	M12-1.5	6	18.5	11.5	12	22	400
BX-ML-0614	3/8-19	M14-1.5	8	18.5	11.5	12	22	400
BX-ML-0616	3/8-19	M16-1.5	10	22.5	15	12	22	400
BX-ML-0618	3/8-19	M18-1.5	12	24.5	17	12	22	400
BX-ML-0622	3/8-19	M22-1.5	15	20.5	13.5	12	24	400
BX-ML-0814	1/2-14	M14-1.5	8	19	12	14	27	400
BX-ML-0816	1/2-14	M16-1.5	10	20	13	14	27	400
BX-ML-0818	1/2-14	M18-1.5	12	20	13	14	27	400
BX-ML-0822	1/2-14	M22-1.5	15	21	14	14	27	400
BX-ML-0826	1/2-14	M26-1.5	18	22	14.5	14	27	400
BX-ML-0830	1/2-14	M30-2	22	24	16.5	14	32	250
BX-ML-1222	3/4-14	M22-1.5	15	22	15	16	32	250
BX-ML-1226	3/4-14	M26-1.5	18	22	14.5	16	32	250
BX-ML-1230	3/4-14	M30-2	22	24	16.5	16	32	250
BX-ML-1236	3/4-14	M36-2	28	25	17.5	16	41	250
BX-ML-1630	1-11	M30-2	22	25	17.5	18	41	250
BX-ML-1636	1-11	M36-2	28	25	17.5	18	41	250
BX-ML-1645	1-11	M45-2	35	28	17.5	18	46	250
BX-ML-2045	1.1/4-11	M45-2	35	28	17.5	20	50	250
BX-ML-2052	1.1/4-11	M52-2	42	30	19	20	55	250
BX-ML-2452	1.1/2-11	M52-2	42	30	19	22	55	250

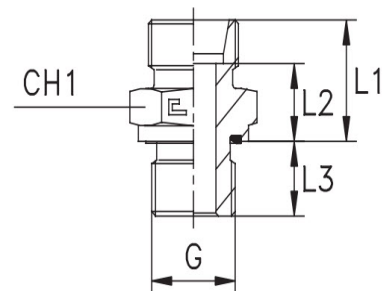
BX-MS

BSP STUD X MET HEAVY MALE

BSP STUD CAPTIVE SEAL X METRIC 24° CONE

HEAVY MALE STRAIGHT

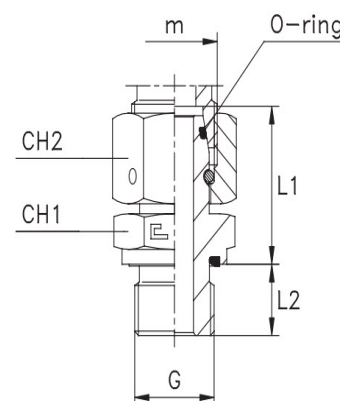
- ISO 8434-1



Part Number	BSPP Male Thread - G	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (Bar)
BX-MS-0414	1/4-19	M14-1.5	6	20	13	12	19	800
BX-MS-0416	1/4-19	M16-1.5	8	17	10	12	19	800
BX-MS-0418	1/4-19	M18-1.5	10	18	11	12	19	800
BX-MS-0420	1/4-19	M20-1.5	12	19	12	12	22	800
BX-MS-0616	3/8-19	M16-1.5	8	22.5	15.5	12	22	800
BX-MS-0618	3/8-19	M18-1.5	10	22.5	15	12	22	800
BX-MS-0620	3/8-19	M20-1.5	12	24.5	17	12	22	800
BX-MS-0622	3/8-19	M22-1.5	14	26.5	18.5	12	24	630
BX-MS-0624	3/8-19	M24-1.5	16	26.5	18	12	27	630
BX-MS-0818	1/2-14	M18-1.5	10	20	13	14	27	630
BX-MS-0820	1/2-14	M20-1.5	12	20	13	14	27	630
BX-MS-0822	1/2-14	M22-1.5	14	27	19	14	27	630
BX-MS-0824	1/2-14	M24-1.5	16	27	18.5	14	27	630
BX-MS-0830	1/2-14	M30-2	20	31	20.5	14	32	420
BX-MS-1224	3/4-14	M24-1.5	16	29	20.5	16	32	420
BX-MS-1230	3/4-14	M30-2	20	31	20.5	16	32	420
BX-MS-1236	3/4-14	M36-2	25	35	23	16	41	420
BX-MS-1630	1-11	M30-2	20	33	22.5	18	41	420
BX-MS-1636	1-11	M36-2	25	35	23	18	41	420
BX-MS-1642	1-11	M42-2	30	37	23.5	18	46	420
BX-MS-2042	1.1/4-11	M42-2	30	37	23.5	20	50	420
BX-MS-2052	1.1/4-11	M52-2	38	42	26	20	55	420
BX-MS-2452	1.1/2-11	M52-2	38	42	26	22	55	420

BX-UL

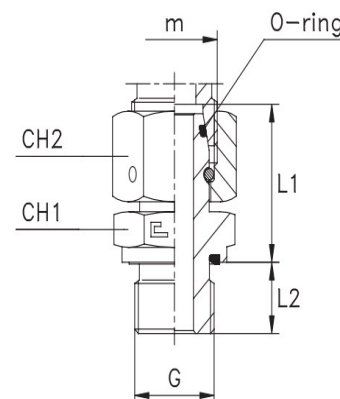
BSP STUD X MET LIGHT FEMALE
BSP STUD CAPTIVE SEAL X METRIC 24° CONE
LIGHT FEMALE SWIVEL NUT STRAIGHT



Part Number	BSPP Male Thread - G	Metric Female Thread - m	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm)	CH1 (mm)	CH2 (mm)	PN (Bar)
BX-UL-0212	1/8-28	M12-1.5	6	25	8	14	14	500
BX-UL-0412	1/4-19	M12-1.5	6	27	12	19	14	500
BX-UL-0414	1/4-19	M14-1.5	8	30	12	19	17	500
BX-UL-0416	1/4-19	M16-1.5	10	28	12	19	19	500
BX-UL-0418	1/4-19	M18-1.5	12	27.5	12	19	22	400
BX-UL-0616	3/8-19	M16-1.5	10	29	12	22	19	400
BX-UL-0618	3/8-19	M18-1.5	12	34	12	22	22	400
BX-UL-0622	3/8-19	M22-1.5	15	31.5	12	22	27	400
BX-UL-0818	1/2-14	M18-1.5	12	30	14	27	22	400
BX-UL-0822	1/2-14	M22-1.5	15	32	14	27	27	400
BX-UL-0826	1/2-14	M26-1.5	18	32	14	27	32	400
BX-UL-1222	3/4-14	M22-1.5	15	30.5	16	32	27	250
BX-UL-1226	3/4-14	M26-1.5	18	31.5	16	32	32	250
BX-UL-1230	3/4-14	M30-2	22	33	16	32	36	250
BX-UL-1236	3/4-14	M36-2	28	33.5	16	32	41	250
BX-UL-1630	1-11	M30-2	22	34	18	41	36	250
BX-UL-1636	1-11	M36-2	28	35	18	41	41	250
BX-UL-2445	1.1/2-11	M45-2	35	46.5	22	55	50	250
BX-UL-2452	1.1/2-11	M52-2	42	46.5	22	55	60	250

BX-US

BSP STUD X MET HEAVY FEMALE
BSP STUD CAPTIVE SEAL X METRIC 24° CONE
HEAVY FEMALE SWIVEL NUT STRAIGHT

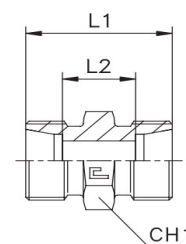


Part Number	BSPP Male Thread - G	Metric Female Thread - m	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm)	CH1 (mm)	CH2 (mm)	PN (Bar)
BX-US-0414	1/4-19	M14-1.5	6	27	12	19	17	800
BX-US-0416	1/4-19	M16-1.5	8	30	12	19	19	800
BX-US-0418	1/4-19	M18-1.5	10	30.5	12	19	22	800
BX-US-0420	1/4-19	M20-1.5	12	30.5	12	19	24	630
BX-US-0618	3/8-19	M18-1.5	10	32	12	22	22	630
BX-US-0620	3/8-19	M20-1.5	12	34	12	22	24	630
BX-US-0622	3/8-19	M22-1.5	14	37	12	22	27	630
BX-US-0624	3/8-19	M24-1.5	16	39.5	12	22	30	630
BX-US-0818	1/2-14	M18-1.5	10	32	14	27	22	630
BX-US-0820	1/2-14	M20-1.5	12					630
BX-US-0822	1/2-14	M22-1.5	14	37	14	27	27	630
BX-US-0824	1/2-14	M24-1.5	16	37	14	27	30	630
BX-US-1230	3/4-14	M30-2	20	43	16	32	36	250
BX-US-1236	3/4-14	M36-2	25	45.5	16	32	46	420
BX-US-1636	1-11	M36-2	25	48	18	41	46	420
BX-US-1642	1-11	M42-1.5	30	50.5	18	41	50	420
BX-US-2042	1.1/4-11	M42-1.5	30	51	20	50	50	420
BX-US-2052	1.1/4-11	M52-2	38	53	20	50	60	420
BX-US-2452	1.1/2-11	M52-2	38	60	22	55	60	420

ML-ML

MET LIGHT MALE X MET LIGHT MALE
METRIC 24° CONE LIGHT MALE X METRIC 24°
CONE LIGHT MALE STRAIGHT

- ISO 8434-1

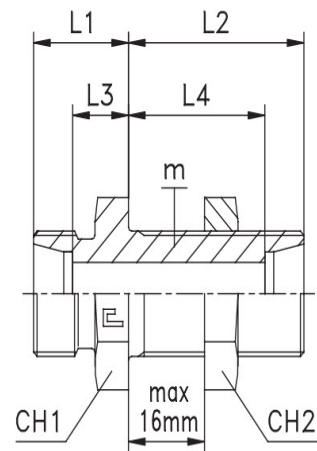


Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	CH1 (mm)	PN (bar)
ML-ML-1212	M12-1.5	6	24	10	12	500
ML-ML-1414	M14-1.5	8	25	11	14	500
ML-ML-1616	M16-1.5	10	27	13	17	500
ML-ML-1818	M18-1.5	12	28	14	19	400
ML-ML-2222	M22-1.5	15	30	16	24	400
ML-ML-2626	M26-1.5	18	31	16	27	400
ML-ML-3030	M30-2	22	35	20	32	250
ML-ML-3636	M36-2	28	36	21	41	250
ML-ML-4545	M45-2	35	41	20	46	250
ML-ML-5252	M52-2	42	43	21	55	250

ML-MLK

MET LIGHT MALE X MET LIGHT B/HEAD
METRIC 24° CONE LIGHT MALE X METRIC 24°
CONE LIGHT BULKHEAD STRAIGHT

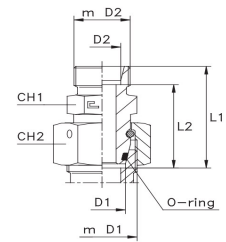
- ISO 8434-1



Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	L4 (mm) - mm	CH1 (mm)	CH2 (mm)	PN (Bar)
ML-MLK-1212	M12-1.5	6	14	34	7	27	17	17	500
ML-MLK-1414	M14-1.5	8	15	34	8	27	19	19	500
ML-MLK-1616	M16-1.5	10	17	35	10	28	22	22	500
ML-MLK-1818	M18-1.5	12	17	36	10	29	24	24	500
ML-MLK-2222	M22-1.5	15	19	38	12	31	27	30	400
ML-MLK-2626	M26-1.5	18	21	40	14	33	32	36	400
ML-MLK-3030	M30-2	22	24	42	17	35	36	41	250
ML-MLK-3636	M36-2	28	26	43	19	36	41	46	250
ML-MLK-4545	M45-2	35	29	47	18.5	36.5	50	55	250
ML-MLK-5252	M52-2	38	30	47	19	36	60	65	250

ML-UL

MET LIGHT MALE X MET LIGHT F/M
METRIC 24° CONE LIGHT MALE X METRIC 24°
CONE LIGHT FEMALE SWIVEL NUT STRAIGHT

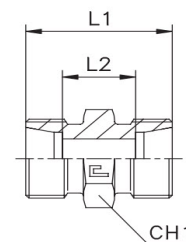


Part Number	Metric Male Thread - m D2	Metric Female Thread - m D1	D2 - mm	D1 (mm)	L1-mm	L2 (mm) - mm	CH1 (mm)	CH2 (mm)	PN (Bar)
ML-UL-1214	M12-1.5	M14-1.5	6	8	31	24	12	17	500
ML-UL-1216	M12-1.5	M16-1.5	6	10	32.5	25.5	14	19	500
ML-UL-1414	M14-1.5	M14-1.5	8	8					500
ML-UL-1416	M14-1.5	M16-1.5	8	10	32.5	25.5	14	19	500
ML-UL-1418	M14-1.5	M18-1.5	8	12	32.5	25.5	17	22	400
ML-UL-1616	M16-1.5	M16-1.5	10	10					400
ML-UL-1618	M16-1.5	M18-1.5	10	12	33.5	26.5	17	22	400
ML-UL-1622	M16-1.5	M22-1.5	10	15	36.5	29.5	19	27	400
ML-UL-1626	M16-1.5	M26-1.5	10	18					400
ML-UL-1818	M18-1.5	M18-1.5	12	12					400
ML-UL-1822	M18-1.5	M22-1.5	12	15	36.5	29.5	19	27	400
ML-UL-1826	M18-1.5	M26-1.5	12	18	37.5	30.5	24	32	250
ML-UL-2222	M22-1.5	M22-1.5	15	15					250
ML-UL-2226	M22-1.5	M26-1.5	15	18	38.5	31.5	24	32	250
ML-UL-2230	M22-1.5	M30-2	15	22	39.5	32.5	27	36	250
ML-UL-2236	M22-1.5	M36-2	15	28					250
ML-UL-2626	M26-1.5	M26-1.5	18	18					250
ML-UL-2630	M26-1.5	M30-2	18	22	40.5	33	27	36	250
ML-UL-2636	M26-1.5	M36-2	18	28					250
ML-UL-3030	M30-2	M30-2	22	22					250
ML-UL-3036	M30-2	M36-2	22	28	43.5	36	32	41	250
ML-UL-3045	M30-2	M45-2	22	35					250
ML-UL-3052	M30-2	M52-2	22	42					250
ML-UL-3636	M36-2	M36-2	28	28					250
ML-UL-3645	M36-2	M45-2	28	35					250
ML-UL-3652	M36-2	M52-2	28	42					250
ML-UL-4545	M45-2	M45-2	35	35					250
ML-UL-4552	M45-2	M52-2	35	42					250
ML-UL-5252	M52-2	M52-2	42	42					250

MS-MS

MET HEAVY MALE X MET HEAVY MALE
METRIC 24° CONE HEAVY MALE X METRIC 24°
CONE HEAVY MALE STRAIGHT

- ISO 8434-1

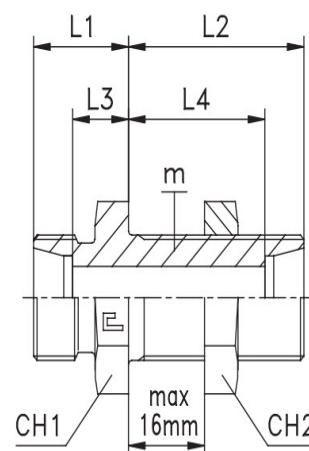


Part Number	Metric Male Thread	Metric Male Thread	suits tube (D1)	Suits Tube-D2	L1 (mm)	L2 (mm) - mm	CH1 (mm)	PN (bar)
MS-MS-1414	M14-1.5	M14-1.5	6	6	30	16	14	800
MS-MS-1416	M16-1.5	M14-1.5	8	6	32	18	17	800
MS-MS-1420	M20-1.5	M14-1.5	12	6	34	19.5	22	630
MS-MS-1616	M16-1.5	M16-1.5	8	8	32	18	17	800
MS-MS-1618	M18-1.5	M16-1.5	10	8	32	18	19	800
MS-MS-1818	M18-1.5	M18-1.5	10	10	32	17	19	800
MS-MS-1820	M20-1.5	M18-1.5	12	10	34	19	22	630
MS-MS-2020	M20-1.5	M20-1.5	12	12	34	19	22	630
MS-MS-2022	M22-1.5	M20-1.5	14	12	36	21	24	630
MS-MS-2024	M24-1.5	M20-1.5	16	12	36	20	24	630
MS-MS-2030	M30-2	M20-1.5	20	12	40	22	32	420
MS-MS-2222	M22-1.5	M22-1.5	14	14	38	22	24	630
MS-MS-2224	M24-1.5	M22-1.5	16	14	38	22	27	630
MS-MS-2424	M24-1.5	M24-1.5	16	16	38	21	27	630
MS-MS-2430	M30-2	M24-1.5	20	16	42	23	32	420
MS-MS-2436	M36-2	M24-1.5	25	16	46	25.5	41	420
MS-MS-3030	M30-2	M30-2	20	20	44	23	32	420
MS-MS-3036	M36-2	M30-2	25	20	48	26	41	420
MS-MS-3042	M30-2	M42-2	30	20	50	26	46	420
MS-MS-3636	M36-2	M36-2	25	25	50	26	41	420
MS-MS-3642	M42-2	M36-2	30	25	52	27	46	420
MS-MS-4242	M42-2	M42-2	30	30	54	27	46	420
MS-MS-4252	M52-2	M42-2	38	30	59	30	55	420
MS-MS-5252	M52-2	M52-2	38	38	61	29	55	420

MS-MSK

MET HEAVY MALE X MET HEAVY B/HEAD
METRIC 24° CONE HEAVY MALE X METRIC 24°
CONE HEAVY BULKHEAD STRAIGHT

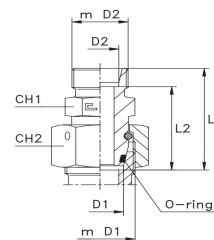
- ISO 8434-1



Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	L4 (mm) - mm	CH1 (mm)	CH2 (mm)	PN (bar)
MS-MSK-1414	M14-1.5	6	19	36	12	29	19	19	800
MS-MSK-1616	M16-1.5	8	20	36	13	29	22	22	800
MS-MSK-1818	M18-1.5	10	22	37	14.5	29.5	24	24	800
MS-MSK-2020	M20-1.5	12	22	38	15	31	27	27	630
MS-MSK-2222	M22-1.5	14	25	40	17	32	30	30	630
MS-MSK-2424	M24-1.5	16	25	40	17	32	32	32	630
MS-MSK-3030	M30-2	20	28	44	18	34	41	41	420
MS-MSK-3636	M36-2	25	32	47	20	35	46	46	420
MS-MSK-4242	M42-2	30	35	51	22	38	50	50	420
MS-MSK-5252	M52-2	38	38	53	22	37	65	65	420

MS-US

MET HEAVY MALE X MET HEAVY F/M
METRIC 24° CONE HEAVY MALE X METRIC 24°
CONE HEAVY FEMALE SWIVEL NUT STRAIGHT



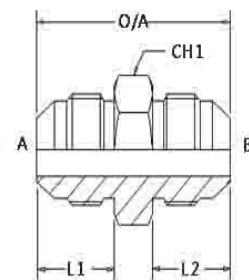
Part Number	Metric Male Thread	Metric Female Thread - m D1	D2 - mm	D1 (mm)	L1-mm	L2 (mm) - mm	CH1 (mm)	CH2 (mm)	PN (bar)
MS-US-1414	M14-1.5	M14-1.5	6	6					800
MS-US-1416	M14-1.5	M16-1.5	6	8	36	29	14	19	800
MS-US-1418	M14-1.5	M18-1.5	6	10	39	32	17	22	800
MS-US-1616	M16-1.5	M16-1.5	8	8					800
MS-US-1618	M16-1.5	M18-1.5	8	10	38.5	31.5	17	22	800
MS-US-1620	M16-1.5	M20-1.5	8	12	38.5	31.5	17	24	630
MS-US-1818	M18-1.5	M18-1.5	10	10					630
MS-US-1820	M18-1.5	M20-1.5	10	10	38.5	31	19	24	630
MS-US-1822	M18-1.5	M22-1.5	10	12	41	33.5	19	27	630
MS-US-1824	M18-1.5	M24-1.5	10	16					630
MS-US-2020	M20-1.5	M20-1.5	12	12					630
MS-US-2022	M20-1.5	M22-1.5	12	14	43	35.5	22	27	630
MS-US-2024	M20-1.5	M24-1.5	12	16	45.5	38	22	30	630
MS-US-2036	M20-1.5	M36-2	12	25					420
MS-US-2222	M22-1.5	M22-1.5	14	14					420
MS-US-2224	M22-1.5	M24-1.5	14	16	47.5	39.5	24	30	420
MS-US-2230	M22-1.5	M30-2	14	20	50	42	27	36	420
MS-US-2424	M24-1.5	M24-1.5	16	16					420
MS-US-2430	M24-1.5	M30-2	16	20	50	41.5	27	36	420
MS-	M24-1.5	M36-2	16	25	54.5	46	32	46	420

US-2436									
MS-US-2442	M24-1.5	M42-2	16	30	59	50.5	41	50	420
MS-US-3030	M30-2	M30-2	20	20					420
MS-US-3036	M30-2	M36-2	20	25	56.5	46	32	46	420
MS-US-3042	M30-2	M42-2	20	30	61	50.5	41	50	420
MS-US-3636	M36-2	M36-2	25	25					420
MS-US-3642	M36-2	M42-2	25	30	63	51	41	50	420
MS-US-3652	M36-2	M52-2	25	38					420
MS-US-4242	M42-2	M42-2	30	30					420
MS-US-5252	M52-2	M52-2	38	38					420

MY-MY

JISM MALE X JISM MALE

JIS METRIC MALE X JIS METRIC MALE 30° FLARE
(KOMATSU STYLE)

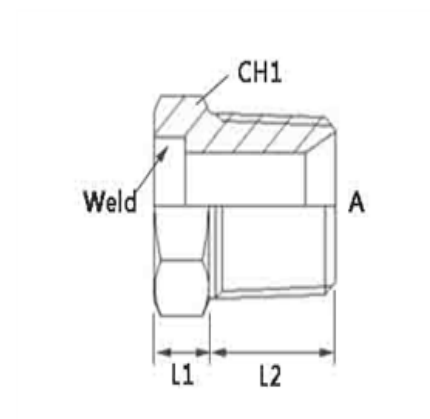


Part Number	Metric Male Thread (A)	Metric Male Thread (B)	Overall Length mm - L1 (mm)	Thread Length - mm (L2)	Thread Length - L3 (mm)	Hex A/F - CH1 (mm)	PN (bar)
MY-MY-1414	M14-1.5	M14-1.5	40	17	17	17	350
MY-MY-1616	M16-1.5	M16-1.5	42	18	18	17	350
MY-MY-1818	M18-1.5	M18-1.5	42	18	18	19	350
MY-MY-2222	M22-1.5	M22-1.5	48	20	20	24	350
MY-MY-2424	M24-1.5	M24-1.5	53	21.5	21.5	27	350
MY-MY-3030	M30-1.5	M30-1.5	63	26	26	32	280
MY-MY-3333	M33-1.5	M33-1.5	71	30	30	36	210

TW-A

TUBEWELD X BSPT MALE

IMPERIAL TUBE WELD SOCKET X BSPT MALE



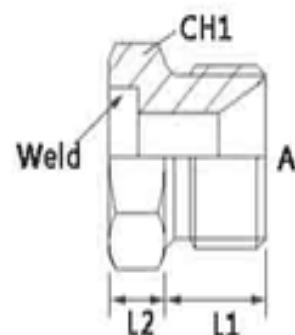
Part Number	suits tube	BSPT Male Thread (A)	Weld Socket	L2 - mm	L1 - mm	Hex A/F (CH1)
TW-A-0404	1/4	1/4-19	6.5 x 5	20	14	16
TW-A-0406	1/4	3/8-19	6.5 x 5	23	15	19
TW-A-0604	3/8	1/4-19	9.7 x 5	20	14	16
TW-A-0606	3/8	3/8-19	9.7 x 5	23	15	19
TW-A-0806	1/2	3/8-19	12.9 x 6	23	15	19
TW-A-0808	1/2	1/2-14	12.9 x 6	27	19	22
TW-A-1212	3/4	3/4-14	19.2 x 7	32	20	29
TW-A-1616	1	1-11	25.5 x 8	36	24	35
TW-A-2020	1.1/4	1.1/4-11	32 x 8	41	25	45

TW-B

TUBEWELD X BSP MALE

IMPERIAL TUBE WELD SOCKET X BSP 60° CONE

MALE



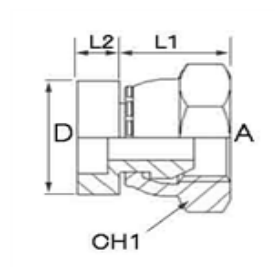
Part Number	suits tube	BSPP Male Thread (A)	Weld Socket	L1 - mm	L2 - mm	Hex A/F (CH1)
TW-B-0606	3/8	3/8-19	9.7 x 5	20	12	22
TW-B-0806	1/2	3/8-19	12.9 x 6	20	12	22
TW-B-0808	1/2	1/2-14	12.9 x 6	24	14	27
TW-B-1208	3/4	1/2-14	19.2 x 7	24	14	27
TW-B-1212	3/4	3/4-14	19.2 x 7	28	16	32
TW-B-1612	1	3/4-14	25.5 x 8	28	16	32
TW-B-1616	1	1-11	25.5 x 8	33	19	41
TW-B-2016	1.1/4	1-11	32 x 8	33	19	41
TW-B-2020	1.1/4	1.1/4-11	32 x 8	36	20	50
TW-B-2420	1.1/2	1.1/4-11	38.3 x 10	36	20	50
TW-B-2424	1.1/2	1.1/2-11	38.3 x 10	38	22	55

TW-C

TUBEWELD X BSP FEMALE

IMPERIAL TUBE WELD SOCKET X BSP 60° CONE

FEMALE SWIVEL NUT

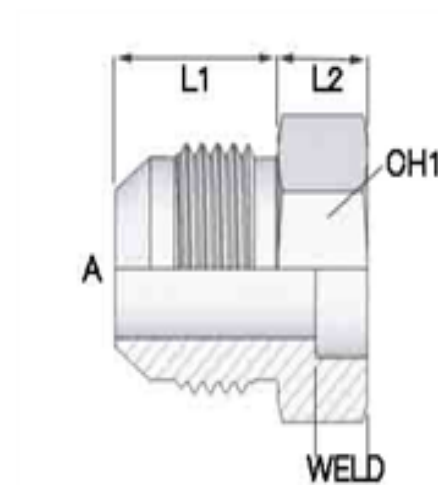


Part Number	suits tube	BSPP Female Thread (A)	Weld Socket	L1 - mm	L2 - mm	Diameter - mm	Hex A/F (CH1)
TW-C-0404	1/4	1/4-19	6.5 x 5	18	11	13	19
TW-C-0606	3/8	3/8-19	12.9 x 6	20	13	16	22
TW-C-0808	1/2	1/2-14	12.9 x 6	24	15	22	27
TW-C-1212	3/4	3/4-14	19.2 x 6.5	27	17	25	32
TW-C-1612	1	3/4-14	25.5 x 8	29	17	30	32
TW-C-1616	1	1-11	25.5 x 8	30	18	35	38
TW-C-2020	1.1/4	1.1/4-11	32 x 8	35	23	41	51
TW-C-2424	1.1/2	1.1/2-11	32 x 8	33	21	51	55
TW-C-3232	2	2-11	51 x 10	37	22	64	70

TW-G

TUBEWELD X JIC MALE

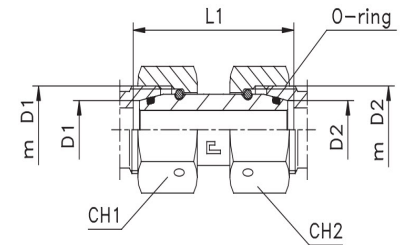
IMPERIAL TUBE WELD SOCKET X JIC MALE



Part Number	suits tube	JIC Male Thread (A)	Weld Socket	L1 - mm	L2 - mm	Hex A/F (CH1)
TW-G-0407	1/4	7/16-20	6.5 x 5	21	15	16
TW-G-0409	1/4	9/16-18	6.5 x 5	21	15	16
TW-G-0609	3/8	9/16-18	9.7 x 5	22	14	16
TW-G-0612	3/8	3/4-16	9.7 x 5	22.1	14.1	16
TW-G-0809	1/2	9/16-18	12.9 x 6	23	15	16
TW-G-0812	1/2	3/4-16	12.9 x 6	25	17	22
TW-G-0814	1/2	7/8-14	12.9 x 6	30	20	25
TW-G-1012	5/8	3/4-16	16 x 6	27	17	25
TW-G-1014	5/8	7/8-14	16 x 6	30	20	25
TW-G-1214	3/4	7/8-14	19.2 x 7	32	20	29
TW-G-1217	3/4	1.1/16-12	19.2 x 7	34	22	29
TW-G-1617	1	1.1/16-12	25.5 x 8	36	22	35
TW-G-1621	1	1.5/16-12	25.5 x 8	37	23	35
TW-G-2021	1.1/4	1.5/16-12	32 x8	37	23	41
TW-G-2026	1.1/4	1.5/8-12	32 x8	40	24	44
TW-G-2430	1.1/2	1.7/8-12	38.3 x 10	44	28	51

UL-UL

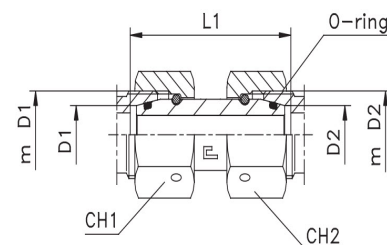
MET LIGHT FEMALE X MET LIGHT FEMALE
METRIC 24° CONE LIGHT FEMALE SWIVEL NUT X
METRIC 24° CONE LIGHT FEMALE SWIVEL NUT
STRAIGHT



Part Number	Metric Female Thread - m D2	Metric Female Thread - m D1	Suits Tube size - D2 (mm)	Suits Tube size - D1 (mm)	L1-mm	CH1 (mm)	CH2 (mm)	PN (bar)
UL-UL-1212	M12-1.5	M12-1.5	6	6	40	14	14	500
UL-UL-1214	M12-1.5	M14-1.5	6	8	37	17	14	500
UL-UL-1414	M14-1.5	M14-1.5	8	8	40	17	17	500
UL-UL-1416	M14-1.5	M16-1.5	8	10	37	19	17	500
UL-UL-1616	M16-1.5	M16-1.5	10	10	40	19	19	500
UL-UL-1618	M16-1.5	M18-1.5	10	12	36	22	19	400
UL-UL-1622	M16-1.5	M22-1.5	10	15	40	27	19	400
UL-UL-1818	M18-1.5	M18-1.5	12	12	40	22	22	400
UL-UL-1822	M18-1.5	M22-1.5	12	15	40	27	22	400
UL-UL-1826	M18-1.5	M26-1.5	12	18	40	34	22	400
UL-UL-2222	M22-1.5	M22-1.5	15	15	44	27	27	400
UL-UL-2226	M22-1.5	M26-1.5	15	18	44	32	27	400
UL-UL-2626	M26-1.5	M26-1.5	18	18	43	32	32	400
UL-UL-2630	M26-1.5	M30-2	18	22	46	36	32	250
UL-UL-2636	M26-1.5	M36-2	18	28	47	41	32	250
UL-UL-3030	M30-2	M30-2	22	22	50	36	36	250
UL-UL-3036	M30-2	M36-2	22	28	50	41	36	250
UL-UL-3636	M36-2	M36-2	28	28	51	41	41	250

US-US

MET HEAVY FEMALE X MET HEAVY FEMALE
METRIC 24° CONE HEAVY FEMALE SWIVEL NUT X
METRIC 24° CONE HEAVY FEMALE SWIVEL NUT
STRAIGHT



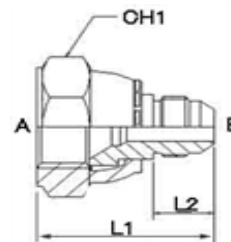
Part Number	Metric Female Thread - m D2	Metric Female Thread - m D1	Suits Tube size - D2 (mm)	Suits Tube size - D1 (mm)	L1-mm	CH1 (mm)	CH2 (mm)	PN (bar)
US-US-1418	M14-1.5	M18-1.5	6	10	38	22	17	800
US-US-1616	M16-1.5	M16-1.5	8	8	41	19	19	800
US-US-1820	M18-1.5	M20-1.5	10	12	40	24	22	630
US-US-2222	M22-1.5	M22-1.5	14	14	49	27	27	630
US-US-3036	M30-2	M36-2	20	25	60	46	36	420
US-US-5252	M52-2	M52-2	38	38	83	60	60	420

TK

JIC FEMALE X JIC MALE

JIC 37° FLARE FEMALE X JIC 37° FLARE MALE

- SAE J514

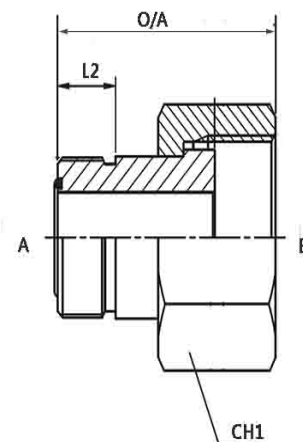


Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	PN (bar)
TK-0707-0.8MM	7/16-20	7/16-20	29.2	14	14.3	350
TK-0709	7/16-20	9/16-18	25.4	14.2	15.9	350
TK-0907	9/16-18	7/16-20	25	14	18	350
TK-0909-0.8MM	9/16-18	9/16-18	30.2	14.2	17.5	350
TK-0912	9/16-18	3/4-16	32.5	16.7	20.6	310
TK-1207	3/4-16	7/16-20	25	14	22	310
TK-1209	3/4-16	9/16-18	25	14	22	310
TK-1214	3/4-16	7/8-14	34	19.3	23.8	240
TK-1217	3/4-16	1.1/16-12	36.6	21.9	28.6	240
TK-1407	7/8-14	7/16-20	26	14	25	240
TK-1409	7/8-14	9/16-18	26	14	25	240
TK-1412	7/8-14	3/4-16	36	17	25	240
TK-1417	7/8-14	1.1/16-12	38.6	21.9	28.6	240
TK-1707	1.1/16-12	7/16-20	28	14	32	240
TK-1709	1.1/16-12	9/16-18	28	14	32	240
TK-1712	1.1/16-12	3/4-16	30	17	32	240
TK-1714	1.1/16-12	7/8-14	42	19	32	240
TK-1721	1.1/16-12	1.5/16-12	46.2	23.1	34.9	210
TK-2112	1.5/16-12	3/4-16	33	17	38	210
TK-2114	1.5/16-12	7/8-14	35	19	38	210
TK-2117	1.5/16-12	1.1/16-12	37	22	38	210
TK-2126	1.5/16-12	1.5/8-12	43.2	24.2	42.9	170
TK-2617	1.5/8-12	1.1/16-12	38	22	51	270
TK-2621	1.5/8-12	1.5/16-12	39	23	51	270
TK-2630	1.5/8-12	1.7/8-12	54.1	27.5	50.8	140
TK-3021	1.7/8-12	1.5/16-12	54.9	23.1	57.2	140
TK-3026	1.7/8-12	1.5/8-12	56.1	24.2	57.2	140
TK-4030	2.1/2-12	1.7/8-12	67.1	27.5	73	105

TR

FEMALE ORFS X ORFS MALE

ORFS FEMALE SWIVEL NUT X MALE ORFS



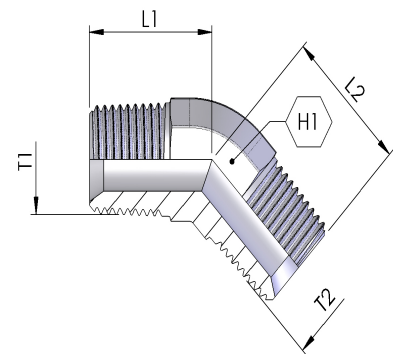
Part Number	ORFS Female Thread (B)	ORFS Male Thread (A)	Overall Length (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
TR-1109	11/16-16	9/16-18	29.2	10	20.6	630
TR-1309	13/16-16	9/16-18	32.8	10	23.8	630
TR-1311	13/16-16	11/16-16	33.3	11.2	23.8	630
TR-1609	1-14	9/16-18	36.4	10	28.6	400
TR-1611	1-14	11/16-16	37.8	11.2	28.6	400
TR-1613	1-14	13/16-16	38.9	12.8	28.6	400
TR-1909	1.3/16-12	9/16-18	39.3	10	34.6	400
TR-1911	1.3/16-12	11/16-16	39.9	11.2	34.9	400
TR-1913	1.3/16-12	13/16-16	42.2	12.8	34.9	400
TR-1916	1.3/16-12	1-14	43.9	15.5	34.9	400
TR-2313	1.7/16-12	13/16-16	43.9	12.8	41.3	400
TR-2316	1.7/16-12	1-14	45.7	15.5	41.3	400
TR-2319	1.7/16-12	1.3/16-12	47.8	17	41.3	400
TR-2719	1.11/16-12	1.3/16-12	47.8	17	47.6	250
TR-2723	1.11/16-12	1.7/16-12	51.6	17.5	47.6	250

45 DEGREE ADAPTORS

A-A-45

BSPT MALE X BSPT MALE

BSPT MALE X BSPT MALE 45° ELBOW



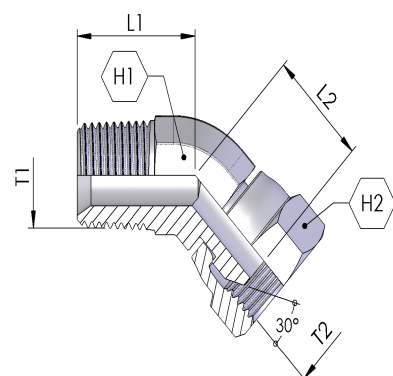
Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-A-45-0202	1/8-28	1/8-28	14	21	21	345
A-A-45-0404	1/4-19	1/4-19	14	22	22	275
A-A-45-0606	3/8-19	3/8-19	19	27	27	210
A-A-45-0608	3/8-19	1/2-14	22	24	29	210
A-A-45-0808	1/2-14	1/2-14	22	29	29	210
A-A-45-0812	1/2-14	3/4-14	27	32	32	170
A-A-45-1212	3/4-14	3/4-14	27	32	32	170
A-A-45-1216	3/4-14	1-11	35	38	43	140
A-A-45-1616	1-11	1-11	35	43	43	140

A-C-45

BSPT MALE X BSP FEMALE

BSPT MALE X BSP 60° CONE FEMALE SWIVEL NUT

45° ELBOW

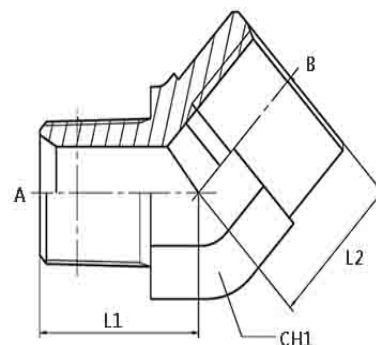


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-C-45-0202	1/8-28	1/8-28	14	14	17	17	345
A-C-45-0404	1/4-19	1/4-19	14	19	22	20	275
A-C-45-0606	3/8-19	3/8-19	19	22	27	24	210
A-C-45-0808	1/2-14	1/2-14	22	27	29	24	210
A-C-45-1212	3/4-14	3/4-14	27	32	32	29	170
A-C-45-1616	1-11	1-11	35	41	40	33	140

A-E-45

BSPT MALE X BSPT FEMALE

BSPT MALE X BSPT FIXED FEMALE 45° ELBOW

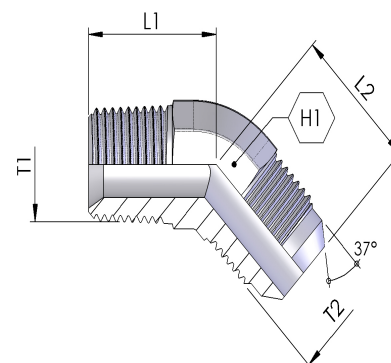


Part Number	BSPT Male Thread (A)	BSPT Female Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
A-E-45-0404	1/4-19	1/4-19	18	20	16	275
A-E-45-0606	3/8-19	3/8-19	25.5	23.5	24	210
A-E-45-0808	1/2-14	1/2-14	31.5	27.5	30	210

A-G-45

BSPT MALE X JIC MALE

BSPT MALE X JIC MALE 45° ELBOW



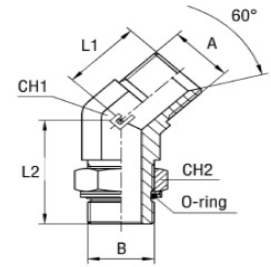
Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-G-45-0207	1/8-28	7/16-20	14	17	20	345
A-G-45-0208	1/8-28	1/2-20	14	17	20	345
A-G-45-0209	1/8-28	9/16-18	22	17	20	345
A-G-45-0407	1/4-19	7/16-20	14	22	20	275
A-G-45-0408	1/4-19	1/2-20	14	22	20	275
A-G-45-0409	1/4-19	9/16-18	14	22	21	275
A-G-45-0412	1/4-19	3/4-16	19	24	25	275
A-G-45-0609	3/8-19	9/16-18	19	24	22	210
A-G-45-0612	3/8-19	3/4-16	19	24	25	210
A-G-45-0614	3/8-19	7/8-14	22	27	28	210
A-G-45-0809	1/2-14	9/16-18	22	29	23	210
A-G-45-0812	1/2-14	3/4-16	22	29	25	210
A-G-45-0814	1/2-14	7/8-14	22	29	28	210
A-G-45-0817	1/2-14	1.1/16-12	27	31	32	210
A-G-45-1212	3/4-14	3/4-16	27	31	27	170
A-G-45-1214	3/4-14	7/8-14	27	31	30	170
A-G-45-1217	3/4-14	1.1/16-12	27	31	32	170
A-G-45-1221	3/4-14	1.5/16-12	35	33	38	170
A-G-45-1621	1-11	1.5/16-12	35	38	38	140
A-G-45-2026	1.1/4-11	1.5/8-12	44	43	41	80
A-G-45-3240	2-11	2.1/2-12	63	50	58	70

B-BP-45

BSP MALE X BSP ADJUSTABLE

BSP 60° CONE MALE X BSP ADJUSTABLE STUD 45°
ELBOW

- ISO 8434-6



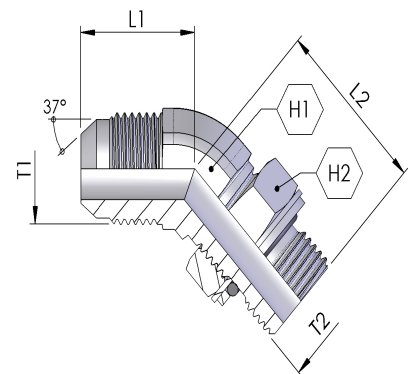
Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	CH2 (mm)	PN (bar)
B-BP-45-0404	1/4-19	1/4-19	21	29	14	19	200
B-BP-45-0606	3/8-19	3/8-19	24	33	19	22	200
B-BP-45-0808	1/2-14	1/2-14	26	39	22	30	200
B-BP-45-1212	3/4-14	3/4-14	32	44	27	36	200
B-BP-45-1616	1-11	1-11	37	47	33	46	200
B-BP-45-2020	1.1/4-11	1.1/4-11	39	48	41	50	160

G-BP-45

JIC MALE X BSP ADJUSTABLE

JIC MALE X BSP ADJUSTABLE STUD 45° ELBOW

- ISO 8434-2

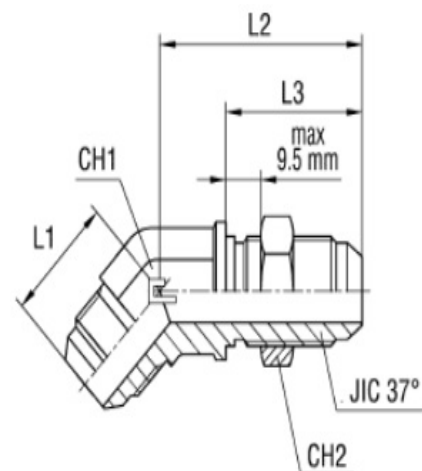


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-BP-45-0704	7/16-20	1/4-19	14	19	21	28	200
G-BP-45-0904	9/16-18	1/4-19	14	19	21	28	200
G-BP-45-0906	9/16-18	3/8-19	19	22	22	33	200
G-BP-45-0908	9/16-18	1/2-14	19	27	22	37	200
G-BP-45-1206	3/4-16	3/8-19	19	22	25	33	200
G-BP-45-1208	3/4-16	1/2-14	22	27	25	37	200
G-BP-45-1408	7/8-14	1/2-14	22	27	28	37	200
G-BP-45-1712	1.1/16-12	3/4-14	27	36	32	42	200
G-BP-45-1716	1.1/16-12	1-11	37.5	44	33	41	200
G-BP-45-2116	1.5/16-12	1-11	35	41	37.5	47	200

G-GK-45

JIC MALE X JIC BULKHEAD

JIC MALE X JIC BULKHEAD MALE 45° ELBOW



Part Number	JIC Male Thread	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
G-GK-45-0707	7/16-20	19.6	38.9	11.1	17.5	350
G-GK-45-0909	9/16-18	21	42.4	14.3	20.6	350
G-GK-45-1212	3/4-16	24.9	49.3	19.1	25.4	310
G-GK-45-1414	7/8-14	28.2	55.1	22.2	28.6	240
G-GK-45-1717	1.1/16-12	32.5	62	27	34.9	240
G-GK-45-2121	1.5/16-12	37.3	65	33.3	41.3	210

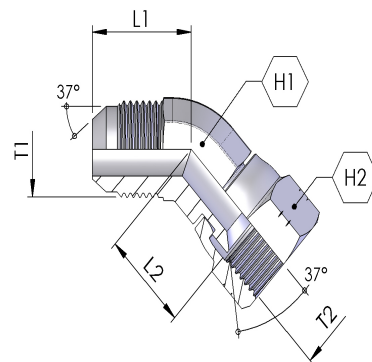
G-J-45

JIC MALE X JIC FEMALE

JIC 37° FLARE MALE X JIC 37° FLARE FEMALE

SWIVEL NUT 45° ELBOW

- ISO 8434-2

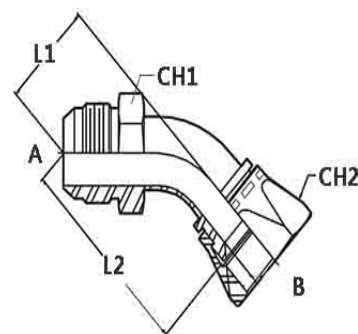


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-J-45-0707	7/16-20	7/16-20	14	14	20	15	350
G-J-45-0808	1/2-20	1/2-20	22	22	14	17	350
G-J-45-0909	9/16-18	9/16-18	14	19	21	19	350
G-J-45-1212	3/4-16	3/4-16	19	22	25	22	310
G-J-45-1414	7/8-14	7/8-14	22	27	28	24	240
G-J-45-1717	1.1/16-12	1.1/16-12	27	32	32	24	240
G-J-45-2121	1.5/16-12	1.5/16-12	35	41	38	29	210
G-J-45-2626	1.5/8-12	1.5/8-12	41	50	40	51	170
G-J-45-3030	1.7/8-12	1.7/8-12	49	50.8	48	55	140
G-J-45-4040	2.1/2-12	2.1/2-12	63	73	56	74	105

G-J-45S

JIC MALE X JIC FEMALE

JIC MALE X JIC FEMALE SWIVEL NUT 45° SWEPT

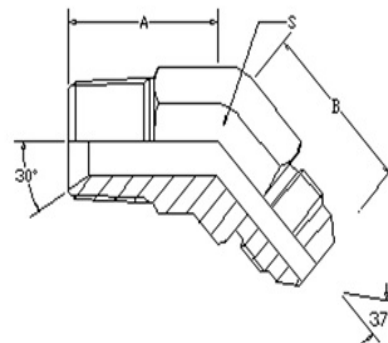


Part Number	JIC Male Thread (A)	JIC Female Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
G-J-45S-0707	7/16-20	7/16-20	29.3	30.9	12.6	14.3	350
G-J-45S-0909	9/16-18	9/16-18	30	41.8	15.9	17.5	350
G-J-45S-1212	3/4-16	3/4-16	39	43.1	20.6	22.2	310
G-J-45S-1414	7/8-14	7/8-14	39.9	50.9	23.8	25.4	240
G-J-45S-1717	1.1/16-12	1.1/16-12	48.6	62.5	28.6	31.8	240

G-L-45

JIC MALE X NPTF MALE

JIC MALE X NPTF MALE 45° ELBOW



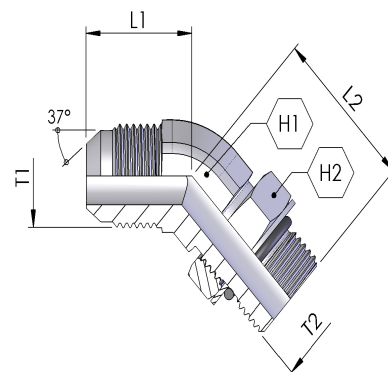
Part Number	JIC Male Thread (A)	NPTF Male Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
G-L-45-0702	7/16-20	1/8-27	18.3	16.3	11.1	345
G-L-45-0704	7/16-20	1/4-18	20.8	21.8	14.3	275
G-L-45-0904	9/16-18	1/4-18	21.1	21.8	14.3	275
G-L-45-0906	9/16-18	3/8-18	22.1	24.1	19.1	210
G-L-45-1204	3/4-16	1/4-18	24.9	24.1	19.1	275
G-L-45-1206	3/4-16	3/8-18	24.9	24.1	19.1	210
G-L-45-1208	3/4-16	1/2-14	25.1	29.7	22.2	210
G-L-45-1212	3/4-16	3/4-14	25.1	32.8	26.7	170
G-L-45-1406	7/8-14	3/8-18	25.1	29	21.6	210
G-L-45-1408	7/8-14	1/2-14	28.2	29.7	22.2	210
G-L-45-1412	7/8-14	3/4-14	29.5	30.5	27	170
G-L-45-1708	1.1/16-12	1/2-14	32.5	30.5	27	210
G-L-45-1712	1.1/16-12	3/4-14	32.5	30.5	27	170
G-L-45-1716	1.1/16-12	1-11.1/2	30.1	37.6	33.3	140
G-L-45-2112	1.5/16-12	3/4-14	37.3	37.6	33.3	170
G-L-45-2116	1.5/16-12	1-11.1/2	37.3	37.6	33.3	140
G-L-45-2620	1.5/8-12	1.1/4-11.1/2	40.4	42.4	41.3	80
G-L-45-3024	1.7/8-12	1.1/2-11.1/2	45.2	45	47.6	70
G-L-45-4032	2.1/2-12	2-11.1/2	56.4	53.6	63.5	70

G-NP-45

JIC MALE X UNO ADJUSTABLE

JIC MALE X UNO ADJUSTABLE STUD 45° ELBOW

- ISO 8434-2

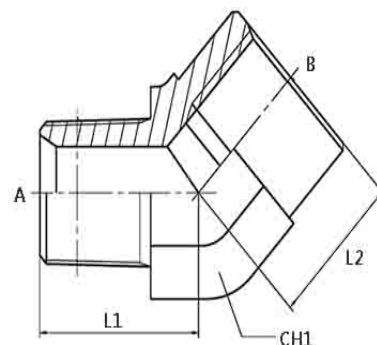


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-NP-45-0707	7/16-20	7/16-20	14	14	20	27	315
G-NP-45-0709	7/16-20	9/16-18	18.3	27.4	11.1	14	250
G-NP-45-0909	9/16-18	9/16-18	14	17	21	28	250
G-NP-45-0912	9/16-18	3/4-16	19	22	22	32	250
G-NP-45-1209	3/4-16	9/16-18	24.9	29.7	19.1	22	250
G-NP-45-1212	3/4-16	3/4-16	19	22	25	32	250
G-NP-45-1214	3/4-16	7/8-14	22	27	25	37	250
G-NP-45-1217	3/4-16	1.1/16-12	26.4	43.9	27	31.8	200
G-NP-45-1412	7/8-14	3/4-16	28.2	34.5	22.2	22.2	240
G-NP-45-1414	7/8-14	7/8-14	22	27	28	37	200
G-NP-45-1417	7/8-14	1.1/16-12	29.5	43.9	27	31.8	200
G-NP-45-1712	1.1/16-12	3/4-16	27	22	32	36	240
G-NP-45-1714	1.1/16-12	7/8-14	32.5	40.1	27	25.4	200
G-NP-45-1717	1.1/16-12	1.1/16-12	27	32	32	42	200
G-NP-45-1721	1.1/16-12	1.5/16-12	35	41	36	47	160
G-NP-45-2117	1.5/16-12	1.1/16-12	37.3	47.2	33.3	31.8	200
G-NP-45-2121	1.5/16-12	1.5/16-12	35	41	38	47	160
G-NP-45-2626	1.5/8-12	1.5/8-12	44	50	41	49	125
G-NP-45-3030	1.7/8-12	1.7/8-12	45.2	48.5	47.6	54	125

L-AC-45

NPTF MALE X NPTF FEMALE

NPTF MALE X NPTF FIXED FEMALE 45° ELBOW

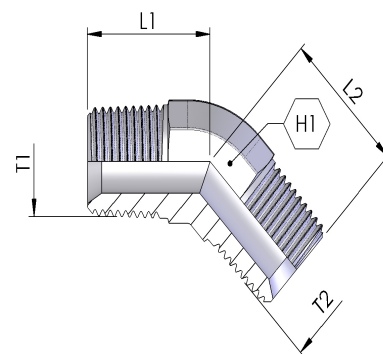


Part Number	NPTF Male Thread (A)	NPTF Female Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
L-AC-45-0202	1/8-27	1/8-27	18.3	11.9	14.3	345
L-AC-45-0404	1/4-18	1/4-18	26.7	16	19.1	275
L-AC-45-0606	3/8-18	3/8-18	26.9	18.3	22.2	210
L-AC-45-0808	1/2-14	1/2-14	34	23.1	27	210
L-AC-45-1212	3/4-14	3/4-14	35.1	24.6	33.3	170
L-AC-45-1616	1-11.1/2	1-11.1/2	43.7	28.4	41.3	140

L-L-45

MALE NPTF X NPTF MALE

NPTF MALE X MALE 45° ELBOW



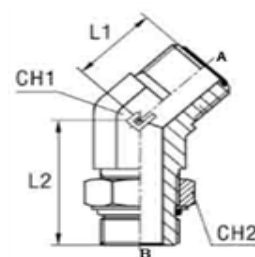
Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	PN (bar)
L-L-45-0202	1/8-27	1/8-27	17	14.7	11.1	345
L-L-45-0404	1/4-18	1/4-18	21.6	21.6	14.3	275
L-L-45-0606	3/8-18	3/8-18	24.1	24.1	19.1	210
L-L-45-0808	1/2-14	1/2-14	30	30	22.2	210
L-L-45-1212	3/4-14	3/4-14	35.1	35.1	27	170
L-L-45-1616	1-11.1/2	1-11.1/2	37.6	37.6	41.3	140

R-NP-45

ORFS MALE X UNO ADJUSTABLE

ORFS MALE X UNO ADJUSTABLE STUD 45° ELBOW

- SAE J1453



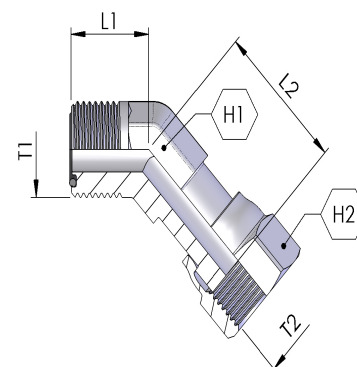
Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	CH2 (mm)	PN (bar)
R-NP-45-0907	9/16-18	7/16-20	16	30	14	14	315
R-NP-45-0909	9/16-18	9/16-18	17.3	33	19.1	19.1	250
R-NP-45-1107	11/16-16	7/16-20	18.8	30.1	19.1	15.9	315
R-NP-45-1109	11/16-16	9/16-18	19	33	19	17	250
R-NP-45-1112	11/16-16	3/4-16	20.3	36.3	19.1	23.8	250
R-NP-45-1309	13/16-16	9/16-18	20.3	30	19.1	19.1	250
R-NP-45-1312	13/16-16	3/4-16	21	37	19	22	250
R-NP-45-1612	1-14	3/4-16	23.4	36.3	27	23.8	250
R-NP-45-1614	1-14	7/8-14	24	45	27	27	200
R-NP-45-1914	1.3/16-12	7/8-14	25.9	46	30.2	27	200
R-NP-45-1917	1.3/16-12	1.1/16-12	26	50	30	32	200
R-NP-45-2321	1.7/16-12	1.5/16-12	30	53	36	41	160
R-NP-45-2726	11.1/16-12	1.5/8-12	32	53.6	41.3	44.5	125

R-T-45

ORFS MALE X ORFS FEMALE

ORFS MALE X ORFS FEMALE SWIVEL NUT 45°

ELBOW



Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	H2 (mm)	PN (bar)
R-T-45-0909	9/16-18	9/16-18	16	27	14	17	630
R-T-45-1111	11/16-16	11/16-16	19	29	19	22	630
R-T-45-1313	13/16-16	13/16-16	21	38	19	24	630
R-T-45-1616	1-14	1-14	24	41	27	30	400
R-T-45-1919	1.3/16-12	1.3/16-12	26	47	30	36	400
R-T-45-2323	1.7/16-12	1.7/16-12	30	54	36	41	400
R-T-45-2727	1.11/16-12	1.11/16-12	32	58	41	50	250

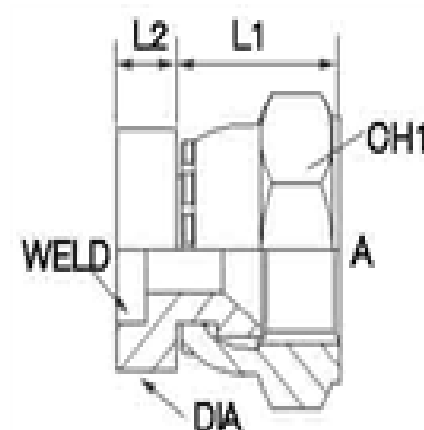
TUBEWELDS

TW-J

TUBEWELD X JIC FEMALE

IMPERIAL TUBE WELD SOCKET X JIC 37 FLARE

FEMALE SWIVEL NUT

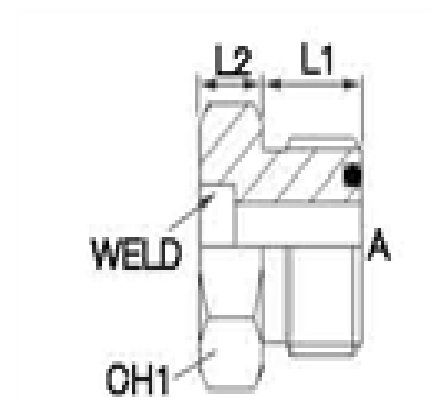


Part Number	suits tube	JIC Female Thread (A)	Weld Socket	L1 - mm	L2 - mm	Diameter - mm	Hex A/F (CH1)
TW-J-0407	1/4	7/16-20	6.5 x 5	14	7	13	15
TW-J-0609	3/8	9/16-18	9.7 x 5	16	9	16	19
TW-J-0812	1/2	3/4-16	12.9 x 6	19	10	19	24
TW-J-0814	1/2	7/8-14	12.9 x 6	20	11	22	27
TW-J-1014	5/8	7/8-14	16 x 6	20	11	22	27
TW-J-1214	3/4	7/8-14	19.2 x 6.5	21	11	25	27
TW-J-1217	3/4	1.1/16-12	16.2 x 6.5	23	13	25	32
TW-J-1621	1	1.5/16-12	25.5 x 8	27	15	35	38
TW-J-2021	1.1/4	1.5/16-12	32 x 8	26.7	14.7	38	38
TW-J-2026	1.1/4	1.5/8-12	32 x 8	29	17	41	51
TW-J-2430	1.1/2	1.7/8-12	38.3 x 10	28	16	51	57

TW-R

TUBEWELD X ORFS MALE

IMPERIAL TUBE WELD SOCKET X ORFS MALE

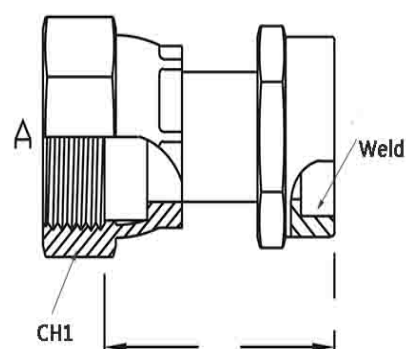


Part Number	suits tube	UNF Male Thread (A)	Weld Socket	L1 - mm	L2 - mm	Hex A/F (CH1)
TW-R-0409	1/4	9/16-18	6.5 x 5	18.5	10	19
TW-R-0611	3/8	11/16-16	9.7 x 5	20	11	19
TW-R-0813	1/2	13/16-16	12.9 x 6	22	13	22
TW-R-1016	5/8	1-14	16 X 6	24	14	27
TW-R-1219	3/4	1.3/16-12	19.2 x 7	28	17	32
TW-R-1623	1	1.7/16-12	25.5 x 8	33	18	38

TW-T

TUBEWELD X ORFS FEMALE

WELD SOCKET TO SUIT TUBE X ORFS FEMALE



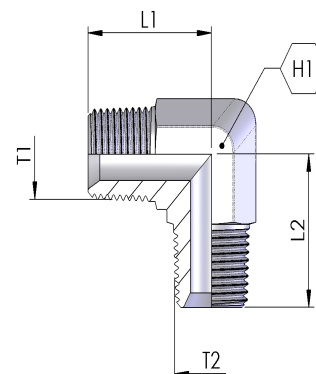
Part Number	suits tube	UNF Female Thread (A)	Weld Socket	L1 - mm	L2 - mm	Hex A/F (CH1)
TW-T-0409	1/4	9/16-18	6.5 x 5	18	10	19
TW-T-0611	3/8	11/16-16	9.7 x 5	19.9	11.4	19
TW-T-0813	1/2	13/16-16	12.9 x 6	22.3	12.8	22
TW-T-1016	5/8	1-14	16 X 6	24.2	14.2	27
TW-T-1219	3/4	1.3/16-12	19.2 x 7	28	17	32
TW-T-1623	1	1.7/16-12	25.5 x 8	32.5	17.5	38

90 DEGREE ADAPTORS

A-A-90

BSPT MALE X BSPT MALE

BSPT MALE X BSPT MALE 90° ELBOW

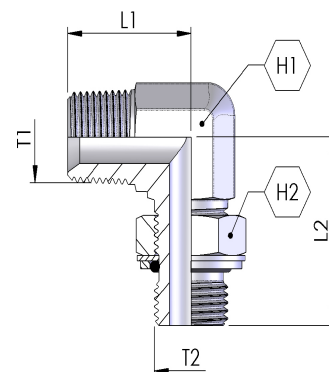


Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-A-90-0202	1/8-28	1/8-28	12	20	20	345
A-A-90-0204	1/8-28	1/4-19	14	20	25	275
A-A-90-0404	1/4-19	1/4-19	14	25	25	275
A-A-90-0406	1/4-19	3/8-19	19	28	31	210
A-A-90-0408	1/4-19	1/2-14	22	30	35	210
A-A-90-0606	3/8-19	3/8-19	19	31	31	210
A-A-90-0608	3/8-19	1/2-14	22	30	35	210
A-A-90-0808	1/2-14	1/2-14	22	35	35	210
A-A-90-0812	1/2-14	3/4-14	27	40	40	170
A-A-90-1212	3/4-14	3/4-14	27	40	40	170
A-A-90-1216	3/4-14	1-11	35	43	48	140
A-A-90-1616	1-11	1-11	35	48	48	140
A-A-90-1620	1-11	1.1/4-11	41	54	55	80
A-A-90-2020	1.1/4-11	1.1/4-11	41	55	55	80
A-A-90-2424	1.1/2-11	1.1/2-11	50	60	60	70
A-A-90-3232	2-11	2-11	65	74	74	70

A-BP-90

BSPT MALE X BSP ADJUSTABLE

BSPT MALE X BSP ADJUSTABLE STUD 90° ELBOW



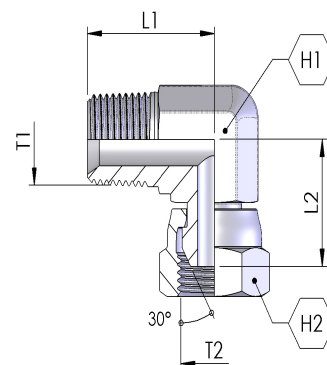
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-BP-90-0404	1/4-19	1/4-19	16	22	26	31	200
A-BP-90-0406	1/4-19	3/8-19	16	22	27	36	200
A-BP-90-0606	3/8-19	3/8-19	16	22	28	37	200
A-BP-90-0608	3/8-19	1/2-14	22	27	33	43	200
A-BP-90-0806	1/2-14	3/8-19	22	22	35	43	200
A-BP-90-0808	1/2-14	1/2-14	22	27	35	43	200
A-BP-90-0812	1/2-14	3/4-14	27	32	40	49	200
A-BP-90-1212	3/4-14	3/4-14	27	32	43	49	170
A-BP-90-1216	3/4-14	1-11	33	41	43	53	170
A-BP-90-1616	1-11	1-11	33	41	47	53	140

A-C-90

BSPT MALE X BSP FEMALE

BSPT MALE X BSP 60° CONE FEMALE SWIVEL NUT

90° ELBOW

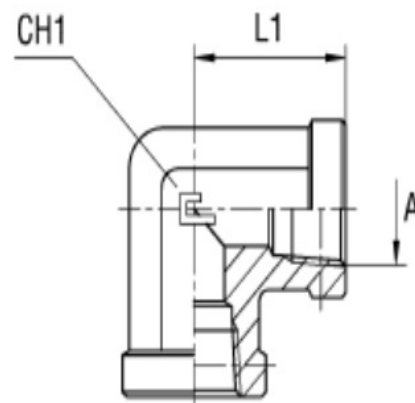


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-C-90-0202	1/8-28	1/8-28	12	14	22	19	345
A-C-90-0404	1/4-19	1/4-19	14	19	26	23	275
A-C-90-0406	1/4-19	3/8-19	19	22	32	26	275
A-C-90-0604	3/8-19	1/4-19	19	19	32	25	210
A-C-90-0606	3/8-19	3/8-19	19	22	32	26	210
A-C-90-0608	3/8-19	1/2-14	22	27	32	29	210
A-C-90-0806	1/2-14	3/8-19	22	22	36	27	210
A-C-90-0808	1/2-14	1/2-14	22	27	36	29	210
A-C-90-0812	1/2-14	3/4-14	27	32	43	35	210
A-C-90-1208	3/4-14	1/2-14	27	27	43	33	170
A-C-90-1212	3/4-14	3/4-14	27	32	43	35	170
A-C-90-1216	3/4-14	1-11	35	41	45	40	170
A-C-90-1612	1-11	3/4-14	35	32	48	39	140
A-C-90-1616	1-11	1-11	35	41	48	40	140
A-C-90-2020	1.1/4-11	1.1/4-11	41	48	57	47	80
A-C-90-2424	1.1/2-11	1.1/2-11	50	58	65	53	70

AC-AC-90

NPTF FEMALE X NPTF FEMALE

NPTF FIXED FEMALE SOCKET EQUAL 90° ELBOW

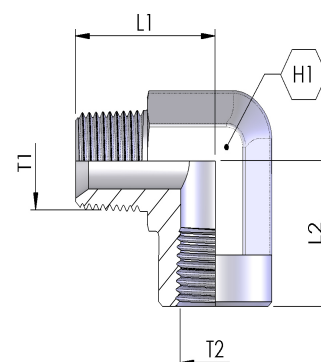


Part Number	NPTF Female Thread (A)	L1 (mm)	Hex A/F (CH1)	PN (bar)
AC-AC-90-0202	1/8-27	16.8	14.3	345
AC-AC-90-0404	1/4-18	22.4	19.1	275
AC-AC-90-0606	3/8-18	25.9	22.2	210
AC-AC-90-0808	1/2-14	31.2	27	210
AC-AC-90-1212	3/4-14	34.5	33.3	170
AC-AC-90-1616	1-11.1/2	41.4	41.3	140
AC-AC-90-2020	1.1/4-11.1/2	43.2	47.6	80

A-E-90

BSPT MALE X BSPT FEMALE

BSPT MALE X BSPT FIXED FEMALE 90° ELBOW

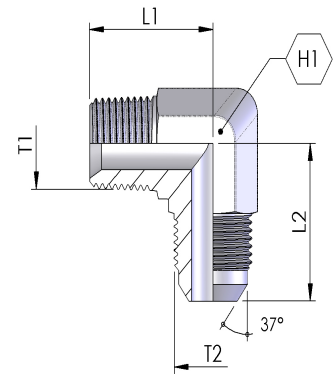


Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-E-90-0202	1/8-28	1/8-28	14	20	17	345
A-E-90-0404	1/4-19	1/4-19	19	28	22	275
A-E-90-0606	3/8-19	3/8-19	22	30	26	210
A-E-90-0608	3/8-19	1/2-14	33.5	31.5	27	210
A-E-90-0806	1/2-14	3/8-19	22	35	26	210
A-E-90-0808	1/2-14	1/2-14	27	37	31	210
A-E-90-1212	3/4-14	3/4-14	35	42	35	170
A-E-90-1616	1-11	1-11	41	50	41	140
A-E-90-2020	1.1/4-11	1.1/4-11	50	61	43	80

A-G-90

BSPT MALE X JIC MALE

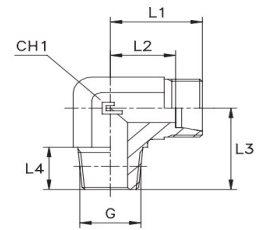
BSPT MALE X JIC 37° MALE 90° ELBOW



Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
A-G-90-0207	1/8-28	7/16-20	14	20	24	345
A-G-90-0208	1/8-28	1/2-20	14	20	24	345
A-G-90-0209	1/8-28	9/16-18	14	20	26	345
A-G-90-0407	1/4-19	7/16-20	14	25	24	275
A-G-90-0408	1/4-19	1/2-20	14	25	24	275
A-G-90-0409	1/4-19	9/16-18	14	25	26	275
A-G-90-0412	1/4-19	3/4-16	19	28	32	275
A-G-90-0607	3/8-19	7/16-20	19	31	29	210
A-G-90-0609	3/8-19	9/16-18	19	31	29	210
A-G-90-0612	3/8-19	3/4-16	19	31	32	210
A-G-90-0614	3/8-19	7/8-14	22	30	36	210
A-G-90-0807	1/2-14	7/16-20	22	35	31	210
A-G-90-0809	1/2-14	9/16-18	22	35	31	210
A-G-90-0812	1/2-14	3/4-16	22	35	34	210
A-G-90-0814	1/2-14	7/8-14	22	35	36	210
A-G-90-0817	1/2-14	1.1/16-12	27	40	42	210
A-G-90-1209	3/4-14	9/16-18	43.5	34.8	27	170
A-G-90-1212	3/4-14	3/4-16	27	40	36	170
A-G-90-1214	3/4-14	7/8-14	27	40	39	170
A-G-90-1217	3/4-14	1.1/16-12	27	40	42	170
A-G-90-1221	3/4-14	1.5/16-12	35	43	47	170
A-G-90-1617	1-11	1.1/16-12	35	48	46	140
A-G-90-1621	1-11	1.5/16-12	35	48	47	140
A-G-90-1626	1-11	1.5/8-12	41	54	53	140
A-G-90-2017	1.1/4-11	1.1/16-12	41	55	51	80
A-G-90-2021	1.1/4-11	1.5/16-12	41	55	53	80
A-G-90-2026	1.1/4-11	1.5/8-12	41	55	53	80
A-G-90-2426	1.1/2-11	1.5/8-12	60	65	59	70
A-G-90-2430	1.1/2-11	1.7/8-12	50	60	59	70
A-G-90-3240	2-11	2.1/2-12	63	75	67	70

A-ML-90

BSPT MALE X MET LIGHT MALE
BSPT MALE X METRIC 24° CONE LIGHT MALE 90°
ELBOW



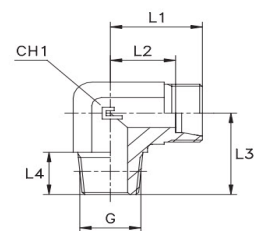
Part Number	BSPT Male Thread (G)	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	L4 (mm) - mm	CH1 (mm)	PN (bar)
A-MLL-90-0208	1/8-28	M8-1.0	4	15	11	17	9	12	100
A-ML-90-0212	1/8-28	M12-1.5	6	19	12	20	8	12	315
A-ML-90-0214	1/8-28	M14-1.5	8	21	14	22	8	12	315
A-ML-90-0216	1/8-28	M16-1.5	10	22	15	22	8	14	315
A-ML-90-0412	1/4-19	M12-1.5	6	21	14	26	12	12	315
A-ML-90-0414	1/4-19	M14-1.5	8	21	14	26	12	12	315
A-ML-90-0416	1/4-19	M16-1.5	10	22	15	27	12	14	315
A-ML-90-0418	1/4-19	M18-1.5	12	24	17	28	12	17	315
A-ML-90-0614	3/8-19	M14-1.5	8	23	16	28	12	17	315
A-ML-90-0616	3/8-19	M16-1.5	10	24	17	28	12	17	315
A-ML-90-0618	3/8-19	M18-1.5	12	24	17	28	12	17	315
A-ML-90-0622	3/8-19	M22-1.5	15	28	31	30	12	19	315
A-ML-90-0816	1/2-14	M16-1.5	10	27	20	34	14	19	315
A-ML-90-0818	1/2-14	M18-1.5	12	27	20	34	14	19	315
A-ML-90-0822	1/2-14	M22-1.5	15	28	21	34	14	19	315
A-ML-90-0826	1/2-14	M26-1.5	18	31	24	36	14	24	315
A-ML-90-1230	3/4-14	M30-2	22	35	28	42	16	27	160
A-ML-90-1636	1-11	M36-2	28	38	30.5	48	18	36	160
A-ML-90-2045	1.1/4-11	M45-2	35	45	34.5	54	20	41	160

A-MS-90

BSPT MALE X MET HEAVY MALE

BSPT MALE X METRIC 24° CONE HEAVY MALE 90°

ELBOW

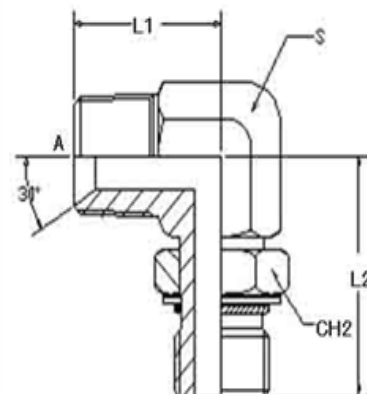


Part Number	BSPT Male Thread (G)	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	L4 (mm) - mm	CH1 (mm)	PN (bar)
A-MS-90-0414	1/4-19	M14-1.5	6	23	16	26	12	12	630
A-MS-90-0416	1/4-19	M16-1.5	8	24	17	27	12	14	630
A-MS-90-0618	3/8-19	M18-1.5	10	25	18	28	12	17	630
A-MS-90-0620	3/8-19	M20-1.5	12	29	22	28	12	17	630
A-MS-90-0820	1/2-14	M20-1.5	12	28	21	32	14	19	630
A-MS-90-0822	1/2-14	M22-1.5	14	30	22	32	14	19	630
A-MS-90-0824	1/2-14	M24-1.5	16	33	25	32	14	24	400
A-MS-90-1230	3/4-14	M30-2	20	37	27	42	16	27	400
A-MS-90-1636	1-11	M36-2	25	42	30	48	18	36	400
A-MS-90-2042	1.1/4-11	M42-2	30	49	36	54	20	41	400

A-NP-90

BSPT MALE X UNO ADJUSTABLE

BSPT MALE X UNO ADJUSTABLE STUD 90° ELBOW

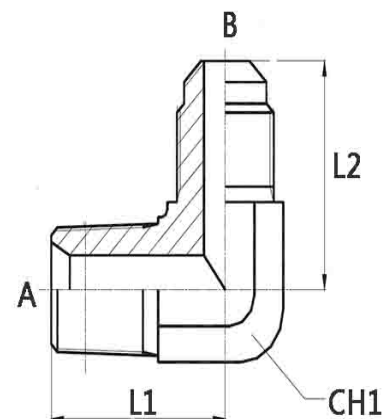


Part Number	BSPT Male Thread (A)	UNO Thread	L1 (mm)	L2 (mm)	S (mm)	CH2 (mm)	PN (bar)
A-NP-90-0407	1/4-19	7/16-20	25	31	14	16	275
A-NP-90-0409	1/4-19	9/16-18	25	32	14	19	250
A-NP-90-0412	1/4-19	3/4-16	27	37	19	24	250
A-NP-90-0609	3/8-19	9/16-18	31	35	19	19	210
A-NP-90-0612	3/8-19	3/4-16	29	37	19	24	210
A-NP-90-0614	3/8-19	7/8-14	28	39	22	27	200
A-NP-90-0812	1/2-14	3/4-16	35	39	22	24	210
A-NP-90-0814	1/2-14	7/8-14	33	44	22	27	200
A-NP-90-0817	1/2-14	1.1/16-12	44	49	27	32	200
A-NP-90-1214	3/4-14	7/8-14	40	49	27	27	170
A-NP-90-1217	3/4-14	1.1/16-12	38	49	27	32	170
A-NP-90-1621	1-11	1.5/16-12	45	52	35	38	140

A-AA-90

MALE BSPT X SAE MALE 90°

BSPT MALE X SAE MALE 45° CONE 90° ELBOW



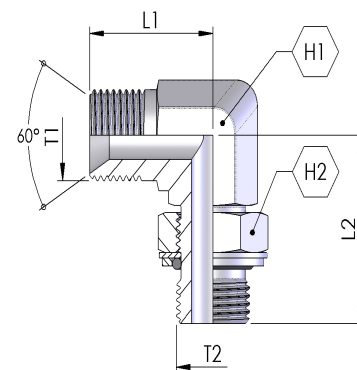
Part Number	BSPT Male Thread (A)	SAE Male Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
A-AA-90-0610	3/8-19	5/8-18	28.5	30	16	210

B-BP-90

BSP MALE X BSP ADJUSTABLE

BSP 60° CONE MALE X BSP ADJUSTABLE STUD 90° ELBOW

- ISO 8434-6

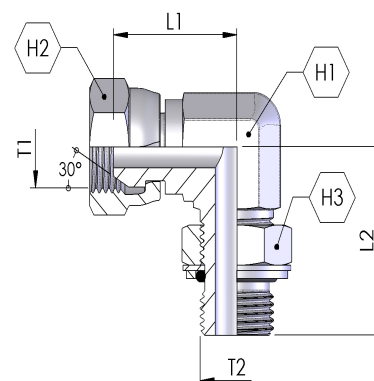


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
B-BP-90-0404	1/4-19	1/4-19	14	19	25	32	200
B-BP-90-0406	1/4-19	3/8-19	16	22	27	37	200
B-BP-90-0606	3/8-19	3/8-19	16	22	28	37	200
B-BP-90-0608	3/8-19	1/2-14	22	27	31	43	200
B-BP-90-0808	1/2-14	1/2-14	22	27	35	43	200
B-BP-90-1212	3/4-14	3/4-14	27	32	40	49	200
B-BP-90-1616	1-11	1-11	33	41	46	53	200
B-BP-90-2020	1.1/4-11	1.1/4-11	41	50	52	58	160

C-BP-90

BSP FEMALE X BSP ADJUSTABLE
BSP 60° CONE FEMALE SWIVEL NUT X BSP
ADJUSTABLE STUD 90° ELBOW

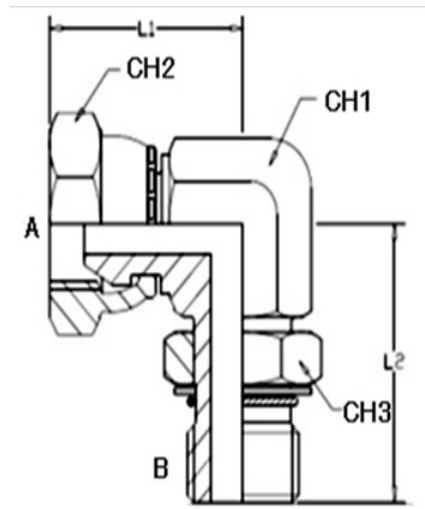
- ISO 8434-6



Part Number	T1	T2	H1 (mm)	H2 (mm)	H3 (mm)	L1 (mm)	L2 (mm)	PN (bar)
C-BP-90-0202	1/8-28	1/8-28	11	14	14	14	14	200
C-BP-90-0404	1/4-19	1/4-19	14	19	19	26	32	200
C-BP-90-0606	3/8-19	3/8-19	16	22	22	30	36	200
C-BP-90-0808	1/2-14	1/2-14	22	27	27	35	43	200
C-BP-90-1212	3/4-14	3/4-14	27	32	32	41	47	200
C-BP-90-1616	1-11	1-11	33	41	41	44	53	200

C-NP-90

BSP FEMALE X UNO ADJUSTABLE
BSP 60° CONE FEMALE SWIVEL NUT X UNO
ADJUSTABLE STUD 90° ELBOW



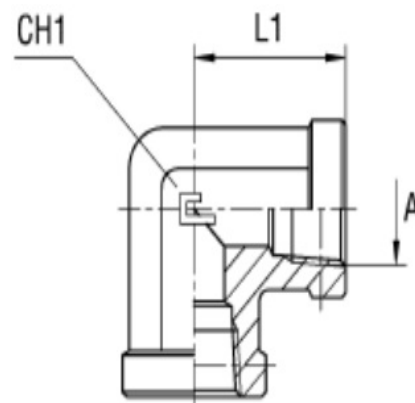
Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	CH2 (mm)	CH3	PN (bar)
C-NP-90-0409	1/4-19	9/16-18	26.2	27.2	14	19	19	250
C-NP-90-0609	3/8-19	9/16-18	31	33	16	19	22	250
C-NP-90-0612	3/8-19	3/4-16	31	35	19	24	22	250
C-NP-90-0812	1/2-14	3/4-16	33	35	19	24	27	250
C-NP-90-0814	1/2-14	7/8-14	33	41	22	27	27	200
C-NP-90-1217	3/4-14	1 1/16-12	43	51	27	32	32	200
C-NP-90-1621	1-11	1 5/16-12	47	55	33	41	41	160

E-E-90

BSPT FEMALE X BSPT FEMALE

BSPT FIXED FEMALE X BSPT FIXED FEMALE 90°

ELBOW

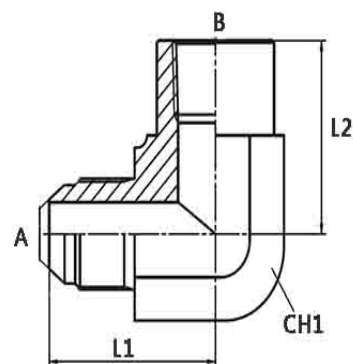


Part Number	A	L1 (mm)	CH1 (mm)	PN (bar)
E-E-90-0202	1/8-28	22	17	345
E-E-90-0404	1/4-19	23	23	275
E-E-90-0606	3/8-19	25	27	210
E-E-90-0808	1/2-14	29	33	210
E-E-90-1212	3/4-14	34	39	170
E-E-90-1616	1-11	40	47	140
E-E-90-2020	1.1/4-11	45	57	80
E-E-90-2424	1.1/2-11	51	63	70
E-E-90-3232	2-11	60	76	70

G-AC-90

MALE JIC X NPT FEMALE SOCKET 90°

JIC MALE X NPTF FEMALE FIXED 90° ELBOW



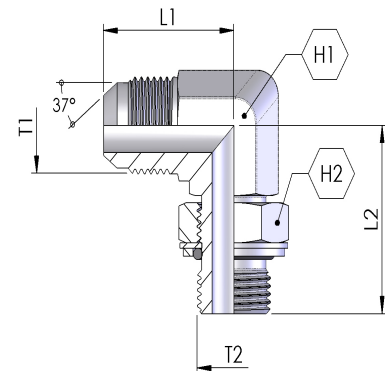
Part Number	JIC Male Thread (A)	NPTF Female Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
G-AC-90-0904	9/16-18	1/4-18	31.2	22.4	19.1	275
G-AC-90-0906	9/16-18	3/8-18	33.3	25.9	22.2	210
G-AC-90-0908	9/16-18	1/2-14	35.8	31.2	27	210
G-AC-90-1204	3/4-16	1/4-18	36.1	25.9	22.2	275
G-AC-90-1206	3/4-16	3/8-18	36.1	25.9	22.2	210
G-AC-90-1208	3/4-16	1/2-14	38.6	31.2	27	210
G-AC-90-1212	3/4-16	3/4-14	42.4	34.5	34.9	170
G-AC-90-1406	7/8-14	3/8-18	38.6	25.7	25.4	210
G-AC-90-1408	7/8-14	1/2-14	41.7	31.2	27	210

G-BP-90

JIC MALE X BSP ADJUSTABLE

JIC 37° FLARE MALE X BSP ADJUSTABLE STUD 90°
ELBOW

- ISO 8434-2



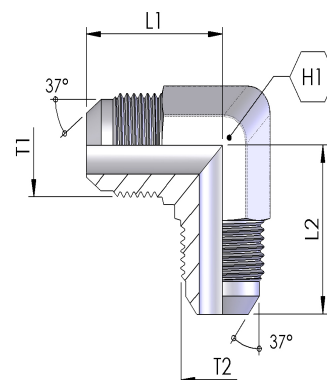
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-BP-90-0702	7/16-20	1/8-28	14	14	24	27	200
G-BP-90-0704	7/16-20	1/4-19	14	19	27	32	200
G-BP-90-0706	7/16-20	3/8-19	19	22	29	37	200
G-BP-90-0708	7/16-20	1/2-14	22	27	31	43	200
G-BP-90-0902	9/16-18	1/8-28	14	19	27	32	200
G-BP-90-0904	9/16-18	1/4-19	14	19	27	32	200
G-BP-90-0906	9/16-18	3/8-19	19	22	29	37	200
G-BP-90-0908	9/16-18	1/2-14	22	27	31	43	200
G-BP-90-1204	3/4-16	1/4-19	19	22	27	32	200
G-BP-90-1206	3/4-16	3/8-19	19	22	32	37	200
G-BP-90-1208	3/4-16	1/2-14	22	27	34	43	200
G-BP-90-1212	3/4-16	3/4-14	27	36	36	49	200
G-BP-90-1406	7/8-14	3/8-19	22	22	37	38	200
G-BP-90-1408	7/8-14	1/2-14	22	27	37	43	200
G-BP-90-1412	7/8-14	3/4-14	27	36	39	50	200
G-BP-90-1708	1.1/16-12	1/2-14	27	27	41	47	200
G-BP-90-1712	1.1/16-12	3/4-14	27	36	41	50	200
G-BP-90-1716	1.1/6-12	1-11	35	41	46	52	200
G-BP-90-2112	1.5/16-12	3/4-14	33	36	46	50	200
G-BP-90-2116	1.5/6-12	1-11	35	41	47	52	200
G-BP-90-2120	1.5/16-12	1.1/4-11	41	50	53	58	160
G-BP-90-2124	1.5/16-12	1.1/2-11	52	62.1	47	54.8	160
G-BP-90-2616	1.5/8-12	1-11	41	41	53	58	170
G-BP-90-2620	1.5/8-12	1.1/4-11	41	50	53	58	160
G-BP-90-2624	1.5/8-12	1.1/2-11	51.4	61.1	47	54.8	160
G-BP-90-3020	1.7/8-12	1.1/4-11	48	50	63	63	140
G-BP-90-3024	1.7/8-12	1.1/2-11	48	55	59	60	140

G-G-90

JIC MALE X JIC MALE

JIC MALE X JIC MALE 90° ELBOW

- ISO 8434-2



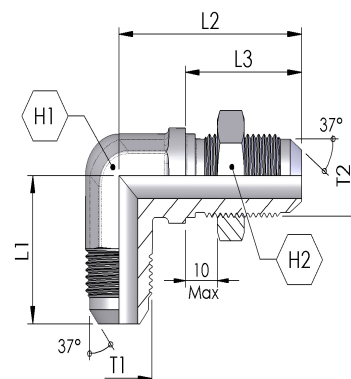
Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-G-90-0707	7/16-20	7/16-20	11	23	23	350
G-G-90-0709	7/16-20	9/16-18	14	26	26	350
G-G-90-0808	1/2-20	1/2-20	14	24	24	350
G-G-90-0909	9/16-18	9/16-18	14	26	26	350
G-G-90-0912	9/16-18	3/4-16	19	26	32	310
G-G-90-1212	3/4-16	3/4-16	19	32	32	310
G-G-90-1214	3/4-16	7/8-14	22	33	36	240
G-G-90-1217	3/4-16	1.1/16-12	27	36	42	240
G-G-90-1414	7/8-14	7/8-14	22	36	36	240
G-G-90-1717	1.1/16-12	1.1/16-12	27	40	40	240
G-G-90-2121	1.5/16-12	1.5/16-12	35	48	48	210
G-G-90-2626	1.5/8-12	1.5/8-12	41	53	53	170
G-G-90-3030	1.7/8-12	1.7/8-12	50	60	60	140

G-GK-90

JIC MALE X JIC BULKHEAD

JIC MALE X JIC BULKHEAD 90° ELBOW

- ISO 8434-2



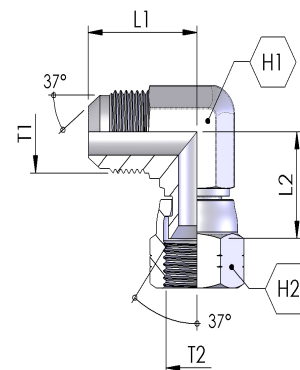
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
G-GK-90-0707	7/16-20	7/16-20	11.1	17	25	38	23	350
G-GK-90-0808	1/2-20	1/2-20	14	19	27	44	26	350
G-GK-90-0909	9/16-18	9/16-18	14	21	28	46	28	350
G-GK-90-1212	3/4-16	3/4-16	19	25	35	54	35	310
G-GK-90-1414	7/8-14	7/8-14	22	29	40	61	39	240
G-GK-90-1717	1.1/16-12	1.1/16-12	27	35	45	68	40	240
G-GK-90-2121	1.5/16-12	1.5/16-12	33	41	49	71	40	210
G-GK-90-2626	1.5/8-12	1.5/8-12	41	48	55	79	41	170

G-J-90

JIC MALE X JIC FEMALE

JIC MALE X JIC FEMALE SWIVEL NUT 90° ELBOW

- ISO 8434-2

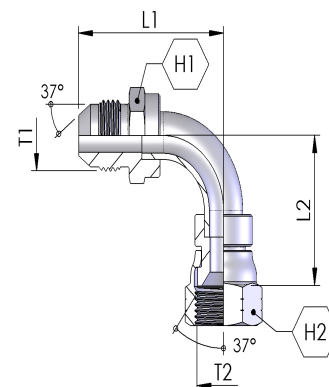


Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-J-90-0707	7/16-20	7/16-20	14	14	24	17	350
G-J-90-0808	1/2-20	1/2-20	14	17	26	22	350
G-J-90-0909	9/16-18	9/16-18	14	19	26	22	350
G-J-90-1212	3/4-16	3/4-16	19	22	32	24	310
G-J-90-1214	3/4-16	7/8-14	19	27	32	27	240
G-J-90-1412	7/8-14	3/4-16	22	24	36	24	240
G-J-90-1414	7/8-14	7/8-14	22	27	36	28	240
G-J-90-1717	1.1/16-12	1.1/16-12	27	32	42	30	240
G-J-90-2121	1.5/16-12	1.5/16-12	35	41	46	36	210
G-J-90-2626	1.5/8-12	1.5/8-12	41	50	53	43	170
G-J-90-3030	1.7/8-12	1.7/8-12	48	55	62	52	140
G-J-90-4040	2.1/2-12	2.1/2-12	75.5	84.1	63	75	105

G-J-90S

MALE JIC X JIC FEMALE SWEPT 90°

JIC MALE X JIC FEMALE SWIVEL NUT 90° SWEPT

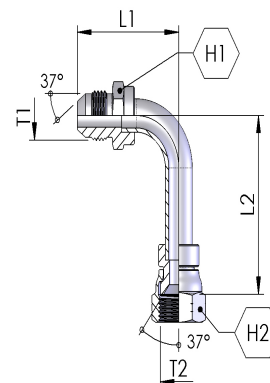


Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	H2 (mm)	PN (bar)
G-J-90S-0707	7/16-20	7/16-20	30.5	32.5	12.7	14.3	350
G-J-90S-0909	9/16-18	9/16-18	38.1	40.4	15.9	17.5	350
G-J-90S-1212	3/4-16	3/4-16	45.7	45.7	20.6	22.2	310
G-J-90S-1414	7/8-14	7/8-14	50.8	50.8	23.8	25.4	240
G-J-90S-1717	1.1/16-12	1.1/16-12	63.5	57.2	28.6	31.8	240
G-J-90S-2121	1.5/16-12	1.5/16-12	71.1	71.1	34.9	38.1	210
G-J-90S-2626	1.5/8-12	1.5/8-12	82.8	65.8	42.9	50.8	170
G-J-90S-3030	1.7/8-12	1.7/8-12	104.5	75.2	50.6	57	140
G-J-90S-4040	2.1/2-12	2.1/2-12	128.5	98.7	70	70	105

G-J-90S X1

MALE JIC X EXTENDED JIC FEM. 90°

JIC MALE X JIC FEMALE SWIVEL NUT 90° SWEPT



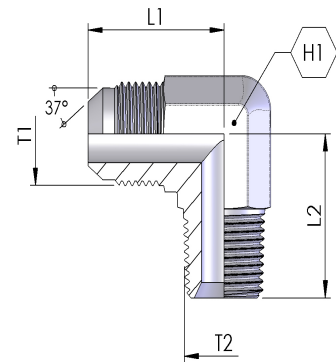
Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	H2 (mm)	PN (bar)
G-J-90S-0707X1	7/16-20	7/16-20	30.5	45.7	12.7	14.3	350
G-J-90S-0909X1	9/16-18	9/16-18	38.1	55.4	15.9	17.5	350
G-J-90S-1212X1	3/4-16	3/4-16	45.7	62	20.6	22.2	310
G-J-90S-1414X1	7/8-14	7/8-14	50.8	65.5	23.8	25.4	240
G-J-90S-1717X1	1.1/16-12	1.1/16-12	63.5	94.7	28.6	31.8	240
G-J-90S-2121X1	1.5/16-12	1.5/16-12	71.1	110	34.9	38.1	210
G-J-90S-2626X1	1.5/8-12	1.5/8-12	82.8	127	42.9	50.8	170
G-J-90S-3030X1	1.7/8-12	1.7/8-12	135	127	50	57	140
G-J-90S-4040X1	2.1/2-12	2.1/2-12	135	127	70	70	105

G-L-90

JIC MALE X NPTF MALE

JIC MALE X NPTF MALE 90° ELBOW

- SAE J514



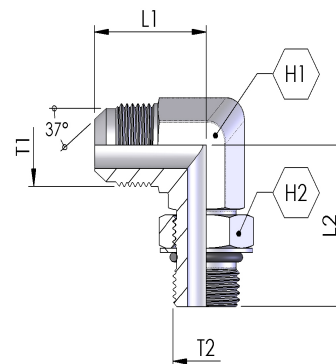
Part Number	T1	T2	H1 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-L-90-0702	7/16-20	1/8-27	12	22	20	345
G-L-90-0702X	7/16-20	1/8-27	11	23	30	345
G-L-90-0702X1	7/16-20	1/8-27	22.6	39.6	11.1	345
G-L-90-0704	7/16-20	1/4-18	14	24	28	275
G-L-90-0704X1	7/16-20	1/4-18	25.8	52	14.3	275
G-L-90-0706	7/16-20	3/8-18	19	28	31	210
G-L-90-0802	1/2-20	1/8-27	14	24	20	345
G-L-90-0902	9/16-18	1/8-27	14	27	23	345
G-L-90-0904	9/16-18	1/4-18	14	28	28	275
G-L-90-0904X1	9/16-18	1/4-18	27	40.2	14.3	275
G-L-90-0906	9/16-18	3/8-18	19	29	31	210
G-L-90-0908	9/16-18	1/2-14	22	29	37	210
G-L-90-1204	3/4-16	1/4-18	19	32	31	275
G-L-90-1206	3/4-16	3/8-18	19	32	31	210
G-L-90-1208	3/4-16	1/2-14	22	34	37	210
G-L-90-1212	3/4-16	3/4-14	27	36	40	170
G-L-90-1406	7/8-14	3/8-18	22	37	33	210
G-L-90-1408	7/8-14	1/2-14	22	37	37	210
G-L-90-1412	7/8-14	3/4-14	27	39	40	170
G-L-90-1708	1.1/16-12	1/2-14	42.2	40.4	27	210
G-L-90-1712	1.1/16-12	3/4-14	27	42	40	170
G-L-90-1716	1.1/16-12	1-11.5	33	45	50	140
G-L-90-2112	1.5/16-12	3/4-12	46	45.2	33.3	170
G-L-90-2116	1.5/16-12	1-11.1/2	35	46	48	140
G-L-90-2616	1.5/8-12	1-11.1/2	46	50	33.3	140
G-L-90-2620	1.5/8-12	1.1/4-11.5	41	52	60	80
G-L-90-2624	1.5/8-12	1.1/2-11.1/2	56	67.1	48	70
G-L-90-3024	1.7/8-12	1.1/2-11.1/2	59.2	67.1	48	70
G-L-90-4032	2.1/2-12	2-11.1/2	77.7	76.2	63.5	70

G-NP-90

JIC MALE X UNO ADJUSTABLE

JIC MALE X UNO ADJUSTABLE STUD 90° ELBOW

- ISO 8434-2



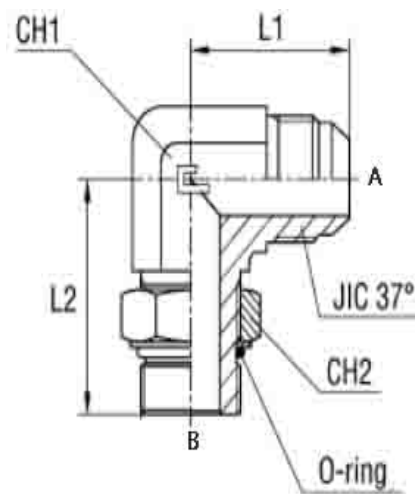
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
G-NP-90-0707	7/16-20	7/16-20	14	14	24	28	315
G-NP-90-0708	7/16-20	1/2-20	14	16	24	28	315
G-NP-90-0709	7/16-20	9/16-18	14	18	27	32	250
G-NP-90-0808	1/2-20	1/2-20	14	16	24	29	315
G-NP-90-0809	1/2-20	9/16-18	16	17	27	32	250
G-NP-90-0907	9/16-18	7/16-20	14	14	27	30	315
G-NP-90-0908	9/16-18	1/2-20	14	16	27	32	315
G-NP-90-0909	9/16-18	9/16-18	14	17	27	31	250
G-NP-90-0912	9/16-18	3/4-16	19	22	29	37	250
G-NP-90-0914	9/16-18	7/8-14	22	25	31	43	200
G-NP-90-0917	9/16-18	1.1/16-12	27	32	33	49	200
G-NP-90-1209	3/4-16	9/16-18	19	27	32	34	250
G-NP-90-1212	3/4-16	3/4-16	19	22	32	37	250
G-NP-90-1214	3/4-16	7/8-14	22	27	34	43	200
G-NP-90-1217	3/4-16	1.1/16-12	27	32	36	49	200
G-NP-90-1412	7/8-14	3/4-16	22	22	37	40	200
G-NP-90-1414	7/8-14	7/8-14	22	27	37	43	200
G-NP-90-1417	7/8-14	1.1/16-12	27	32	39	50	200
G-NP-90-1712	1.1/16-12	3/4-16	27	22	42	42	240
G-NP-90-1714	1.1/16-12	7/8-14	27	25	42	45	200
G-NP-90-1717	1.1/16-12	1.1/16-12	27	32	41	50	200
G-NP-90-1721	1.1/16-12	1.5/16-12	33	38	45	52	160
G-NP-90-2117	1.5/16-12	1.1/16-12	33	32	46	52	200
G-NP-90-2121	1.5/16-12	1.5/16-12	35	41	47	52	160
G-NP-90-2126	1.5/16-12	1.5/8-12	41	48	51	57	125
G-NP-90-2621	1.5/8-12	1.5/16-12	41	38	52	57	160
G-NP-90-2626	1.5/8-12	1.5/8-12	41	48	52	57	125
G-NP-90-3026	1.7/8-12	1.5/8-12	48	48	59	61	125
G-NP-90-3030	1.7/8-12	1.7/8-12	48	54	59	61	125
G-NP-90-4040	2.1/2-12	2.1/2-12	64	70	78	73	100

G-NP-90 X1

JIC MALE X UNO ADJUSTABLE

JIC MALE X UNO MALE ADJUSTABLE STUD 90°

ELBOW

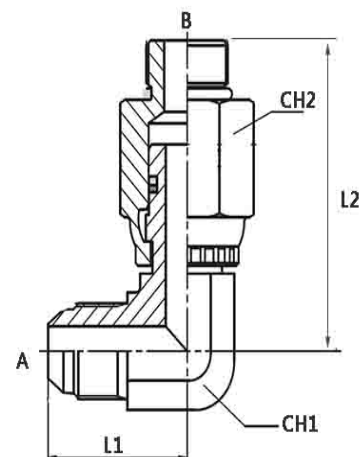


Part Number	JIC Male Thread (A)	UNO Male Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
G-NP-90-0707X1	7/16-20	7/16-20	22.6	43.9	11.1	14.3	315
G-NP-90-0909X1	9/16-18	9/16-18	26.9	52.8	14.3	17.5	250
G-NP-90-1212X1	3/4-16	3/4-16	31.8	63	19.1	22.2	250
G-NP-90-1414X1	7/8-14	7/8-14	26.8	73.4	22.2	25.4	200
G-NP-90-1717X1	1.1/16-12	1.1/16-12	42.2	84.8	26.9	31.8	200
G-NP-90-2121X1	1.5/16-12	1.5/16-12	46	94.5	33.3	38.1	160

G-NPS-90

MALE JIC X UNO SWIVEL

JIC MALE X UNO MALE SWIVEL 90° ELBOW

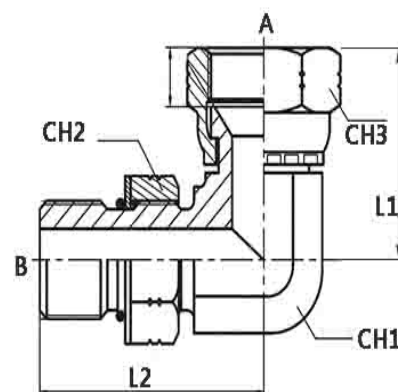


Part Number	JIC Male Thread (A)	UNO Male Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
G-NPS-90-1214	3/4-16	7/8-14	30.5	52.5	18.6	26.9	200

J-NP-90

JIC FEMALE SWIVEL X UNO ADJUSTABLE

JIC FEMALE SWIVEL X UNO MALE ADJUSTABLE 90° ELBOW



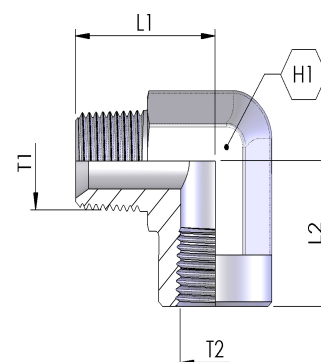
Part Number	JIC Female Thread (A)	UNO Male Thread (B)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	Hex A/F - CH3 (mm)	PN (bar)
J-NP-90-0707	7/16-20	7/16-20	23.9	26.2	11.1	14.3	14.3	315
J-NP-90-0909	9/16-18	9/16-18	31.2	32.8	14.3	17.5	22.2	250
J-NP-90-1212	3/4-16	3/4-16	35.1	36.8	19.1	22.2	22.2	250
J-NP-90-1414	7/8-14	7/8-14	41.1	43.2	22.2	25.4	25.4	200
J-NP-90-1717	1.1/16-12	1.1/16-12	44.5	49.3	27	31.8	31.8	200
J-NP-90-2121	1.5/16-12	1.5/16-12	51.1	52.1	33.3	38.1	38.1	160

L-AC-90

NPTF MALE X NPTF FEMALE

NPTF MALE X NPTF FIXED FEMALE 90° ELBOW

- SAE J514

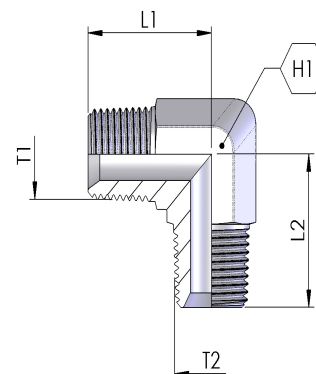


Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	PN (bar)
L-AC-90-0202	1/8-27	1/8-27	20	17	14	345
L-AC-90-0404	1/4-18	1/4-18	28	23	19	275
L-AC-90-0606	3/8-18	3/8-18	31	26	22	210
L-AC-90-0808	1/2-14	1/2-14	37	31	27	210
L-AC-90-1212	3/4-14	3/4-14	40	35	33	170
L-AC-90-1616	1-11.5	1-11.5	50	41	41	140
L-AC-90-2020	1.1/4-11.1/2	1.1/4-11.1/2	60.5	43.2	47.6	80
L-AC-90-2424	1.1/2-11.1/2	1.1/2-11.1/2	67.1	52.8	65.1	70
L-AC-90-3232	1.1/2-11.1/2	1.1/2-11.1/2	76.2	60.7	71.4	70

L-L-90

NPTF MALE X NPTF MALE

NPTF MALE X NPTF MALE 90° ELBOW

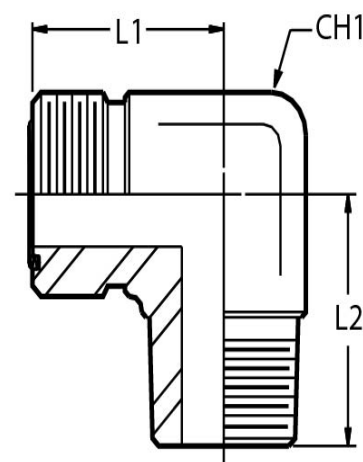


Part Number	T1	T2	L1 (mm)	L2 (mm)	H1 (mm)	PN (bar)
L-L-90-0202	1/8-27	1/8-27	20	20	13	345
L-L-90-0204	1/8-27	1/4-18	22.9	27.7	14.3	275
L-L-90-0404	1/4-18	1/4-18	28	28	16	275
L-L-90-0406	1/4-18	3/8-18	30	31	21	210
L-L-90-0606	3/8-18	3/8-18	31	31	21	210
L-L-90-0608	3/8-18	1/2-14	33	37	24	210
L-L-90-0808	1/2-14	1/2-14	37	37	24	210
L-L-90-0812	1/2-14	3/4-14	40.9	40.4	27	170
L-L-90-1212	3/4-14	3/4-14	40	40	29	170
L-L-90-1616	1-11.5	1-11.5	50	50	35	140
L-L-90-2020	1.1/4-11.1/2	1.1/4-11.1/2	56.4	56.4	41.3	80

L-R-90

MALE NPTF X ORFS 90°

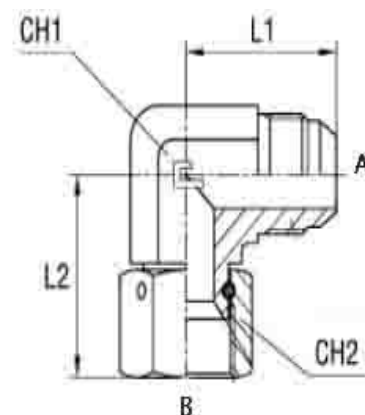
NPTF MALE X ORFS MALE 90° ELBOW



Part Number	NPTF Male Thread	ORFS Male Thread	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
L-R-90-0209	1/8-27	9/16-18	21.6	20.3	14.3	345
L-R-90-0409	1/4-18	9/16-18	21.6	28.5	14.3	275
L-R-90-0411	1/4-18	11/16-16	24.9	27.7	19.1	275

MY-UY-90

JIS METRIC MALE X JIS METRIC FEMALE
JIS MALE METRIC X JIS METRIC FEMALE 90°
ELBOW (KOMATSU STYLE)

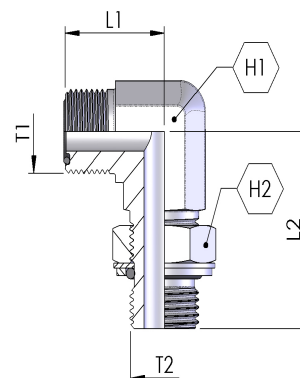


Part Number	Metric Male Thread (A)	Metric Female Thread (B)	Thread Length - L2 (mm)	Thread Length - mm (L3)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
MY-UY-90-1414	M14-1.5	M14-1.5	29	29.5	14	19	350
MY-UY-90-1616	M16-1.5	M16-1.5	31.5	31	16	22	350
MY-UY-90-1818	M18-1.5	M18-1.5	33.8	34.1	19	24	350
MY-UY-90-2222	M22-1.5	M22-1.5	38	39.3	22	27	350
MY-UY-90-2424	M24-1.5	M24-1.5	41.2	43.1	24	30	350
MY-UY-90-3030	M30-1.5	M30-1.5	48	51.7	30	36	280

R-BP-90

ORFS MALE X BSP ADJUSTABLE

ORFS MALE X BSP ADJUSTABLE STUD 90° ELBOW



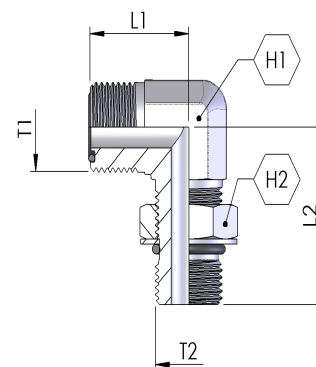
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
R-BP-90-0904	9/16-18	1/4-19	14	19	22	35	200
R-BP-90-1106	11/16-16	3/8-19	19	22	25	38	200
R-BP-90-1306	13/16-16	3/8-19	19	22	28	38	200
R-BP-90-1308	13/16-16	1/2-14	22	27	30	48	200
R-BP-90-1608	1-14	1/2-14	27	27	34	48	200
R-BP-90-1912	1.3/16-12	3/4-14	30	36	38	52	200
R-BP-90-2316	1.7/16-12	1-11	36	41	42	59	200

R-NP-90

ORFS MALE X UNO ADJUSTABLE

ORFS MALE X UNO ADJUSTABLE STUD 90° ELBOW

- SAE J1453



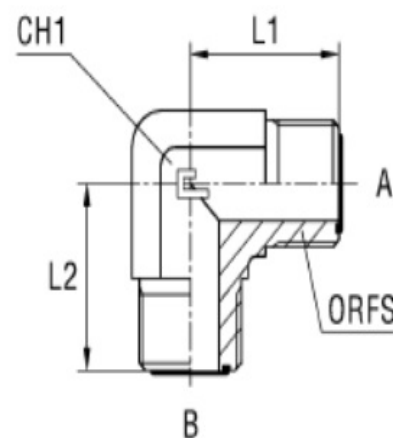
Part Number	T1	T2	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	PN (bar)
R-NP-90-0907	9/16-18	7/16-20	14	17	22	32	315
R-NP-90-0909	9/16-18	9/16-18	17	19	24	36	250
R-NP-90-1107	11/16-16	7/16-20	19	16	25	35	315
R-NP-90-1109	11/16-16	9/16-18	17	19	25	36	250
R-NP-90-1112	11/16-16	3/4-16	19	24	27	41	250
R-NP-90-1309	13/16-16	9/16-18	19	19	28	37	250
R-NP-90-1312	13/16-16	3/4-16	19	24	28	41	250
R-NP-90-1612	1-14	3/4-16	24	24	34	46	250
R-NP-90-1614	1-14	7/8-14	24	27	34	50	200
R-NP-90-1914	1.3/16-12	7/8-14	30	27	37	51	200
R-NP-90-1917	1.3/16-12	1.1/16-12	30	36	38	55	200
R-NP-90-2321	1.7/16-12	1.5/16-12	36	41	42	60	315
R-NP-90-2726	1.11/16-12	1.5/8-12	41	50	45	62	250

R-R-90

ORFS MALE X ORFS MALE

ORFS MALE X ORFS MALE 90° ELBOW

- ISO 8434-3



Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	PN (bar)
R-R-90-0909	9/16-18	9/16-18	22	22	14	630
R-R-90-1111	11/16-16	11/16-16	25	25	19	630
R-R-90-1313	13/16-16	13/16-16	28	28	19	630
R-R-90-1616	1-14	1-14	34	34	27	400
R-R-90-1919	1.3/16-12	1.3/16-12	38	38	30	400
R-R-90-2323	1.7/16-12	1.7/16-12	42	42	36	400
R-R-90-2727	1.11/16-12	1.11/16-12	45	45	41	250
R-R-90-3232	2-12	2-12	49	49	48	250

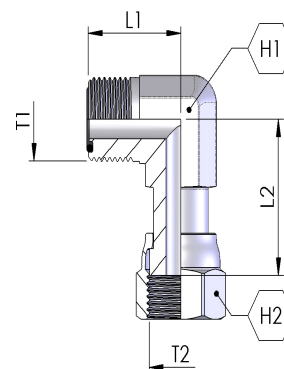
R-T-90

ORFS MALE X ORFS FEMALE

ORFS MALE X ORFS FEMALE SWIVEL NUT 90°

ELBOW

- ISO 8434-3

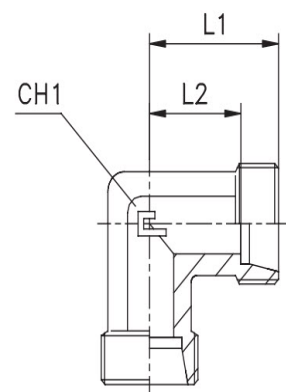


Part Number	ORFS Male Thread (T1)	ORFS Female Thread (T2)	L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
R-T-90-0909	9/16-18	9/16-18	22	27	14	17	630
R-T-90-1111	11/16-16	11/16-16	25	29	19	22	630
R-T-90-1313	13/16-16	13/16-16	28	38	19	24	630
R-T-90-1616	1-14	1-14	34	41	27	30	400
R-T-90-1919	1.3/16-12	1.3/16-12	38	47	30	36	400
R-T-90-2323	1.7/16-12	1.7/16-12	42	54	36	41	400
R-T-90-2727	1.11/16-12	1.11/16-12	45	58	41	50	250
R-T-90-3232	2-12	2-12	48.8	75.9	47.6	57.2	250

ML-ML-90

MET LIGHT MALE X MET LIGHT MALE
METRIC 24° CONE LIGHT MALE X METRIC 24°
CONE LIGHT MALE 90° ELBOW

- ISO 8434-1



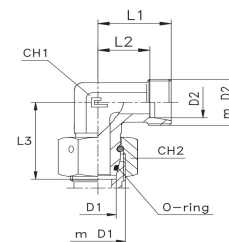
Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	CH1 (mm)	PN (bar)
ML-ML-90-1212	M12-1.5	6	19	12	12	500
ML-ML-90-1414	M14-1.5	8	21	14	12	500
ML-ML-90-1616	M16-1.5	10	22	15	14	500
ML-ML-90-1818	M18-1.5	12	24	17	17	400
ML-ML-90-2222	M22-1.5	15	28	21	19	400
ML-ML-90-2626	M26-1.5	18	31	24	24	400
ML-ML-90-3030	M30-2	22	35	28	27	250
ML-ML-90-3636	M36-2	28	38	31	36	250
ML-ML-90-4545	M45-2	35	45	35	41	250
ML-ML-90-5252	M52-2	42	51	40	50	250

ML-UL-90

MET LIGHT MALE X MET LIGHT F/M

METRIC 24° CONE LIGHT MALE X METRIC 24°

CONE LIGHT FEMALE SWIVEL NUT 90° ELBOW

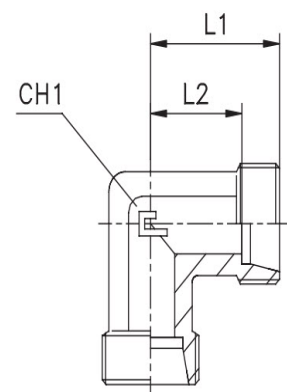


Part Number	Metric Male Thread	Metric Female Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	CH2 (mm)	PN (Bar)
ML-UL-90-1212	M12-1.5	M12-1.5	6	19	12	26	12	14	500
ML-UL-90-1414	M14-1.5	M14-1.5	8	21	14	28	12	17	500
ML-UL-90-1616	M16-1.5	M16-1.5	10	22	15	29	14	19	500
ML-UL-90-1818	M18-1.5	M18-1.5	12	24	17	30	17	22	400
ML-UL-90-2222	M22-1.5	M22-1.5	15	28	21	33	19	27	400
ML-UL-90-2626	M26-1.5	M26-1.5	18	31	24	36	24	32	400
ML-UL-90-3030	M30-2	M30-2	22	35	28	39	27	36	250
ML-UL-90-3636	M36-2	M36-2	28	38	31	42	36	41	250
ML-UL-90-4545	M45-2	M45-2	35	45	35	42	41	50	250
ML-UL-90-5252	M52-2	M52-2	42	51	40	56	50	60	250

MS-MS-90

MET HEAVY MALE X MET HEAVY MALE
METRIC 24° CONE HEAVY MALE X METRIC 24°
CONE HEAVY MALE 90° ELBOW

- ISO 8434-1



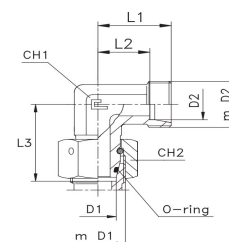
Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	CH1 (mm)	PN (Bar)
MS-MS-90-1414	M14-1.5	6	23	16	12	800
MS-MS-90-1616	M16-1.5	8	24	17	14	800
MS-MS-90-1818	M18-1.5	10	25	18	17	800
MS-MS-90-2020	M20-1.5	12	29	22	17	630
MS-MS-90-2222	M22-1.5	14	30	22	19	630
MS-MS-90-2424	M24-1.5	16	33	25	24	630
MS-MS-90-3030	M30-2	20	37	27	27	400
MS-MS-90-3636	M36-2	25	42	30	36	400
MS-MS-90-4242	M42-2	30	49	36	41	400
MS-MS-90-5252	M52-2	38	57	41	50	315

MS-US-90

MET HEAVY MALE X MET HEAVY F/M

METRIC 24° CONE HEAVY MALE X METRIC 24°

CONE HEAVY FEMALE SWIVEL NUT 90° ELBOW

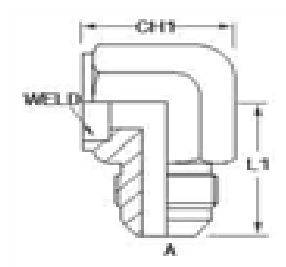


Part Number	Metric Male Thread	Metric Female Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	CH2 (mm)	PN (Bar)
MS-US-90-1414	M14-1.5	M14-1.5	6	23	16	27	12	17	800
MS-US-90-1616	M16-1.5	M16-1.5	8	24	17	28	14	19	800
MS-US-90-1818	M18-1.5	M18-1.5	10	25	18	30	17	22	800
MS-US-90-2020	M20-1.5	M20-1.5	12	29	22	31	17	24	630
MS-US-90-2222	M22-1.5	M22-1.5	14	30	22	35	19	27	630
MS-US-90-2424	M24-1.5	M24-1.5	16	33	25	37	24	30	630
MS-US-90-3030	M30-2	M30-2	20	37	27	45	27	36	420
MS-US-90-3636	M36-2	M36-2	25	42	30	50	36	46	420
MS-US-90-4242	M42-2	M42-2	30	49	36	56	41	50	420
MS-US-90-5252	M52-2	M52-2	38	57	41	63	50	60	420

TW-G-90

TUBEWELD X JIC MALE 90° ELBOW

IMPERIAL TUBE WELD SOCKET X JIC MALE 90° ELBOW

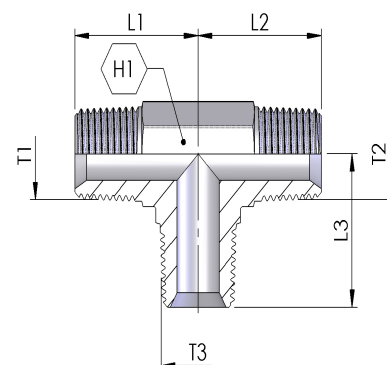


Part Number	suits tube	JIC Male Thread (A)	Weld Socket	L1 - mm	Hex A/F (CH1)
TW-G-90-0609	3/8	9/16-18	9.7 x 5	23	16
TW-G-90-0812	1/2	3/4-16	12.8x4.8	31.8	20.6
TW-G-90-1014	5/8	7/8-14	16 x 6	33	25
TW-G-90-1217	3/4	1.1/16-12	19.2 x 6	36	29
TW-G-90-1621	1	1.5/16-12	25.6x6.4	46	35.1
TW-G-90-2026	1.1/4	1.5/8-12	31.9x7.9	52.3	44.5

TEE ADAPTORS

A-A-A

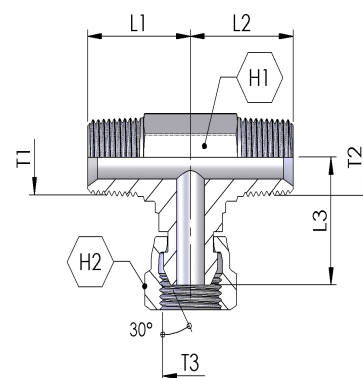
BSPT MALE X BSPT MALE X BSPT MALE
BSPT MALE X BSPT MALE X BSPT MALE TEE



Part Number	T1/T2/T3	H1 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
A-A-A-020202	1/8-28	12	20	20	20	345
A-A-A-040404	1/4-19	14	25	25	25	275
A-A-A-060606	3/8-19	16	31	31	31	210
A-A-A-080808	1/2-14	22	35	35	35	210
A-A-A-121212	3/4-14	27	40	40	40	170
A-A-A-161616	1-11	35	47	47	47	140
A-A-A-202020	1.1/4-11	41	55	55	55	80
A-A-A-242424	1.1/2-11	50	60	60	60	70

A-A-C

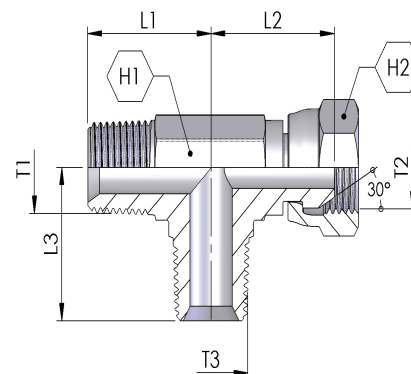
BSPT MALE X BSPT MALE X BSP FEMALE
BSPT MALE X BSPT MALE X BSP 60° CONE FEMALE
SWIVEL NUT BRANCH TEE



Part Number	T1/T2/T3	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
A-A-C-040404	1/4-19	14	19	25	25	20	275
A-A-C-060606	3/8-19	19	22	31	31	30	210
A-A-C-080808	1/2-14	22	27	35	35	35	210
A-A-C-121212	3/4-14	27	32	40	40	37	170
A-A-C-161616	1-11	35	41	46	46	42	140

A-C-A

BSPT MALE X BSP FEMALE X BSPT MALE
BSPT MALE X BSP 60° CONE FEMALE SWIVEL NUT
X BSPT MALE RUN TEE

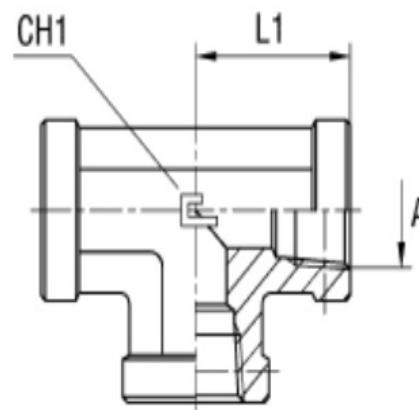


Part Number	T1/T2/T3	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
A-C-A-040404	1/4-19	14	19	25	20	25	275
A-C-A-060606	3/8-19	19	22	31	30	31	210
A-C-A-080808	1/2-14	22	27	35	35	35	210
A-C-A-121212	3/4-14	27	32	40	42	40	170
A-C-A-161616	1-11	35	41	47	47	47	140
A-C-A-202020	1.1/4-11	41	50	55	54	55	80

AC-AC-AC

NPTF FEMALE X NPTF FEMALE X NPTF FEMALE
NPTF FIXED FEMALE X NPTF FIXED FEMALE X NPTF
FIXED FEMALE TEE

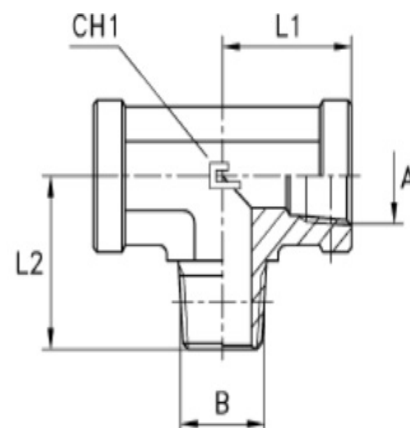
- SAE J514



Part Number	A	L1 (mm)	CH1 (mm)	PN (bar)
AC-AC-AC-020202	1/8-27	16.76	16	345
AC-AC-AC-040404	1/4-18	22.35	19	275
AC-AC-AC-060606	3/8-18	25.91	22	210
AC-AC-AC-080808	1/2-14	31.24	29	210
AC-AC-AC-121212	3/4-14	34.54	35	170
AC-AC-AC-161616	1-11.1/2	41.15	41	140
AC-AC-AC-202020	1.1/4-11.1/2	43	48	80

AC-AC-L

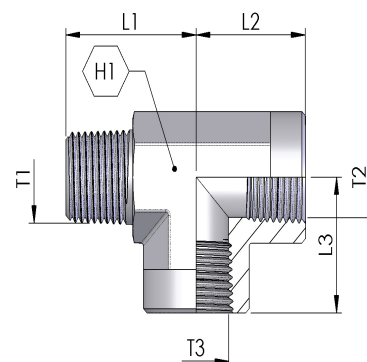
NPTF FEMALE X NPTF FEMALE X NPTF MALE
NPTF FIXED FEMALE X NPTF FIXED FEMALE X NPTF
MALE BRANCH TEE



Part Number	NPTF Female Thread (A)	NPTF Female Thread (A)	NPTF Male Thread (B)	Overall Length - L1 (mm)	L2 (mm)	Hex A/F - CH1 (mm)	PN (bar)
AC-AC-L-040404	1/4-18	1/4-18	1/4-18	44.7	27.7	19	275
AC-AC-L-060606	3/8-18	3/8-18	3/8-18	51.8	31	22.2	210
AC-AC-L-080808	1/2-18	1/2-18	1/2-18	62.5	37.3	27	210
AC-AC-L-121212	3/4-14	3/4-14	3/4-14	69.1	40.4	33.3	170
AC-AC-L-161616	1-11.1/2	1-11.1/2	1-11.1/2	82.3	50	41.3	140

A-E-E

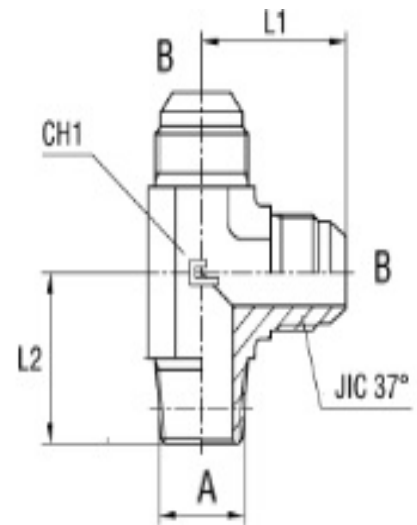
BSPT MALE X BSPT FEMALE X BSPT FEMALE
BSPT MALE X BSPT FIXED FEMALE X BSPT FIXED
FEMALE RUN TEE



Part Number	T1/T2/T3	H1 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
A-E-E-020202	1/8-28	16	20	24	20	345
A-E-E-040404	1/4-19	19	28	22	22	275
A-E-E-060606	3/8-19	22	31	26	26	210
A-E-E-080808	1/2-14	27	37	31	31	210
A-E-E-121212	3/4-14	35	44	34	34	170
A-E-E-161616	1-11	41	52	42	42	140

A-G-G

BSPT MALE X JIC MALE X JIC MALE
BSPT MALE X JIC MALE X JIC MALE RUN TEE

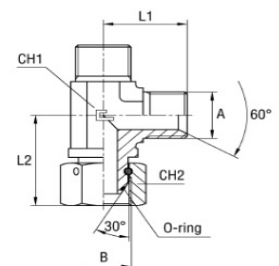


Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	PN (bar)
A-G-G-020707	1/8-28	7/16-20	23	20	14	345
A-G-G-040707	1/4-19	7/16-20	24	28	14	275
A-G-G-040909	1/4-19	9/16-18	28	28	14	275
A-G-G-060909	3/8-19	9/16-18	30	31	19	210
A-G-G-061212	3/8-19	3/4-16	32	31	19	210
A-G-G-081212	1/2-14	3/4-16	34	38	22	210
A-G-G-081414	1/2-14	7/8-14	37	38	22	210
A-G-G-121717	3/4-14	1.1/16-12	42	40	27	170
A-G-G-162121	1-11	1.5/16-12	50	49	49	140

B-C-B

BSP MALE X BSP FEMALE X BSP MALE
BSP MALE X BSPP FEMALE SWIVEL NUT X BSP
MALE RUN TEE

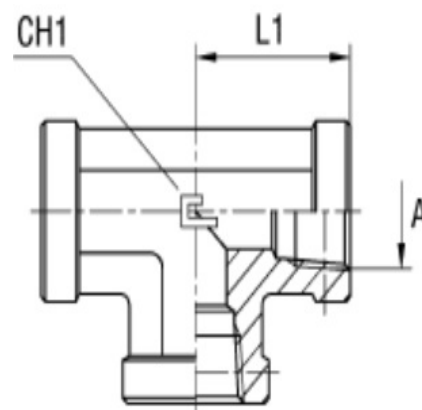
- ISO 8434-6



Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	CH2 (mm)	PN (bar)
B-C-B-040404	1/4-19	1/4-19	26	33	14	19	400
B-C-B-060606	3/8-19	3/8-19	29	37	19	22	400
B-C-B-080808	1/2-14	1/2-14	34	43	22	27	350
B-C-B-121212	3/4-14	3/4-14	41	54	27	32	315
B-C-B-161616	1-11	1-11	45	61	33	41	250

E-E-E

BSPT FEMALE X BSPT FEMALE X BSPT FEMALE
BSPT FIXED FEMALE X BSPT FIXED FEMALE X BSPT
FIXED FEMALE TEE

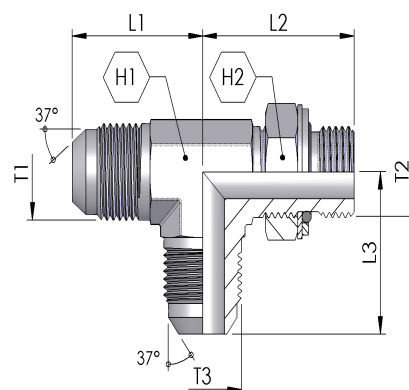


Part Number	A	L1 (mm)	CH1 (mm)	PN (bar)
E-E-E-020202	1/8-28	17	14	345
E-E-E-040404	1/4-19	23	23	275
E-E-E-060606	3/8-19	25	27	210
E-E-E-080808	1/2-14	29	33	210
E-E-E-121212	3/4-14	34	39	170
E-E-E-161616	1-11	38	47	140
E-E-E-202020	1.1/4-11	45	53	80
E-E-E-242424	1.1/2-11	51	63	70

G-BP-G

JIC MALE X BSP ADJUSTABLE X JIC MALE
JIC MALE X BSP ADJUSTABLE STUD X JIC MALE
RUN TEE

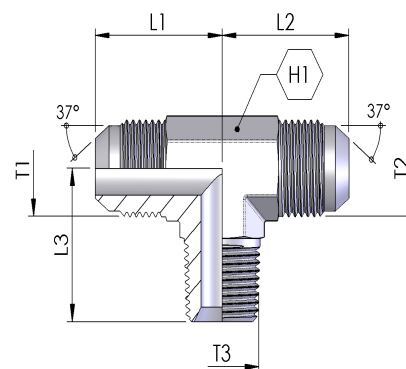
- ISO 8434-2



Part Number	T1	T2	T3	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
G-BP-G-070407	7/16-20	1/4-19	7/16-20	14	19	27	32	27	200
G-BP-G-090409	9/16-18	1/4-19	9/16-18	14	19	27	31	27	200
G-BP-G-090609	9/16-18	3/8-19	9/16-18	19	22	29	37	29	200
G-BP-G-120612	3/4-16	3/8-19	3/4-16	19	22	32	37	32	200
G-BP-G-120812	3/4-16	1/2-14	3/4-16	22	27	35	43	35	200
G-BP-G-140814	7/8-14	1/2-14	7/8-14	22	27	38	44	38	200
G-BP-G-171217	1.1/16-12	3/4-14	1.1/16-12	27	36	44	50	44	200
G-BP-G-211621	1.5/16-12	1-11	1.5/16-12	36	41	49	53	49	200

G-G-A

JIC MALE X JIC MALE X BSPT MALE
JIC FLARE MALE X JIC FLARE MALE X BSPT MALE
BRANCH TEE

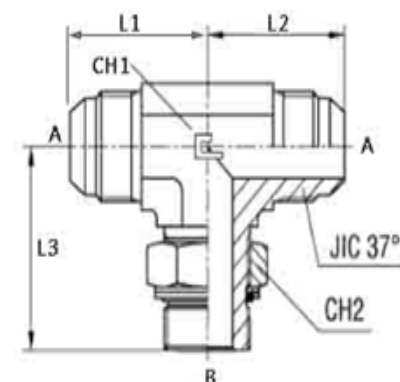


Part Number	T1	T2	T3	H1 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
G-G-A-070702	7/16-20	7/16-20	1/8-28	12	23	23	20	345
G-G-A-070704	7/16-20	7/16-20	1/4-19	14	27	27	27	275
G-G-A-090904	9/16-18	9/16-18	1/4-19	14	27	27	27	275
G-G-A-090906	9/16-18	9/16-18	3/8-19	19	29	29	31	210
G-G-A-121206	3/4-16	3/4-16	3/8-19	19	32	32	31	210
G-G-A-121208	3/4-16	3/4-16	1/2-14	22	34	34	35	210
G-G-A-141406	7/8-14	7/8-14	3/8-19	26.7	37.6	37.6	35.6	210
G-G-A-141408	7/8-14	7/8-14	1/2-14	22	36	36	35	210
G-G-A-141412	7/8-14	7/8-14	3/4-14	26.2	39	39	40	170
G-G-A-171712	1.1/16-12	1.1/16-12	3/4-14	27	42	42	40	170
G-G-A-212116	1.5/16-12	1.5/16-12	1-11	35	46	46	47	140

G-G-BP

JIC MALE X JIC MALE X BSP ADJUSTABLE
JIC 37° FLARE MALE X JIC 37° FLARE MALE X BSP
ADJUSTABLE STUD BRANCH TEE

- ISO 8434-2

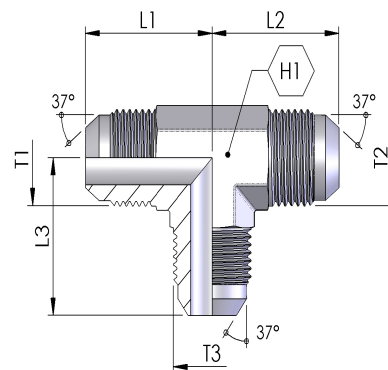


Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	CH2 (mm)	PN (bar)
G-G-BP-070702	7/16-20	1/8-28	23	26	11	14	200
G-G-BP-070704	7/16-20	1/4-19	26.6	26.6	14	19	200
G-G-BP-090904	9/16-18	1/4-19	27.5	32	14	19	200
G-G-BP-090906	9/16-18	3/8-19	28.5	28.5	16	22	200
G-G-BP-121206	3/4-16	3/8-19	32	37	19	22	200
G-G-BP-121208	3/4-16	1/2-14	34	43	22	27	200
G-G-BP-141408	7/8-14	1/2-14	37	43	22	27	200
G-G-BP-171712	1.1/16-12	3/4-14	42	49	27	36	200
G-G-BP-212116	1.5/16-12	1-11	46	52	33	41	200
G-G-BP-262620	1.5/8-12	1.1/4-11	52	52	41.8	50	160
G-G-BP-303024	1.7/8-12	1.1/2-11	59.2	59.2	47.4	60	140

G-G-G

JIC MALE X JIC MALE X JIC MALE
JIC MALE X JIC MALE X JIC MALE TEE

- ISO 8434-2

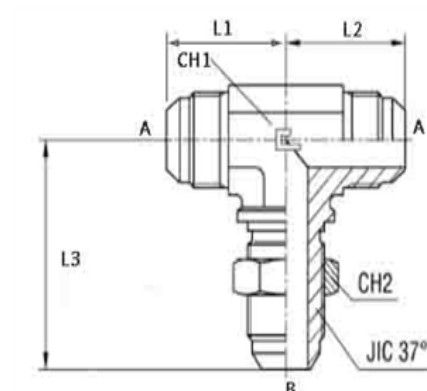


Part Number	T1	T2	T3	H1 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
G-G-G-070707	7/16-20	7/16-20	7/16-20	11	25	25	25	350
G-G-G-080808	1/2-20	1/2-20	1/2-20	14	26	26	26	350
G-G-G-090909	9/16-18	9/16-18	9/16-18	14	27	27	27	350
G-G-G-121212	3/4-16	3/4-16	3/4-16	19	32	32	32	310
G-G-G-121214	3/4-16	3/4-16	7/8-14	22.2	35	35	38	240
G-G-G-121217	3/4-16	3/4-16	1.1/16-12	28.6	38	38	44	240
G-G-G-141414	7/8-14	7/8-14	7/8-14	22	38	38	38	240
G-G-G-171712	1.1/16-12	1.1/16-12	3/4-16	27	44	44	38	240
G-G-G-171714	1.1/16-12	1.1/16-12	7/8-14	28.6	44	44	41	240
G-G-G-171717	1.1/16-12	1.1/16-12	1.1/16-12	27	44	44	44	240
G-G-G-212121	1.5/16-12	1.5/16-12	1.5/16-12	33	49	49	49	210
G-G-G-262626	1.5/8-12	1.5/8-12	1.5/8-12	41	57	57	57	170
G-G-G-303030	1.7/8-12	1.7/8-12	1.7/8-12	48	63	63	63	140

G-G-GK

JIC MALE X JIC MALE X JIC BULKHEAD
JIC 37° FLARE MALE X JIC 37° FLARE MALE X JIC
37° FLARE BULKHEAD BRANCH TEE

- ISO 8434-2

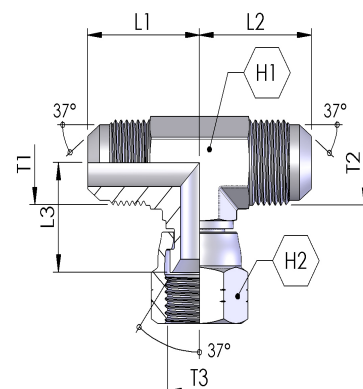


Part Number	A	B	L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
G-G-GK-070707	7/16-20	7/16-20	25	40	28	13	18	350
G-G-GK-090909	9/16-18	9/16-18	28	46	30	16	21	350
G-G-GK-121212	3/4-16	3/4-16	35	54	35	21	25	310
G-G-GK-141414	7/8-14	7/8-14	40	61	39	24	29	240
G-G-GK-171717	1.1/16-12	1.1/16-12	45	68	43	29	35	240
G-G-GK-212121	1.5/16-12	1.5/16-12	48	71	49	49	71	210

G-G-J

JIC MALE X JIC MALE X JIC FEMALE
JIC 37° FLARE MALE X JIC 37° FLARE MALE X JIC
37° FLARE FEMALE SWIVEL NUT BRANCH TEE

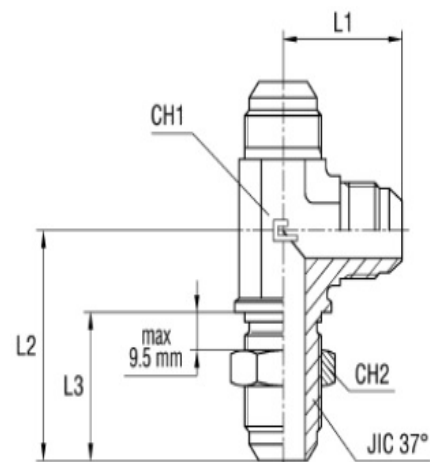
- ISO 8434-2



Part Number	T1	T2	T3	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
G-G-J-070707	7/16-20	7/16-20	7/16-20	12	14	23	23	17	350
G-G-J-080808	1/2-20	1/2-20	1/2-20	14	17	27	27	22	350
G-G-J-090909	9/16-18	9/16-18	9/16-18	14	19	27	27	22	350
G-G-J-121212	3/4-16	3/4-16	3/4-16	19	22	32	32	24	310
G-G-J-141414	7/8-14	7/8-14	7/8-14	22	27	36	36	28	240
G-G-J-171717	1.1/16-12	1.1/16-12	1.1/16-12	27	32	42	42	30	240
G-G-J-212121	1.5/16-12	1.5/16-12	1.5/16-12	35	41	46	46	36	210
G-G-J-262626	1.5/16-12	1.5/16-12	1.5/16-12	41	50	53	53	43	210
G-G-J-303030	1.7/8-12	1.7/8-12	1.7/8-12	48	55	64	64	54	140

G-GK-G

JIC MALE X JIC BULKHEAD X JIC MALE
JIC MALE X JIC MALE BULKHEAD X JIC MALE RUN
TEE

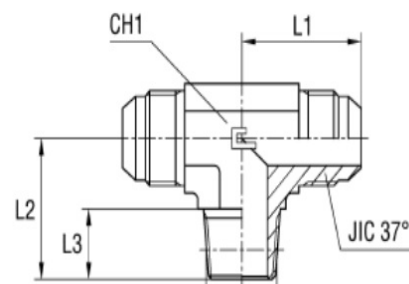


Part Number	JIC Male Thread	JIC Male Thread	JIC Male Thread	L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
G-GK-G-070707	7/16-20	7/16-20	7/16-20	24.6	40.4	24.6	11.1	17.5	350
G-GK-G-090909	9/16-18	9/16-18	9/16-18	27.7	46	27.7	14.3	20.6	350
G-GK-G-121212	3/4-16	3/4-16	3/4-16	34.5	53.6	34.5	19.1	25.4	310
G-GK-G-141414	7/8-14	7/8-14	7/8-14	39.6	60.7	39.6	22.2	28.6	240
G-GK-G-171717	1.1/16-12	1.1/16-12	1.1/16-12	45.2	67.8	45.2	27	34.9	240
G-GK-G-212121	1.5/16-12	1.5/16-12	1.5/16-12	50.2	70.6	50.5	32.7	40.8	210

G-G-L

MALE JIC X JIC MALE X NPTF MALE

JIC MALE X JIC MALE X NPTF MALE BRANCH TEE

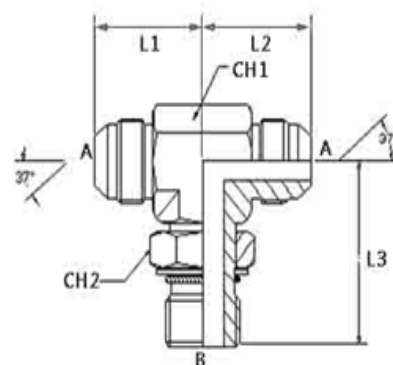


Part Number	JIC Male Thread	NPTF Male Thread	L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	PN (bar)
G-G-L-070702	7/16-20	1/8-27	22.6	22.6	19.8	11.1	345
G-G-L-070704	7/16-20	1/4-18	26.7	26.7	27.7	14.3	275
G-G-L-090904	9/16-18	1/4-18	26.9	26.9	27.7	14.3	275
G-G-L-090906	9/16-18	3/8-18	29.5	31	31	14.5	210
G-G-L-121206	3/4-16	3/8-18	31.8	31.8	31	19.1	210
G-G-L-121208	3/4-16	1/2-14	33.8	33.8	37.3	22.2	210
G-G-L-141408	7/8-14	1/2-14	36.8	36.8	37.3	22.2	210
G-G-L-171712	1.1/16-12	3/4-14	42.2	42.2	40.4	27	170
G-G-L-212116	1.5/16-12	1-11.1/2	46	46	50	33.3	140

G-G-NP

JIC MALE X JIC MALE X UNO ADJUSTABLE
JIC MALE X JIC MALE X UNO ADJUSTABLE STUD
BRANCH TEE

- ISO 8434-2

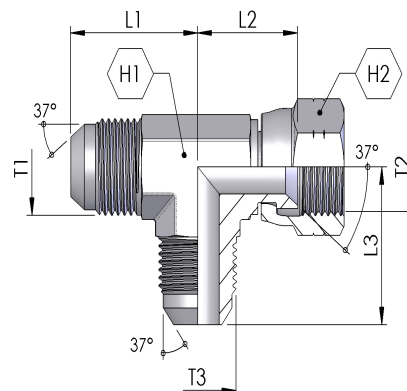


Part Number	A	B	L1 (mm)	L2 (mm)	CH1 (mm)	CH2 (mm)	PN (bar)
G-G-NP-070707	7/16-20	7/16-20	23	26	11	14	315
G-G-NP-090909	9/16-18	9/16-18	27	32	14	18	250
G-G-NP-090912	9/16-18	3/4-16	29	29	19.1	22.2	250
G-G-NP-121212	3/4-16	3/4-16	32	37	19	22	250
G-G-NP-121214	3/4-16	7/8-14	33.3	33.3	23.8	25.4	200
G-G-NP-141212	7/8-14 X 3/4-16	3/4-16	35.7	34.5	23.7	22	240
G-G-NP-141412	7/8-14	3/4-16	36.8	36.8	23.8	22.2	240
G-G-NP-141414	7/8-14	7/8-14	37	43	22	25	200
G-G-NP-171717	1.1/16-12	1.1/16-12	42	49	27	32	200
G-G-NP-212121	1.5/16-12	1.5/16-12	46	52	33	38	160
G-G-NP-262626	1.5/8-12	1.5/8-12	52.3	52.3	41.3	47.6	125

G-J-G

JIC MALE X JIC FEMALE X JIC MALE
JIC MALE X JIC FEMALE SWIVEL NUT X JIC MALE
RUN TEE

- ISO 8434-2

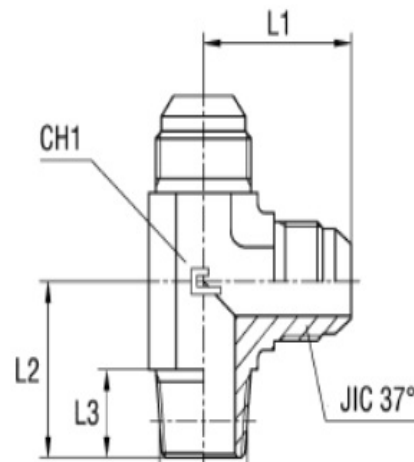


Part Number	T1	T2	T3	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	PN (bar)
G-J-G-070707	7/16-20	7/16-20	7/16-20	12	14	23	17	23	350
G-J-G-080808	1/2-20	1/2-20	1/2-20	14	17	27	22	27	350
G-J-G-090909	9/16-18	9/16-18	9/16-18	14	19	27	22	27	350
G-J-G-121212	3/4-16	3/4-16	3/4-16	19	22	32	24	32	310
G-J-G-141414	7/8-14	7/8-14	7/8-14	22	27	36	28	36	240
G-J-G-171717	1.1/16-12	1.1/16-12	1.1/16-12	27	32	42	30	42	240
G-J-G-212121	1.5/16-12	1.5/16-12	1.5/16-12	35	41	46	36	46	210
G-J-G-262626	1.5/8-12	1.5/8-12	1.5/8-12	41	50	55	45	55	170
G-J-G-303030	1.7/8-12	1.7/8-12	1.7/8-12	48	55	63	53	63	140

G-L-G

MALE JIC X NPTF MALE X JIC MALE

JIC MALE X NPTF MALE X JIC MALE RUN TEE

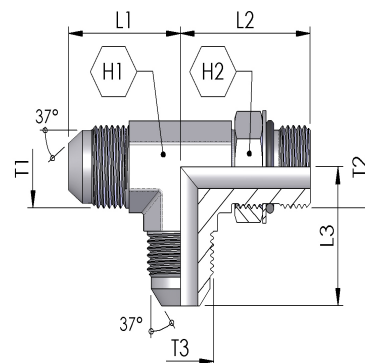


Part Number	JIC Male Thread	NPTF Male Thread	L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	PN (bar)
G-L-G-070207	7/16-20	1/8-27	22.6	19.8	22.6	11.1	345
G-L-G-070407	7/16-20	1/4-18	26.7	27.7	26.7	14.3	275
G-L-G-090409	9/16-18	1/4-18	26.9	27.7	26.9	14.3	275
G-L-G-090609	9/16-18	3/8-18	29	31	29	19.1	210
G-L-G-120612	3/4-16	3/8-18	31.8	31	31.8	19.1	210
G-L-G-120812	3/4-16	1/2-14	33.8	37.3	33.8	22.2	210
G-L-G-140814	7/8-14	1/2-14	36.8	37.3	37.3	22.2	210
G-L-G-171217	1.1/16-12	3/4-14	42.2	40.4	42.2	27	170
G-L-G-211621	1.5/16-12	1-11.1/2	46	50	46	33.3	140

G-NP-G

JIC MALE X UNO ADJUSTABLE X JIC MALE
JIC MALE X UNO ADJUSTABLE STUD X JIC MALE
RUN TEE

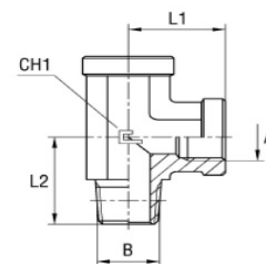
- ISO 8434-2



Part Number	T1/T3	T2	L1 (mm)	L2 (mm)	L3 (mm)	H1 (mm)	H2 (mm)	PN (bar)
G-NP-G-070707	7/16-20	7/16-12	22.6	26.2	22.6	11	14	315
G-NP-G-090909	9/16-18	9/16-18	26.9	31.7	26.9	14	18	250
G-NP-G-121212	3/4-16	3/4-16	31.7	36.9	31.7	19	22	250
G-NP-G-141414	7/8-14	7/8-14	36.9	43.2	36.9	22	25	200
G-NP-G-171717	1.1/16-12	1.1/16-12	42.2	45.2	42.2	27	32	200
G-NP-G-212121	1.5/16-12	1.5/16-12	46.0	52.0	46.0	33.3	38.1	160
G-NP-G-262626	1.5/8-12	1.5/8-12	52.3	57.2	52.3	41.3	47.6	125

L-AC-AC

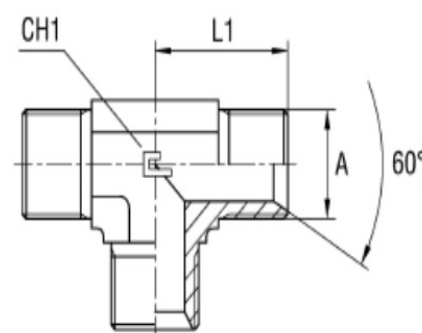
NPTF MALE X NPTF FEMALE X NPTF FEMALE
NPTF MALE X NPTF FEMALE X NPTF FEMALE RUN
TEE



Part Number	NPTF Male Thread (A)	NPTF Female Thread (B)	L1 (mm)	L2 (mm)	L3 (mm)	Hex A/F - CH1 (mm)	PN (bar)
L-AC-AC-020202	1/8-27	1/8-27	19.8	16.8	16.8	14.3	345
L-AC-AC-040404	1/4-18	1/4-18	27.7	22.4	22.4	19.1	275
L-AC-AC-060606	3/8-18	3/8-18	31	25.9	25.9	22.2	210
L-AC-AC-080808	1/2-14	1/2-14	37.3	31.2	31.2	27	210
L-AC-AC-121212	3/4-14	3/4-14	40.4	35.1	35.1	33.3	170
L-AC-AC-161616	1-11.1/2	1-11.1/2	50	41.1	41.1	41.3	140
L-AC-AC-202020	1.1/4-11.1/2	1.1/4-11.1/2	60.5	43.2	43.2	47.6	80

L-L-L

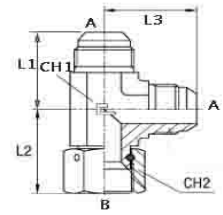
NPTF MALE X NPTF MALE X NPTF MALE
NPT MALE X NPT MALE X NPT MALE TEE



Part Number	NPTF Male Thread (A)	L1 (mm)	Hex A/F (CH1)	PN (bar)
L-L-L-040404	1/4-18	27.7	14.3	275
L-L-L-060606	3/8-18	31	19.1	210
L-L-L-080808	1/2-18	37.3	22.2	210

MY-UY-MY

JIS MALE MET X JIS FEMALE MET X JIS MALE MET
JIS MET MALE X JIS MET FEMALE X JIS MET MALE
RUN TEE (KOMATSU STYLE)

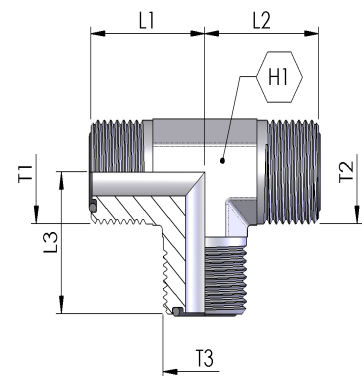


Part Number	Metric Male Thread (A)	Metric Female Thread (B)	Overall Length mm - L1 (mm)	Thread Length - mm (L2)	Thread Length - L3 (mm)	Hex A/F - CH1 (mm)	Hex A/F - CH2 (mm)	PN (bar)
MY-UY-MY-141414	M14-1.5	M14-1.5	53	26.5	26.5	19	14	350
MY-UY-MY-161616	M16-1.5	M16-1.5	59	29.5	29.5	22	16	350
MY-UY-MY-181818	M18-1.5	M18-1.5	61.6	30.8	30.8	24	19	350
MY-UY-MY-222222	M22-1.5	M22-1.5	71	35.5	35.5	27	22	350
MY-UY-MY-242424	M24-1.5	M24-1.5	74	37	37	32	22	350
MY-UY-MY-303030	M30-1.5	M30-1.5	90	45	45	36	30	280

R-R-R

ORFS MALE X ORFS MALE X ORFS MALE
ORFS MALE X ORFS MALE X ORFS MALE TEE

- ISO 8434-3

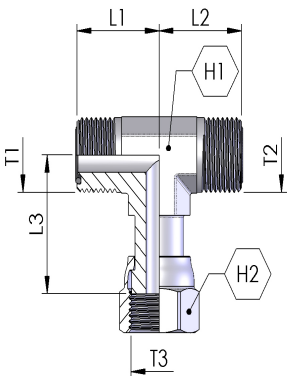


Part Number	T1/T2/T3	L1/L2/L3 (mm)	H1 (mm)	PN (bar)
R-R-R-090909	9/16-18	22	14	630
R-R-R-111111	11/16-16	25	19	630
R-R-R-131313	13/16-16	28	19	630
R-R-R-161616	1-14	33	27	400
R-R-R-191919	1.3/16-12	38	30	400
R-R-R-232323	1.7/16-12	42	36	400
R-R-R-272727	1.11/16-12	45	41	250

R-R-T

ORFS MALE X ORFS MALE X ORFS FEMALE
ORFS MALE X ORFS MALE X ORFS FEMALE SWIVEL
NUT BRANCH TEE

- ISO 8434-3

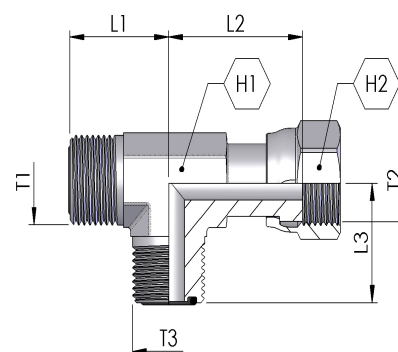


Part Number	T1/T2	T3	L1/L2 (mm)	L3 (mm)	H1 (mm)	H2 (mm)	PN (bar)
R-R-T-090909	9/16-18	9/16-18	22	27	14	17	630
R-R-T-111111	11/16-16	11/16-16	25	29	19	22	630
R-R-T-131313	13/16-16	13/16-16	28	38	19	24	630
R-R-T-161616	1-14	1-14	34	41	27	30	400
R-R-T-191919	1.3/16-12	1.3/16-12	38	47	30	36	400
R-R-T-232323	1.7/16-12	1.7/16-12	42	54	36	41	400
R-R-T-272727	1.11/16-12	1.11/16-12	45	58	41	50	250

R-T-R

ORFS MALE X ORFS FEMALE X ORFS MALE
ORFS MALE X ORFS FEMALE SWIVEL NUT X ORFS
MALE RUN TEE

- ISO 8434-3



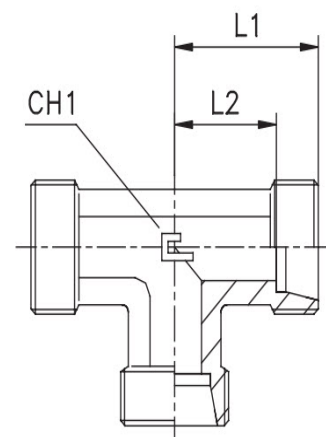
Part Number	T1/T3	T2	L1 (mm)	L2 (mm)	L3 (mm)	H1 (mm)	H2 (mm)	PN (bar)
R-T-R-090909	9/16-18	9/16-18	22	27	14	14	17	630
R-T-R-111111	11/16-16	11/16-16	25	29	19	19	22	630
R-T-R-131313	13/16-16	13/16-16	28	38	19	19	24	630
R-T-R-161616	1-14	1-14	34	41	27	27	30	400
R-T-R-191919	1.3/16-12	1.3/16-12	38	47	30	30	36	400
R-T-R-232323	1.7/16-12	1.7/16-12	42	54	36	36	41	400
R-T-R-272727	1.11/16-12	1.11/16-12	45	58	41	41	50	250
R-T-R-323232	2-12	2-12	54	68	54	50	60	250

ML-ML-ML

MET LIGHT MALE TEE

METRIC 24° CONE LIGHT MALE TEE

- ISO 8434-1



Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	CH1 (mm)	PN (bar)
ML-ML-ML-121212	M12-1.5	6	19	12	12	500
ML-ML-ML-141414	M14-1.5	8	21	14	12	500
ML-ML-ML-161616	M16-1.5	10	22	15	14	500
ML-ML-ML-181818	M18-1.5	12	24	17	17	400
ML-ML-ML-222222	M22-1.5	15	28	21	19	400
ML-ML-ML-262626	M26-1.5	18	31	24	24	400
ML-ML-ML-303030	M30-2	22	35	28	27	250
ML-ML-ML-363636	M36-2	28	38	31	36	250
ML-ML-ML-454545	M45-2	35	45	35	41	250
ML-ML-ML-525252	M52-2	42	51	40	50	250

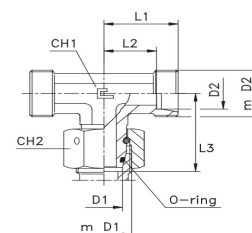
ML-ML-UL

MET LIGHT MALE X MET LIGHT F/M

METRIC 24° CONE LIGHT MALE X METRIC 24°

CONE LIGHT FEMALE SWIVEL NUT BRANCH TEE

- ISO 8434-1



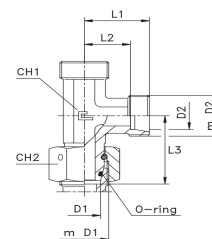
Part Number	Metric Male Thread	Metric Female Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (bar)
ML-ML-UL-121212	M12-1.5	M12-1.5	6	19	12	26	12	500
ML-ML-UL-141414	M14-1.5	M14-1.5	8	21	14	28	12	500
ML-ML-UL-161616	M16-1.5	M16-1.5	10	22	15	29	14	500
ML-ML-UL-181818	M18-1.5	M18-1.5	12	24	17	30	17	400
ML-ML-UL-222222	M22-1.5	M22-1.5	15	28	21	33	19	400
ML-ML-UL-262626	M26-1.5	M26-1.5	18	31	24	36	24	400
ML-ML-UL-303030	M30-2	M30-2	22	35	28	39	27	250
ML-ML-UL-363636	M36-2	M36-2	28	38	30.5	41.5	36	250
ML-ML-UL-454545	M45-2	M45-2	35	45	34.5	51.5	41	250
ML-ML-UL-525252	M52-2	M52-2	42	51	40	56	50	250

ML-UL-ML

MET LIGHT MALE X MET LIGHT F/M

METRIC 24° CONE LIGHT MALE X METRIC 24°

CONE LIGHT FEMALE SWIVEL NUT RUN TEE

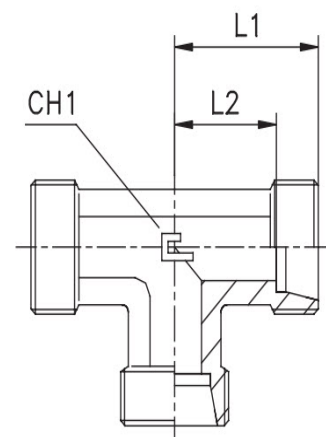


Part Number	Metric Male Thread - D2	Metric Female Thread - D1	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	CH2 (mm)	PN (Bar)
ML-UL-ML-121212	M12-1.5	M12-1.5	6	19	12	26	12	14	500
ML-UL-ML-141414	M14-1.5	M14-1.5	8	21	14	28	12	17	500
ML-UL-ML-161616	M16-1.5	M16-1.5	10	22	15	29	14	19	500
ML-UL-ML-181818	M18-1.5	M18-1.5	12	24	17	30	17	22	400
ML-UL-ML-222222	M22-1.5	M22-1.5	15	28	21	33	19	27	400
ML-UL-ML-262626	M26-1.5	M26-1.5	18	31	24	36	24	32	400
ML-UL-ML-303030	M30-2	M30-2	22	35	28	39	27	36	250
ML-UL-ML-363636	M36-2	M36-2	28	38	31	42	36	41	250
ML-UL-ML-454545	M45-2	M45-2	35	45	34.5	51.5	41	50	250

MS-MS-MS

MET HEAVY MALE TEE

METRIC 24° CONE HEAVY MALE TEE



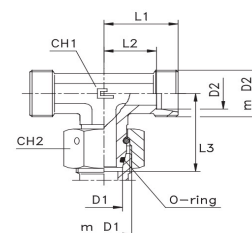
Part Number	Metric Male Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (Bar)
MS-MS-MS-141414	M14-1.5	6	23	16	31	12	800
MS-MS-MS-161616	M16-1.5	8	24	17	32	14	800
MS-MS-MS-181818	M18-1.5	10	25	18	34	17	800
MS-MS-MS-202020	M20-1.5	12	29	22	38	17	630
MS-MS-MS-222222	M22-1.5	14	30	22	40	19	630
MS-MS-MS-242424	M24-1.5	16	33	25	43	24	630
MS-MS-MS-303030	M30-2	20	37	27	48	27	420
MS-MS-MS-363636	M36-2	25	42	30	54	36	420
MS-MS-MS-424242	M42-2	30	49	36	62	41	420
MS-MS-MS-525252	M52-2	38	57	41	72	50	420

MS-MS-US

MET HEAVY MALE X MET HEAVY F/M

METRIC 24° CONE HEAVY MALE X METRIC 24°

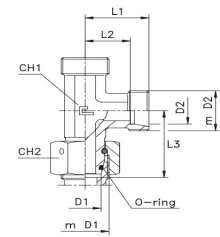
CONE HEAVY FEMALE SWIVEL NUT BRANCH TEE



Part Number	Metric Male Thread	Metric Female Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	PN (bar)
MS-MS-US-141414	M14-1.5	M14-1.5	6	23	16	27	12	800
MS-MS-US-161616	M16-1.5	M16-1.5	8	24	17	28	14	800
MS-MS-US-181818	M18-1.5	M18-1.5	10	25	18	30	17	800
MS-MS-US-202020	M20-1.5	M20-1.5	12	29	22	31	17	630
MS-MS-US-222222	M22-1.5	M22-1.5	14	30	22	35	19	630
MS-MS-US-242424	M24-1.5	M24-1.5	16	33	25	37	24	630
MS-MS-US-303030	M30-2	M30-2	20	37	27	45	27	420
MS-MS-US-363636	M36-2	M36-2	25	42	30	50	36	420
MS-MS-US-424242	M42-2	M42-2	30	49	36	56	41	420
MS-MS-US-525252	M52-2	M52-2	38	57	41	63	50	420

MS-US-MS

MET HEAVY MALE X MET HEAVY F/M
METRIC 24° CONE HEAVY MALE X METRIC 24°
CONE HEAVY FEMALE SWIVEL NUT RUN TEE



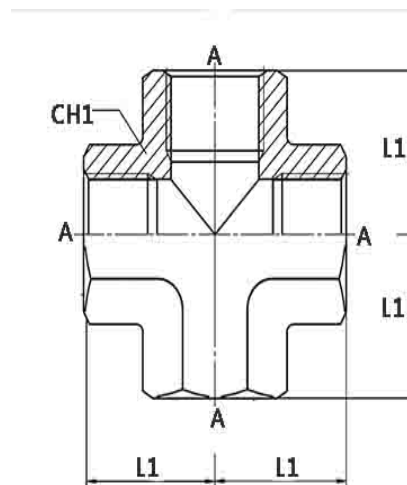
Part Number	Metric Male Thread	Metric Female Thread	Suits Tube Diameter (mm)	L1 (mm)	L2 (mm) - mm	L3 (mm) - mm	CH1 (mm)	CH2 (mm)	PN (bar)
MS-US-MS-141414	M14-1.5	M14-1.5	6	23	16	27	12	17	800
MS-US-MS-161616	M16-1.5	M16-1.5	8	24	17	27.5	14	19	800
MS-US-MS-181818	M18-1.5	M18-1.5	10	25	18	31	17	22	800
MS-US-MS-202020	M20-1.5	M20-1.5	12	29	22	31	17	24	630
MS-US-MS-222222	M22-1.5	M22-1.5	14	30	22	35	19	27	630
MS-US-MS-242424	M24-1.5	M24-1.5	16	33	25	37	24	30	630
MS-US-MS-303030	M30-2	M30-2	20	37	27	45	27	36	420
MS-US-MS-363636	M36-2	M36-2	25	42	30	50	36	46	420
MS-US-MS-424242	M42-2	M42-2	30	49	36	56	41	50	420
MS-US-MS-525252	M52-2	M52-2	38	57	41	63	50	60	420

CROSS ADAPTOR

F-F-F-F

BSPP FEMALE EQUAL CROSS

BSPP EQUAL FEMALE CROSS FORGED

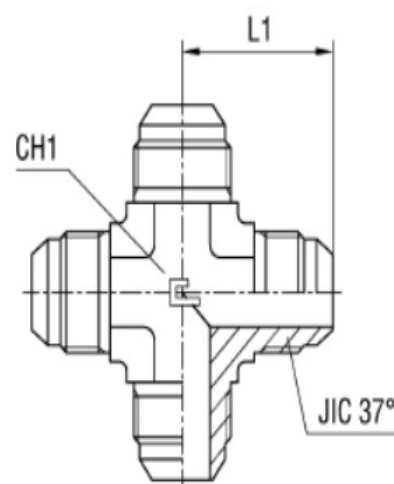


Part Number	BSPP Female Thread (A)	L1 (mm)	Hex A/F (CH1)	PN (bar)
F-F-F-F-04040404	1/4-19	22.5	19	400
F-F-F-F-06060606	3/8-19	26	24	400
F-F-F-F-08080808	1/2-14	32	30	350
F-F-F-F-12121212	3/4-14	34	33	315

G-G-G-G

JIC MALE EQUAL CROSS ADAPTOR

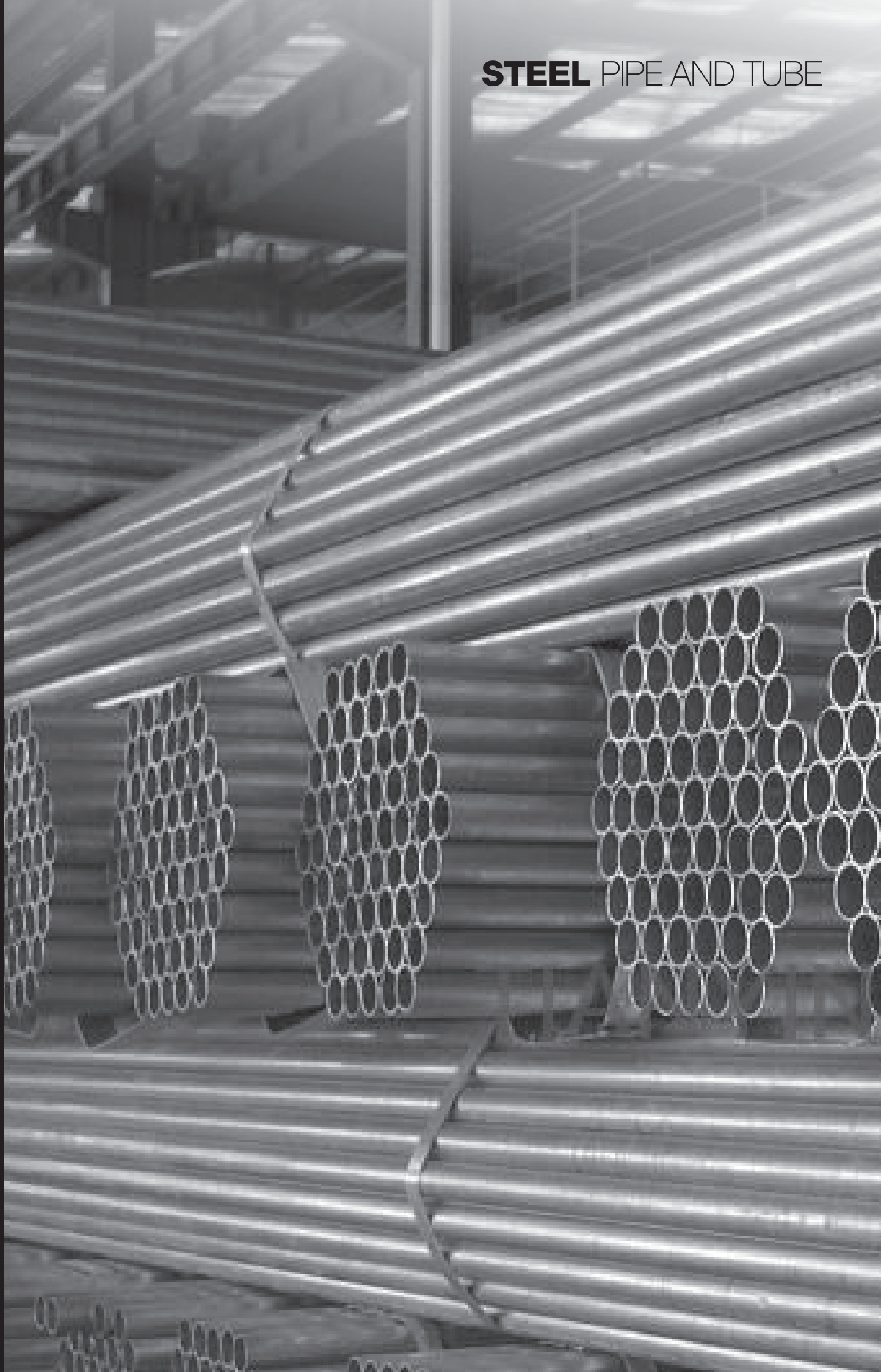
JIC EQUAL MALE CROSS WITH 37° CONE



Part Number	JIC Male Thread (A)	L1 (mm)	Hex A/F (CH1)	PN (bar)
G-G-G-G-07070707	7/16-20	23.4	11.1	350
G-G-G-G-09090909	9/16-18	26.9	14.3	350
G-G-G-G-12121212	3/4-16	31.75	19	310
G-G-G-G-14141414	7/8-14	36.8	23.8	240
G-G-G-G-17171717	1.1/16-12	42.2	27	240
G-G-G-G-21212121	1.5/16-12	46	33.3	210



STEEL PIPE AND TUBE



GENERAL INFORMATION

Rigid hydraulic tubing offers intrinsic benefits when installing fluid transfer lines in both fixed and mobile plant applications. Hydraulic tube and schedule pipe have a low I.D. to O.D. ratio, have a compact minimum bend radius, can be easily bent to required shapes, are easily clamped (even in multiple runs) and, provided adequate protection is applied, have a long service life.

Imperial or metric hydraulic tube supplied by Hydraulink is a cold drawn seamless annealed tube in carbon steel or AISI 316 stainless steel qualified to the appropriate standards. Hydraulink can also supply pre-formed tube bends (45° and 90° as standard; other angles by request) in standard and long-leg versions. The standard leg version is also available in heavy wall tube for heavy duty applications.

Pressure ratings

Pressures in the table are based on tubing with a tensile strength of 340MPa and were calculated in accordance with the formulae stated in the ISO 10763/SAE J1065 standards.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

PART NUMBERING SYSTEM - HYDRAULIC TUBE

The Hydraulink part numbering system is a concise product description in coded form. The part number consists of a minimum of two modules as follows:

Module 1. Code letters ST denoting carbon steel or SST denoting stainless steel tube. STP denotes trivalent plated Carbon Steel tube.

Module 2: Number denoting the size of outside diameter, expressed as follows:

Imperial tube: expressed in 1/16th inch increments denoting the outside diameter.
For example: 08 = $8/16 = 1/2$ " O.D and 20 = $20/16 = 1\ 1/4$ " O.D.

Metric tube: expressed in millimetres with prefix M, denoting the outside diameter.
For example: M16 = 16mm O.D.

Module 3: Number denoting the wall thickness of the steel tube

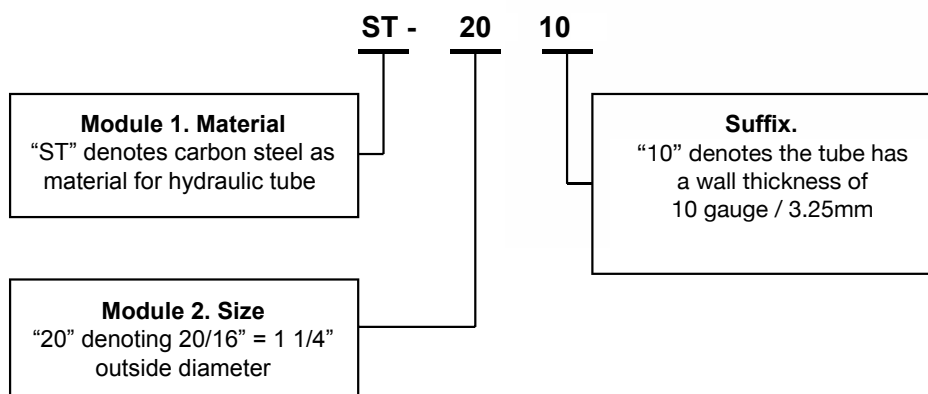
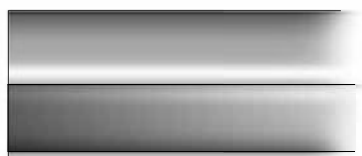
Imperial tube: expressed in wall thickness gauge.
For example: 14 = 14 gauge = 2.03mm

Metric tube: expressed in millimetres (with the decimal point missing).
For example: 15 = 1.5mm wall thickness

PART NUMBERING SYSTEM - EXAMPLE

Part number: ST-2010

Complete description: 1 1/4" outside diameter carbon steel hydraulic line tube, with 10 gauge (3.25mm) wall thickness.



Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

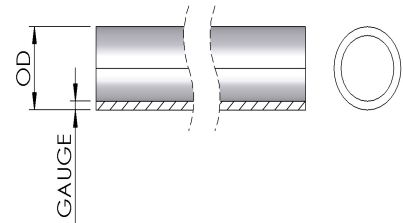
HYDRAULIC TUBE

STP

IMPERIAL HYDRAULIC TUBE - PLATED

SEAMLESS HYDRAULIC LINE TUBE - IMPERIAL O.D.

- Working Pressure calculated using a tensile strength of 340MPa (49300psi), at a safety factor of 4:1.
- Flow capacity calculated using a fluid velocity of 20ft/sec (6.1m/sec)
- Standards: Conforms to specifications of ASTM A179
- NOTE: Working and burst pressures can vary based on tensile strength of material.



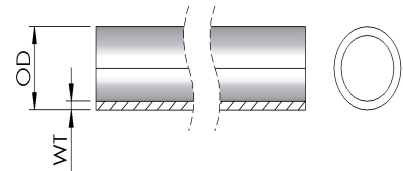
Part Number	O.D - inches	O.D - mm	Wall thickness - Gauge	Wall thickness - mm	Weight - kg/m	Working Pressure - bar	Working Pressure - psi	Flow - l/min
STP-0420	1/4	6.35	20	0.91	0.13	280	4060	5.8
STP-0618	3/8	9.5	18	1.22	0.25	252	3660	14.4
STP-0816	1/2	12.7	16	1.63	0.45	252	3660	25.4
STP-1016	5/8	15.9	16	1.63	0.57	195	2830	45.4
STP-1214	3/4	19.1	14	2.03	0.85	202	2930	65
STP-1610	1	25.4	10	3.25	1.77	250	3625	102
STP-1614	1	25.4	14	2.03	1.14	148	2147	130
STP-2010	1.1/4	31.8	10	3.25	3.10	195	2820	184

STP-M

METRIC HYDRAULIC TUBE - PLATED

SEAMLESS HYDRAULIC LINE TUBE - METRIC O.D.

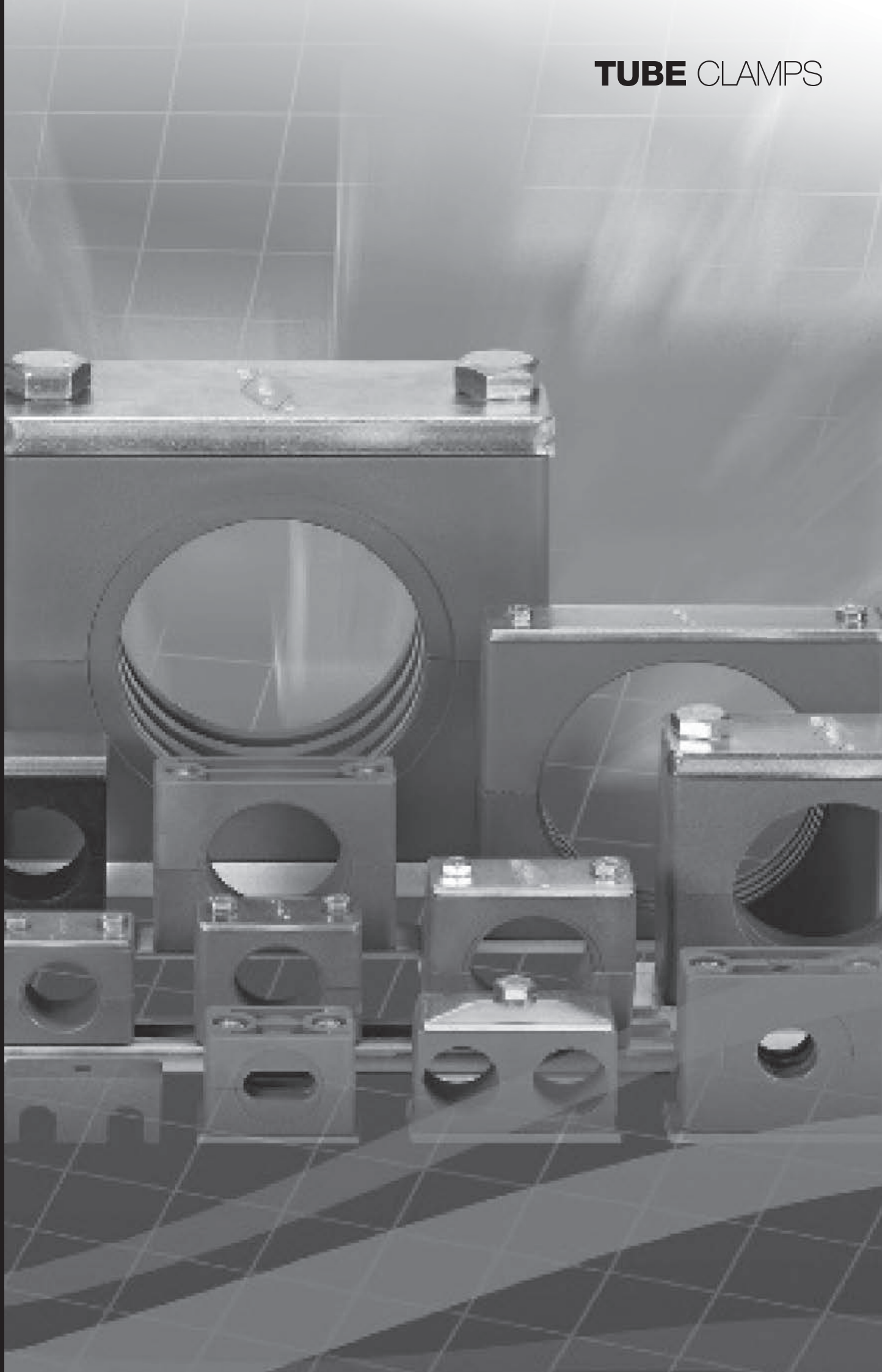
- Working Pressure calculated using a tensile strength of 340MPa (49300psi), at a safety factor of 3:1.
- Flow capacity calculated using a fluid velocity of 20ft/sec (6.1m/sec)
- Standards: Conforms to specifications of ASTM A179 / DIN 2391/C
- NOTE: Working and burst pressures can vary based on tensile strength of material.



Part Number	O.D - mm	Wall thickness - mm	Weight - kg/m	Working Pressure - bar	Working Pressure - psi	Flow - l/min
STP-M810	8	1.0	0.17	245	3550	8.6
STP-M1015	10	1.5	0.31	303	4390	16.7
STP-M1215	12	1.5	0.39	244	3540	21.8
STP-M1420	14	2.0	0.59	286	4150	34.2
STP-M1515	15	1.5	0.50	190	2755	49.2
STP-M1620	16	2.0	0.69	244	3540	49.2
STP-M1815	18	1.5	0.61	155	2250	76.8
STP-M2020	20	2.0	0.89	283	4096	76.8
STP-M2220	22	2.0	0.99	170	2470	111
STP-M2530	25	3.0	1.63	233	3380	123



TUBE CLAMPS



GENERAL INFORMATION

The Hydraulink range of tube clamps is available in four main series. For normal mechanical stress applications (up to approximately 200bar line pressure), clamps are available either as single or twin. For high mechanical stress applications (high pressure, flow or impulse) clamps are available either as single heavy duty or extra heavy duty.

For all series the clamp halves are identical and incorporate either a knurled or ribbed bore to absorb impact and vibration as well as provide high shear strength in the direction of the tube axis. Clamp halves are typically supplied in polypropylene, but are also available in fire-resistant polyamide or aluminium on request.

Clamp bolts, top plates and base plates are typically supplied in steel and finished with a silver trivalent chromium plating and clear sealant to further increase protection against corrosion, but are also available in AISI 316 stainless steel. Please contact Hydraulink for further details regarding alternative mounting systems such as stacking bolts, multiple clamp base plates and track rails.

All four series of tube clamp supplied by Hydraulink can be supplied to metric or imperial tube sizes (true O.D.) or to suit schedule 40, 80 or 160 pipe (nominal bore).

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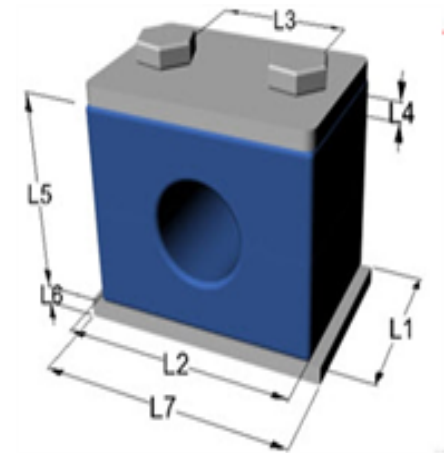
Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

SINGLE TUBE CLAMPS

CS

SINGLE TUBE CLAMPS
COMPLETE SINGLE CLAMPS WITH
POLYPROPYLENE INSERTS

- *Nominal bore.
- **CS1 series clamps have only 1 bolt.



Part Number	Internal Bore - mm	Nominal Bore-Schedule Pipe	Internal Bore - imperial	L1 - mm	L2 - mm	L3 - mm	L4 - mm	L5 - mm	L6 - mm
CS2-04C	6.35		1/4	30	37	20	3	28	3
CS1-M8C	8		5/16	30	28	N/A**	3	28	3
CS2-M8C	8		5/16	30	37	20	3	28	3
CS2-06C	9.52		3/8	30	37	20	3	28	3
CS2-M10C	10	1/8		30	37	20	3	28	3
CS2-M12C	12			30	37	20	3	28	3
CS2-08C	12.7		1/2	30	37	20	3	28	3
CS3-M14C	14			30	43	26	3	33	3
CS3-M15C	15			30	43	26	3	33	3
CS3-10C	16		5/8	30	43	26	3	33	3
CS3-H06C	17.2	3/8		30	43	26	3	33	3
CS3-M18C	18			30	43	26	3	33	3
CS4-12C	19		3/4	30	50	33	3	36	3
CS4-M20C	20			30	50	33	3	36	3
CS4-H08C	21.3	1/2		30	50	33	3	36	3
CS4-M22C	22		7/8	30	50	33	3	36	3
CS4-M23C	23			30	50	33	3	36	3
CS4-16C	25.4		1	30	50	33	3	36	3
CS5-H12C	26.9	3/4		30	57	40	3	44	3
CS5-M28C	28			30	57	40	3	44	3
CS5-M30C	30			30	57	40	3	44	3
CS5-20C	32		1.1/4	30	57	40	3	44	3
CS6-H16C	33.7	1		30	70	52	3	57	3
CS6-M35C	35			30	70	52	3	57	3
CS6-24C	38		1.1/2	30	70	52	3	57	3
CS6-H20C	42.4	1.1/4		30	70	52	3	57	3
CS7-28C	44.5		1.3/4	30	86	66	3	66	3

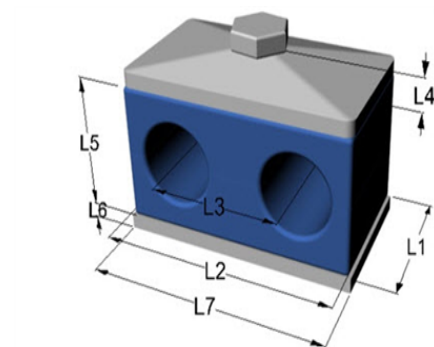
CS6-M45C	45		30	70	52	3	57	3
CS7-H24C	48.3	1.1/2	30	86	66	3	66	3
CS7-32C	50.8	2	30	86	66	3	66	3
CS7-M53C	53		30	86	66	3	66	3
CS7-H28C	54	1.3/4	30	86	66	3	66	3
CS8-36C	57.2	2.1/4	30	121	94	5	93	5

DOUBLE TUBE CLAMPS

CF

DOUBLE TUBE CLAMPS

COMPLETE DOUBLE CLAMPS W. POLYPROPYLENE INSERTS

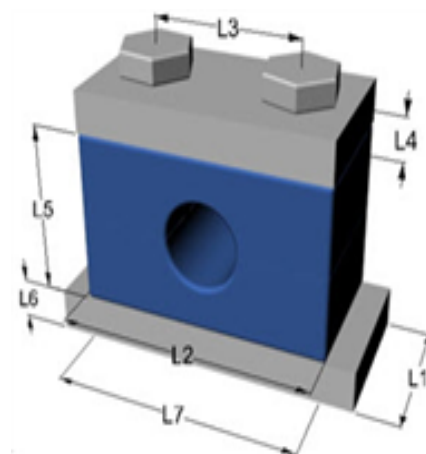


Part Number	Internal Bore - mm	Nominal Bore-Schedule Pipe	Internal Bore - imperial	L1 - mm	L2 - mm	L3 - mm	L4 - mm	L5 - mm	L6 - mm
CF1-04C	6.35		1/4	30	36	20	7	27	3
CF1-M8C	8		5/16	30	36	20	7	27	3
CF1-06C	9.52		3/8	30	36	20	7	27	3
CF1-M10C	10	1/8		30	36	20	7	27	3
CF1-M12C	12			30	36	20	7	27	3
CF1-08C	12.7		1/2	30	36	20	7	27	3
CF2-08C	12.7		1/2	30	54	29	7	27	3
CF2-M14C	14			30	54	29	7	27	3
CF2-M15C	15			30	54	29	7	27	3
CF2-10C	16		5/8	30	54	29	7	27	3
CF2-H06C	17.2	3/8		30	54	29	7	27	3
CF2-M18C	18			30	54	29	7	27	3
CF3-12C	19		3/4	30	37	36	7	37	3
CF3-M20C	20			30	37	36	7	37	3
CF3-M22C	22		7/8	30	37	36	7	37	3
CF3-16C	25.4		1	30	37	36	7	37	3
CF4-M28C	28			30	81	45	7	42	3
CF4-M30C	30			30	81	45	7	42	3
CF5-20C	32		1 1/4	30	106	56	7	53	3
CF5-M35C	35			30	106	56	7	53	3
CF5-24C	38		1.1/2	30	106	56	7	53	3
CF5-M42C	42			30	106	56	7	53	3

HEAVY DUTY SINGLE TUBE CLAMPS

CP

HEAVY DUTY SINGLE TUBE CLAMPS
COMPLETE SINGLE CLAMPS W. POLYPROPYLENE
INSERTS



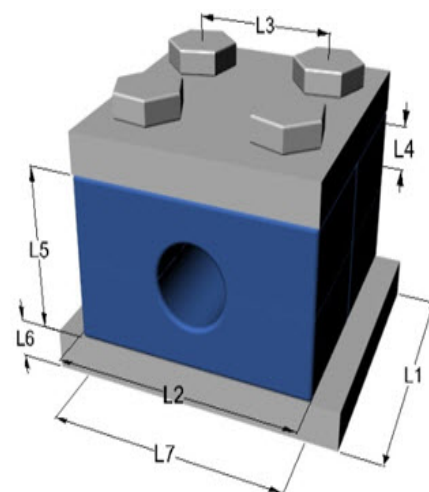
Part Number	Internal Bore - mm	Nominal Bore-Schedule Pipe	Internal Bore - imperial	L1 - mm	L2 - mm	L3 - mm	L4 - mm	L5 - mm	L6 - mm
CP1S-08C	12.7		1/2	30	57	33	8	33	8
CP1S-10C	16		5/8	30	57	33	8	33	8
CP2S-12C	19		3/4	30	57	33	8	33	8
CP2S-H08C	21.3	1/2		30	57	33	8	33	8
CP2S-16C	25.4		1	30	57	33	8	33	8
CP2S-H12C	26.9	3/4		30	57	33	8	33	8
CP3S-20C	32		1.1/4	30	57	33	8	33	8
CP3S-H16C	33.7	1		30	57	33	8	33	8
CP3S-24C	38		1.1/2	30	57	33	8	33	8
CP3S-H20C	42.4	1.1/4		30	57	33	8	33	8
CP4S-32C	50.8		2	30	57	33	8	33	8
CP4S-H32C	60.3	2		30	57	33	8	33	8

HEAVY DUTY DOUBLE TUBE CLAMPS

CPD

HEAVY DUTY DOUBLE TUBE CLAMPS

COMPLETE SINGLE CLAMPS W. POLYPROPYLENE
INSERTS



Part Number	Internal Bore - mm	Nominal Bore-Schedule Pipe	Internal Bore - imperial	L1 - mm	L2 - mm	L3 - mm	L4 - mm	L5 - mm	L6 - mm
CP2D-12C	19		3/4	60	69	45	8	49	8
CP2D-16C	25.4		1	60	69	45	8	49	8
CP3D-20C	32		1.1/4	60	84	60	8	60	8
CP3D-24C	38		1.1/2	60	84	60	8	60	8
CP4D-32C	50.8		2	90	117	91	10	88	10

QUICK RELEASE COUPLINGS



GENERAL INFORMATION

Quick release couplings are primarily designed to allow quick and easy connection and disconnection of fluid transfer lines. The installation of quick release couplings in fluid power systems can eliminate the need to close valves, recharge and bleed the system as well as minimising fluid loss when a component or attachment is removed or fitted to the system, saving time and resources.

Although the ability for some quick release couplings to rotate and “self-align” reducing mechanical stress on adjoining parts of the system can be a benefit, it must be noted that quick release couplings are not designed for use as constant rotation unions or live swivels. The use of a coupling for such a purpose is not recommended and will void any warranty, or subsequent warranty claim.

Hydraulink supply a wide range of quick release couplings for many applications, and in many configurations of end type. To fulfill the requirements of the application the quick release coupling is being selected for, several questions will need to be considered which may include;

- What functions are required of the coupling?
- What is the fluid flow rate required?
- What is the system working pressure?
- What are the variations in system pressure; how high are the spikes?
- What is the allowable pressure drop at required flow rate?
- Does the coupling need to be connected or disconnected under pressure?
- What fluid or media is being used?
- Is minimum fluid loss or air inclusion critical?
- Does the coupling need to interchange with existing units?

Quick release couplings are typically manufactured in steel and finished with a silver trivalent chromium plating and clear sealant to further increase protection against corrosion, but some series are also available in AISI 316 stainless steel or brass. Please contact Hydraulink for further details of available materials and variants of internal seals.

Hydraulink thread forms and sealing methods are manufactured to the relevant international standards where applicable. All dimensions shown are nominal, and subject to change due to ongoing product development. For critical applications, please contact Hydraulink to confirm dimensions.

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Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

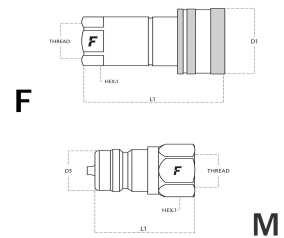
STANDARD SERIES

QNV

POPPET SEAL COUPLINGS

INTERCHANGE WITH ISO 7241-1 PART A IN 08 SIZE

- Please enquire for other thread forms and sizes.
- Overall length when connected is calculated based on both couplings having the same thread form and size.
- Recommended for: Agriculture, industrial, construction, earthmoving.
- Connection: Connect without pressure - pull back female sleeve and push couplings to connect. Disconnect under pressure not allowed - pull back female sleeve to disconnect.
- Latching: Balls latching.
- Shut-off system: Poppet valve. Guidevalve with mechanical backstop.
- Temperature range: -25°C to +125°C
- Standards: 08 (1/2) size only; Interchangeability according to ISO 7241-1 part A
- All other sizes; Faster proprietary standard.
- Interchangeability with all QNS series couplings to 16 (1)

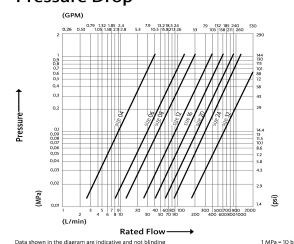


QNV - TECHNICAL DATA

POPPET SEAL COUPLINGS

INTERCHANGE WITH ISO 7241-1 PART A IN 08 SIZE

Pressure Drop



Part Number	Rated Flow (l/min)	Force to connect - N	Force to connect - lb	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi	Fluid Spill - ml max
QNV-F04	15	55	12.1	350	5000	20000	20000	0.8
QNV-F06	50	85	18.7	300	4500	20000	17400	1.3
QNV-F08	75	80	17.9	300	4500	17400	17400	1.8
QNV-F0812Q	75	80	17.9	300	4500	17400	17400	1.8
QNV-F0814Q	75	80	17.9	300	4500	17400	17400	1.8
QNV-F12	150	150	33.7	300	4500	17400	17400	8
QNV-F16	220	130	28.6	250	3625	14500	14500	13
QNV-F20	340	145	31.9	220	3300	13500	13500	30
QNV-F24	450	265	58.4	200	3000	12000	12000	34
QNV-F32	1000	250	56.2	150	2250	9000	9000	100
QNV-M04	15	55	12.1	350	5000	20000	20000	0.8
QNV-M06	50	85	18.7	300	4500	17400	17400	1.3
QNV-M08	75	80	17.9	300	4500	17400	17400	1.8
QNV-M0812Q	75	80	17.9	300	4500	17400	17400	1.8
QNV-M0814Q	75	80	17.9	300	4500	17400	17400	1.8
QNV-M12	150	150	33.7	300	4500	17400	17400	8
QNV-M16	220	130	28.6	250	3625	14500	14500	13
QNV-M20	340	145	31.9	220	3300	13500	13500	30
QNV-M24	450	265	58.4	200	3000	12000	12000	34
QNV-M32	1000	250	56.2	150	2250	9000	9000	100

INTERCHANGE WITH ISO 7241-1 PART A IN 08 SIZE

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INTERCHANGE WITH ISO 7241-1 PART A IN 08 SIZE

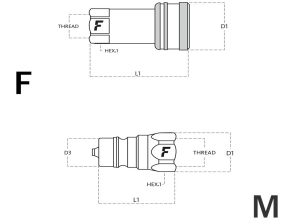


QANV

POPPET SEAL COUPLINGS

INTERCHANGE ACCORDING TO ISO 7241-1 PART A

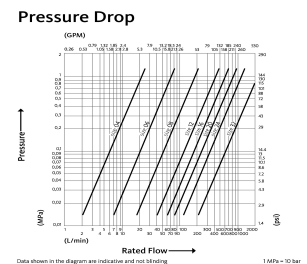
- Please enquire for other combinations of base size and thread form.
- Overall length when connected is calculated based on both couplings having the same thread form and size.
- Recommended for: Agricultural applications.
- Connection: Connect without pressure - pull back female sleeve and push couplings to connect. Disconnect under pressure not allowed - pull back female sleeve to disconnect.
- Latching: Balls latching.
- Shut-off system: Poppet valve. Guidevalve with mechanical backstop.
- Temperature range: -25°C to +125°C
- Standards: Interchangeability according to ISO 7241-1 part A



QANV - TECHNICAL DAT

POPPET SEAL COUPLINGS

INTERCHANGE ACCORDING TO ISO 7241-1 PART A



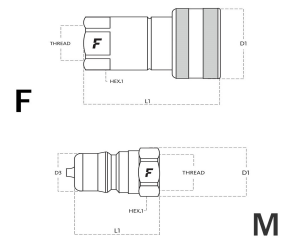
Part Number	Rated Flow (l/min)	Force to connect - N	Force to connect - lb	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi	Fluid Spill - ml max
QANV-F04	9	45	10	500	7500	30000	30000	0.5
QANV-F06	30	80	17.6	300	4500	18000	21000	1.1
QANV-F12	180	150	34	300	4500	18000	18000	8
QANV-F16	270	180	40	250	3625	14500	14500	13
QANV-M04	9	45	10	500	7500	30000	30000	0.5
QANV-M06	30	80	17.6	300	4500	24000	21000	1.1
QANV-M12	180	150	34	300	4500	18000	18000	8
QANV-M16	270	180	40	250	3625	14500	14500	13

QHNV

POPPET SEAL COUPLINGS

INTERCHANGE ACCORDING TO ISO 7241-1 PART B

- Please enquire for other combinations of base size and thread form.
- Overall length when connected is calculated based on both couplings having the same thread form and size.
- Recommended for: Industrial applications.
- Connection: Connect without pressure - pull back female sleeve and push couplings to connect. Disconnect under pressure not allowed - pull back female sleeve to disconnect.
- Latching: Balls latching.
- Shut-off system: Poppet valve. Guide valve with mechanical backstop.
- Temperature range: -25°C to +125°C
- Standards: Interchangeability according to ISO 7241-1 part B
- Interchangeability with all QBHNV and SQHNV series couplings.

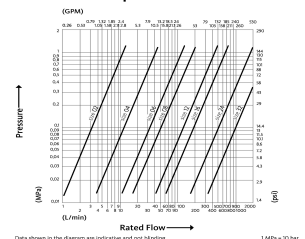


QHNV - TECHNICAL DAT

POPPET SEAL COUPLINGS

INTERCHANGE ACCORDING TO ISO 7241-1 PART B

Pressure Drop



Part Number	Rated Flow (l/min)	Force to connect - N	Force to connect - lb	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi	Fluid Spill - ml max
QHNV-F04	17	65	14.3	450	6750	27000	30000	1
QHNV-F06	50	80	17.6	300	4500	19500	18000	1.5
QHNV-F08	75	92	20.3	350	5250	21000	21000	2.8
QHNV-F12	190	120	26.4	250	3625	16500	14500	10
QHNV-F16	270	180	39.6	300	4500	18000	18000	13
QHNV-M04	17	65	14.3	450	6750	27000	30000	1
QHNV-M06	50	80	17.6	300	4500	27000	18000	1.5
QHNV-M08	75	92	20.3	350	5250	22500	21000	2.8
QHNV-M12	190	120	26.4	250	3625	14500	14500	10
QHNV-M16	270	180	39.6	300	4500	18000	18000	13

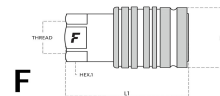
AGRICULTURAL SERIES

QPV

PUSH/PULL POPPET SEAL

INTERCHANGE ACCORDING TO ISO 7241-1 PART A

- QPV are only available in 08 (1/2) base size.
- Please enquire for thread forms and sizes.
- NOTE: Male coupling is base size 08 (1/2) QNV series. QPV series is only female couplings.
- Recommended for: Agricultural equipment.
- Connection: Connect without pressure - push male coupling to connect. Disconnect under pressure not allowed - pull male coupling to disconnect.
- Latching: Balls latching.
- Shut-off system: Poppet valve.
- Temperature range: -25°C to +125°C
- Standards: Interchangeability according to ISO 7241-1 part A standard.

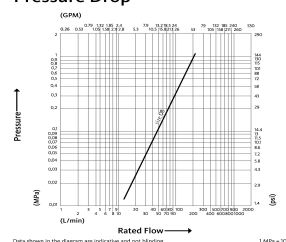


QPV - TECHNICAL DATA

PUSH/PULL POPPET SEAL

INTERCHANGE ACCORDING TO ISO 7241-1 PART A

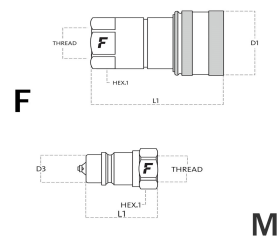
Pressure Drop



Part Number	Rated Flow (l/min)	Force to connect - N	Force to connect - lb	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi	Fluid Spill - ml max
QPV-F08	75	160	35	260	3770	15950	21460	2

Q4

POPPET SEAL WITH DECOMPRESSION POPPET
INTERCHANGE ACCORDING TO ISO 7241-1 PART A

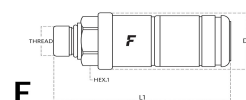


Part Number	Base Size	Threadform	Thread size	Coupling Length (L1)	Coupling O.D (D1)	Hex Size A/F (Hex 1)	Inner Coupling O.D - D3
Q4NV-M08	08	BSPPF socket	1/2-14	44.0	30	27	20.5

Q3CFHF

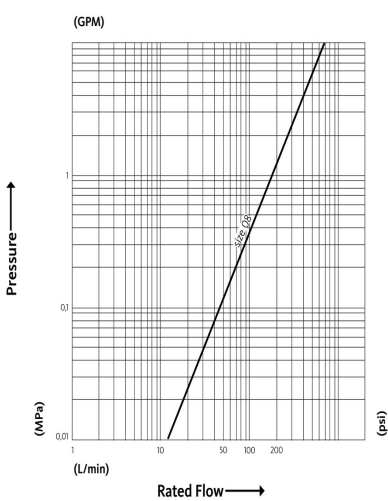
AGRICULTURAL BREAKAWAY - HIGH FLOW RATE
INTERCHANGE ACCORDING TO ISO 7241-1 PART A

- Q3CFHF are only available in 08 (1/2) base size.
- Please enquire for optional thread forms and sizes.
- NOTE: Male coupling is base size 08 (1/2) QNV series.
- Recommended for: Agricultural equipment.
- Connection: Connect without pressure, or with only male coupling under pressure.
- Disconnect under pressure in emergency only.
- Latching: Ball lock latching.
- Shut-off system: Poppet valve.
- Temperature range: -25°C to +125°C.



Q3CFHF - TECHNICAL D

AGRICULTURAL BREAKAWAY - HIGH FLOW RATE
INTERCHANGE ACCORDING TO ISO 7241-1 PART A



Part Number	Rated Flow (l/min)	Force to connect - N	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi	Fluid Spill - ml max
Q3CFHF-F08	70	250	250	3625	14500	15250	2
Q3CFHF-F0822M	70	250	250	3625	14500	15250	2

QSD

DOUBLE BRACKET
MOUNTING BRACKET FOR PUSH/PULL COUPLINGS



Part Number	Suits coupling base size
QSD-08	08

TRANSPORT SERIES

QNZV

POPPET SEAL COUPLINGS

PBR INTERCHANGE

**QNZV - TECHNICAL DAT**

POPPET SEAL COUPLINGS

COUPLINGS SPECIFICALLY DESIGNED FOR

AUST/NZ TRANSPORT MARKET

Part Number	Rated Flow (l/min)	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi
QNZV-F16	160	230	3335	13340	17200
QNZV-M16	160	230	3335	13340	17200

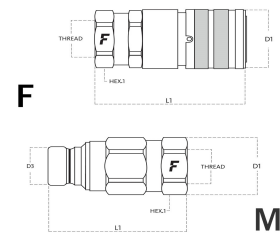
FLAT FACE SERIES

QFFH

FLAT FACE COUPLINGS

INTERCHANGE ACCORDING TO ISO 16028

- Sizes above 16 are available on request, but are to a proprietary standard not ISO 16028.
- Please enquire for other combinations of base size and thread form.
- Overall length when connected is calculated based on both couplings having the same thread form and size.
- Recommended for: Agriculture, industrial, construction, earthmoving.
- Connection: Connect without pressure - push couplings to connect. Disconnect under pressure not allowed - pull back female sleeve to disconnect.
- Latching: Balls latching.
- Shut-off system: Flat valve (male coupling with double valve).
- Temperature range: -25°C to +100°C
- Standards: Interchangeability according to ISO 16028.

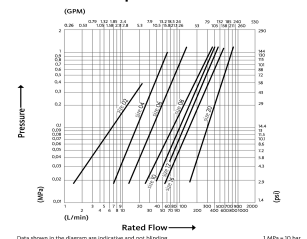


QFFH - TECHNICAL DAT

FLAT FACE COUPLINGS

INTERCHANGE ACCORDING TO ISO 16028

Pressure Drop

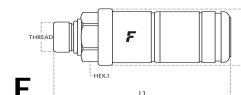


QFFH-F0817Q	12.5	110	210	47.2	350	5000	20000	24200	0.01
QFFH-F1012	16	125	205	46.1	350	5000	20000	20000	0.01
QFFH-F1017Q	16	125	205	46.1	350	5000	20000	20000	0.01
QFFH-F12	19	160	215	48.3	350	5000	20000	20000	0.01
QFFH-F1216	19	160	215	48.3	350	5000	20000	20000	0.01
QFFH-F1217Q	19	160	215	48.3	350	5000	20000	20000	0.01
QFFH-F16	25	230	280	62.9	350	5000	20000	24200	0.01
QFFH-M04	6.3	25	110	24.7	350	5000	20000	25700	0.006
QFFH-M06	10	50	150	33.7	350	5000	20000	24200	.008
QFFH-M0608	12.5	50	150	33.7	350	5000	20000	24200	.008
QFFH-M0612Q	12.5	50	150	33.7	350	5000	20000	24200	.008
QFFH-M08	12.5	110	210	47.2	350	5000	20000	24200	0.01
QFFH-M0812	12.5	110	210	47.2	350	5000	20000	24200	0.01
QFFH-M0814GK	12.5	110	210	47.2	350	5000	20000	24200	0.01
QFFH-M0814Q	12.5	110	210	47.2	350	5000	20000	24200	0.01
QFFH-M0816RK	12.5	110	210	47.2	350	5000	20000	24200	0.01
QFFH-M0817Q	12.5	110	210	47.2	350	5000	20000	24200	0.01
QFFH-M1012	16	125	205	46.1	350	5000	20000	20000	0.01
QFFH-M1017Q	16	125	205	46.1	350	5000	20000	20000	0.01
QFFH-M12	19	160	215	48.3	350	5000	20000	20000	0.01
QFFH-M1216	19	160	215	48.3	350	5000	20000	20000	0.01
QFFH-M1217Q	19	160	215	48.3	350	5000	20000	20000	0.01
QFFH-M16	25	230	280	62.9	350	5000	20000	24200	0.01

Q3FFH

FLAT FACE COUPLINGS

INTERCHANGE ACCORDING TO ISO 16028



Part Number	Base Size	Threadform	Thread Size	Coupling Length - L1	Coupling O.D - D1	Hex Size A/F (Hex 1)	Inner Coupling O.D - D3
Q3FFH-F06	06	BSPPF socket	3/8-19	75	30	27	
Q3FFH-F08	08	BSPPF socket	1/2-14	81.3	38	34	
Q3FFH-F12	12	BSPPF socket	3/4-14	100	48	42	
Q3FFH-M06	06	BSPPF socket	3/8-19	100	30	32	19.7
Q3FFH-M08	08	BSPPF socket	1/2-14	115.7	37	34	24.5
Q3FFH-M12	12	BSPPF socket	3/4-14	128.4	46	42	30

QFHV

FLAT FACE COUPLINGS

SCREW TO CONNECT FLAT FACE COUPLING

Part Number	Base Size	Threadform	Thread Size	Coupling Length - L1	Coupling O.D - D1	Hex Size A/F (Hex 1)
QFHV-F08	08	BSPPF socket	1/2-14	109.7	55	41
QFHV-F12	12	BSPPF socket	3/4-14	129.5	64	46
QFHV-F16	16	BSPPF socket	1-11	138	74	55
QFHV-F20	20	BSPPF socket	1.1/4-11	146.7	74	60
QFHV-M08	08	BSPPF socket	1/2-14	109.5	44.5	36
QFHV-M12	12	BSPPF socket	3/4-14	122.5	54.5	46
QFHV-M16	16	BSPPF socket	1-11	143.8	64	55
QFHV-M20	20	BSPPF socket	1.1/4-11	165.8	68	55

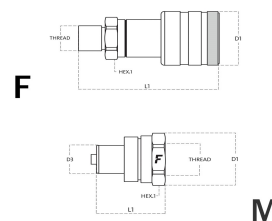
SCREW LOCK SERIES

QPVV

HYDRAULIC TOOL COUPLINGS

INTERCHANGE WITH EUROPE AND US MARKETS

- QPVV series are only available in base sizes 04 and 06 (1/4 and 3/8).
- Please enquire for further thread forms and sizes.
- Connection: Connect with pressure - screw couplings together to connect.
- Disconnect with pressure - unscrew couplings to disconnect.
- NOTE: Can be connected with pressure in either or both couplings.
- Latching: Threaded with safety lock.
- Shut-off system: Poppet valve. Interchanges with ball-type hydraulic tool couplings.
- Temperature range: -25°C to +125°C
- Standards: Faster proprietary standard; interchange with US and European hydraulic tool couplings.

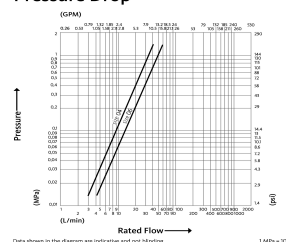


QPVV - TECHNICAL DAT

HYDRAULIC TOOL COUPLINGS

INTERCHANGE WITH EUROPE AND US MARKETS

Pressure Drop



Part Number	Rated Flow (l/min)	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi
QPVV-F04L	15	1030	14935	47850	47850
QPVV-F06L	20	1000	14500	43500	43500
QPVV-M04AC	15	1030	14935	44950	47850
QPVV-M06AC	20	1000	14500	47850	43500

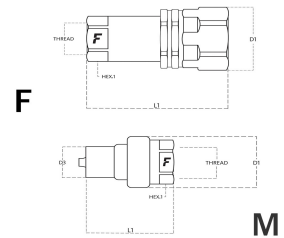
QVV

DUAL LOCK

FASTER PROPRIETARY STANDARD

(INTERCHANGES WITH QVV AND QNV MALES)

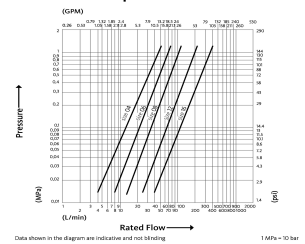
- For sizes above 16 please refer to QVVS series.
- Please enquire for other combinations of base size and thread form.
- Overall length when connected is calculated based on both couplings having the same thread form and size.
- Recommended for: Agriculture, industrial, construction, earthmoving.
- Connection: For QVV male couplings (A); connect or disconnect under pressure.
- Latching: Threaded.
- Shut-off system: Poppet valve. Guidevalve with mechanical backstop.
- Connection: For QNV male couplings (B); connect without pressure - pull back female sleeve and push couplings to connect. Disconnect under pressure not allowed - pull back female sleeve to disconnect.
- Latching: Balls latching.
- Shut-off system: Poppet valve. Reinforced guidevalve with mechanical backstop.
- Temperature range: -25°C to +125°C
- Standards: 08 (1/2) size female only; Interchangeability according to ISO 7241-1 part A. All other sizes; Faster proprietary standard.



QVV - TECHNICAL DATA

DUAL LOCK
FASTER PROPRIETARY STANDARD

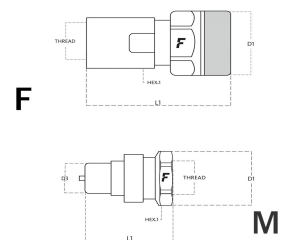
Pressure Drop



Part Number	Rated Flow (l/min)	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi	Fluid Spill - ml max
QVV-F04	18	350	5075	24650	21750	1.5
QVV-F06	30	300	4350	17400	21750	2
QVV-F08	45	300	4350	18850	23200	3
QVV-F12	90	250	3625	14500	17400	10
QVV-F16	140	230	3625	14210	17400	15
QVV-M04	18	350	5075	20300	21750	1.5
QVV-M06	30	300	4350	17400	21750	2
QVV-M08	45	300	4350	17400	23200	3
QVV-M12	90	250	3625	14500	17400	10
QVV-M16	140	230	3625	13500	17400	15

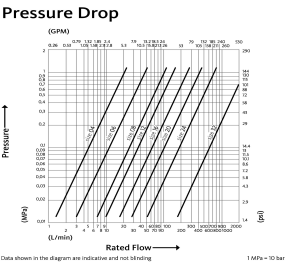
QVVS

DUAL LOCK
FASTER PROPRIETARY STANDARD



- Sizes above 20 (1.1/4) are available on request.
- Please enquire for other combinations of base size and thread form.
- Overall length when connected is calculated based on both couplings having the same thread form and size.
- Recommended for: Construction, earthmoving, hydraulic tools.
- Connection: Connect with pressure - screw couplings together to connect. Disconnect with pressure - unscrew couplings to disconnect.
- NOTE: Can be connected with pressure in either or both couplings.
- Latching: Threaded.
- Shut-off system: Poppet valve. Reinforced guidevalve with mechanical backstop.
- Temperature range: -25°C to +125°C
- Standards: Faster proprietary standard. Interchangeability with all QVV series couplings to size 16 (1).

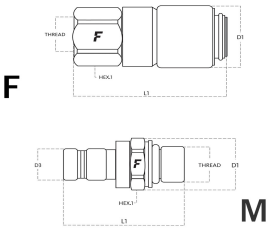
QVVS - TECHNICAL DAT
DUAL LOCK
FASTER PROPRIETARY STANDARD



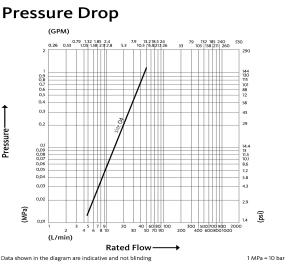
Part Number	Rated Flow (l/min)	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi	Fluid Spill - ml max
QVVS-F04	8	800	11600	34800	36250	1
QVVS-F06	18	760	11020	36250	33350	1.5
QVVS-F08	30	730	10585	31900	31900	2
QVVS-F12	45	700	10150	33350	31030	3
QVVS-F16	90	530	7685	32480	28130	10
QVVS-F20	140	600	8700	26100	29000	15
QVVS-M04	8	800	11600	34800	36250	1
QVVS-M06	18	760	11020	42050	33350	1.5
QVVS-M08	30	730	10585	34510	31900	2
QVVS-M12	45	700	10150	30740	31030	3
QVVS-M16	90	530	7685	23200	28130	10
QVVS-M20	140	600	8700	26100	29000	15

DIAGNOSTIC SERIES

QDF
 FLAT FACE DIAGNOSTIC COUPLINGS
 INTERCHANGE ACCORDING TO ISO 15171-1



QDF - TECHNICAL DATA
 FLAT FACE DIAGNOSTIC COUPLINGS
 INTERCHANGE ACCORDING TO ISO 15171-1



Part Number	Rated Flow (l/min)	Maximum WP Connected - bar	Maximum WP Connected - psi	Minimum BP Disconnected - psi	Minimum BP Connected - psi	Spillage (ml)
QDF-F04AC	2	470	6815	21750	26100	0.01
QDF-F0409Q	2	470	6815	21750	26100	0.01
QDF-M04AC	2	470	6815	27550	26100	0.01
QDF-M0409JF	2	470	6815	27550	26100	0.01
QDF-M0409Q	2	470	6815	27550	26100	0.01

TEMA

TEMA

TEMA QUICK RELEASE COUPLINGS

POPPET STYLE QUICK RELEASE COUPLING



Part Number	Base Size	Threadform	Thread Size - A	Coupling Length - B	Coupling O.D - D	Hex A/F (CHF)
TEMA-10010	16	BSPPF socket	1-11	92	62	48
TEMA-10020	16	BSPPF socket	1-11	92	62	45
TEMA-2510	04	BSPPF socket	1/4-19	60	26	21
TEMA-2520	04	BSPPF socket	1/4-19	60	26	21
TEMA-3810	06	BSPPF socket	3/8-19	62	35	24
TEMA-3820	06	BSPPF socket	3/8-19	62	35	24
TEMA-5010	08	BSPPF socket	1/2-14	68	41	33
TEMA-5020	08	BSPPF socket	1/2-14	68	41	30
TEMA-7510	12	BSPPF socket	3/4-14	77	52	38
TEMA-7520	12	BSPPF socket	3/4-14	77	52	38

COUPLING REPAIR KITS

QRK-4BD / 4FI

FLAT FACE MANIFOLD COUPLINGS

COUPLINGS FOR FLAT FACE MANIFOLD (BOBCAT)



Part Number	Coupling size - in	Base Size	Standard
Q4BD4FH08	1/2	08	ISO 16028
Q4BD4FH12	3/4	12	ISO 16028
QRK-4BD-FFHF08	1/2	08	ISO 16028
QRK-4BD-FFHF12	3/4	12	ISO 16028
QRK-4BD-FFHM06	3/8	06	ISO 16028
QRK-4BD-FFHM08	1/2	08	ISO 16028
QRK-4BD-FFHM12	3/4	12	ISO 16028
QRK-4BD-FFNM06	3/8	06	ISO 16028
QRK-4FIF08	1/2	08	ISO 16028
QRK-4FIM08	1/2	08	ISO 16028

QSK

SEAL KIT FOR FASTER QUICK RELEASE
COUPLINGS



Part Number	Coupling size - in	Suits coupling with base size	Compatible with
QSK-F04N	1/4	04	NV-VV-VVS
QSK-F06N	3/8	06	NV-VV-VVS
QSK-F08N	1/2	08	NV-VV-VVS
QSK-F12N	3/4	12	NV-VV-VVS
QSK-F16N	1	16	NV-VV-VVS
QSK-F20N	1 1/4	20	NV-VV-VVS
QSK-F24N	1 1/2	24	NV-VV-VVS
QSK-F06PVV	3/8	06	QPVV-F06
QSK-M08FH	1/2	08	QFFH-M08
QSK-M12FH	3/4	12	QFFH-M12

COUPLING PROTECTION

QT

QNV DUST COVERS

PVC COVERS FOR QNV-QNS SERIES COUPLINGS



Part Number	QNV Male Size	QNV Female Size	Colour
QT-F04B	04		Blue
QT-F06B	06		Blue
QT-F08B	08		Blue
QT-F08BLK	08		Black
QT-F08G	08		Green
QT-F08O	08		Orange
QT-F08R	08		Red
QT-F08Y	08		Yellow
QT-F12B	12		Blue
QT-F16B	16		Blue
QT-M04B		04	Blue
QT-M06B		06	Blue
QT-M08B		08	Blue
QT-M08BLK		08	Black
QT-M08G		08	Green
QT-M08O		08	Orange
QT-M08R		08	Red
QT-M08Y		08	Yellow
QT-M12B		12	Blue
QT-M16B		16	Blue

QT-S

QNV DUST COVERS

ALUMINIUM COVERS FOR QNV SERIES COUPLINGS



Part Number	QNV Male Size	QNV Female Size
QT-F20S	20	
QT-F24S	24	
QT-F32S	32	
QT-M20S		20
QT-M24S		24
QT-M32S		32

QTF

FLAT FACE DUST COVERS

ALUMINIUM COVERS FOR FLAT FACE COUPLINGS



Part Number	QFFH/Q3FFH Male	QFFH/Q3FFH Female
QTFI-F04S	04	
QTFI-F08S	08	
QTFI-F12S	12	
QTFI-M04S		04
QTFI-M08S		08
QTFI-M12S		12

QTFFH

FLAT FACE DUST COVERS

PVC COVERS FOR FLAT FACE COUPLINGS



Part Number	QFFH/Q3FFH Male	QFFH/Q3FFH Female
QTFFH-F04	04	
QTFFH-F06	06	
QTFFH-F08	08	
QTFFH-F12	12	
QTFFH-F16	16	
QTFFH-M04		04
QTFFH-M06		06
QTFFH-M08		08
QTFFH-M12		12
QTFFH-M16		16

QTP

QPVV DUST COVERS

ALUMINIUM COVERS FOR HYDRAULIC TOOL COUPLINGS

- Only available in 04 and 06 (1/4 and 3/8) size.
- QTP series covers protect QPVV series couplings from contamination, atmospheric agents and damage to sealing faces and connection threads when disconnected and not in use.



Part Number	QPVV Male	QPVV Female
QTP-F04S	04	
QTP-F06S	06	
QTP-M04S		04
QTP-M06S		06

QTFDF

QDF DUST COVERS

PVC COVERS FOR QDF SERIES COUPLINGS



Part Number	QDF Male	QDF Female
QTFDF-F04	04	
QTFDF-M04		04

QTH

QHNV DUST COVERS

PVC COVERS FOR QHNV SERIES COUPLINGS



Part Number	QHNV Male Size	QHNV Female Size
QTH-F04	04	
QTH-F06	06	
QTH-F08	08	
QTH-F12	12	
QTH-F16	16	
QTH-M04		04
QTH-M06		06
QTH-M08		08
QTH-M12		12
QTH-M16		16

QTVV

QVV / QVVS DUST COVERS

ALUMINIUM COVERS FOR SCREW-LOCK COUPLINGS

- Please enquire for QTVV aluminium covers larger than size 20 (1.1/4).
- QTVV series covers protect QVV and QVVS series couplings from contamination, atmospheric agents and damage to sealing faces and connection threads when disconnected and not in use.



Part Number	QVV/QVVS Male	QVV/QVVS Female
QTVV-F04S	04	
QTVV-F06S	06	
QTVV-F08S	08	
QTVV-F12S	12	
QTVV-F16S	16	
QTVV-M04S		04
QTVV-M06S		06
QTVV-M08S		08
QTVV-M12S		12
QTVV-M16S		16



GENERAL INFORMATION

Ball valves supplied by Hydraulink can be used for a wide range of applications. Various options are available subject to the pressure and porting requirements. When specifying or selecting a ball valve for a particular application, the following criteria should be considered;

- What functions are required of the coupling?
- What is the fluid flow rate required?
- What size and end type of port thread is required?
- What are the ambient and fluid temperature requirements?
- What is the system working pressure?
- What are the variations in system pressure; how high are the spikes?
- What is the fluid or media to be conveyed?

Ball valves are typically supplied in steel and finished with a silver trivalent chromium plating and clear sealant to further increase protection against corrosion, but are also available other material such as AISI 316 stainless steel. In addition to the valves listed, a wide range of options for port connection styles including S.A.E., D.I.N. and A.N.S.I. flanges. Please contact Hydraulink for further details of available materials, internal seal, configuration and end type combinations.

Check valves (or non-return valves) supplied by Hydraulink are available in various combinations of end type (thread form) and crack pressure. On request, Hydraulink can also supply kits to update the crack pressure of existing check valves. Material is typically steel, finished with a silver trivalent chromium plating and clear sealant to further increase protection against corrosion. Please contact Hydraulink for further details of available materials, crack pressure and end type combinations.

Hydraulink Fluid Connectors Ltd. reserves the right to discontinue, or to alter the design and specification of any product listed in this catalogue.

Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

BALL VALVES

BV

TWO WAY BALL VALVE

BLOCK TYPE WITH MOUNTING HOLES UP TO -16

- VALVES UP TO AND INCLUDING -16 ARE BLOCK TYPE BODY.
- VALVES -20 TO -32 HAVE A FORGED BODY.



Part Number	BSPP Female Thread	Internal Bore - mm	Working Pressure - bar	Working Pressure - psi	Mounting Hole Size - mm
BV-04	1/4-19	6	500	7250	5
BV-06	3/8-19	10	500	7250	5
BV-08	1/2-14	13	500	7250	5
BV-12	3/4-14	20	500	7250	6
BV-16	1-11	25	500	7250	6
BV-20	1.1/4-11	32	400	5800	n/a
BV-24	1.1/2-11	38	400	5800	n/a
BV-32	2-11	50	400	5800	n/a

BV3L

L-PORTED 3 WAY BALL VALVE
BLOCK TYPE WITH MOUNTING HOLES UP TO -16

- VALVES UP TO AND INCLUDING -16 ARE BLOCK TYPE BODY.
- VALVES -20 TO -32 HAVE A FORGED BODY.



Part Number	BSPP Female Thread	Internal Bore - mm	Working Pressure - bar	Working Pressure - psi	Mounting Hole Size - mm
BV3L-04	1/4-19	6	400	5800	5
BV3L-06	3/8-19	10	400	5800	5
BV3L-08	1/2-14	13	350	5075	5
BV3L-12	3/4-14	20	350	5075	8
BV3L-16	1-11	25	350	5075	8
BV3L-20	1.1/4-11	32	400	5800	8
BV3L-24	1.1/2-11	38	400	5800	8

BVR

TWO WAY BALL VALVE REDUCED BORE
FORGED TYPE WITHOUT MOUNTING HOLES

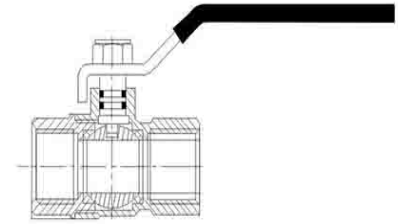


Part Number	BSPP Female Thread	Internal Bore - mm	Working Pressure - bar	Working Pressure - psi
BV-20R	1.1/4-11	25	350	5075
BV-24R	1.1/2-11	25	350	5075
BV-32R	2-11	40	350	5075

LOW PRESSURE BALL VALVES

LPBV

TWO WAY BALL VALVE LOW PRESSURE
TWO WAY BALL VALVE LOW PRESSURE PLATED
BRASS

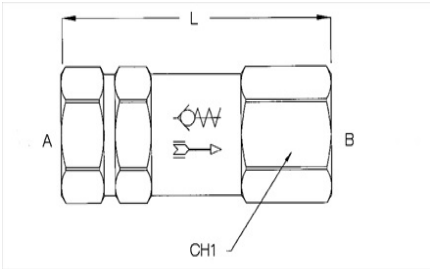


Part Number	BSPTF Female Thread (B)	Bore	Working Pressure psi	Working Pressure Bar
LPBV-04	1/4-19	10mm	435	30
LPBV-06	3/8-19	10mm	435	30
LPBV-08	1/2-14	15mm	435	30
LPBV-12	3/4-14	20mm	435	30
LPBV-16	1-11	25mm	435	30
LPBV-20	1.1/4-11	32mm	360	25
LPBV-24	1.1/2-11	40mm	360	25
LPBV-32	2-11	50mm	360	25

CHECK VALVES

CVF

BSPPF CHECK VALVE
STEEL CHECK VALVE (5 psi CRACK PRESSURE)



Part Number	Base Size	BSPP Female Thread (A)	BSPP Female Thread (B)	Overall Length (L)	Hex A/F (CH1)
CVF-04	04	1/4-19	1/4-19	50	19
CVF-06	06	3/8-19	3/8-19	60	24
CVF-08	08	1/2-14	1/2-14	70	27
CVF-12	12	3/4-14	3/4-14	86	34
CVF-16	16	1-11	1-11	100	41



GENERAL INFORMATION

Hydraulink stock a comprehensive range of accessories, from individual seals for adaptors to spill kits for rapid and convenient containment and disposal of hydraulic oil spills.

Various types of protective hose armour are available, to protect and prolong the service life of hose assemblies whether in conventional or aggressive environments. Some of these armours require clamping in place, and the ranges of clamps to do so are also in this section as well as tables for easy selection of protective hose armour based on hose size.

Bolts and washers for S.A.E. flanges and a wide variety of seals are among the essentials for new installations or for service work. Also listed are projectile cleaning kits to ensure every assembly manufactured is contamination free, and robust threaded plastic caps and plugs to protect those assemblies from further contamination once assembled.

For the mobile service vehicle, workshop or hose shop, Hydraulink supply a standardised bin and racking system detailed in this section, as well as various sizes of spill kit and environmentally responsible organic absorbent to contain either hydraulic oil or general spills.

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HOSE PROTECTION

BR

VINYL BEND RESTRICTOR
TAPERED BLACK PVC SLEEVE



Part Number	I.D - mm	I.D - inches	Overall Length - mm	Overall Length - inches	Suits Hose
BR1055	13.46	0.53	134.6	5.3	4R7
BR1050	16	0.63	139.7	5.5	1/4 - 1 and 2 Wire
BR1051	18.54	0.73	152.4	6	3/8 - 1 and 2 Wire
BR1054	19.56	0.77	177.8	7	6G2& 6PC5000
BR1052	21.34	0.84	177.8	7	8G1
BR1053	25.4	1	203.2	8	10G1& 10M2T& 10M3K

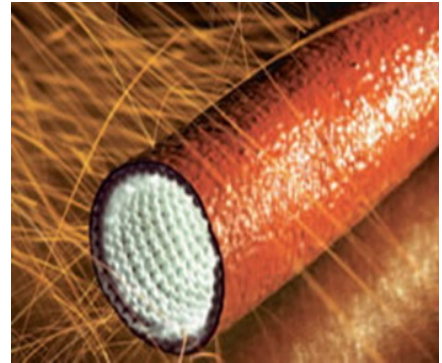
HSG
WIRE SPRING GUARD
HIGH TENSILE WIRE SPRING GUARD FOR HOSE



Part Number	Nominal I.D - mm	Nominal I.D - inches	Wire O.D (B) - mm	Wire O.D (B) - inches	Pitch (C) - mm	Pitch (C) - inches	Standard Length - m
HSG-7	7	0.275	1.25	0.05	4.0	0.16	6
HSG-14	14	0.55	2	0.08	5.6	0.22	6
HSG-17	17.5	0.69	2	0.08	4.0	0.16	6
HSG-19	18.8	0.738	2	0.08	5.6	0.22	6
HSG-21	21.6	0.852	2	0.08	5.6	0.22	6
HSG-23	23.2	0.915	2	0.08	5.6	0.22	6
HSG-25	24.8	0.977	2	0.08	5.6	0.22	6
HSG-26	26.4	1.04	2	0.08	5.6	0.22	6
HSG-28	28.5	1.122	2	0.08	5.6	0.22	6
HSG-32	32.5	1.278	2	0.08	5.6	0.22	6
HSG-34	34	1.34	3	0.12	8.8	0.35	6
HSG-40	40.1	1.578	3	0.12	8.8	0.35	6
HSG-41	41.5	1.63	3	0.12	8.8	0.35	6
HSG-47	46.9	1.847	3	0.12	10.4	0.41	6
HSG-51	50.5	2	3	0.12	10.4	0.41	6
HSG-54	53.7	2.112	3	0.12	10.4	0.41	6
HSG-59	58.7	2.312	3	0.12	10.4	0.41	6

HTG

HeatGuard« PROTECTIVE SLEEVING
KNITTED COATED FIBREGLASS HOSE SLEEVING



Part Number	I.D - mm	I.D - inches
HTG-6	9.53	3/8
HTG-8	12.7	1/2
HTG-12	19.05	3/4
HTG-14	22.35	7/8
HTG-16	25.4	1
HTG-18	28.45	1.1/8
HTG-22	35.05	1.3/8
HTG-28	44.45	1.3/4
HTG-32	50.8	2
HTG-36	57.15	2.1/4
HTG-40	63.5	2.1/2
HTG-44	69.85	2.3/4
HTG-56	76.2	3.1/2
HTG-64	101.6	4

PHG

PROTECTIVE HOSE GUARD

HIGH DENSITY POLYETHYLENE PROTECTIVE HOSE WRAP



Part Number	Nominal O.D - mm	Nominal O.D - inches	Nominal I.D - mm	Nominal I.D - inches	Suits hose - Min O.D - mm	Suits hose - Min O.D - inches	Suits hose - Max O.D - mm	Suits hose - Max O.D - inches	Colour
PHG-12	12	0.47	9.5	0.35	10	.35	17	0.56	BLACK
PHG-12R	12	0.47	9.5	0.35	10	0.35	17	0.47	RED
PHG-16	16	0.63	12.5	0.5	12	0.67	22	0.87	BLACK
PHG-16R	16	0.63	12.5	0.49	12	0.47	22	0.67	RED
PHG-16Y	16	0.63	12.5	0.49	12	0.47	22	0.67	YELLOW
PHG-20	20	0.79	16	0.63	16	0.91	27	1.02	BLACK
PHG-20R	20	0.79	16	0.63	16	0.63	27	0.87	RED
PHG-20Y	20	0.79	16	0.63	16	0.63	27	0.87	YELLOW
PHG-25	25	0.98	21	0.83	22	1.06	35	1.14	BLACK
PHG-25R	25	0.98	21	0.83	22	0.87	35	1.06	RED
PHG-25Y	25	0.98	21	0.83	22	0.87	35	1.06	YELLOW
PHG-32	32	1.26	27	1.03	27	1.18	43	1.54	BLACK
PHG-32R	32	1.26	27	1.06	27	1.06	43	1.3	RED
PHG-32Y	32	1.26	27	1.06	27	1.06	43	1.3	YELLOW
PHG-40	40	1.57	34	1.34	33	1.69	55	1.97	BLACK
PHG-40Y	40	1.57	34	1.39	33	1.3	55	1.65	YELLOW
PHG-50	50	1.97	44	1.73	42	2.09	64	2.64	BLACK
PHG-50Y	50	1.97	44	1.73	42	1.65	64	2.17	YELLOW
PHG-63	63	2.48	55	2.17	52	2.68	75	3.03	BLACK
PHG-75	75	2.95	66	2.6	65	3.07	96	3.31	BLACK
PHG-90	90	3.54	79	3.1	80	3.35	110	3.94	BLACK
PHG-110	110	4.34	97	3.8	97	3.94	125	4.72	BLACK

SGX

HEAVY DUTY PROTECTIVE HOSE GUARD
HIGH DENSITY POLYETHYLENE PROTECTIVE HOSE
WRAP



Part Number	Nominal O.D - mm	Nominal I.D - mm	HOSE O.D RANGE - mm
SGX-12	13	9	9 > 12
SGX-16	16.5	12	12 > 17
SGX-20	20	15	16 > 22
SGX-25	24.5	19	22 > 28
SGX-32	30	23	27 > 33
SGX-40	39	30.5	33 > 42
SGX-50	46.5	38	42 > 55
SGX-63	58	47	52 > 65
SGX-75	73	61	65 > 80
SGX-90	84.5	70.5	80 > 150
SGX-110	150	135	150+

SC

LIFEGUARD COLLAR
LIFEGUARD STAINLESS STEEL CRIMP COLLAR



Part Number	Collar O.D (mm)
6SC-4	29.2
10SC-4	41.1
12SC-4	47.5
6SC-4-SS	29.2
8SC-4-SS	35.5
10SC-4-SS	41.1
12SC-4-SS	47.5

LG

LIFEGUARD SLEEVE

LIFEGUARD 5000 PSI BURST SLEEVE



Part Number	Inside flat-mm	Inside round-mm
14LG5K	35	22.3
16LG5K	41.1	26.1
20LG5K	48.5	31.0
26LG5K	63.5	40.4

TEXS

WOVEN NYLON HOSE GUARD

MSHA APPROVED ABRASION RESISTANT
SLEEVEING



Part Number	Internal dimension - mm	Internal Dimension - inches	I.D when opened - mm	I.D when opened - inch
TEXS20	31	1.24	20	0.8
TEXS23	36	1.44	23	0.92
TEXS27	42	1.68	27	1.08
TEXS31	49	1.96	31	1.24
TEXS36	54	2.16	36	1.44
TEXS40	63	2.52	40	1.6
TEXS47	74	2.96	47	1.88
TEXS55	86	3.39	55	2.17
TEXS60	94	3.76	60	2.4
TEXS66	104	4.16	66	2.64
TEXS73	115	4.60	73	2.92
TEXS85	136	5.35	85	3.35
TEXS93	149	5.87	93	3.66
TEXS112	179	7.05	112	4.41
TEXS127	205	8.07	127	5.00

HOSE CLAMPS

HC

WORM DRIVE HOSE CLAMP

WORM DRIVE HOSE CLAMP



Part Number	Minimum Final I.D - mm	Minimum Final I.D - inches	Maximum Final I.D - mm	Maximum Final I.D - inches	Band width - mm	Band Width - inches	Hex Head - inches
HC6-16	6	1/4	16	5/8	8	5/16	1/4
HC8-22	8	5/16	22	7/8	8	5/16	1/4
HC16-25	16	21/32	25	31/32	12.7	1/2	21/25
HC20-32	20	25/32	32	1 1/4	12.7	1/2	21/25
HC32-50	32	1 1/4	50	1 31/32	12.7	1/2	21/25
HC40-60	40	1 19/32	60	2 11/32	12.7	1/2	21/25
HC50-70	50	1 31/32	70	2 3/4	12.7	1/2	21/25
HC65-90	65	2 14/25	90	3 1/2	12.7	1/2	21/25
HC80-100	80	3 1/8	100	3 15/16	12.7	1/2	21/25
HC90-110	90	3 9/16	110	4 5/16	12.7	1/2	21/25
HC100-120	100	3 15/16	120	4 23/32	12.7	1/2	21/25
HC110-130	110	4 5/16	130	5 1/8	12.7	1/2	21/25
HC130-155	130	5 3/25	155	6 1/10	12.7	1/2	21/25
HC155-180	155	6 1/10	180	7 8/89	12.7	1/2	21/25
HC180-205	180	7 8/89	205	8 4/57	12.7	1/2	21/25

PHC
P CLAMP
P CLIP CLAMP 6MM MOUNTING HOLE



Part Number	Clamp I.D. Closed mm	Bolt hole mm
PHC-6	6	6
PHC-10	10	6
PHC-13	13	6
PHC-16	16	6
PHC-21	21	6
PHC-22	22	6
PHC-25	25	6
PHC-27	27	6
PHC-29	29	6
PHC-38	38	6
PHC-40	40	6
PHC-44	44	6
PHC-51	51	6
PHC-70	70	6

HPHC

HEAVY DUTY VINYL P CLAMP
H/DUTY VINYL COATED P CLIP CLAMP 10MM
MOUNTING HOLE



Part Number	Clamp I.D. Closed mm	Bolt hole-mm
HPHC-06	6	10
HPHC-10	10	10
HPHC-13	13	10
HPHC-16	16	10
HPHC-19	19	10
HPHC-21	21	10
HPHC-24	24	10
HPHC-25	25	10
HPHC-27	27	10
HPHC-29	29	13
HPHC-32	32	13
HPHC-40	40	13
HPHC-44	44	13
HPHC-51	51	13
HPHC-70	70	13

SHHC

HEAVY DUTY HOSE CLAMP
T-BOLT TYPE HOSE CLAMP



Part Number	Minimum Final I.D -	Minimum Final I.D -	Maximum Final I.D -	Maximum Final I.D -	Bolt Thread	Bolt Head (mm)	Band Width - mm	Band Width - inches
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	mm	inches	mm	inches				
HSHC17-19	17	0.67	19.00	0.75	M6	8	19.8	0.31
HSHC20-22	20	0.79	22.00	0.87	M6	8	19.8	0.31
HSHC23-25	23	0.91	25.00	0.98	M6	8	19.8	0.31
HSHC26-28	26	1.02	28.00	1.10	M6	8	19.8	0.31
HSHC29-31	29	1.14	31.00	1.22	M7	10	22	0.39
HSHC32-35	32	1.26	35.00	1.38	M7	10	22	0.39
HSHC36-39	36	1.42	39.00	1.54	M7	10	22	0.39
HSHC40-43	40	1.57	43.00	1.69	M7	10	22	0.39
HSHC42-45	42	1.65	45.00	1.69	M7	10	22	0.39
HSHC44-47	44	1.73	47.00	1.85	M7	10	22	0.39
HSHC48-51	48	1.89	51.00	2.01	M7	10	22	0.39
HSHC52-55	52	2.05	55.00	2.17	M7	10	22	0.39
HSHC56-59	56	2.20	59.00	2.32	M7	10	22	0.39
HSHC60-63	60	2.36	63.00	2.48	M7	10	22	0.39
HSHC64-67	64	2.52	67.00	2.64	M7	10	22	0.39
HSHC68-73	68	2.68	73.00	2.87	M8	13	27.5	0.51
HSHC74-79	74	2.91	79.00	3.11	M8	13	27.5	0.51
HSHC80-85	80	3.15	85.00	3.35	M8	13	27.5	0.51
HSHC86-91	86	3.39	81.00	3.19	M8	13	27.5	0.51
HSHC92-97	92	3.62	97.00	3.82	M8	13	27.5	0.51
HSHC98-103	98	3.86	103.00	4.06	M8	13	27.5	0.51
HSHC104-112	104	4.09	112.00	4.41	M8	13	27.5	0.51
HSHC113-121	113	4.45	121.00	4.76	M8	13	27.5	0.51
HSHC122-130	122	4.80	130.00	5.12	M8	13	27.5	0.51
HSHC131-139	131	5.16	139.00	5.47	M10	15	19.8	0.59
HSHC140-148	140	5.51	148.00	5.83	M10	15	19.8	0.59
HSHC149-161	149	5.87	161.00	6.34	M10	15	19.8	0.59
HSHC162-174	162	6.38	174.00	6.85	M10	15	19.8	0.59
HSHC175-187	175	6.89	187.00	7.36	M10	15	19.8	0.59
HSHC188-200	188	7.40	200.00	7.87	M10	15	19.8	0.59
HSHC201-213	201	7.91	213.00	8.39	M10	15	19.8	0.59
HSHC214-226	214	8.43	226	8.90	M10	16	26	0.59
HSHC227-239	227	8.94	239.00	9.41	M10	15	19.8	0.59
HSHC240-252	240	9.45	252.00	9.92	M10	15	19.8	0.59

SB
POWERGRIP® SB CLAMP
THERMOPLASTIC HEAT SHRINK CLAMP



Part Number	Minimum Final I.D - mm	Minimum Final I.D - inches	Maximum Final I.D - mm	Maximum Final I.D - inches
SB15	12.7	0.5	17.46	0.69
SB19	17.46	0.69	20.64	0.81
SB22	20.64	0.81	23.81	0.94
SB25	23.81	0.94	26.99	1.06
SB29	26.99	1.06	30.16	1.19
SB34	33.34	1.31	38.10	1.50
SB41	38.1	1.5	44.45	1.75
SB48	44.45	1.75	50.8	2
SB54	50.8	2	57.15	2.25
SB60	57.15	2.25	63.5	2.5
SB67	63.5	2.5	69.85	2.75
SB73	69.85	2.75	76.2	3

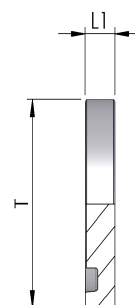
SAE FLANGE ADAPTORS

VP

SAE CODE 61 BLANKING

SAE CODE 61 BLANKING DISC

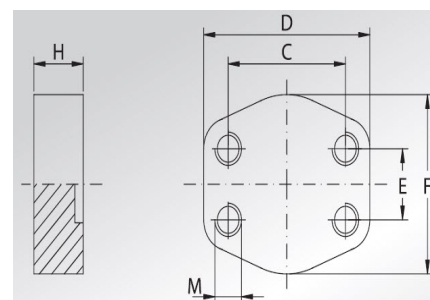
- Recommended for temporary blanking of flange ports and connectors during servicing and repairs.



Part Number	NOMINAL SAE FLANGE SIZE	T	L1
VP-08	1/2	30.2	6.73
VP-12	3/4	38.1	6.73
VP-16	1	44.4	8.00
VP-20	1.1/4	50.8	8.00
VP-24	1.1/2	60.3	8.00
VP-32	2	71.4	9.53

VBC

SAE CODE 61 COMPANION BLANKING PLATE

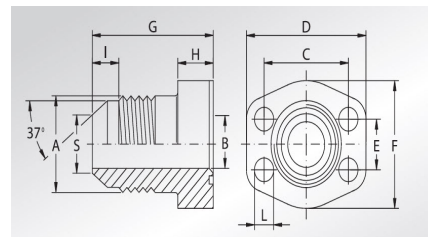


Part Number	NOMINAL SAE FLANGE SIZE	C	D	E	F	H	SUITS METRIC BOLTS
VBC-40	2.1/2	88.9	114	50.8	105	20	M10-1.5 x 35
VBC-48	3	106.4	134	61.9	124	24	M10-1.5 x 35

G-V

JIC MALE x SAE FLANGE CODE 61

JIC MALE x SAE FLANGE CODE 61 FLANGE

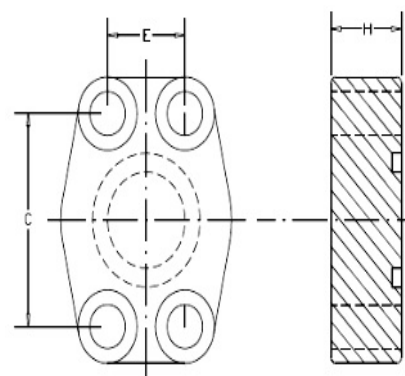


Part Number	JIC Male Thread (A)	Nominal SAE Size Flange	Overall Length (L1)
G-V-1712	1.1/16-12	3/4	70
G-V-1716	1.1/16-12	1	71
G-V-1720	1.1/16-12	1 1/4	71
G-V-2116	1.5/16-12	1	71
G-V-2120	1.5/16-12	1 1/4	71
G-V-2620	1.5/8-12	1 1/4	78
G-V-3024	1.7/8-12	1 1/2	89

VBO

SAE CODE 61 BLANKING PLATE

SAE CODE 61 FLANGE PORT BLANKING PLATE

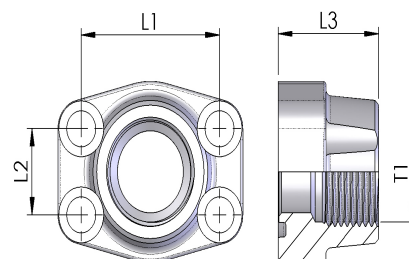


Part Number	Nominal SAE Size Flange	C	E	H	Suits metric bolts	Suits imperial bolts
VBO-08	1/2	38	17	16	M8x30	5/16x1.1/4
VBO-12	3/4	48	22	18	M10x35	3/8x1.1/4
VBO-16	1	52	26	19	M10x35	3/8x1.1/4
VBO-20	1.1/4	59	30	18	M10x45	7/16x1.1/2
VBO-24	1.1/2	70	36	20	M12x45	1/2x1.1/2
VBO-32	2	78	43	20	M12x45	1/2x1.1/2

F-V

BSP FEMALE X SAE CODE 61

BSP FIXED FEMALE X SAE CODE 61 FLANGE BLOCK

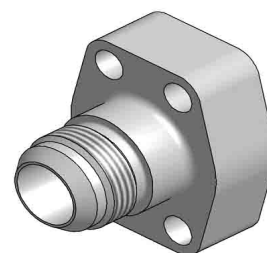


Part Number	T1	Nominal SAE Flange Size	L1 (mm)	L2 (mm)	L3 - mm	Suits metric bolts	Suits imperial bolts
F-V-0808	1/2-14	1/2	38.1	17.48	36	M8x30	5/16x1.1/4
F-V-1212	3/4-14	3/4	47.6	22.23	36	M10x35	3/8x1.1/4
F-V-1616	1-11	1	52.37	26.19	38	M10x35	3/8x1.1/4
F-V-2020	1.1/4-11	1.1/4	58.72	30.18	40	M10x45	7/16x1.1/2
F-V-2424	1.1/2-11	1.1/2	69.85	35.71	45	M12x45	1/2x1.1/2
F-V-3232	2-11	2	77.77	42.88	45	M12x45	1/2x1.1/2

G-VB

JIC MALE x SAE FLANGE BLOCK CODE 61

JIC MALE x SAE FLANGE BLOCK CODE 61

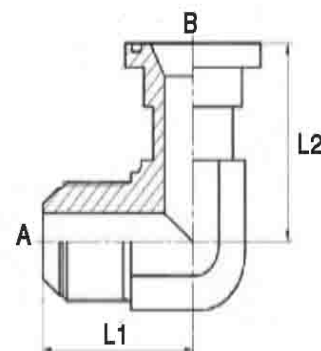


Part Number	JIC Male Thread (A)	Nominal SAE Size Flange	Overall Length (L1)
G-VB-1712	1.1/16-12	3/4	60
G-VB-2116	1.5/16-12	1	63
G-VB-2620	1.5/8-12	1 1/4	65
G-VB-3024	1.7/8-12	1 1/2	70

G-V-90

JIC MALE x SAE FLANGE CODE 61 90°

90° SAE CODE 61 FLANGE HEAD x JIC 37° MALE



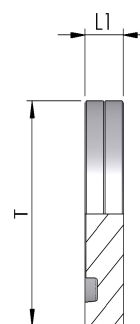
Part Number	JIC Male Thread (A)	Nominal SAE Size Flange	Length 1	Length 2
G-V-90-1712	1.1/16-12	3/4	42.93	54.1
G-V-90-1716	1.1/16-12	1	45.97	60.2
G-V-90-2116	1.5/16-12	1	49.53	60.45
G-V-90-2120	1.5/16-12	1 1/4	52.32	66.55
G-V-90-2620	1.5/8-12	1 1/4	51.56	67.01
G-V-90-3024	1.7/8-12	1 1/2	59.69	79.25

VHP

SAE CODE 62 BLANKING PLATE

SAE CODE 62 BLANKING DISC

- Recommended for temporary blanking of flange ports and connectors during servicing and repairs.

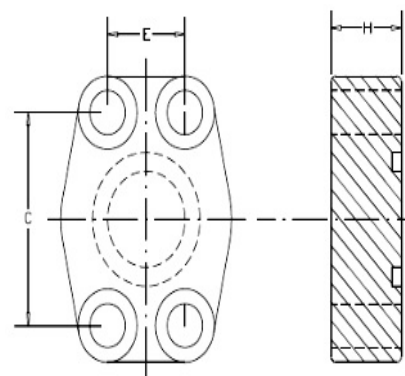


Part Number	NOMINAL SAE FLANGE SIZE	T	L1
VHP-12	3/4	41.3	8.76
VHP-16	1	47.6	9.53
VHP-20	1.1/4	54.0	10.29
VHP-24	1.1/2	63.5	12.57
VHP-32	2	79.4	12.57

VHBO

SAE CODE 62 BLANKING PLATE

SAE CODE 62 FLANGE PORT BLANKING PLATE

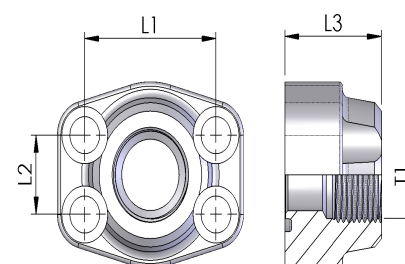


Part Number	Nominal SAE Size Flange	C	E	H	Suits metric bolts	Suits imperial bolts
VHBO-08	1/2	40	18	16	M8x35	5/16x1.1/4
VHBO-12	3/4	51	24	19	M10x35	3/8x1.1/2
VHBO-16	1	57	28	24	M12x45	7/16x1.3/4
VHBO-20	1.1/4	67	32	27	M14x50	1/2x1.3/4
VHBO-24	1.1/2	79	37	30	M16x55	5/8x2
VHBO-32	2	97	44	30	M20x65	3/4x2.1/2

F-VH

BSP FEMALE X SAE CODE 62

BSP FIXED FEMALE X SAE CODE 62 FLANGE BLOCK

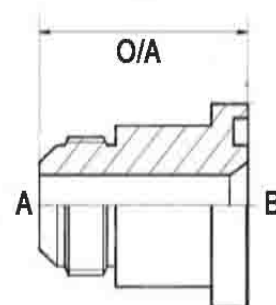


Part Number	T1	Nominal SAE Flange Size	L1 (mm)	L2 (mm)	L3 - mm	Suits metric bolts	Suits imperial bolts
F-VH-0808	1/2-14	1/2	40.49	18.24	36	M8x35	5/16x1.1/4
F-VH-1212	3/4-14	3/4	50.8	23.8	36	M10x35	3/8x1.1/2
F-VH-1616	1-11	1	57.15	27.76	42	M12x45	7/16x1.3/4
F-VH-2020	1.1/4-11	1.1/4	66.68	31.75	45	M14x50	1/2x1.3/4
F-VH-2424	1.1/2-11	1.1/2	79.38	36.5	50	M16x55	5/8x2
F-VH-3232	2-11	2	96.82	44.45	65	M20x65	3/4x2.1/2

G-VH

JIC MALE x SAE FLANGE CODE 62

JIC MALE x SAE FLANGE CODE 62 FLANGE

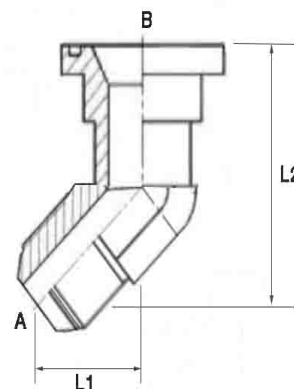


Part Number	JIC Male Thread (A)	Nominal SAE Size Flange	Overall Length (L1)
G-VH-1712	1.1/16-12	3/4	69.85
G-VH-2116	1.5/16-12	1	71.12
G-VH-2620	1.5/8-12	1 1/4	77.72
G-VH-3024	1.7/8-12	1 1/2	89.41

G-VH-45

JIC MALE x SAE FLANGE CODE 62 45°

JIC MALE x SAE FLANGE CODE 62 45°

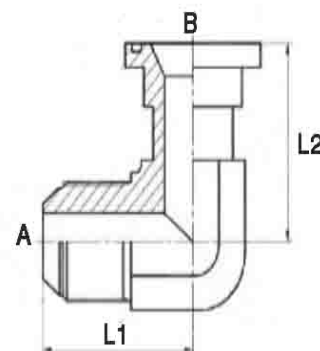


Part Number	JIC Male Thread (A)	Nominal SAE Size Flange	length 1	length 2
G-VH-45-1712	1.1/16-12	3/4	34.04	38.61
G-VH-45-2116	1.5/16-12	1	37.34	46.99
G-VH-45-2620	1.5/8-12	1 1/4	40.39	51.82
G-VH-45-3024	1.7/8-12	1 1/2	45.47	71.63

G-VH-90

JIC MALE x SAE FLANGE CODE 62 90°

JIC MALE x SAE FLANGE CODE 62 90°

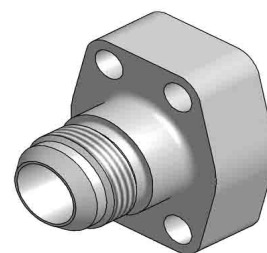


Part Number	JIC Male Thread (A)	Nominal SAE Size Flange	length 1	length 2
G-VH-90-1712	1.1/16-12	3/4	44.7	54.1
G-VH-90-2112	1.5/16-12	3/4	42.16	54.1
G-VH-90-2116	1.5/16-12	1	53.59	60.71
G-VH-90-2120	1.5/16-12	1 1/4	52.32	70.1
G-VH-90-2620	1.5/8-12	1 1/4	52.83	69.85
G-VH-90-3024	1.7/8-12	1 1/2	59.18	80.01

G-VHB

JIC MALE x SAE FLANGE BLOCK CODE 62

JIC MALE x SAE FLANGE BLOCK CODE 62



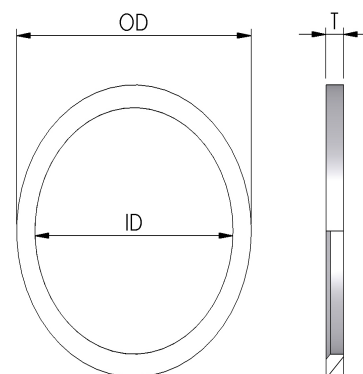
Part Number	JIC Male Thread (A)	Nominal SAE Size Flange	Overall Length (L1)
G-VHB-1712	1.1/16-12	3/4	73
G-VHB-2116	1.5/16-12	1	82
G-VHB-2620	1.5/8-12	1 1/4	92
G-VHB-3024	1.7/8-12	1 1/2	96

SAE FLANGES

FRS

SAE FLANGE SPACER

SAE CODE 62 FLANGE SPACER RING TO ADAPT TO
CATERPILLAR XT5 STYLE FLANGE CLAMP

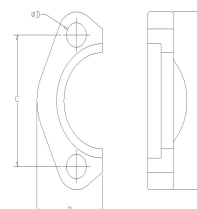


Part Number	Suits SAE Nominal size	Outside Diameter - mm	Inside Diameter - mm	Thickness - mm
FRS-12	3/4	41	33	5.5
FRS-16	1	47.4	39	4.7
FRS-20	1 1/4	53.3	45	4
FRS-24	1 1/2	63.2	52	1.7
FRS-32	2	79.1	68	1.7

W

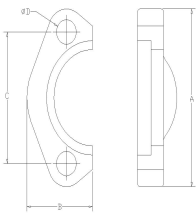
SAE CODE 61 CLAMP

SAE CODE 61 FLANGE CLAMP



Part Number	NOMINAL SAE FLANGE SIZE	Diameter mm (A)	Width mm (B)	Bolt Holes Spacing mm (C)	Hole Size mm (D)
W-08	1/2	54	23	38.1	9
W-12	3/4	65.1	26.1	47.6	11
W-16	1	69.8	29.4	52.4	11
W-20	1 1/4	79.4	36.5	58.7	11
W-24	1 1/2	93.7	41.3	69.8	13.5
W-32	2	101.6	48.4	77.8	13.5
W-40	2 1/2	114	54.1	88.9	13.5
W-48	3	135	65.3	106.3	17

WHP
SAE CODE 62 CLAMP
SAE CODE 62 FLANGE CLAMP



Part Number	NOMINAL SAE FLANGE SIZE	Diameter mm (A)	Width mm (B)	Bolt Hole Spacing mm (C)	Hole Size mm (D)
WHP-08	1/2	56.3	28.1	40.5	9
WHP-12	3/4	71.4	30.2	50.8	11
WHP-16	1	80.9	34.9	57.1	13
WHP-20	1 1/4	95.2	38.9	66.7	15
WHP-24	1 1/2	112.7	47.6	79.4	17
WHP-32	2	133.3	57.1	96.8	21

SAE FLANGE CLAMPS

WHPC

FLANGE CLAMPS TO SUIT CATERPILLAR STYLE
FLANGE
CLAMPS TO SUIT CAT STYLE FLANGE COMPLETE
WITH O RING/UNC BOLT KIT



Part Number	Nominal Flange size (T)	Dash Size	Flange Diameter (mm)	Bolt Hole Spacing (mm)	Kit Includes
WHPC-12	3/4	12	41	50.8	O-ring-spring washers-bolts
WHPC-16	1	16	48	57.15	O-ring-spring washers-bolts
WHPC-20	1.1/4	20	54	66	O-ring-spring washers-bolts
WHPC-24	1.1/2	24	64	79.5	O-ring-spring washers-bolts
WHPC-32	2	32	79	96.8	O-ring-spring washers-bolts

BK

SAE CODE 61 IMPERIAL BOLT KIT
COMES WITH O-RING CAP SCREWS AND WASHERS



Part Number	Nominal SAE Flange Size	Imperial bolts
BK-08	1/2	5/16x1.1/4
BK-12	3/4	3/8x1.1/4
BK-16	1	3/8x1.1/4
BK-20	1.1/4	7/16x1.1/2
BK-24	1.1/2	1/2x1.1/2
BK-32	2	1/2x1.1/2

BKM

SAE CODE 61 METRIC BOLT KIT

COMES WITH O-RING CAP SCREWS AND WASHERS



Part Number	Nominal SAE Flange Size	Metric bolts
BKM-08	1/2	M8x30
BKM-12	3/4	M10x35
BKM-16	1	M10x35
BKM-20	1.1/4	M10x45
BKM-24	1.1/2	M12x45
BKM-32	2	M12x45

BKH

SAE CODE 62 IMPERIAL BOLT KIT

COMES WITH O-RING CAP SCREWS AND WASHERS



Part Number	Nominal SAE Flange Size	Imperial bolts
BKH-08	1/2	5/16x1.1/4
BKH-12	3/4	3/8x1.1/2
BKH-16	1	7/16x1.3/4
BKH-20	1.1/4	1/2x1.3/4
BKH-24	1.1/2	5/8x2
BKH-32	2	3/4x2.1/2

BKMH

SAE CODE 62 METRIC BOLT KIT

COMES WITH O-RING CAP SCREWS AND WASHERS



Part Number	Nominal SAE Flange Size	Metric bolts
BKMH-08	1/2	M8x35
BKMH-12	3/4	M10x35
BKMH-16	1	M12x45
BKMH-20	1.1/4	M14x50
BKMH-24	1.1/2	M16x55
BKMH-32	2	M20x65

REPLACEMENT SEALS

D

BONDED SEAL

SELF CENTERING BONDED (DOWTY) SEAL

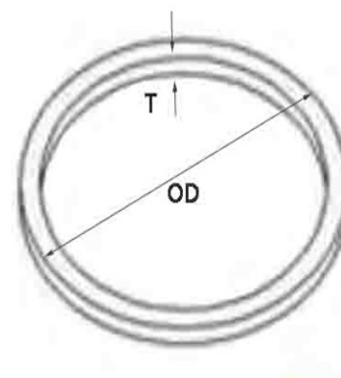


Part Number	Internal dimension - mm	Suits thread
D-02	10.4	1/8-28 BSPP
D-04	13.7	1/4-19 BSPP
D-06	17.3	3/8-19 BSPP
D-08	21.5	1/2-14 BSPP
D-12	27.1	3/4-14 BSPP
D-16	33.9	1-11 BSPP
D-20	42.9	1.1/4-11 BSPP
D-24	48.4	1.1/2-11 BSPP
D-32	60.6	2-11 BSPP
D-40	76.1	2 1/2-11
D-M8	8	M8
D-M10	10	M10
D-M12	12	M12
D-M14	14	M14
D-M16	16	M16
D-M18	18	M18
D-M20	20	M20
D-M22	22	M22
D-M24	24	M24
D-M26	26	M26
D-M27	27	M27
D-M30	30	M30
D-M33	33	M33
D-M42	42	M42
D-M48	48	M48

RSB

BSP STUD STEEL RING

BSP STUD O-RING STEEL RETAINING RING



Part Number	Suits BSPP Male thread	Thickness - mm	Ring O.D - mm
RSB-02	1/8-28	1.5	14.9
RSB-04	1/4-19	1.5	20.2
RSB-06	3/8-19	1.6	23.9
RSB-08	1/2-14	1.7	28.7
RSB-12	3/4-14	1.8	35
RSB-16	1-11	2.3	44.4
RSB-20	1.1/4-11	2.3	54.8
RSB-24	1.1/2-11	2.3	56.9

FTS

FLARETITE SEAL

JIC FLARE MALE FLARETITE CLIP ON SEAL



Part Number	Suits JIC Male thread
FTS37-07	7/16-20
FTS37-09	9/16-18
FTS37-12	3/4-16
FTS37-14	7/8-14
FTS37-17	1.1/16-12
FTS37-21	1.5/16-12
FTS37-26	1.5/8-12

IP

CATERPILAR STYLE D-RING SEAL
D-SECTION RING SUIT CATERPILLAR STYLE



Part Number	Suits Caterpillar nominal size	Flange Diameter - mm	Seal Thickness - mm	Seal I.D - mm
1P-3700	1/2	31.8	5	19
1P-3702	3/4	41.3	5	25.4
1P-3703	1	47.6	5	31.9
1P-3704	1.1/4	54	5	38.2
1P-3705	1.1/2	63.5	5	44.7
1P-3709	2	79.4	5	63.9

Y

SAE FLANGE O-RING
SAE CODE 61 & CODE 62 FLANGE NITRILE O-RING

- Y-10 JIS KOMATSU STYLE FLANGE



Part Number	Suits SAE Flange Nominal Size	Seal Thickness - mm	Seal I.D - mm
Y-08	1/2	3.6	18.5
Y-10	5/8*	3.6	21.8
Y-12	3/4	3.6	24.9
Y-16	1	3.6	33
Y-20	1.1/4	3.6	37.6
Y-24	1.1/2	3.6	47.2
Y-32	2	3.6	56.6
Y-40	2.1/2	3.6	69.3
Y-48	3	3.6	85.7

Z

ORFS O-RING

ORFS MALE NITRILE O-RING



Part Number	Suits ORFS Male Thread	Seal Thickness - mm	Seal I.D. - mm
Z-09	9/16-18	1.8	8.9
Z-11	11/16-16	1.8	10.2
Z-13	13/16-16	1.8	12.4
Z-16	1-14	1.8	15.6
Z-19	1.3/16-12	1.8	19.8
Z-23	1.7/16-12	1.8	24.4
Z-27	1.11/16-12	1.8	29.9
Z-32	2-12	1.8	37.8

X

UNO STUD O-RING

UNO STUD NITRILE O-RING



Part Number	Suits UNF Male Thread	Seal Thickness - mm	Seal I.D. - mm
X-07	7/16-20	1.8	8.9
X-08	1/2-20	1.8	10.5
X-09	9/16-18	2	11.9
X-12	3/4-16	2.2	16.4
X-14	7/8-14	2.5	19.2
X-17	1.1/16-12	3	23.5
X-19	1.3/16-12	3	26.6
X-21	1.5/16-12	3	29.7
X-26	1.5/8-12	3	37.5
X-30	1.7/8-12	3	43.7
X-40	2.1/2-12	3	59.4

YU

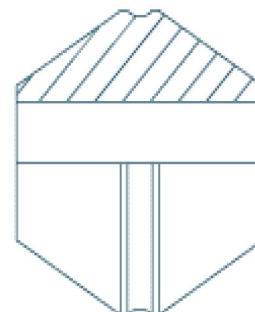
POLYURETHANE U SEALS FOR SAE FLANGES
POLYURETHANE SEAL TO SUIT CODE 61 & 62 SAE
FLANGES



Part Number	Suits SAE Flange Nominal Size	External diameter - mm	Seal Thickness - mm (T)	Seal width-mm (S)
YU-12	3/4	31.8	3.4	3.8
YU-16	1	39.6	3.4	3.8
YU-20	1.1/4	44.5	3.4	3.8
YU-24	1.1/2	53.8	3.4	3.8
YU-32	2	63.4	3.4	3.8

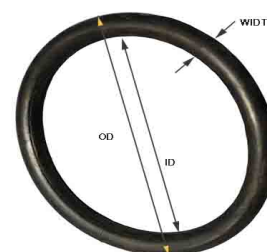
JBA

JIS ADAPTOR
JIS SEALING ADAPTOR CONVERT FROM BSP



Part Number	Description	Size
JBA-04	BSP to JIS 60° double cone con	1/4
JBA-06	BSP to JIS 60° double cone con	3/8
JBA-08	BSP to JIS 60° double cone con	1/2
JBA-12	BSP to JIS 60° double cone con	3/4
JBA-16	BSP to JIS 60° double cone con	1

OSM O RING SUIT METRIC HOSETAILS



Part Number	O'ring I.D.	O'ring O.D.	O'ring Width
OSM-6L/6S	4	7	1.5
OSM-8L/8S	6	9	1.5
OSM-10L/10S	7.5	10.5	1.5
OSM-12L/12S	9	12	1.5
OSM-14S	10	14	2
OSM-15L/16S	12	16	2
OSM-18L	15	19	2
OSM-20S	16.3	21.1	2.4
OSM-22L	20	24	2
OSM-25S	20.3	25.1	2.4
OSM-30S	25.3	30.1	2.4
OSM-28L	26	30	2
OSM-35L	32	37	2.5
OSM-38S	33.3	38.1	2.4
OSM-42L	38	43	2.5

OR

O RING FOR BSPP POSITIONAL
O-RING ON BSPP POSITIONAL MALE



Part Number	Description	Size
OR-V02	Seal for BSPP ORING port	1/8
OR-V04	Seal for BSPP ORING port	1/4
OR-V06	Seal for BSPP ORING port	3/8
OR-V08	Seal for BSPP ORING port	1/2
OR-V12	Seal for BSPP ORING port	3/4
OR-V16	Seal for BSPP ORING port	1
OR-V20	Seal for BSPP ORING port	1 1/4
OR-V24	Seal for BSPP ORING port	1 1/2

RKSJ

SWIVEL JOINT REPAIR KIT
VITON SEALS

- Suitable for Hydraulics Inc Swivels only



Part Number	Body type	Material
RKSJ-S6V	Straight	Viton
RKSJ-S8V	Straight	Viton
RKSJ-S16V	Straight	Viton
RKSJ-9S6V	90 degree	Viton
RKSJ-9S8V	90 degree	Viton
RKSJ-9S12V	90 degree	Viton
RKSJ-9S16V	90 degree	Viton

PROJECTILE CLEANING

CT-C

TUBE/HOSE CLEANING PROJECTILES - COUPLING
FOAM PROJECTILES FOR PNEUMATIC CLEANING
SYSTEMS



Part Number	Nominal O.D - mm	Hose/Tube min I.D - mm	Hose/Tube min I.D - inches	Hose/Tube max I.D - mm	Hose/Tube max I.D - inches	Standard pack quantity
CT-C07	7	5.26	0.21	6.48	0.26	100
CT-C10	10	7.52	0.30	8.70	0.34	100
CT-C12	12	9.02	0.36	10.43	0.41	100
CT-C16	16	12.03	0.47	13.91	0.55	100
CT-C20	20	15.04	0.59	17.39	0.68	100
CT-C22	22	16.54	0.65	19.13	0.75	100
CT-C33	33	24.81	0.98	28.70	1.13	40
CT-C40	40	30.08	1.18	34.78	1.37	30
CT-C50	50	37.59	1.48	43.48	1.71	20
CT-C60	60	45.11	1.78	52.17	2.05	20

CT-S

TUBE/HOSE CLEANING PROJECTILES - HOSE
FOAM PROJECTILES FOR PNEUMATIC CLEANING
SYSTEMS



Part Number	Nominal O.D - mm	Hose/Tube min I.D - mm	Hose/Tube min I.D - inches	Hose/Tube max I.D - mm	Hose/Tube max I.D - inches	Standard pack quantity
CT-S07	7	5.26	0.21	6.48	0.26	100
CT-S12	12	9.02	0.36	10.43	0.41	100
CT-S14	14	10.53	0.41	12.17	0.48	100
CT-S16	16	12.03	0.47	13.91	0.55	100
CT-S18	18	13.53	0.53	15.65	0.62	100
CT-S20	20	15.04	0.59	17.39	0.68	100
CT-S22	22	16.54	0.65	19.13	0.75	100
CT-S26	26	19.55	0.77	22.61	0.89	50
CT-S33	33	24.81	0.98	28.70	1.13	40
CT-S40	40	30.08	1.18	34.78	1.37	30
CT-S50	50	37.59	1.48	43.48	1.71	20
CT-S60	60	45.11	1.78	52.17	2.05	20

CT-A

TUBE/HOSE CLEANING PROJECTILES - ABRASIVE
FOAM PROJECTILES FOR PNEUMATIC CLEANING
SYSTEMS



Part Number	Nominal O.D - mm	Hose/Tube min I.D - mm	Hose/Tube min I.D - inches	Hose/Tube max I.D - mm	Hose/Tube max I.D - inches	Standard pack quantity
CT-A07	7	5.26	0.21	6.48	0.26	100
CT-A10	10	7.52	0.30	8.70	0.34	100
CT-A12	12	9.02	0.36	10.43	0.41	100
CT-A14	14	10.53	0.41	12.17	0.48	100
CT-A18	18	13.53	0.53	15.65	0.62	100
CT-A22	22	16.54	0.65	19.13	0.75	100
CT-A26	26	19.55	0.77	22.61	0.89	50
CT-A33	33	24.81	0.98	28.70	1.13	40
CT-A40	40	30.08	1.18	34.78	1.37	30
CT-A50	50	37.59	1.48	43.48	1.71	20
CT-A60	60	45.11	1.78	52.17	2.05	20

PCK-MULTI

PROJECTILE CLEANING KIT
PROJECTILE LAUNCHER AND NOZZLES IN CASE



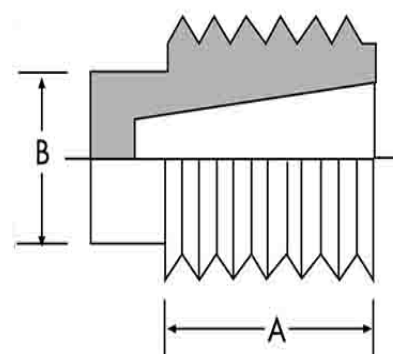
Part Number	Height (case closed)	Width - mm	Depth - mm	Weight
PCK-MULTI	150	470	350	5kg

THREAD PROTECTION

P-B

MALE BSP PLUG (PLASTIC)

PLASTIC SCREWED PROTECTIVE BSP PLUG

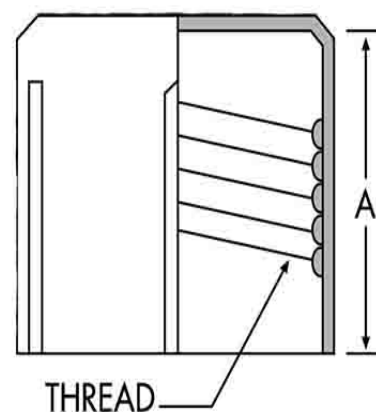


Part Number	BSPP Male Thread (A)	Thread - L1	Overall L2 - mm	Diameter CH1 - mm
P-B02	1/8-28	11.1	17.1	7.1
P-B04	1/4-19	11.9	17.9	7.9
P-B06	3/8-19	14.3	20.3	11.1
P-B08	1/2-14	13.5	19.5	12.7
P-B12	3/4-14	16.7	22.7	17.5
P-B16	1-11	19.8	25.8	22.2

P-C

FEMALE BSP CAP (PLASTIC)

PLASTIC SCREWED PROTECTIVE BSP CAP

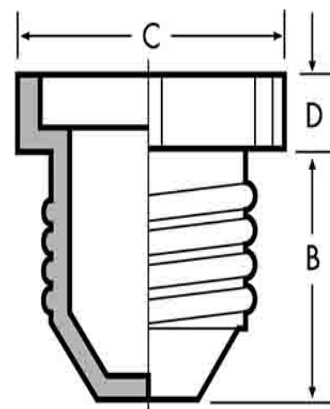


Part Number	BSPP Female Thread (A)	Overall L1 - mm
P-C02	1/8-28	10
P-C04	1/4-19	10.5
P-C06	3/8-19	15.5
P-C08	1/2-14	21.2
P-C12	3/4-14	22
P-C16	1-11	26

P-G

MALE JIC PLUG (PLASTIC)

PLASTIC SCREWED PROTECTIVE JIC PLUG

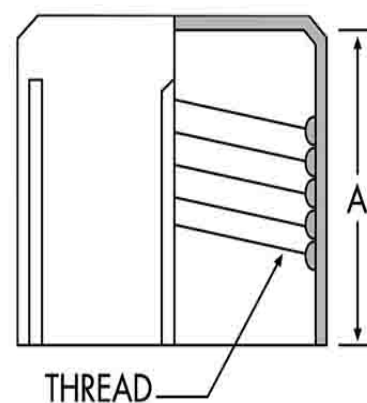


Part Number	JIC Male thread (A)	Thread - L1	Head - L2	Diameter CH1 - mm
P-G07	7/16-20	13.5	4.83	15.75
P-G09	9/16-18	12.7	6.35	20.57
P-G12	3/4-16	19.05	6.35	23.88
P-G14	7/8-14	22.1	6.35	26.93
P-G17	1.1/16-12	22.61	6.35	31.75
P-G21	1.5/16-12	23.6	6.35	38.1

P-J

FEMALE JIC CAP (PLASTIC)

PLASTIC SCREWED PROTECTIVE JIC CAP

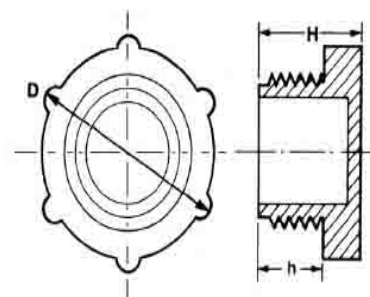


Part Number	JIC Female thread (A)	Overall L1 - mm
P-J07	7/16-20	11.94
P-J09	9/16-18	13.46
P-J12	3/4-16	14.48
P-J14	7/8-14	17.27
P-J17	1.1/16-12	19.05
P-J21	1.5/16-12	21.34

P-R

MALE ORFS PLUG (PLASTIC)

PLASTIC SCREWED PROTECTIVE ORFS PLUG

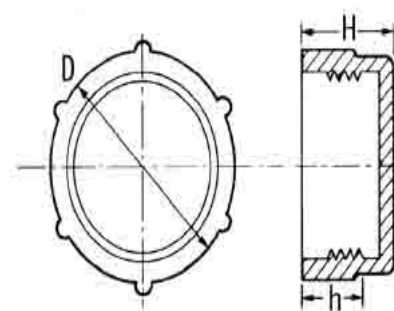


Part Number	UNF Male Thread (A)	Thread - L1	Head - L2	Diameter CH1 - mm
P-R09	9/16-18	12.2	6.35	17.3
P-R11	11/16-16	11.2	6.35	22.1
P-R13	13/16-16	12.7	6.35	23.9
P-R16	1-14	15	6.35	29.5
P-R19	1.3/16-12	16	6.35	33.8
P-R23	1.7/16-12	19	6.35	41.4

P-T

ORFS FEMALE CAP (PLASTIC)

PLASTIC SCREWED PROTECTIVE ORFS CAP

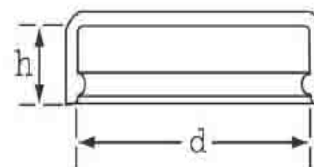


Part Number	UNF Female Thread (A)	Thread - L1	Head - L2	Diameter CH1 - mm
P-T09	9/16-18	9.5	13.7	16.5
P-T11	11/16-16	11	15	20
P-T13	13/16-16	9.3	15.3	23.3
P-T16	1-14	12	17.2	27.6
P-T19	1.3/16-12	13	19.1	32.7
P-T23	1.7/16-12	15.2	21.7	38.9

P-V

SAE FLANGE CAP (PLASTIC)

PLASTIC PROTECTIVE CAP TO SUIT SAE CODE 61

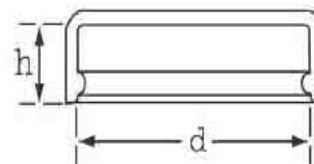


Part Number	Nominal SAE Flange Size	Internal diameter - mm	Internal depth - mm
P-V12	3/4	37	9
P-V16	1	44	10
P-V20	1.1/4	50	10
P-V24	1.1/2	60	10
P-V32	2	71	15

P-VH

SAE FLANGE CAP (PLASTIC)

PLASTIC PROTECTIVE CAP TO SUIT SAE CODE 62



Part Number	Nominal SAE Flange Size	Internal diameter - mm	Internal depth - mm
P-VH12	3/4	41.3	8.7
P-VH16	1	47.6	9.5
P-VH20	1.1/4	54	10.3
P-VH24	1.1/2	63.5	12.6
P-VH32	2	79.4	12.6

CABLE TIES

CT
CABLE TIE STD DUTY
BLACK STANDARD DUTY UV RESISTANT CABLE TIE



Part Number	Length-mm	Width-mm
CT200L	200	4.6
CT300L	300	4.8
CT430L	430	4.8

CT-H
CABLE TIE H/DUTY
BLACK HEAVY DUTY UV RESISTANT CABLE TIE



Part Number	Length-mm	Width-mm
CT300H	300	7.6
CT550H	550	8
CT800H	810	9

SPILL KITS

TSS
SPILL KITS
HYDRAULIC / GENERAL PURPOSE SPILL KIT



Part Number	Description	Height - mm	Width - mm	Depth - mm	Weight - kg
TSS120HDL	120L SPILL KIT	950	550	650	30
TSS32HDL	32L SPILL KIT	500	500	200	6

OA
SPILL KIT COMPONENTS
ORGANIC ABSORBENT

- ORGANIC ABSORBENT 50LTR



Part Number	Description
OA15L	ORGANIC ABSORBANT 15L
OA25OB	ORGANIC ABSORBANT 2.5L
OA50L	ORGANIC ABSORBANT 50L

SPARES
ACCESSORIES
DUST PAN AND BRUSH



Part Number	Description
X-BAT	WASTE BAGS & TIES 10PK
X-BIN240OR	MOBILE BIN 240L
X-CAP	WEATHER RESIST CAP
X-LIS	INSTRUCTION SHEET 21x30cm
X-ORG	PVC GLOVES LARGE
X-SCOOP	DUSTPAN & BRUSH

SUNDRIES

THREAD TAPE

THREAD TAPE
ROLL OF THREAD TAPE

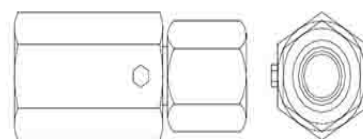


Part Number	Description
THREAD TAPE	12mm / 10mtr Standard Tape

INLINE SWIVELS

SJS-ACAC

INLINE NPT F/F SWIVEL JOINT
INLINE FEMALE NPT x FEMALE NPT SWIVEL JOINT

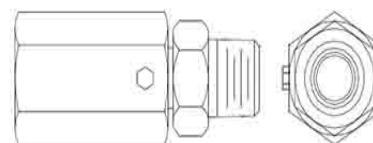


Part Number	Body thread	Stem thread	Replacement Seal kit
SJS-ACAC0606V/H	3/8	3/8	RKSJ-S6V
SJS-ACAC0808V/H	1/2	1/2	RKSJ-S8V
SJS-ACAC1212V/H	3/4	3/4	RKSJ-S8V
SJS-ACAC1616V/H	1	1	RKSJ-S16V

SJS-ACL

INLINE NPT F/M SWIVEL JOINT

INLINE FEMALE NPT x MALE NPT SWIVEL JOINT



Part Number	Body thread	Stem thread	Replacement Seal kit
SJS-ACL0404V/H	1/4	1/4	RKSJ-S6V
SJS-ACL0606V/H	3/8	3/8	RKSJ-S6V
SJS-ACL0808V/H	1/2	1/2	RKSJ-S8V
SJS-ACL1212V/H	3/4	3/4	RKSJ-S8V
SJS-ACL1616V/H	1	1	RKSJ-S16V

SJS-FB

INLINE BSPP x BSPP SWIVEL JOINT

INLINE BSPP MALE x FEMALE BSPP SWIVEL JOINT

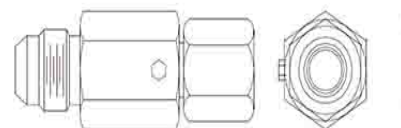


Part Number	Body thread	Stem thread
SJS-FB0404/I	1/4	1/4
SJS-FB0606/I	3/8	3/8
SJS-FB0808/I	1/2	1/2
SJS-FB1212/I	3/4	3/4
SJS-FB1616/I	1	1

SJS-GAC

INLINE JIC x NPT SWIVEL JOINT

INLINE JIC MALE x NPT FEMALE SWIVEL JOINT

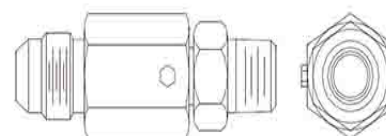


Part Number	Body thread	Stem thread	Replacement Seal kit
SJS-GAC0904V/H	9/16	1/4	RKSJ-S6V
SJS-GAC1206V/H	3/4	3/8	RKSJ-S6V
SJS-GAC1408V/H	7/8	1/2	RKSJ-S8V
SJS-GAC1712V/H	1.1/16	3/4	RKSJ-S8V
SJS-GAC2116V/H	1.5/16	1	RKSJ-S16V

SJS-GL

INLINE JIC x NPT SWIVEL JOINT

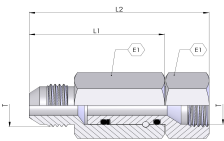
JIC MALE x NPT MALE SWIVEL JOINT



Part Number	Body thread	Stem thread	Replacement Seal kit
SJS-GL0904V/H	9/16	1/4	RKSJ-S6V
SJS-GL0906V/H	9/16	3/8	RKSJ-S6V
SJS-GL1206V/H	3/4	3/8	RKSJ-S6V
SJS-GL1408V/H	7/8	1/2	RKSJ-S8V
SJS-GL1712V/H	1.1/16	3/4	RKSJ-S8V
SJS-GL2116V/H	1.5/16	1	RKSJ-S16V

SJS-GF

INLINE JIC MALE X JIC FEMALE
JIC MALE X JIC FIXED FEMALE STRAIGHT SWIVEL



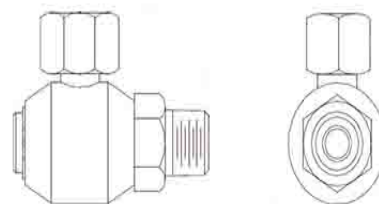
Part Number	Body thread	Stem thread	Seal kit
SJS-GJF0909V/H	9/16	9/16	RKSJ-9S6V
SJS-GJF1212V/H	3/4	3/4	RKSJ-9S6V
SJS-GJF1414V/H	7/8	7/8	RKSJ-9S8V
SJS-GJF1717V/H	1-1/16	1-1/16	RKSJ-9S12V
SJS-GJF2121V/H	1-5/16	1-5/16	RKSJ-9S16V

90 DEGREE SWIVELS

SJ90-ADL

NPSM x NPT MALE 90° SWIVEL JOINT

NPT SWIVEL NUT FEMALE x NPT MALE 90° SWIVEL JOINT



Part Number	Body thread	Stem thread	Replacement Seal kit
SJ90-ADL0404V/H	1/4	1/4	RKSJ-9S6V
SJ90-ADL0606V/H	3/8	3/8	RKSJ-9S6V
SJ90-ADL0808V/H	1/2	1/2	RKSJ-9S8V
SJ90-ADL1212V/H	3/4	3/4	RKSJ-9S12V
SJ90-ADL1616V/H	1	1	RKSJ-9S16V

SJ90-EA

BSPT x BSPT 90° SWIVEL JOINT

BSPT FEMALE x BSPT MALE 90° SWIVEL JOINT



Part Number	Body thread	Stem thread
SJ90-EA0404/F	1/4	1/4
SJ90-EA0606/F	3/8	3/8
SJ90-EA0808/F	1/2	1/2
SJ90-EA1212/F	3/4	3/4
SJ90-EA1616/F	1	1

SJ90-FB

BSPT x BSPT 90° SWIVEL JOINT

BSPP MALE x FEMALE FIXED BSPP 90° SWIVEL JOINT

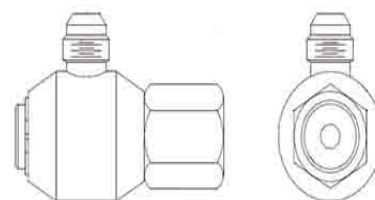


Part Number	Body thread	Stem thread
SJ90-FB0404/I	1/4	1/4
SJ90-FB0606/I	3/8	3/8
SJ90-FB0808/I	1/2	1/2
SJ90-FB1212/I	3/4	3/4
SJ90-FB1616/I	1	1

SJ90-GAC

JIC x NPT 90° SWIVEL JOINT

JIC MALE x NPT FEMALE 90° SWIVEL JOINT

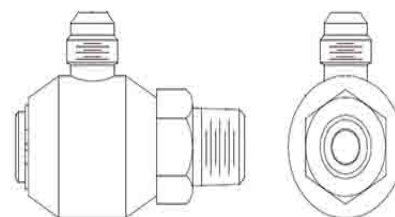


Part Number	Body thread	Stem thread	Replacement Seal kit
SJ90-GAC0904V/H	9/16	1/4	RKSJ-9S6V
SJ90-GAC0906V/H	9/16	3/8	RKSJ-9S6V
SJ90-GAC1206V/H	3/4	3/8	RKSJ-9S6V
SJ90-GAC1208V/H	3/4	1/2	RKSJ-9S8V
SJ90-GAC1408V/H	7/8	1/2	RKSJ-9S8V
SJ90-GAC1712V/H	1.1/16	3/4	RKSJ-9S12V
SJ90-GAC2116V/H	1.5/16	1	RKSJ-9S16V

SJ90-GL

JIC x NPT 90° SWIVEL JOINT

JIC MALE x NPT MALE 90° SWIVEL JOINT

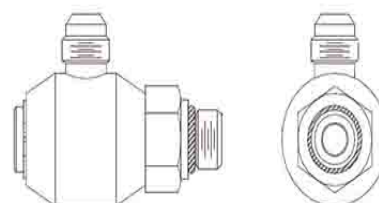


Part Number	Body thread	Stem thread	Replacement Seal kit
SJ90-GL0904V/H	9/16	1/4	RKSJ-9S6V
SJ90-GL0906V/H	9/16	3/8	RKSJ-9S6V
SJ90-GL1206V/H	3/4	3/8	RKSJ-9S6V
SJ90-GL1408V/H	7/8	1/2	RKSJ-9S8V
SJ90-GL1712V/H	1.1/16	3/4	RKSJ-9S12V
SJ90-GL2116V/H	1.5/16	1	RKSJ-9S16V

SJ90-GN

JIC x UNO 90° SWIVEL JOINT

JIC MALE x UNO MALE 90° SWIVEL JOINT



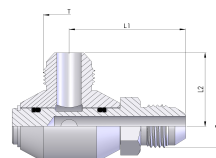
Part Number	Body thread	Stem thread	Replacement Seal kit
SJ90-GN0909V/H	9/16	9/16	RKSJ-9S6V
SJ90-GN0912V/H	9/16	3/4	RKSJ-9S6V
SJ90-GN1212V/H	3/4	3/4	RKSJ-9S6V
SJ90-GN1414V/H	7/8	7/8	RKSJ-9S8V
SJ90-GN1717V/H	1.1/16	1 1/16	RKSJ-9S12V
SJ90-GN2121V/H	1.5/16	1 5/16	RKSJ-9S16V

SJ90-GG

JIC MALE X JIC MALE

JIC 37° FLARE MALE X JIC 37° FLARE MALE 90°

ELBOW SWIVEL



Part Number	Body thread	Stem thread	Seal kit
SJ90-GG0909V/H	9/16	9/16	RKSJ-9S6V
SJ90-GG1212V/H	3/4	3/4	RKSJ-9S6V
SJ90-GG1414V/H	7/8	7/8	RKSJ-9S8V
SJ90-GG1717V/H	1-1/16	1-1/16	RKSJ-9S12V
SJ90-GG2121V/H	1-5/16	1-5/16	RKSJ-9S16V

LUBRICANTS

HYDRAULIC

HYDRAULIC OIL

HYDRAULIC OIL PREMIUM GRADE



5Lt bottle

20Lt bottle

Part Number	Size ltr	TYPE
OIL ISO 46 5LT	5	PREMIUM HYDRAULIC OIL
OIL ISO 46 20LT	20	PREMIUM HYDRAULIC OIL
OIL ISO 46 200LT	200	PREMIUM HYDRAULIC OIL
OIL ISO 68 5LT	5	PREMIUM HYDRAULIC OIL
OIL ISO 68 10LT	10	PREMIUM HYDRAULIC OIL
OIL ISO 68 20LT	20	PREMIUM HYDRAULIC OIL
OIL ISO 68 200LT	200	PREMIUM HYDRAULIC OIL

ATF

AUTOMATIC TRANSMISSION FLUID



5Lt bottle

20Lt bottle

Part Number	Size ltr	TYPE
OIL ATF 5LT	5	TRANSMISSION OIL ATF DX3

BRAKE CLEAN
HYDRAULINK BRAKE & INDUSTRIAL PARTS
CLEANER
600ML



- Applications: Hydraulink Brake and Industrial Parts Cleaner quickly removes grease and oil. Components can often be cleaned without having to disassemble them. Hydraulink Brake and Industrial Parts Cleaner is non-corrosive, non-staining and evaporates quickly leaving no residue. Hydraulink Brake and Industrial Parts Cleaner can be used on brakes, industrial machinery, tools and workshop equipment.

Part Number	Size (Litre)
BRAKE CLEAN	0.6

PRESSURE WASH ACCESSORIES

PCK

KARCHER ADAPTOR

KARCHER PRESSURE WASH ADAPTOR



Part Number	Metric Female Thread (T)	Metric Male Thread (T)	BSPP Male Thread (A)	BSPP Female Thread (A)	Max Press - Bar	Max Pressure - Psi	Max Temp - Degree C
AKM-2204		M22-1.5	1/4-19		250	3600	160
PCKF-A-M2206	M22-1.5		3/8-19		250	3600	160
PCKF-E-M2206	M22-1.5			3/8-19	250	3600	160
PCKJ-M22		M22-1.5			280	4050	160
PCKM-A-M2206		M22-1.5	3/8-19		250	3600	160
PCKM-E-M2206		M22-1.5		3/8-19	250	3600	160

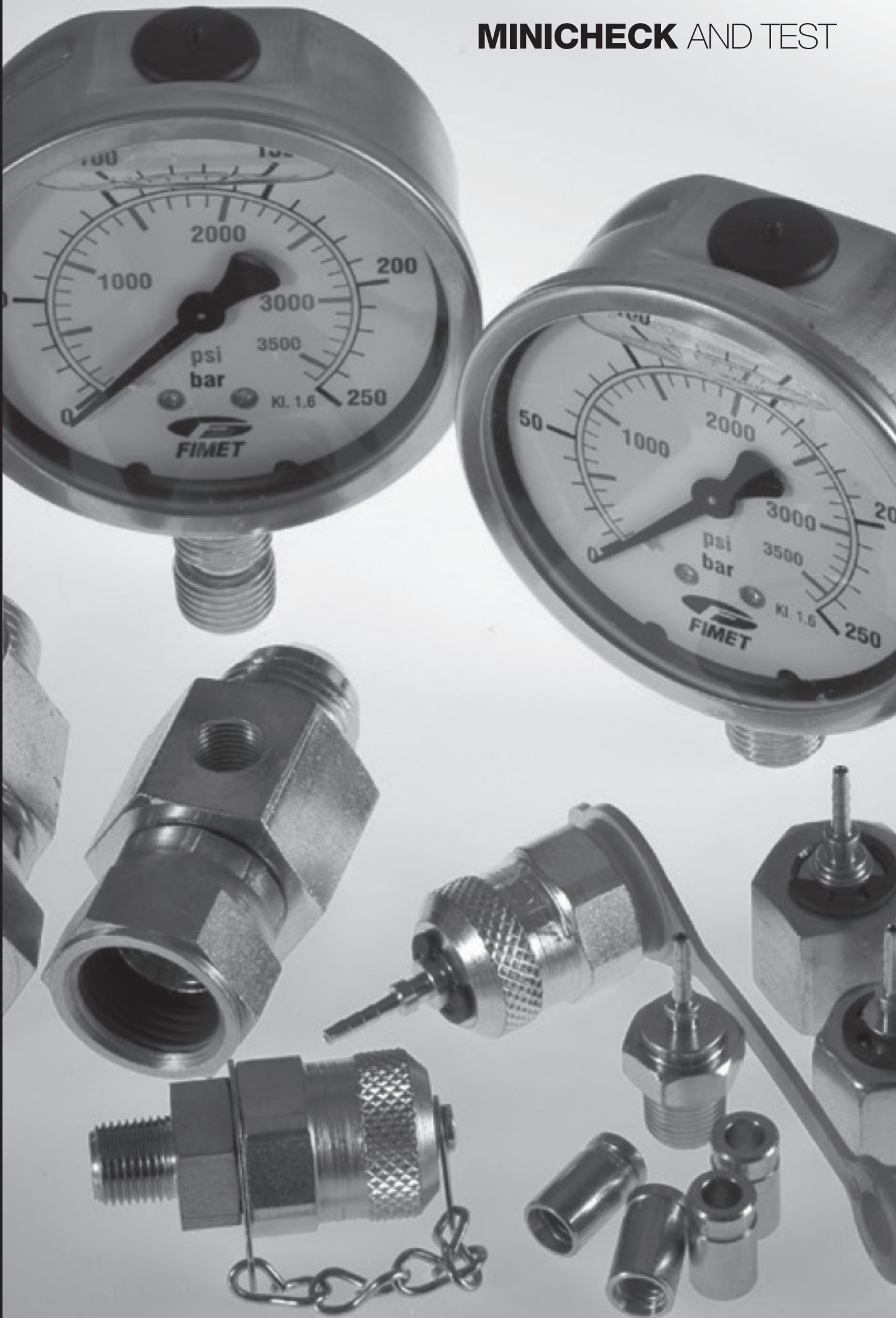
PCSW

INLINE SWIVEL

INLINE SWIVEL 3/8 M/F S/STEEL



Part Number	BSPP Male Thread (A)	BSPP Female Thread (A)	Max Press - Bar	Max Pressure - Psi	Max Temp - Degree C
PCSW-EA06B	3/8	3/8	250	3600	160
PCSW-EA06S	3/8	3/8	350	5100	160



GENERAL INFORMATION

The Hydraulink Minicheck system is a complete range of miniature hose couplings, test-point adaptors, accessories and micro-bore hose. The system is specifically designed for checking hydraulic system pressures, fluid sampling lines, pilot lines, grease lines, air bleeding functions, pressure lines for transducers and switches.

Minicheck couplings and test-point adaptors are typically supplied in steel and finished with a silver trivalent chromium plating and clear sealant to further increase protection against corrosion. Couplings and adaptors are also available in AISI 316 stainless steel on request; please contact Hydraulink for more details.

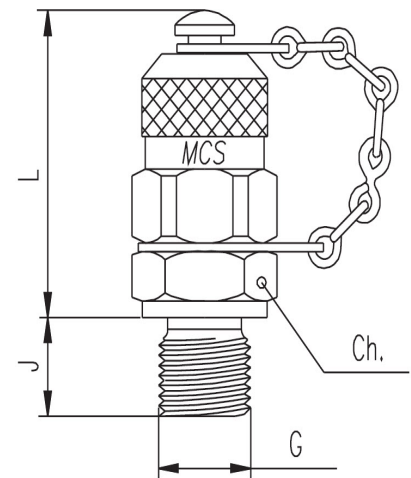
Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

TEST POINTS

A-TP

MALE BSPT X TEST POINT

BSPT MALE X M16-2.0 TEST POINT

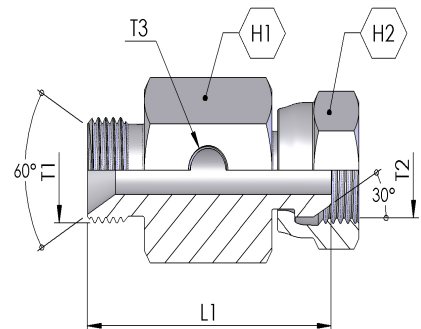


Part Number	BSPT Male Thread	Test point thread	L - mm	J - mm	Hex A/F (CH)	Working Pressure - bar
A-TP-02M16	1/8-28	M16-2	36	8	17	400
A-TP-04M16	1/4-19	M16-2	36	12	17	630

B-C-FP

BSPP IN-LINE TEST POINT

BSPP MALE X FEMALE W. BSPP PORT ON HEX

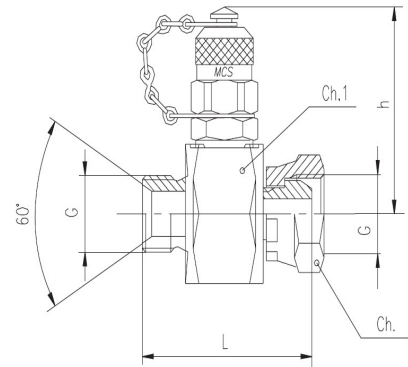


Part Number	BSPP Thread (T1)	BSPP Female Thread (T2)	L1 - mm	Hex A/F (H1)	Hex A/F (H2)	Working Pressure - bar
B-C-FP-040402	1/4-19	1/8-28	53	32	19	400
B-C-FP-060602	3/8-19	1/8-28	60	32	22	400
B-C-FP-080802	1/2-14	1/8-28	60	32	27	400
B-C-FP-121202	3/4-14	1/8-28	68	32	32	400
B-C-FP-161602	1-11	1/8-28	74	41	41	345

B-C-TP

BSPP IN-LINE TEST POINT

BSPP MALE X FEMALE W. M16-2.0 TEST POINT ON BRANCH

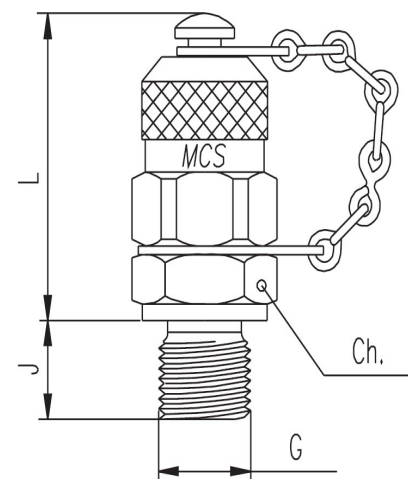


Part Number	BSPP Thread	Test point thread	L - mm	B - mm	Hex A/F (CH1)	Hex A/F (CH2)	Working Pressure - bar
B-C-TP-0404M16	1/4-19	M16-2	53	55	32	19	400
B-C-TP-0606M16	3/8-19	M16-2	60	55	32	22	400
B-C-TP-0808M16	1/2-14	M16-2	60	55	32	27	400
B-C-TP-1212M16	3/4-14	M16-2	68	55	32	32	400
B-C-TP-1616M16	1-11	M16-2	74	55	41	41	345

BX-TP

MALE BSPP X TEST POINT

BSPP MALE X M16-2.0 TEST POINT

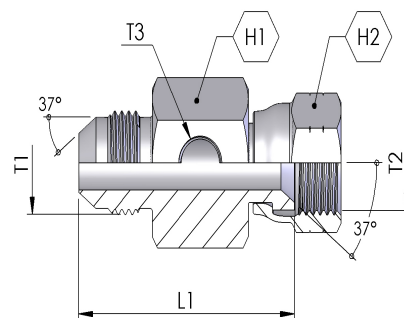


Part Number	BSPP Male Thread	Test point thread	L - mm	J - mm	Hex A/F (CH)	Working Pressure - bar
BX-TP-02M16	1/8-28	M16-2	38	8	17	400
BX-TP-04M16	1/4-19	M16-2	38	12	19	630

G-J-FP

JIC IN-LINE TEST POINT

JIC MALE X FEMALE W. BSPP PORT ON HEX

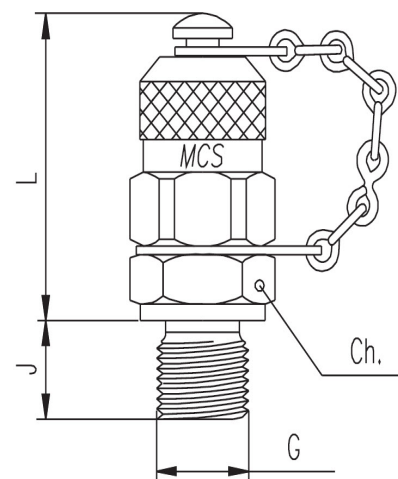


Part Number	JIC Thread (T1 & T2)	BSPP Female Thread (T3)	L1 - mm	Hex A/F (H1)	Hex A/F (H2)
G-J-FP-070702	7/16-20	1/8-28	45	27	14
G-J-FP-090902	9/16-18	1/8-28	46	27	19
G-J-FP-121202	3/4-16	1/8-28	49	27	22
G-J-FP-141402	7/8-14	1/8-28	52	32	27
G-J-FP-171702	1.1/16-12	1/8-28	57	32	32

N-TP

MALE UNO X TEST POINT

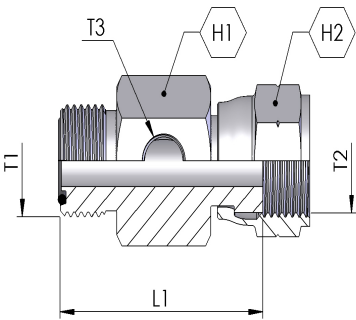
UNO MALE X M16-2.0 TEST POINT



Part Number	UNF Thread	Test point thread	L - mm	J - mm	Hex A/F (CH)	Working Pressure - bar
N-TP-07M16	7/16-20	M16-2	38	11	17	630

R-T-FP

ORFS IN-LINE TEST POINT
ORFS MALE X FEMALE W. BSPP PORT ON HEX



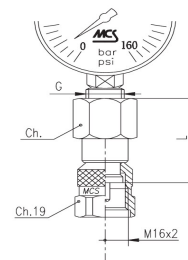
Part Number	ORFS Thread (T1 & T2)	BSPP Female Thread (T3)	L1 - mm	Hex A/F (H1)	Hex A/F (H2)
R-T-FP-090902	9/16-18	1/8-28	40	27	17
R-T-FP-111102	11/16-16	1/8-28	42	27	22
R-T-FP-131302	13/16-16	1/8-28	46	27	24
R-T-FP-161602	1-14	1/8-28	49	32	30
R-T-FP-191902	1.3/16-12	1/8-28	52	32	36

GAUGE ADAPTORS

FX65

DIRECT GAUGE ADAPTOR

BSPP GAUGE SOCKET X M16-2.0 SWIVEL FEMALE

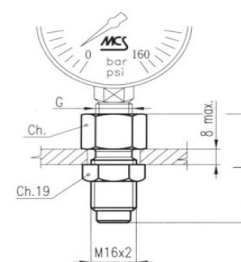


Part Number	BSPP Female Thread (A)	Test point thread (B)	L1 - mm	Hex A/F (CH1)	Hex A/F (CH2)	Working Pressure - bar
FX65-04M16	1/4-19	M16-2	34	19	19	630

FXTPK

DIRECT GAUGE ADAPTOR

GAUGE BULKHEAD ADAPTOR TO M16-2.0 MALE



Part Number	BSPP Female Thread (A)	Metric Male Thread	L (mm)	Hex A/F - CH (mm)	Working Pressure - bar
FXTPK-04M16	ISO228-G 1/4	M16-2	50	19	630

PRESSURE GAUGES

GB

BSPT 63MM PRESSURE GAUGE
BOTTOM ENTRY GAUGE WITH 63mm FACE



Part Number	BSPT Male (A)	Body O.D - mm	Face O.D - mm	O.A - mm	Depth - mm	Pressure range - psi	Pressure range - bar
GB-0300	1/4-19	63	69	86.2	31	0-300	0-20
GB-0600	1/4-19	63	69	86.2	31	0-600	0-40
GB-0850	1/4-19	63	69	86.2	31	0-850	0-60
GB-1450	1/4-19	63	69	86.2	31	0-1450	0-100
GB-3600	1/4-19	63	69	86.2	31	0-3600	0-250
GB-5800	1/4-19	63	69	86.2	31	0-5800	0-400

GBS

BSPP SPIGOT 63MM PRESSURE GAUGE
BOTTOM ENTRY GAUGE WITH 63mm FACE



Part Number	BSPP Male (A)	Body O.D - mm	Face O.D - mm	O.A - mm	Depth - mm	Pressure range - psi	Pressure range - bar
GBS-0160	1/4-19	63	69	86.2	31	0-160	0-10
GBS-0300	1/4-19	63	69	86.2	31	0-300	0-16
GBS-0600	1/4-19	63	69	86.2	31	0-600	0-25
GBS-0850	1/4-19	63	69	86.2	31	0-850	0-60
GBS-1450	1/4-19	63	69	86.2	31	0-1450	0-100
GBS-3600	1/4-19	63	69	86.2	31	0-3600	0-250
GBS-5800	1/4-19	63	69	86.2	31	0-5800	0-400

MINICHECK

RTL

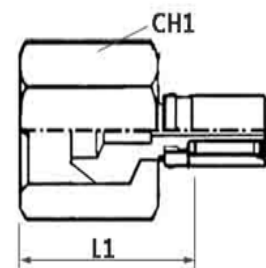
MINICHECK HOSE FOR TEST LEADS
KEVLAR / FIBRE BRAID REINFORCED HOSE



Part Number	Internal dimension - mm	External dimension - mm	Working pressure - psi	Working pressure - bar	Burst pressure - psi	Burst pressure - bar	Weight per metre - g
RTL-M2	2 +/-0.1	5 +/-0.1	9135	630	27550	1900	18

SMC01

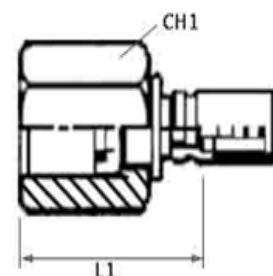
BSPP FEMALE STRAIGHT
BSPP SWIVEL NUT FEMALE WITH 60° CONE



Part Number	BSPP Female Thread	Hose I.D - mm	DIN	Hex A/F (CH1)	Cutoff mm (L1)	Max working Pressure - bar
SMC01-04M2	1/4-19	2	DN2	17	18	630

SMC02

BSPP FEMALE STRAIGHT
BSPP FEMALE SWIVEL FLAT FACE WITH O-RING

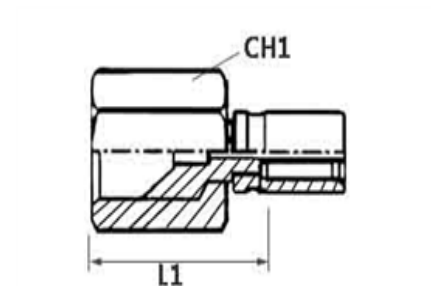


Part Number	BSPP Female Thread	Hose I.D - mm	DIN	Hex A/F (CH1)	Cutoff mm (L1)	Max working Pressure - bar
SMC02-04M2	1/4-19	2	DN2	17	15	630

SMC05

JIC FEMALE STRAIGHT

JIC FEMALE SWIVEL WITH 37° CONE

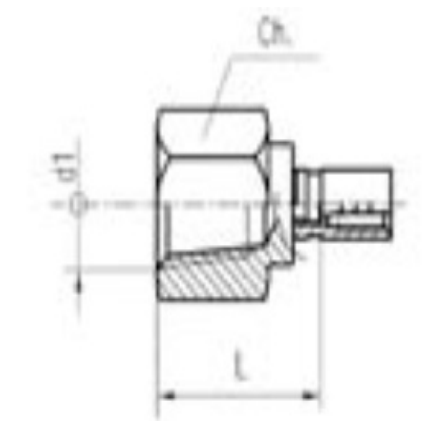


Part Number	JIC Female Thread	Hose I.D - mm	DIN	Hex A/F (CH1)	Cutoff mm (L1)	Max working Pressure - bar
SMC05-07M2	7/16-20	2	DN2	14	15	450
SMC05-09M2	9/16-18	2	DN2	19	18	350

SMC06

BSP FEMALE STRAIGHT

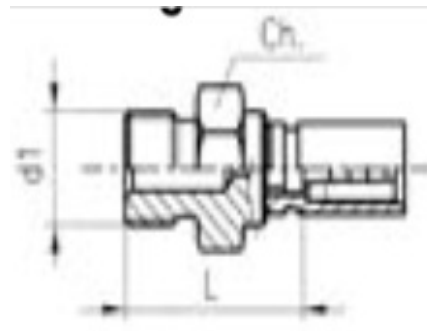
BSPT FIXED FEMALE SOCKET



Part Number	BSPT Female Thread	Hose I.D - mm	DIN	Hex A/F (CH1)	Cutoff mm (L1)	Max working Pressure - bar
SMC06-04M2	1/4-19	2	DN2	19	23	630

SMC12

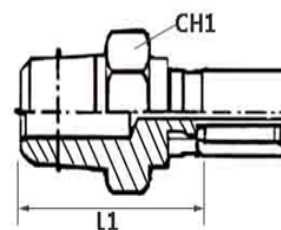
BSPP MALE STRAIGHT
BSPP FIXED MALE



Part Number	BSPP Male Thread	Hose I.D - mm	DIN	Hex A/F (CH1)	Cutoff mm (L1)	Max working Pressure - bar
SMC12-04M2	1/4-19	2	DN2	19	24.5	400

SMC16

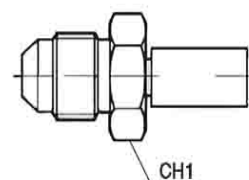
NPTF MALE STRAIGHT
NPTF FIXED MALE



Part Number	NPTF Male Thread	Hose I.D - mm	DIN	Hex A/F (CH1)	Cutoff mm (L1)	Max working Pressure - bar
SMC16-02M2	1/8-27	2	DN2	13	21	400

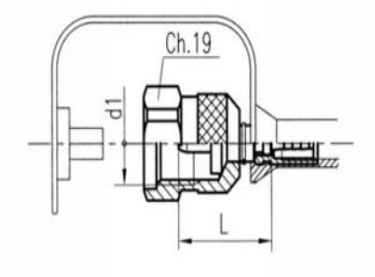
SMC18

JIC MALE STRAIGHT
JIC MALE SWIVEL WITH 37° CONE

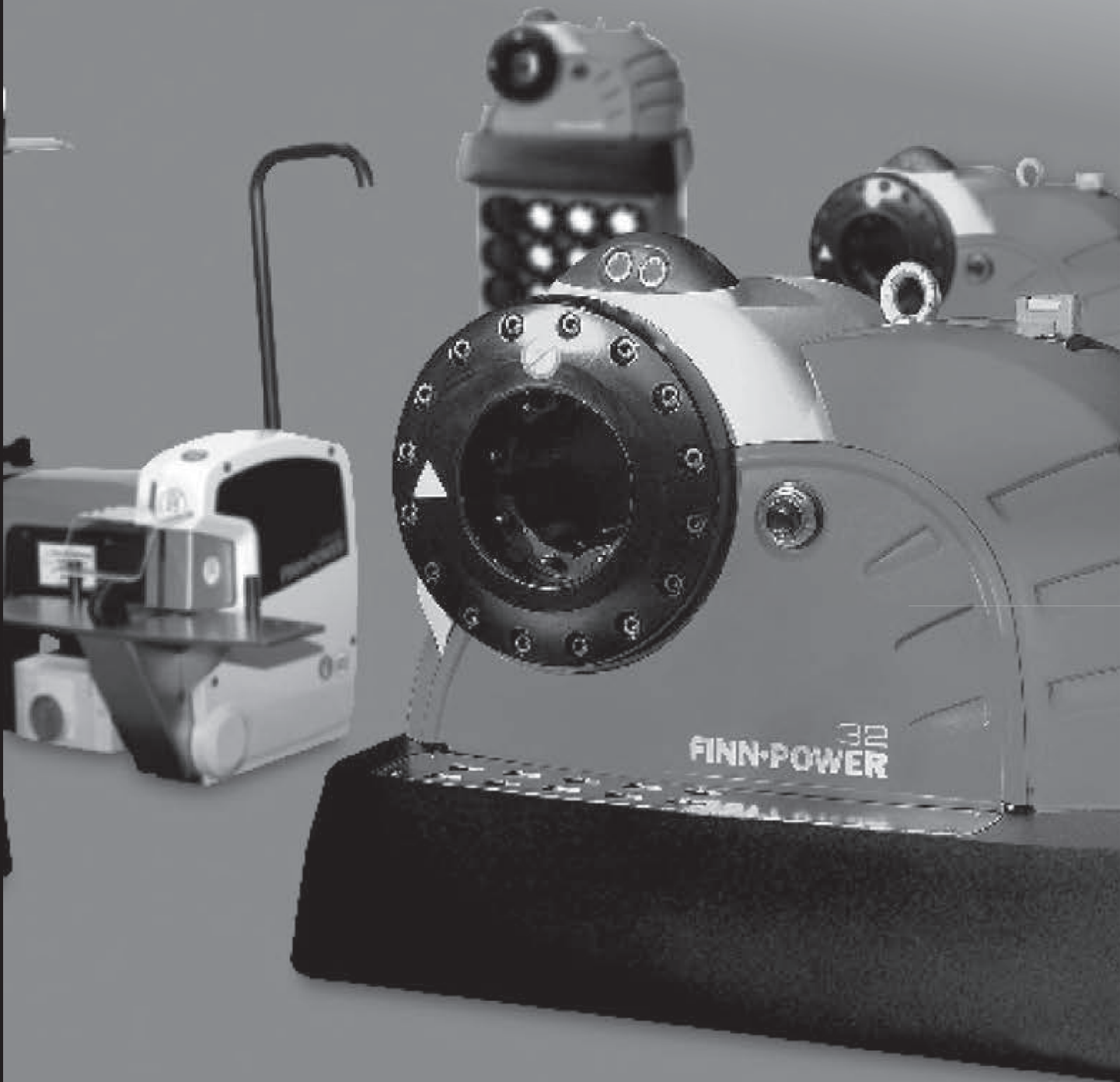


Part Number	JIC Male Thread	Hose I.D - mm	DIN	Hex A/F (CH1)	Cutoff mm (L1)	Max working Pressure - bar
SMC18-09M2	9/16-18	2	DN2	19	18	350

SMC65
METRIC FEMALE STRAIGHT
METRIC FEMALE SWIVEL TEST SPIGOT



Part Number	Metric Male Thread	Hose I.D - mm	DIN	Hex A/F (CH19)	Cutoff mm (L1)	Max working Pressure - bar
SMC65-M16M2	M16 - 2	2	DN2	19	24	630



GENERAL INFORMATION

Hydraulink Fluid Connectors Ltd. are authorised distributors for Finn-Power swagers and cut-off saws. Finn-Power produce high-quality, extremely durable machines that are compact and ergonomically designed.

The swagers available through Hydraulink range from hand-operated portable machines for hoses up to 1" I.D. to large-scale production models with capacity up to 190mm. For more information regarding Finn-Power swagers not detailed in this section, visit <http://www.lillbacka.com/powerco/> or contact Hydraulink.

The most common machines are listed in this section, and the larger models are typically available in one of three control solutions, dependent upon the main type of application. Also listed are tool bases and die-change racks that further improve the ergonomics of the machines and can make them more productive.

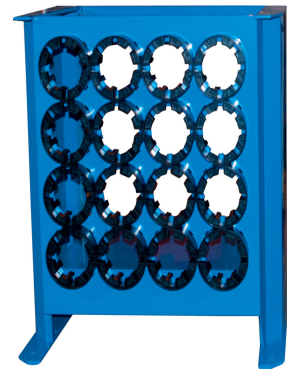
Also included in this section are Finn-Power hose cut-off saws, which are manufactured to the same high standards as their swagers.

Our product range is constantly evolving and Hydraulink reserve the right to change technical specifications without notice

SWAGER BASES

XP20-QCB

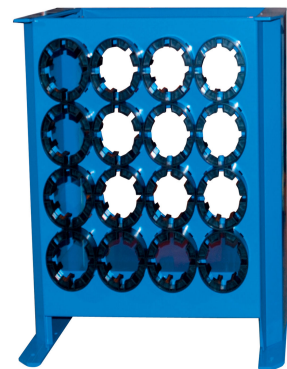
QUICK-CHANGE BASE FOR P20
FLOOR STANDING BASE AND QUICK-CHANGE DIE
RACK



Part Number	Suits number of dies	Includes quick change tool
XP20-QCB	12	Yes

XP32-QCB

QUICK-CHANGE BASE FOR P32
FLOOR STANDING BASE AND QUICK-CHANGE DIE
RACK



Part Number	Suits number of dies	Includes quick change tool
XP32-QCB	16	Yes

SWAGERS

XP16

FINNPOWER P16 SWAGER

SWAGER FOR HOSE ASSEMBLIES TO 1 INCH



Part Number	Swaging Range (mm)	Swaging Force (kN)	Power Source	Swage Control	Length - mm	Width - mm	Height - mm	Weight - kg
XP16-AP	10 - 45	955	Air Pump	manual	390	331	271	26
XP16-HP	10 - 45	955	Handpump	manual	390	331	271	26
XP16-HPZ	10 - 45	955	Handpump	manual	331	386	271	26

XP20

FINNPOWER P20 SWAGER

SWAGER FOR HOSE ASSEMBLIES TO 1 1/4 INCH



Part Number	Swaging Range (mm)	Swaging Force (kN)	Power Source	Swage Control	Length - mm	Width - mm	Height - mm	Weight - kg
XP20-CS-12 V	10 - 61	1370	12V DC	MS*	571	533	387	83
XP20-CS-24 V	10 - 61	1370	24V DC	MS*	571	533	387	83
XP20N-MS-1PH	10 - 61	1370	1 Phase	MS*	800	630	626	157
XP20-AP	10 - 61	1370	Air Pump	MS*	583	477	345	57
XP20-HPL	10 - 61	1370	Handpump	MS*	487	442	389	63

XP32

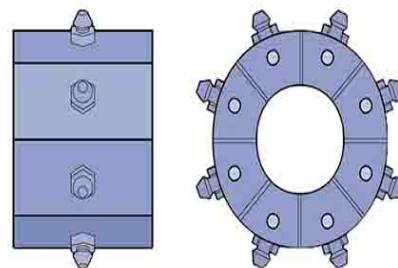
FINNPOWER P32 SWAGER
SWAGER FOR HOSE ASSEMBLIES TO 2 INCH



Part Number	Swaging Range (mm)	Swaging Force (kN)	Power Source	Swage Control	Length - mm	Width - mm	Height - mm	Weight - kg
XP32-CS-24 V	10 - 87	2000	24V DC	MS*	630	610	425	125
XP32N-MS-3PH	10 - 87	2000	3 phase	MS**	800	630	637	205

DS16

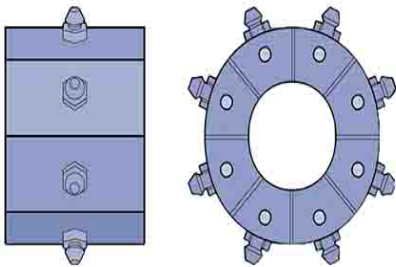
SWAGE DIES SUIT XP16 H16 CRIMPERS
SWAGE DIE SET TO SUIT XP16 H16 CRIMPER



Part Number	Suits crimper	Size range-mm
DS16-6	XP16	6 - 7.9mm
DS16-8	XP16	8 - 9.9mm
DS16-10	XP16	10 - 11.9mm
DS16-12	XP16	12 - 13.9mm
DS16-14	XP16	14 - 15.9mm
DS16-16	XP16	16 - 18.9mm
DS16-19	XP16	19 - 22.9mm
DS16-23	XP16	23 - 26.9mm
DS16-27	XP16	27 - 30.9mm
DS16-31	XP16	31 - 38mm

DS20

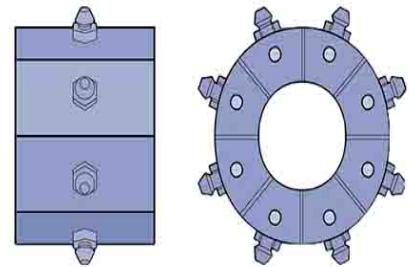
SWAGE DIES SUIT XP20 H20 CRIMPERS
SWAGE DIE SET TO SUIT XP20 H20 CRIMPER



Part Number	Suits crimper	Size range-mm
DS20-6	XP20	6 - 7.9mm
DS20-10	XP20	10 - 11.9mm
DS20-12	XP20	12 - 13.9mm
DS20-14	XP20	14 - 15.9mm
DS20-16	XP20	16 - 18.9mm
DS20-19	XP20	19 - 22.9mm
DS20-23	XP20	23 - 26.9mm
DS20-27	XP20	27 - 30.9mm
DS20-31	XP20	31 - 35.9mm
DS20-36	XP20	36 - 40.9mm
DS20-41	XP20	41 - 46.9mm
DS20-47	XP20	47 - 53.9mm
DS20-54	XP20	54 - 61mm

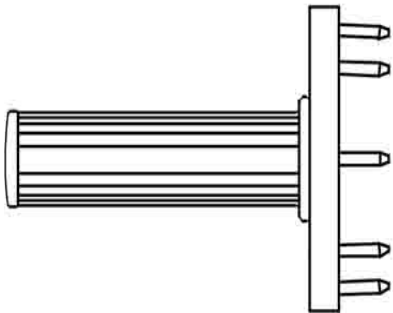
DS32

SWAGE DIES SUIT XP32 CRIMPERS
SWAGE DIE SET TO SUIT XP32 CRIMPER



Part Number	Suits crimper	Size range-mm
DS32-6	XP32	6 - 7.9mm
DS32-10	XP32	10 - 11.9mm
DS32-12	XP32	12 - 13.9mm
DS32-14	XP32	14 - 15.9mm
DS32-16	XP32	16 - 18.9mm
DS32-19	XP32	19 - 21.9mm
DS32-22	XP32	22 - 25.9mm
DS32-26	XP32	26 - 29.9mm
DS32-30	XP32	30 - 33.9mm
DS32-34	XP32	34 - 38.9mm
DS32-39	XP32	39 - 44.9mm
DS32-45	XP32	45 - 50.9mm
DS32-51	XP32	51 - 56.9mm
DS32-57	XP32	57 - 62.9mm
DS32-63	XP32	63 - 68.9mm
DS32-69	XP32	69 - 73.9mm
DS32-74	XP32	74 - 77.9mm
DS32-78	XP32	78 - 87mm

CS TOOL
QUICK CHANGE TOOL



Part Number	Suits Crimper
CS-691043	XP20
CS-701049	XP32

CUTTING SAWS

HASC

CUTOFF SAW

CUTOFF SAW WITHOUT BLADE



Part Number	Voltage
HASC-12V	12V DC
HASC-24V	24V DC
HASC-240V	240V AC
HASC-415V	415V AC

BLADE

CUTOFF SAW

CUTTING BLADE SUIT HASC RANGE



Part Number	Diameter-mm	Thickness-mm	Shaft-mm
BLADE	250	2.5	40



STAINLESS STEEL FITTINGS

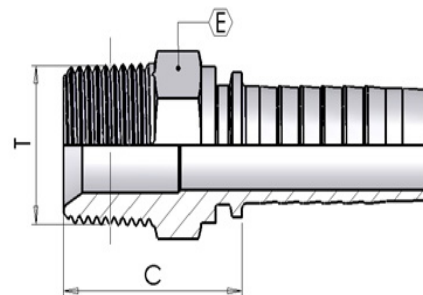


SWAGETAILS

SS15

BSPT MALE STRAIGHT

BSP TAPERED MALE STRAIGHT



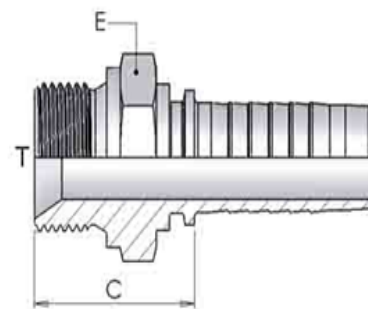
Part Number	BSPT Male Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
SS15-1212	3/4-14	3/4	19	12	30	39
SS15-1616	1-11	1	25.4	16	36	47
SS15-0404	1/4-19	1/4	6.4	04	17	28
SS15-0604	3/8-19	1/4	6.4	04	19	28
SS15-0606	3/8-19	3/8	9.5	06	19	29.5
SS15-0806	1/2-14	3/8	9.5	06	22	29.5
SS15-0808	1/2-14	1/2	12.7	08	22	29.5
SS15-1208	3/4-14	1/2	12.7	08	22	29.5

SS12

BSPP MALE STRAIGHT

BSP 60° CONE MALE STRAIGHT

- ISO 12151-6



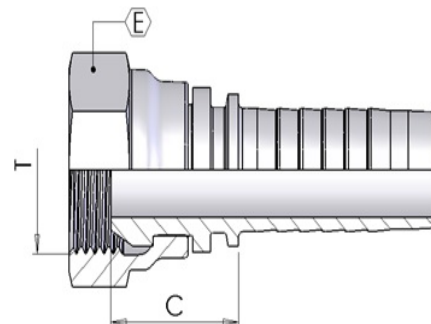
Part Number	BSPP Male Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
SS12-0404	1/4-19	1/4	6.4	04	19	26.5
SS12-0606	3/8-19	3/8	9.5	06	22	29.5
SS12-0808	1/2-14	1/2	12.7	08	27	29.5
SS12-1212	3/4-14	3/4	19	12	32	35.5

SS01

BSP FEMALE STRAIGHT

BSP 60° CONE FEMALE SWIVEL NUT STRAIGHT

- ISO 12151-6



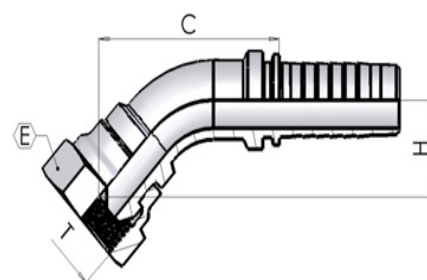
Part Number	BSPP Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
SS01-0404	1/4-19	1/4	6.4	04	19	16
SS01-0406	1/4-19	3/8	9.5	06	19	16
SS01-0604	3/8-19	1/4	6.4	04	22	17.5
SS01-0606	3/8-19	3/8	9.5	06	22	18
SS01-0608	3/8-19	1/2	12.7	08	22	19.3
SS01-0806	1/2-14	3/8	9.5	06	27	19
SS01-0808	1/2-14	1/2	12.7	08	27	19
SS01-1010	5/8-19	5/8	15.9	10	30	20.8
SS01-1208	3/4-14	1/2	12.7	08	32	22.5
SS01-1212	3/4-14	3/4	19	12	32	24
SS01-1616	1-11	1	25.4	16	41	27.5

SS60

BSP FEMALE 45° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT 45° ELBOW

- ISO 12151-6



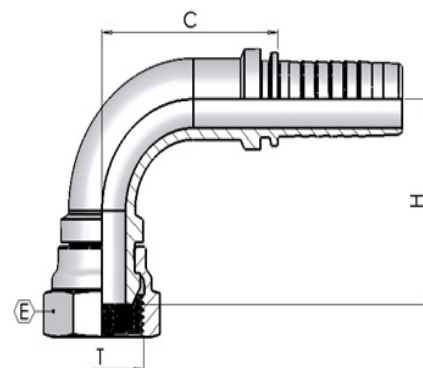
Part Number	BSPP Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Drop - H	Cutoff - C
SS60-0404	1/4-19	1/4	6.4	04	19	15.5	46.5
SS60-0606	3/8-19	3/8	9.5	06	22	20.6	62.1
SS60-0808	1/2-14	1/2	12.7	08	27	22.3	67.8
SS60-1212	3/4-14	3/4	19.0	12	32	27.1	102.1
SS60-1616	1-11	1	25.4	16	41	36.6	125.6

SS51

BSP FEMALE 90° ELBOW

BSP 60° CONE FEMALE SWIVEL NUT 90° ELBOW

- ISO 12151-6



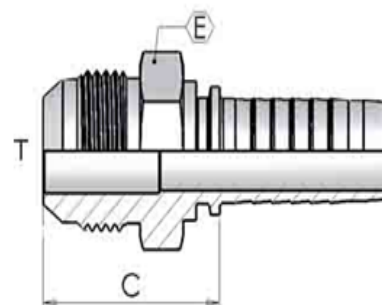
Part Number	BSP Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Drop - H	Cutoff - C
SS51-0404	1/4-19	1/4	6.4	04	19	31.5	28
SS51-0606	3/8-19	3/8	9.5	06	22	39	38.5
SS51-0808	1/2-14	1/2	12.7	08	27	44	42.5
SS51-1212	3/4-14	3/4	19	12	32	63	66
SS51-1616	1-11	1	25.4	16	41	79.5	79

SS18

JIC MALE STRAIGHT

JIC 37° FLARE MALE STRAIGHT

- ISO 12151-5/SAE J516



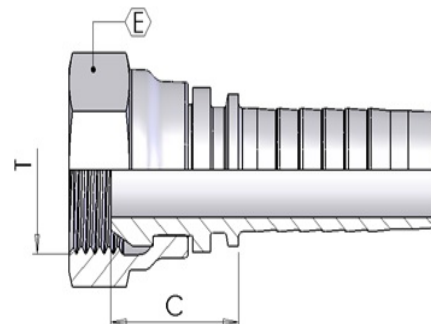
Part Number	JIC Male Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
SS18-0704	7/16-20	1/4	6.4	04	14	30
SS18-0904	9/16-18	1/4	6.4	04	15	26.6
SS18-0906	9/16-18	3/8	9.5	06	15	27.1
SS18-1206	3/4-14	3/8	9.5	06	22	29.5
SS18-1208	3/4-14	1/2	12.7	08	22	30
SS18-1408	7/8-14	1/2	12.7	08	24	29.5
SS18-1712	1.1/16-12	3/4	19	12	27	38.4
SS18-2116	1.5/16-12	1	25.4	16	36	45

SS05

JIC FEMALE STRAIGHT

JIC 37° FLARE FEMALE SWIVEL NUT STRAIGHT

- ISO 12151-5/SAE J516



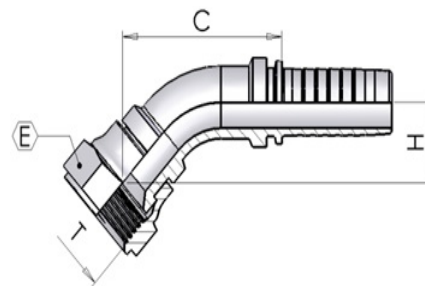
Part Number	JIC Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Cutoff - C
SS05-0703	7/16-20	3/16	4.8	03	14	14.5
SS05-0704	7/16-20	1/4	6.4	04	14	15
SS05-0804	1/2-20	1/4	6.4	04	17	16
SS05-0904	9/16-18	1/4	6.4	04	19	17
SS05-0906	9/16-18	3/8	9.5	06	19	17
SS05-1206	3/4-16	3/8	9.5	06	24	19
SS05-1208	3/4-16	1/2	12.7	08	24	19.5
SS05-1408	7/8-14	1/2	12.7	08	27	20.5
SS05-1410	7/8-14	5/8	15.9	10	27	20.5
SS05-1708	1.1/16-12	1/2	12.7	08	32	23.5
SS05-1710	1.1/16-12	5/8	15.9	10	32	21
SS05-1712	1.1/16-12	3/4	19.0	12	32	23
SS05-2112	1.5/16-12	3/4	19.0	19	41	22.7
SS05-2116	1.5/16-12	1	25.4	16	38	24.5
SS05-2616	1.5/8-12	1	25.4	16	41	23.7

SS64

JIC FEMALE 45° ELBOW

JIC 37° FLARE FEMALE SWIVEL NUT 45° ELBOW

- ISO 12151-5/SAE J516



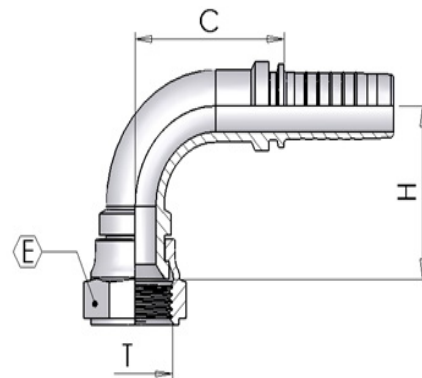
Part Number	JIC Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Drop - H	Cutoff - C
SS64-0704	7/16-20	1/4	6.4	04	14	14.8	45.8
SS64-0904	9/16-18	1/4	6.4	04	19	15.9	46.9
SS64-0906	9/16-18	3/8	9.5	06	19	19.9	61.4
SS64-1206	3/4-16	3/8	9.5	06	24	21.3	62.8
SS64-1208	3/4-16	1/2	12.7	08	24	22.3	67.8
SS64-1408	7/8-14	1/2	12.7	08	27	23.4	68.9
SS64-1712	1.1/16-12	3/4	19	12	32	26.4	101.4
SS64-2116	1.5/16-12	1	25.4	16	38	34.1	123.1

SS55

JIC FEMALE 90° ELBOW

JIC 37° FLARE FEMALE SWIVEL NUT 90° ELBOW

- ISO 12151-5/SAE J516



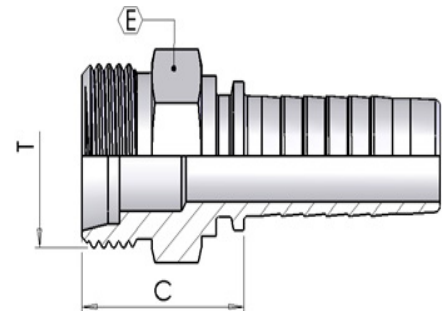
Part Number	JIC Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Hex A/F (E)	Drop - H	Cutoff - C
SS55-0704	7/16-20	1/4	6.4	04	14	30.5	28
SS55-0904	9/16-18	1/4	6.4	04	19	32	28
SS55-0906	9/16-18	3/8	9.5	06	19	38	38.5
SS55-1206	3/4-16	3/8	9.5	06	24	40	38.5
SS55-1208	3/4-16	1/2	12.7	08	24	44	42.5
SS55-1408	7/8-14	1/2	12.7	08	27	45.5	43
SS55-1410	7/8-14	5/8	15.9	10	27	44	43.1
SS55-1712	1.1/16-12	3/4	19	12	32	62	66
SS55-2112	1.5/16-12	3/4	19	12	41	58	56
SS55-2116	1.5/16-12	1	25.4	16	38	76	79

SS78

MET HEAVY MALE STRAIGHT

METRIC 24° CONE HEAVY MALE STRAIGHT

- ISO 12151-5



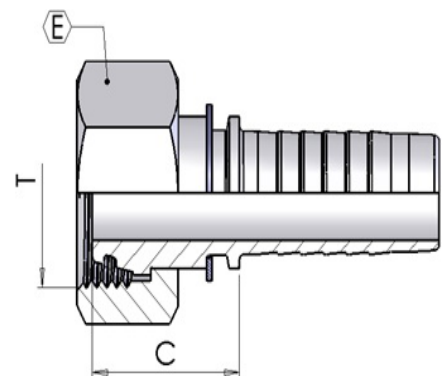
Part Number	Metric Male Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F (E)	Cutoff - C
SS78-M1604	M16-1.5	1/4	6.4	04	8	17	26.5
SS78-M1806	M18-1.5	3/8	9.5	06	10	19	29.5
SS78-M2006	M20-1.5	3/8	9.5	06	12	22	29.5
SS78-M2206	M22-1.5	3/8	9.5	06	14	24	29.5
SS78-M2408	M24-1.5	1/2	12.7	08	16	27	29.5
SS78-M3012	M30-2	3/4	19	12	20	32	39
SS78-M3616	M36-2	1	25.4	16	25	41	47

SS79

MET HEAVY FEMALE STRAIGHT

METRIC 24° CONE HEAVY FEMALE SWIVEL NUT STRAIGHT

- ISO 12151-5



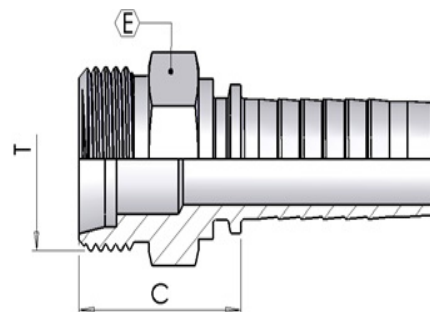
Part Number	Metric Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F (E)	Cutoff - C
SS79-M1604	M16-1.5	1/4	6.4	04	8	19	25
SS79-M1804	M18-1.5	1/4	6.4	04	10	22	26
SS79-M2006	M20-1.5	3/8	9.5	06	12	24	23
SS79-M2206	M22-1.5	3/8	9.5	06	14	27	33
SS79-M2408	M24-1.5	1/2	12.7	08	16	30	35
SS79-M3010	M30-2	5/8	15.9	10	20	36	36.8
SS79-M3012	M30-2	3/4	19	12	20	36	33.6
SS79-M3612	M36-2	3/4	19	12	25	46	43

SS80

MET LIGHT MALE STRAIGHT

METRIC 24° CONE LIGHT MALE STRAIGHT

- ISO 12151-5



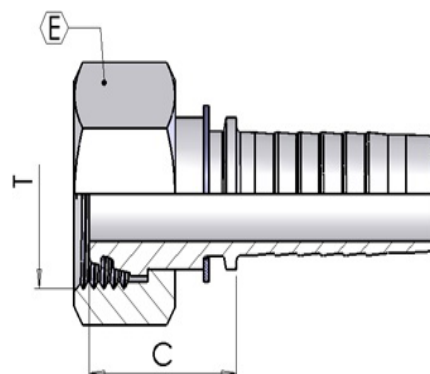
Part Number	Metric Male Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F (E)	Cutoff - C
SS80-M1604	M16-1.5	1/4	6.4	04	10	17	28
SS80-M1606	M16-1.5	3/8	9.5	06	12	17	29.5
SS80-M1806	M18-1.5	3/8	9.5	06	12	19	29.5
SS80-M2208	M22-1.5	1/2	12.7	08	15	24	29.5

SS81

MET LIGHT FEMALE STRAIGHT

METRIC 24° CONE LIGHT FEMALE SWIVEL NUT STRAIGHT

- ISO 12151-5

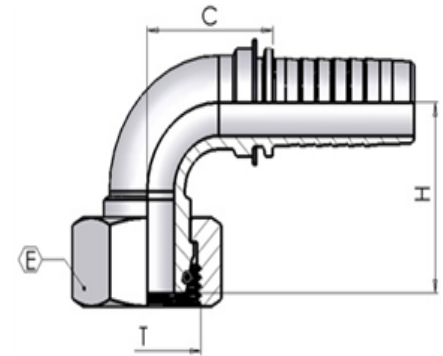


Part Number	Metric Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F (E)	Cutoff - C
SS81-M1604	M16-1.5	1/4	6.4	04	10	19	22
SS81-M1606	M16-1.5	3/8	9.5	06	10	19	24
SS81-M1806	M18-1.5	3/8	9.5	06	12	22	23
SS81-M2208	M22-1.5	1/2	12.7	08	15	27	29
SS81-M2610	M26-1.5	5/8	15.9	10	18	32	30.5
SS81-M3012	M30-2	3/4	19	12	22	46	32.5

SS83

MET HEAVY FEMALE 90° ELBOW
METRIC 24° CONE HEAVY FEMALE SWIVEL NUT
90° ELBOW

- ISO 12151-5

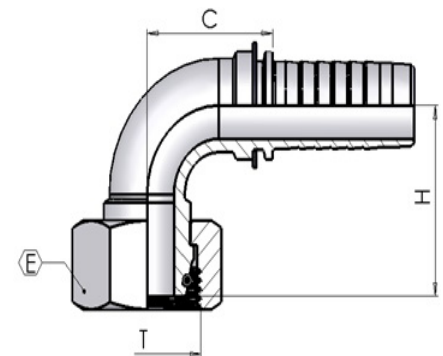


Part Number	Metric Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F (E)	Drop (H)	Cutoff - C
SS83-M2006	M20-1.5	3/8	9.5	06	12	24	34	33.5
SS83-M2408	M24-1.5	1/2	12.7	08	16	30	41	40
SS83-M3612	M36-2	3/4	19	12	25	46	58.5	56.2

SS86

MET LIGHT FEMALE 90° ELBOW
METRIC 24° CONE LIGHT FEMALE SWIVEL NUT 90° ELBOW

- ISO 12151-5



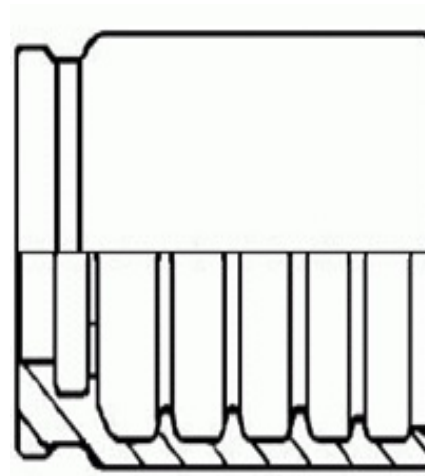
Part Number	Metric Female Thread (T)	Hose I.D (Inches)	Hose I.D (mm)	Dash size	Tube Size	Hex A/F (E)	Drop (H)	Cutoff - C
SS86-M1606	M16-1.5	3/8	9.5	06	10	19	45	38.5
SS86-M1806	M18-1.5	3/8	9.5	06	12	22	41	38.5
SS86-M2208	M22-1.5	1/2	12.7	08	15	27	47.5	42.5
SS86-M3012	M30-2	3/4	19	12	20	46	52	54

FERRULES

SSCN

BRAIDED HOSE SWAGE FERRULE

NON-SKIVE SWAGE FERRULE FOR ONE & TWO-WIRE HOSE

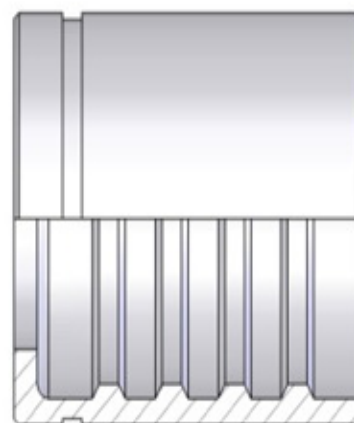


Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	O.A Length	I.D - mm	O.D - mm
SSCN-04	1/4	6.4	04	30.0	15.6	23.0
SSCN-06	3/8	9.5	06	31.0	19.7	26.0
SSCN-08	1/2	12.7	08	32.0	23.0	29.0
SSCN-10	5/8	15.9	10	36.0	26.3	33.0
SSCN-12	3/4	19	12	42.5	30.2	37.0
SSCN-16	1	25.4	16	51.0	39.2	46.0

SSCNT

THERMOPLASTIC HOSE FERRULE

NON-SKIVE SWAGE FERRULE FOR THERMOPLASTIC HOSE



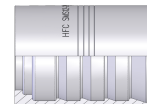
Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	O.A Length	I.D - mm	O.D - mm
SSCNT-03	3/16	4.8	03	26.5	11.3	14.0
SSCNT-04	1/4	6.4	04	30.5	14.0	18.0
SSCNT-06	3/8	9.5	06	33.0	17.8	22.0
SSCNT-08	1/2	12.7	08	34.0	21.0	26.0

SSMS

SPIRAL HOSE SWAGE FERRULE

SKIVE SWAGE FERRULE FOR GATES SPIRAL 4

WIRE HOSE



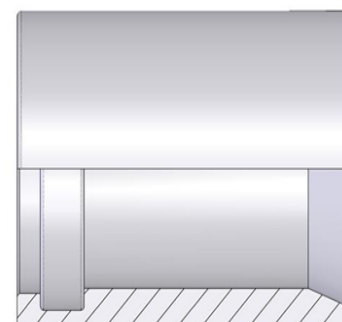
Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	O.A Length	I.D - mm	O.D - mm
SSMS12-06	3/8	9.5	06	24.5	16.7	26.0
SSMS12-08	1/2	12.7	08	32.0	22.2	30.0
SSMS12-10	5/8	15.9	10	36	25.4	33.0
SSMS12-12	3/4	19	12	42.5	29.2	38.0
SSMS12-16	1	25.4	16	51.0	36.4	46.0

SSP1

PTFE SWAGE FERRULE

SWAGE FERRULE FOR PTFE SMOOTH TRUE BORE

HOSE



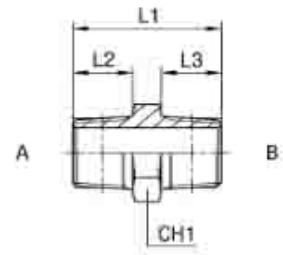
Part Number	Hose I.D inches	Hose I.D (mm)	Dash size	O.A Length	I.D - mm	O.D - mm
SSP1-03	3/16	4.8	03	30.0	10.0	14.0
SSP1-04	1/4	6.4	04	30.0	11.0	15.0
SSP1-06	3/8	9.5	06	30.0	14.0	18.0
SSP1-08	1/2	12.7	08	32.0	19.0	24.0
SSP1-12	3/4	19	12	33.5	24.9	30.0

STRAIGHT ADAPTORS

SA-A

BSPT MALE X BSPT MALE

BSPT MALE X BSPT MALE STRAIGHT ADAPTOR

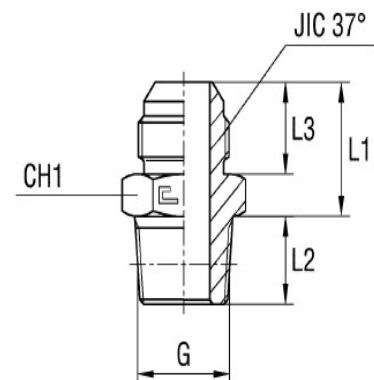


Part Number	BSPT Male Thread (A)	BSPT Male Thread (B)	Overall Length mm (L1)	Thread Length - mm (L2)	Thread Length - mm (L3)	Hex A/F (CH1)
SA-A-0404	1/4-19	1/4-19	34	14	13.5	14
SA-A-0606	3/8-19	3/8-19	41	14.5	14.5	19
SA-A-0808	1/2-14	1/2-14	46	18.5	18.5	22
SA-A-1212	3/4-14	3/4-14	52	20	20	27
SA-A-1616	1-11	1-11	58	24	24	35

SA-G

BSPT MALE X JIC MALE

BSPT MALE X JIC MALE STRAIGHT

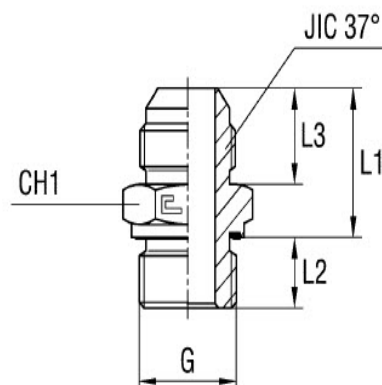


Part Number	BSPT Male Thread (G)	JIC Male Thread (JIC)	Length mm (L1)	Thread Length - mm (L2)	Thread Length - mm (L3)	Hex A/F (CH1)
SA-G-0207	1/8-28	7/16-20	21	10	14	14
SA-G-0407	1/4-19	7/16-20	21	15	14	14
SA-G-0409	1/4-19	9/16-18	22	15	14	17
SA-G-0609	3/8-19	9/16-18	22	15	14	17
SA-G-0612	3/8-19	3/4-16	25	15	17	22
SA-G-0812	1/2-14	3/4-16	25	19	17	22
SA-G-0814	1/2-14	7/8-14	29	19	20	24
SA-G-1217	3/4-14	1.1/16-12	34	19	22	30

SB-G

BSPP MALE X JIC MALE

BSPP MALE X JIC MALE STRAIGHT

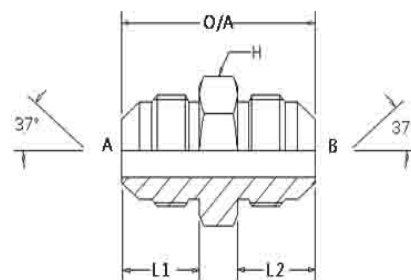


Part Number	BSPP Male Thread (G)	JIC Male Thread (B)	Thread (L1)	Overall Length mm (L2)	Thread Length - mm (L3)	Hex A/F (CH1)
SB-G-0207	1/8-28	7/16-20	28.5	8	14.5	14
SB-G-0209	1/8-28	9/16-18	28.5	8	14.5	16
SB-G-0407	1/4-19	7/16-20	23	12	14	19
SB-G-0409	1/4-19	9/16-18	23	12	14	19
SB-G-0607	3/8-19	7/16-20	34.5	12	14.5	22
SB-G-0609	3/8-19	9/16-18	24	12	14	22
SB-G-0612	3/8-19	3/4-16	27	12	17	22
SB-G-0812	1/2-14	3/4-16	29	14	17	27
SB-G-0814	1/2-14	7/8-14	31	14	19	27
SB-G-1217	3/4-14	1.1/16-12	35	16	22	32
SB-G-1221	3/4-14	1.5/16-12	51	16	23	35
SB-G-1621	1-11	1.5/16-12	38	18	23.1	41

SG-G

JIC MALE X JIC MALE

JIC MALE X JIC MALE STRAIGHT ADAPTOR

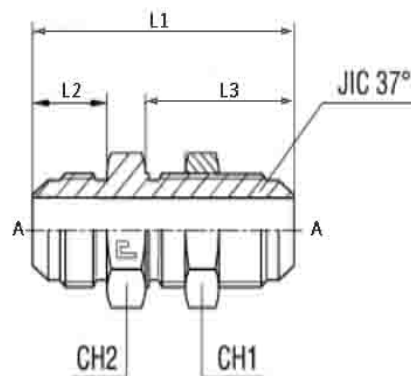


Part Number	JIC Male Thread (A)	JIC Male Thread (A)	L1 - mm	L2 - mm	L3 - mm	Hex A/F (CH1)
SG-G-0707	7/16-20	7/16-20	35	14	14	12
SG-G-0709	7/16-20	9/16-18	36	14	14	17
SG-G-0909	9/16-18	9/16-18	36	14	14	17
SG-G-1212	3/4-16	3/4-16	41	16.7	16.7	22
SG-G-1414	7/8-14	7/8-14	48	19.3	19.3	24
SG-G-1717	1.1/16-12	1.1/16-12	55	21.9	21.9	30

SG-GK

JIC MALE X JIC BULKHEAD

JIC MALE X JIC BULKHEAD



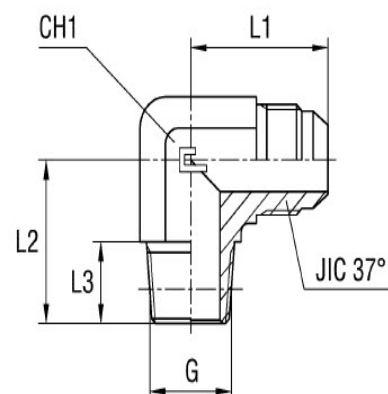
Part Number	JIC Male Thread (A)	L1 - mm	L1 - mm	L2 - mm	L3 - mm	Hex A/F (CH1)
SG-GK-0707	7/16-20	21	31.5	14	17	17
SG-GK-0909	9/16-18	22	33.5	14.1	22	22
SG-GK-1212	3/4-16	24.4	36.6	16.7	24	24
SG-GK-1414	7/8-14	28.4	41.1	19.3	30	30
SG-GK-1717	1.1/16-12	33.1	45.4	21.9	36	36
SG-GK-2121	1.5/16-12	34.6	45.4	23.1	41	41

90 DEGREE ADAPTORS

SA-G-90

BSPT MALE X JIC MALE

BSPT MALE X JIC MALE 90° ELBOW

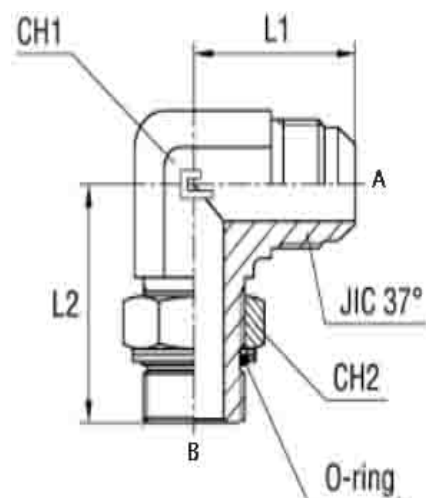


Part Number	BPST Male Thread (G)	JIC Male Thread (JIC)	L1 - mm	L2 - mm	L3 - mm	Hex A/F (CH1)
SA-G-90-0207	1/8-28	7/16-20	21	22.5	12	12
SA-G-90-0407	1/4-19	7/16-20	24	28	14.5	14
SA-G-90-0409	1/4-19	9/16-18	27	27	14.5	14
SA-G-90-0609	3/8-19	9/16-18	30	31	14.5	19
SA-G-90-0612	3/8-19	3/4-16	32	31	14.5	19
SA-G-90-0812	1/2-14	3/4-16	32	37.5	19	22
SA-G-90-0814	1/2-14	7/8-14	37	38	19	22
SA-G-90-1217	3/4-14	1.1/16-12	42	40	19	27

SG-BP-90

JIC MALE X BSPP POSITIONAL 90°

JIC MALE X BSPP MALE 90° ADJUSTABLE



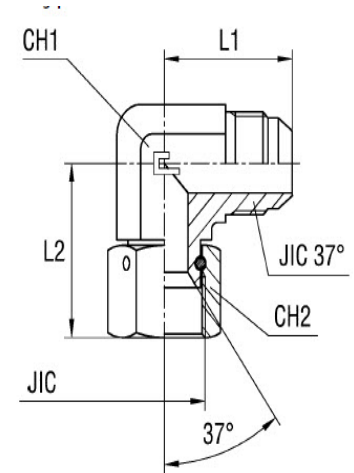
Part Number	JIC Male Thread (A)	BSPP Male Thread (B)	L1 - mm	L2 - mm	Hex A/F (CH1)	Hex A/F (CH2)
SG-BP-90-0704	7/16-20	1/4-19	24	32	14	19
SG-BP-90-0706	7/16-20	3/8-19	29	37	19	22
SG-BP-90-0904	9/16-18	1/4-19	28	32	14	19
SG-BP-90-0906	9/16-18	3/8-19	29.5	37	19	22
SG-BP-90-1208	3/4-16	1/2-14	34	43	22	27
SG-BP-90-1712	1.1/16-12	3/4-14	42	49	27	36
SG-BP-90-2116	1.5/16-12	1-11	46	52	33	41

SG-J-90

JIC MALE X JIC FEMALE

JIC MALE X JIC FEMALE SWIVEL NUT 90° ELBOW

- ISO 8434-2

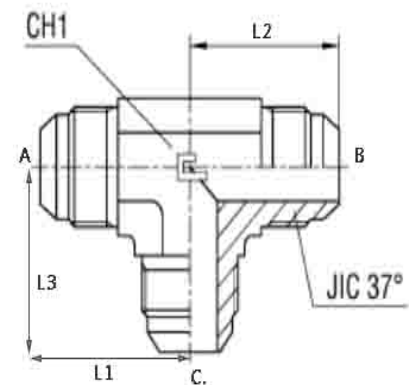


Part Number	JIC Male Thread (A)	JIC Female Thread (JIC)	L1 - mm	L2 - mm	Hex A/F (CH1)	Hex A/F (CH2)
SG-J-90-0707	7/16-20	7/16-20	23	27	11	14
SG-J-90-0909	9/16-18	9/16-18	28	31	14	19
SG-J-90-1212	3/4-16	3/4-16	32	36	19	22
SG-J-90-1414	7/8-14	7/8-14	37	42	22	27
SG-J-90-1717	1.1/16-12	1.1/16-12	42	44	27	32
SG-J-90-2121	1.5/16-12	1.5/16-12	46	51.4	33	41

TEE ADAPTORS

SG-G-G

JIC MALE X JIC MALE X JIC MALE
JIC EQUAL MALE TEE

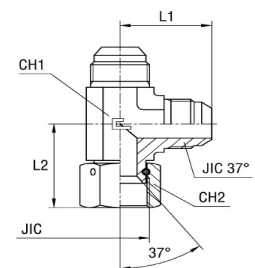


Part Number	JIC Male Thread (A)	L1 - mm	Hex A/F (CH1)
SG-G-G-070707	7/16-20	23	11
SG-G-G-090909	9/16-18	27.5	14
SG-G-G-121212	3/4-16	32	19
SG-G-G-141414	7/8-14	37	22
SG-G-G-171717	1.1/16-12	42	27

SG-J-G

JIC MALE X JIC FEMALE X JIC MALE
JIC MALE X JIC FLARE FEMALE SWIVEL NUT X JIC
MALE RUN TEE

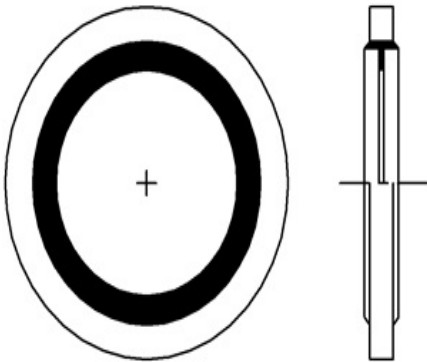
- ISO 8434-2



Part Number	JIC Male Thread (JIC 37)	JIC Female Thread (JIC)	L1 - mm	L2 - mm	Hex A/F (CH1)	Hex A/F (CH2)
SG-J-G-070707	7/16-20	7/16-20	23	27	11	14
SG-J-G-090909	9/16-18	9/16-18	28	31	14	19
SG-J-G-121212	3/4-16	3/4-16	32	36	19	22
SG-J-G-141414	7/8-14	7/8-14	37	42	22	27
SG-J-G-171717	1.1/16-12	1.1/16-12	42	44	27	32

REPLACEMENT SEALS

SD
BONDED SEAL
SELF CENTERING BONDED (DOWTY) SEAL



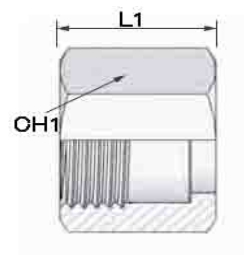
Part Number	Internal dimension - mm	Suits thread
SD-02	8.5	1/8-28BSPP
SD-04	13.7	1/4-19 BSPP
SD-06	17.3	3/8-19 BSPP
SD-08	21.5	1/2-14 BSPP
SD-12	27.1	3/4-14 BSPP
SD-16	33.9	1-11 BSPP
SD-20	42.9	1.1/4-11 BSPP

JIC FLARE TYPE TUBE FITTINGS

STJN

JIC TUBE NUT

JIC 37° FLARE TUBE NUT

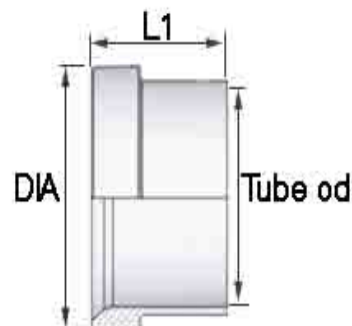


Part Number	suits tube	JIC Female Thread	L1 - mm	Hex A/F (CH1)
STJN-07	1/4	7/16-20	15.494	14
STJN-09	3/8	9/16-18	18.288	18
STJN-12	1/2	3/4-16	21.336	22
STJN-14	5/8	7/8-14	24.638	25
STJN-17	3/4	1.1/16-12	25.908	32

STJS

JIC FLARE SLEEVE

JIC 37° FLARE TUBE SLEEVE



Part Number	suits tube	L1 - mm	Diameter - mm
STJS-04	1/4	10.414	10
STJS-06	3/8	12.7	13
STJS-08	1/2	14.224	17
STJS-10	5/8	16.764	20
STJS-12	3/4	17.272	25