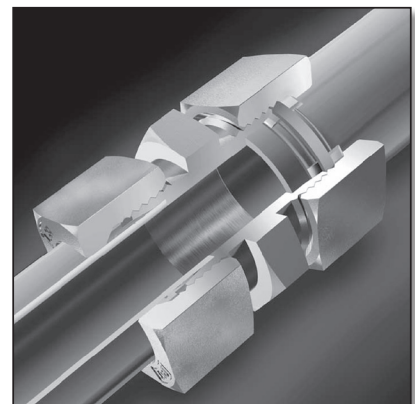
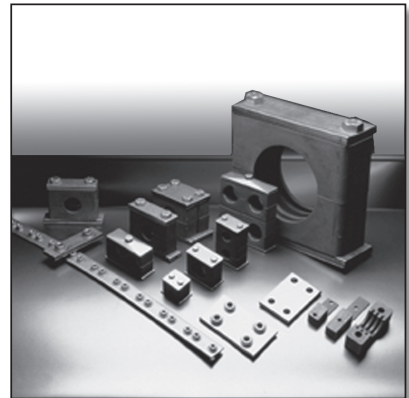



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 **WARNING:** This product may contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information please visit: [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

## INTRODUCTION

Tube and pipe merchants within U.S.A offer a range of products suited to hydraulic, pneumatic and instrumentation applications. The data included here is intended as a guide only to the products more commonly used, and should not be construed as representative of products offered for sale by PIRTEK. Specifications and technical data are typical.

## Standard Tube and Pipe

Tabulated burst pressures for imperial tube and pipe size of various sizes are derived from use of Barlow's Formula. Results are converted to bars for convenience.

$$\text{BP (psi)} = \frac{\text{Wall Thickness (mm/ins)} \times 2 \times \text{Tensile Strength (psi)}}{\text{Outside Dia. (ins)}}$$

Material	Adopted tensile strength	Tabulated
Butt welded wrought steel pipe * (Sched. 40, 80, 160)	39,885 psi (2812 kg/cm <sup>2</sup> )	Yes
Lap welded wrought steel pipe	50,038 psi (3515 kg/cm <sup>2</sup> )	No. Add 20% to above.
Hydraulic Cold Drawn Steel Tube (CDS)	50,038 psi (3515 kg/cm <sup>2</sup> )	Yes
Stainless Steel 302, 303, 304,309, 310, 316, 321, 416	73,969 psi (273 kg/cm <sup>2</sup> )	Yes
Stainless Steel 410, 430	60,045 psi (4222 kg/cm <sup>2</sup> )	No
Stainless Steel 202, 440C	100,076 (7037 kg/cm <sup>2</sup> )	No
Copper	31,908 psi (2 250 kg/cm <sup>2</sup> )	No
* Wrought iron pipe	Thicker than wrought steel. Adopt the same burst pressure as butt welded wrought steel.	

## Flow Rate / Velocity

Flow rates given in the tables are based on the following guides:

Suction lines:	0.6 - 1.2 m/sec
Return lines:	3 - 4.5 m/sec
Medium Pressure (35 - 140 bar) lines:	4.5 - 6 m/sec
High Pressure lines (≥ 200 bar):	≤ 9 m/sec

## Safety Factor

It's recommended that hydraulic systems subjected to shock loads incorporate a 6:1 factor of safety. Use of a lower factor can be contemplated after due consideration of the system operating parameters.

Quoted working pressures for metric tubing are as per relevant DIN standards.

## Copper Tube

Consult page E 8



## Metric Tube

Metric steel tubing is designated by the combination of outside diameter and wall thickness. PIRTEK recommends the use of precision cold drawn seamless tube manufactured to conform to the requirements of DIN 2391 Part 1. Material grade should be St 37.4, Type NBK, as described in DIN 1630. Maximum exterior hardness 75 HRB.

Tabulated pressure ratings are in accordance with :

DIN 2413-I (static loads using a tensile stress yield point of 34,083 psi)  
DIN 2413-III (dynamic loads using a yield point of 32,778 psi).

For thick walled tube (ie the ratio of OD to ID exceeds 1.35), the tabulated pressure is as per DIN2413-III, but with the 34,083 psi yield point. The applicable safety factor in all cases is 1.5.

Allowance factors are:

4 mm tube C = 0.8  
6-8 mm tube C = 0.85  
8mm tube and larger C = 0.9

No additional provision for corrosion is incorporated.

1.4571 stainless steel tubing is designated by the combination of outside diameter and wall thickness. It should be cold drawn precision seamless tube manufactured in accordance with the provisions of DIN 17458-X6CrNiMoTi17122-m or ASTM A269. Maximum exterior hardness 85 HRB. Tolerances as per DIN/EN/ISO 1127.

Tabulated pressure ratings are in accordance with DIN 2413-I (static loads using a tensile stress yield point of 35,534 psi). Pressure ratings for dynamic loads use a yield point of 27,557 psi. Note that no yield stress is published for DIN 17458, so this is a recommended guide only. Calculations are as per DIN 2423-III for dynamic loads.

For thick walled tube (ratio of OD to ID exceeds 1.35), the tabulated pressure is as per DIN2413-III, but with a 35,534 psi yield point. The applicable safety factor in all cases is 1.5.

Allowance factors are:

C = 0.9

No additional provision for corrosion is incorporated.

## Working Temperature

Carbon steel:

Use safely with no reduction in the range of -76° to +248° F. Maximum allowable working temperature 482° F.

Stainless steel:

Use stated working pressures within the range -76° to +68° F.

Maximum allowable working temperature 752° F.

Reduce pressures as indicated for the range 68° to 752° F.

122° F	4.5%
212° F	11%
392° F	20%
572° F	29%
752° F	33%

## Tube Length

Standard tube 20 ft

Metric tube 19.6 ft

## Bending Tube

Use the guide:

Bend Radius ≥ 3 x Tube OD

Bending can cause wall thinning, with a consequent reduction in safe working pressure.

**ANSI / ASME B36.10M SCHEDULE 40 (API STANDARD WEIGHT) PIPE**

Nominal Size	WP	BP	Oil flow capacity (gpm) @ flow velocity (fps)				Dimensions inches			Flow Area (sq. inches)	WT/FT (pounds)
	psi	psi	gpm@2fps	gpm@10fps	gpm@15fps	gpm@25fps	OD	ID	Wall Thickness		
1/8"	2233	13430	0.4	1.8	2.7	4.4	0.405	0.269	0.068	0.057	0.244
1/4"	2175	13038	0.6	3.2	4.9	8.1	0.540	0.364	0.088	0.104	0.424
3/8"	1798	10790	1.2	6.0	8.9	14.9	0.675	0.493	0.091	0.191	0.567
1/2"	1725	10384	1.9	9.5	14.2	23.7	0.840	0.622	0.109	0.304	0.850
3/4"	1435	8615	3.3	16.6	24.9	41.6	1.050	0.824	0.113	0.533	1.13
1"	1348	8093	5.4	26.9	40.4	67.4	1.315	1.049	0.133	0.864	1.677
1.1/4"	1116	6744	9.3	46.6	69.9	93.2	1.660	1.380	0.140	1.496	2.27
1.1/2"	1015	6106	12.7	63.5	95.2	15.7	1.90	1.610	0.145	2.036	2.715
2"	870	5192	20.9	104.6	156.9	261.5	2.375	2.067	0.154	3.649	3.649
2.1/2"	850	5100	29.8	149.2	223.9	373.1	2.875	2.469	0.203	5.787	5.787
3"	826	4931	46.1	230.4	345.7	576.1	3.50	3.068	0.216	7.568	7.568

**ANSI / ASME B36.10M SCHEDULE 80 (API EXTRA STRONG WEIGHT) PIPE**

Nominal Size	WP	BP	Oil flow capacity (gpm) @ flow velocity (fps)				Dimensions inches			Flow Area (sq. inches)	WT/FT (pounds)
	psi	psi	gpm@2fps	gpm@10fps	gpm@15fps	gpm@25fps	OD	ID	Wall Thickness		
1/8"	3190	19130	0.2	1.1	1.7	2.8	0.405	0.215	0.095	0.036	0.314
1/4"	2997	17984	0.4	2.2	3.3	5.6	0.540	0.302	0.119	0.072	0.534
3/8"	2538	15228	0.9	4.4	6.6	11.0	0.675	0.423	0.126	0.141	0.738
1/2"	2378	14271	1.5	7.3	10.9	18.2	0.840	0.546	0.147	0.234	1.087
3/4"	1987	11965	2.7	13.5	20.2	33.7	1.050	0.742	0.154	0.432	1.472
1"	1841	11109	4.5	22.4	33.6	56.1	1.315	0.957	0.179	0.719	2.169
1.1/4"	1566	9383	8.0	40.0	60.0	100.0	1.660	1.278	0.191	1.283	2.993
1.1/2"	1435	8586	11.0	55.1	82.6	137.7	1.900	1.500	0.200	1.767	3.627
2"	1247	7483	18.4	92.0	138.1	230.1	2.375	1.939	0.218	2.953	5.017
2.1/2"	1200	7200	26.4	132.1	198.2	330.3	2.875	2.323	0.276	4.238	7.653
3"	1160	6990	41.2	205.9	308.8	514.7	3.50	2.900	0.300	6.605	10.242

**ANSI / ASME B36.10M SCHEDULE 160 (API DOUBLE EXTRA HEAVY WEIGHT) PIPE**

Nominal Size	WP	BP	Oil flow capacity (gpm) @ flow velocity (fps)				Dimensions inches			Flow Area (sq. inches)	WT/FT (pounds)
	psi	psi	gpm@2fps	gpm@10fps	gpm@15fps	gpm@25fps	OD	ID	Wall Thickness		
1/2"	3045	18260	1.1	5.3	8.0	13.3	0.840	0.466	0.187	0.171	1.303
3/4"	2835	17012	1.8	9.2	13.8	23.1	1.050	0.614	0.218	0.296	1.935
1"	2584	15504	3.3	16.3	24.4	40.7	1.315	0.815	0.250	0.522	2.841
1.1/4"	2045	12284	6.6	32.9	49.4	82.4	1.660	1.160	0.250	1.057	3.761
1.1/2"	2010	12067	8.8	43.8	65.7	109.6	1.900	1.338	0.281	1.406	4.854
2"	1968	11820	13.9	69.7	104.5	174.2	2.375	1.687	0.344	2.235	7.454
2.1/2"	1769	10645	22.1	110.6	165.8	276.4	2.875	2.125	0.375	3.547	10.002
3"	1699	10210	33.7	251.1	627.7	941.5	88.9	66.65	11.125	34.871	21.3



This page is part of a complete catalog containing technical and safety data. All data must be reviewed when selecting a product. PIRTEK reserves the right to change technical specifications without notice.

## PRECISION SEAMLESS HYDRAULIC TUBE (Standard)

Size	GAUGE Thickness	CDS LOW CARBON Note SF 3:1*		316 L STAINLESS STEEL Note SF 3:1*		Oil flow capacity (lit/min) @ flow velocity (m/sec)				Dimensions Inches			Weight lb/ft
		WP psi	BP psi	WP psi	BP psi	1.2 Suction	4.5 Return	6 Med. Press.	9 High Press.	OD	ID	Wall Thick.	
1/8"	20G	10500	31502	-	-	0.1	0.4	0.6	0.8	0.125	0.055	0.035	0.03
3/16"	20G	7005	21001	-	-	0.5	1.9	2.5	3.8	0.187	0.117	0.035	0.05
1/4"	20G	5250	15751	7150	1478	1.2	4.4	5.9	8.9	0.250	0.179	0.035	0.08
	18G	7193	21596	9790	2026	0.9	3.2	4.3	6.5	0.250	0.153	0.049	0.10
	16G	9616	28848	-	-	0.5	2.0	2.7	4.0	0.250	0.121	0.065	0.13
5/16"	20G	4206	12603	5714	17143	2.1	8.0	10.7	16.1	0.312	0.242	0.035	0.10
	18G	5758	17273	7832	23496	1.7	6.4	8.5	12.8	0.312	0.216	0.049	0.13
	16G	7687	23075	-	-	1.2	4.6	6.2	9.3	0.312	0.184	0.065	0.17
3/8"	20G	3495	10500	4757	14286	3.4	12.7	17.0	25.4	0.375	0.305	0.035	0.13
	18G	4800	14402	6526	19580	2.8	10.6	14.2	21.3	0.375	0.279	0.049	0.17
	16G	6410	19232	8716	26164	2.2	8.3	11.1	16.6	0.375	0.246	0.065	0.22
1/2"	20G	2625	7875	3567	10718	6.7	25.3	33.7	50.6	0.50	0.429	0.035	0.17
	18G	3596	10790	4916	14692	6.0	22.3	29.8	44.6	0.50	0.403	0.049	0.23
	16G	4815	14431	6541	19638	5.0	18.9	25.2	37.8	0.50	0.371	0.065	0.30
	14G	-	-	8151	24453	4.2	15.8	21.1	31.7	0.50	0.340	0.083	0.35
5/8"	18G	2886	8644	3916	11748	10.2	38.3	51.0	76.6	0.625	0.529	0.049	0.30
	16G	3843	11545	5235	15693	9.0	33.7	45.0	67.5	0.625	0.496	0.065	0.38
	14G	4786	14373	6512	19551	7.9	29.6	39.5	59.2	0.625	0.465	0.083	0.46
3/4"	18G	2393	7193	3263	9790	15.6	58.5	78.0	117.0	0.750	0.653	0.049	0.36
	16G	3205	9616	4365	13082	14.1	52.9	70.5	105.7	0.750	0.621	0.065	0.32
	14G	3988	11980	5438	16302	12.7	47.7	63.5	95.3	0.750	0.590	0.083	0.57
7/8"	18G	-	-	2799	8397	22.1	83.1	110.7	166.1	0.875	0.779	0.049	0.42
	16G	2741	8238	3741	11211	20.3	76.3	101.7	152.5	0.875	0.746	0.065	0.56
	14G	3422	10268	4655	13967	18.7	70.0	93.3	139.9	0.875	0.715	0.083	0.68
	12G	-	-	6352	19057	15.8	59.1	78.8	118.1	0.875	0.657	0.109	0.89
1"	18G	1798	5395	2451	7353	29.8	111.8	149.1	223.6	1"	0.903	0.049	0.49
	16G	2407	7208	3277	9819	27.7	103.9	138.6	207.9	1"	0.871	0.065	0.96
	14G	2987	8977	4075	12226	25.8	96.6	128.8	193.1	1"	0.840	0.083	0.79
	12G	4090	7034	5554	16679	22.3	83.6	111.5	167.3	1"	0.781	0.109	1.04
	10G	4800	14387	-	-	20.2	75.8	101.0	151.5	1"	0.744	0.134	1.19
1.1/4"	14G	2393	7193	3263	9775	43.4	162.6	216.8	325.2	1.25	1.090	0.083	1.00
	12G	3263	9804	4452	13343	38.8	145.7	194.2	291.4	1.25	1.031	0.109	1.33
	10G	3829	11501	5221	15664	36.1	135.2	180.3	270.4	1.25	0.994	0.134	1.53
1.1/2"	14G	-	-	2712	8151	65.5	245.7	327.6	491.4	1.50	1.340	0.083	3.99
	12G	2726	8165	3712	11124	60.0	224.8	299.8	449.6	1.50	1.281	0.109	1.62
	10G	3190	9586	4351	13053	56.5	211.8	282.3	423.5	1.50	1.244	0.134	1.87
2"	12G	2045	6135	-	-	115.8	434.4	579.2	868.8	2"	1.781	0.109	2.20
	10G	2393	7193	-	-	111.0	416.2	554.9	832.3	2"	1.744	0.134	2.56
	7G	3292	9891	-	-	99.1	371.6	495.5	743.2	2"	1.648	0.180	3.43

### \* Safety Factor

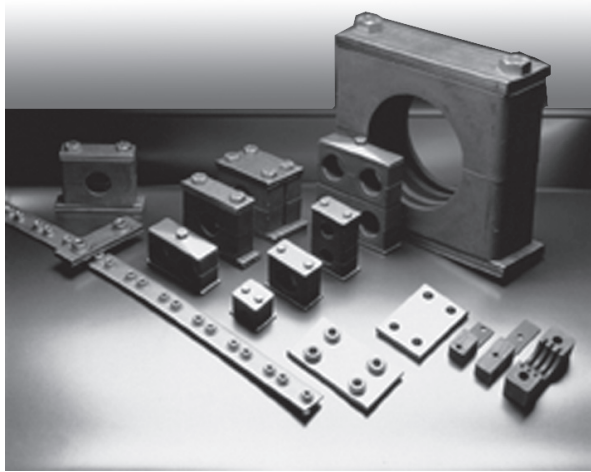
It's recommended that hydraulic systems subjected to shock loads incorporate a 6:1 factor of safety. Use of a lower factor can be contemplated after due consideration of the system operating parameters.







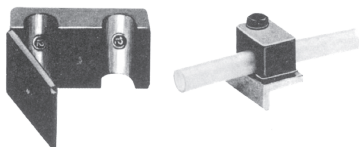
# TUBE CLAMPS



PIRTEK offers a comprehensive and diversified range designed to meet the practical mounting needs of single or multiple tubes and pipes.

Materials used in the manufacture of the supports should be chosen according to the application, from a range that includes polypropylene for temperatures up to 194°F and aluminium for operating temperatures up to 752°F.

Top and base mounting plates are available in galvanized and CR6-free plated mild steel to maximize corrosion resistance. Steel components can be supplied as AISI 316L stainless steel on request.



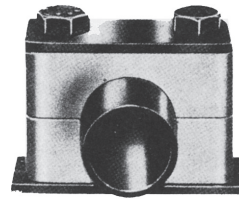
## LIGHTWEIGHT SERIES

In polypropylene (PP) for the sizes shown.

Recommended for the fixing of tubes in pneumatic plants. The clamp can be supplied in either single or double styles, and is available for differing tube diameters within the same clamp.

Low fittings costs, together with the wide range of clamping combinations, make these lightweight supports an essential element of all industrial installations.

- Standard • PP from 3/8" to 1/2"
- Metric • PP from 4 to 25.4 mm
- Gas • PP from 1/8" to 1/2"



## "CC" OR STANDARD SERIES:

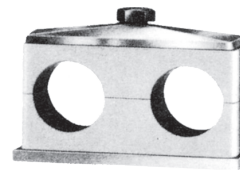
In polypropylene (PP) or aluminium (AL) in a range of sizes and mounting systems:

- weldable plate • elongated plate • double plate • multiple plate
- mounting rail • stacked with upper plate.

This series is recommended for oil-hydraulic installations up to 2900 PSI

Clamp shells with vibration dampening rubber inserts are available on request

- Metric • PP from 6 to 102 mm • AL from 6 to 102 mm
- Gas • PP from 1/8" to 3.1/2" • AL from 1/8" to 1.1/2"
- Standard • PP from 1/4" to 4" • AL from 1/4" to 2"



## "CF" OR STANDARD TWIN SERIES:

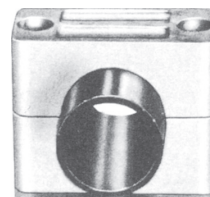
In polypropylene for pipe pairs.

It is recommended that only equally sized pipes be mounted in twin clamps. However, on request, clamps for 2 pipes of different diameter can be supplied. Again, various mounting systems are possible.

- weldable plate • elongated plate • double plate • multiple plate
- mounting rail • stacked with upper plate.

The twin series is recommended for oil-hydraulic installations up to 2900 psi.

- Standard • PP from 1/4" to 1-1/2"
- Metric • PP from 6 to 42.4 mm
- Gas • PP from 1/8" to 1-1/4"



## "CP" and "CH" HEAVYWEIGHT SERIES:

In polypropylene (CP) or aluminium (CH) in a range of sizes.

Recommended for complex systems, for high pressures and considerable oil velocities. Upper plates are supplied in this series. High hexagon head bolts VACP are used in stacked mounting configurations. Clamp shells with vibration dampening rubber inserts are available on request.

A rail mounting option applies only in Size Groups 1-4 ( jaw diameters from 12.7 mm to 63 mm)

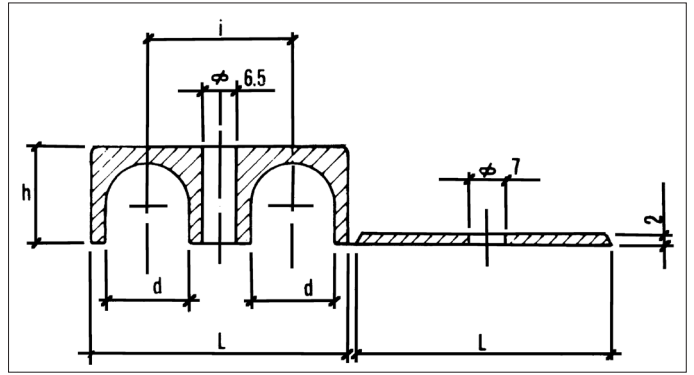
Double width welded base plates available up to Size Group 5 (88 mm tube)

- Standard • CP from 1/4" to 8" • CH from 1/4" to 8"
- Metric • CP from 6 to 324 mm • CH from 6 to 324 mm
- Gas • CP from 1/8" to 12" • CH from 1/8" to 12"

# CCA

Lightweight Twin Tube Support for Pneumatic Systems

Material: Polypropylene



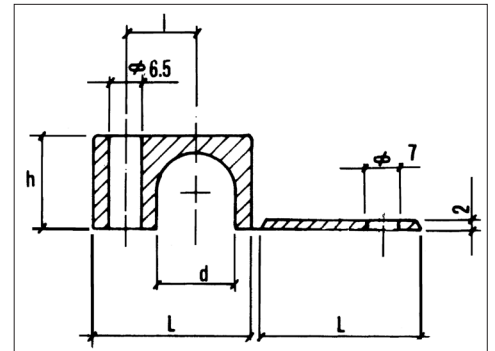
Product Code	Dimension (mm)						
	Ø Tube d	Ø Tube d	h	L	i	Ø Hole	Width
CCA-04	4	4	10.5	31	18	6.5	12.8
CCA-06	6	6	10.5	31	18	6.5	12.8
CCA-08	8	8	10.5	31	18	6.5	12.8
CCA-10	10	10	15	39	22	6.5	16
CCA-12	12	12	15	39	22	6.5	16
CCA-15	15	15	22.5	53	30	6.5	20

Other sizes on request

# CCB

Lightweight Single Tube Support for Pneumatic Systems

Material: Polypropylene



Product Code	Dimension (mm)					
	Ø Tube d	h	L	i	Ø Hole	Width
CCB-04	4	10.5	22	9	6.5	12.8
CCB-06	6	10.5	22	9	6.5	12.8
CCB-08	8	10.5	22	9	6.5	12.8
CCB-10	10	15	27	11	6.5	16
CCB-12	12	15	27	11	6.5	16
CCB-15	15	22.5	34	15	6.5	20

Other sizes on request

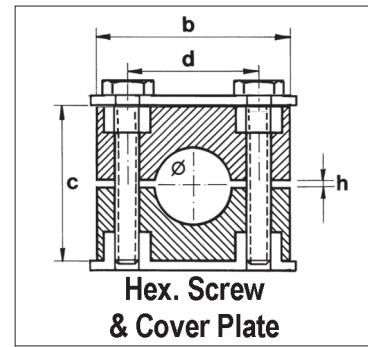


# CCx

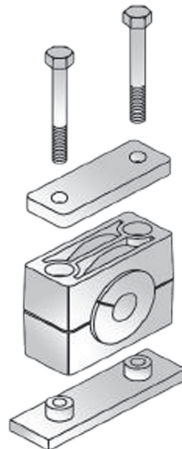
## Standard Tube Support Weld Plate & Cover Plate Configurations

Material: Polypropylene

The cover plate can be substituted by 2 CC-B bushes in conjunction with 2 hex screws.



Clamp Jaws Product Code	Product Codes and Dimensions (mm)									
	Ø Tube	b	c	d	h	Width	Weld Plate	Cover Plate	Hex. Screw (2 needed)	Bushing (2 needed in lieu of cover plate)
CC2-06	6	37	28	20	0.6	30	CC2-01 41 x 30 x 3 Nut 7.5 high	CC2-02 35 x 30 x 3	CC2-03 M6 x 30	CC-B bush 11.5 OD x 6.5 ID x 8 Thick
CC2-07	6.35	37	28	20	0.6	30				
CC2-08	8	37	28	20	0.6	30				
CC2-09	9.52	37	28	20	0.6	30				
CC2-10	10	37	28	20	0.6	30				
CC2-12	12	37	28	20	0.6	30				
CC2-13	12.7	37	28	20	0.6	30	CC3-01 47 x 30 x 3 Nut 7.5 high	CC3-02 41 x 30 x 3	CC3-03 M6 x 35	
CC3-14	14	43	33	26	0.8	30				
CC3-15	15	43	33	26	0.8	30				
CC3-16	16	43	33	26	0.8	30	CC4-01 54 x 30 x 3 Nut 7.5 high	CC4-02 48 x 30 x 3	CC4-03 M6 x 40	
CC3-18	18	43	33	26	0.8	30				
CC4-19	19.05	50	36	33	0.8	30				
CC4-20	20	50	36	33	0.8	30	CC5-01 61 x 30 x 3 Nut 7.5 high	CC5-02 56 x 30 x 3	CC5-03 M6 x 45	
CC4-21.3	21.3	50	36	33	0.8	30				
CC4-22	22	50	36	33	0.8	30				
CC4-25	25	50	36	33	0.8	30				
CC4-25.4	25.4	50	36	33	0.8	30	CC6-01 73 x 30 x 3 Nut 7.5 high	CC6-02 69.5 x 30 x 3	CC6-03 M6 x 60	
CC5-27	26.9	57	44	40	1	30				
CC5-28	28	57	44	40	1	30				
CC5-29	29	57	44	40	1	30	CC7-01 88 x 30 x 3 Nut 7.5 high	CC7-02 85.5 x 30 x 3	CC7-03 M6 x 70	
CC5-30	30	57	44	40	1	30				
CC5-32	31.75	57	44	40	1	30	CC8-01 122 x 30 x 5	CC8-02 118 x 30 x 5	CC8-03 M6 x 100	
CC6-34	33.7	69.5	57	52	1	30				
CC6-35	35	69.5	57	52	1	30	CC7-01 88 x 30 x 3 Nut 7.5 high	CC7-02 85.5 x 30 x 3	CC7-03 M6 x 70	
CC6-38	38	69.5	57	52	1	30				
CC6-42	42	69.5	57	52	1	30	CC8-01 122 x 30 x 5	CC8-02 118 x 30 x 5	CC8-03 M6 x 100	
CC7-48	48.25	86	66	66	1.4	30				
CC7-50	50.8	86	66	66	1.4	30	CC8-01 122 x 30 x 5	CC8-02 118 x 30 x 5	CC8-03 M6 x 100	
CC8-63.5	63.5	120	92	94	1.4	30				



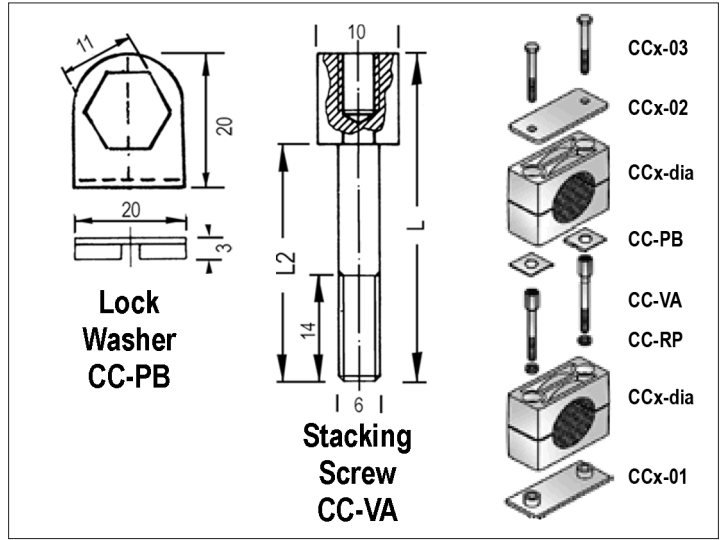
Please enquire about our range of clamp shells with vibration dampening rubber inserts Available in the CCx Series to a maximum tube size of 48.3mm for medium duty applications. Available as a special order only.

# CCx

Standard Tube Support  
Stacked Configuration \*

Material: Polypropylene

\* Please note that the arrangement of hex screws with cover plate CCx-02 as illustrated can be substituted with hex screws and bushes CC-B

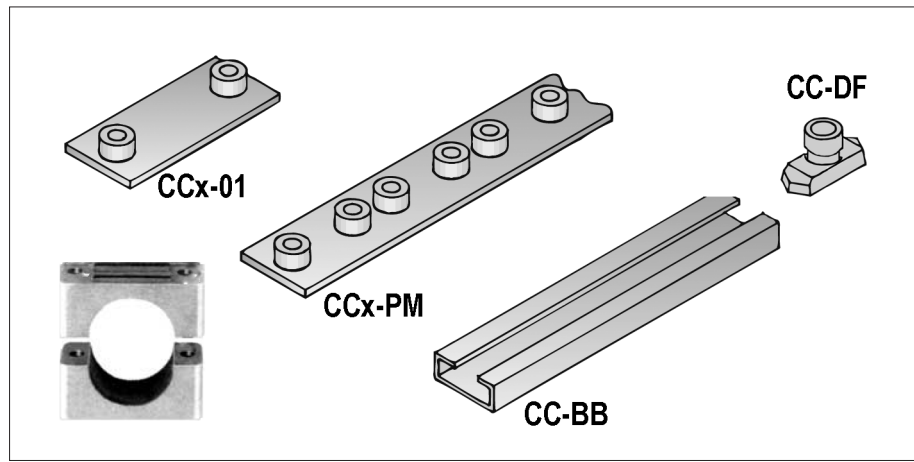


Clamp Jaws Product Code	Product Codes and Dimensions mm						
	Ø Tube	Weld Plate	Cover Plate	Hex. Screw	Stacking Screw	Flat Washer (2 needed)	Lock Washer (2 needed)
CC2-07	6.35	CC2-01 41 x 30 x 3 Nut 7.5 high	CC2-02 35 x 30 x 3	CC2-03 M6 x 30	CC2-VA M6 x 21 L = 35 L2 = 21	CC-RP 11.5 x 6.3 Round 1.5 thick	CC-PB 20 x 20 with 11 mm AF Hex. Hole
CC2-08	8						
CC2-09	9.52						
CC2-10	10						
CC2-12	12						
CC2-13	12.7						
CC3-14	14	CC3-01 47 x 30 x 3 Nut 7.5 high	CC3-02 41 x 30 x 3	CC3-03 M6 x 35	CC3-VA M6 x 27 L = 41 L2 = 27		
CC3-15	15						
CC3-16	16						
CC3-17.2	17.2						
CC3-18	18						
CC4-19	19.05	CC4-01 54 x 30 x 3 Nut 7.5 high	CC4-02 48 x 30 x 3	CC4-03 M6 x 40	CC4-VA M6 x 29 L = 43 L2 = 29		
CC4-20	20						
CC4-22	22						
CC4-25	25						
CC5-27	26.9	CC5-01 61 x 30 x 3 Nut 7.5 high	CC5-02 56 x 30 x 3	CC5-03 M6 x 45	CC5-VA M6 x 39 L = 53 L2 = 39		
CC5-28	28						
CC5-30	30						
CC5-32	31.75						
CC6-34	33.7	CC6-01 73 x 30 x 3 Nut 7.5 high	CC6-02 69.5 x 30 x 3	CC6-03 M6 x 60	CC6-VA M6 x 49 L = 63 L2 = 49		
CC6-35	35						
CC6-38	38						
CC6-42	42						
CC7-48	48.25	CC7-01 88 x 30 x 3 Nut 7.5 high	CC7-02 85.5 x 30 x 3	CC7-03 M6 x 70	CC7-VA M6 x 59 L=73 L2=59		
CC7-50	50.8						

**\*\*NEW\*\* - NOW AVAILABLE - STAINLESS STEEL HARDWARE FOR STANDARD SERIES SINGLE CLAMPS and TWIN CLAMPS - WELD PLATES, COVER PLATES, SCREWS & STACKING SCREWS AISI 316L GRADE. See Page E21**

# CCx

## Standard Tube Support Bottom Mount Options

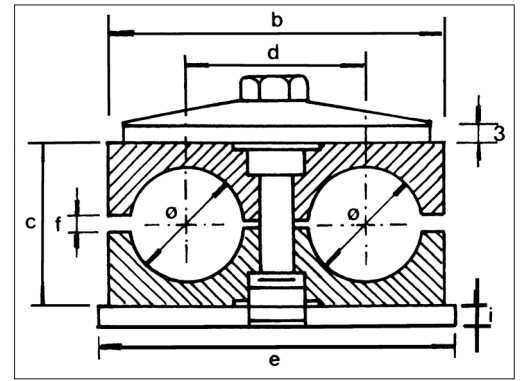


Clamp Jaws Product Code	Product Codes and Dimensions (mm)								
	Ø Tube	Width	Single Weld Plate	Multiple Weld Plate			Rail Mount (fully variable)		
				Details	Max. No. of Clamps	Clamp Spacings	Mounting Nut	O Ring	Rail
CC2-07	6.35	30	CC2-01 41 x 30 x 3 Nut 7.5 high	CC2-PM 384 x 30 x 4 Nut 6.5 high	10	39			
CC2-08	8	30							
CC2-09	9.52	30							
CC2-10	10	30							
CC2-12	12	30							
CC2-13	12.7	30							
CC3-14	14	30	CC3-01 47 x 30 x 3 Nut 7.5 high	CC3-PM 443 x 30 x 4 Nut 6.5 high	10	45			
CC3-15	15	30							
CC3-16	16	30							
CC3-17.2	17.2	30							
CC3-18	18	30							
CC4-19	19.05	30							
CC4-20	20	30							
CC4-22	22	30							
CC4-25	25	30							
CC5-27	26.9	30	CC5-01 61 x 30 x 3 Nut 7.5 high	CC5-PM 301x 30 x 4 Nut 6.5 high	5	59			
CC5-28	28	30							
CC5-30	30	30							
CC5-32	31.75	30							
CC6-34	33.7	30	CC6-01 73 x 30 x 3 Nut 7.5 high	CC6-PM 373 x 30 x 4 Nut 6.5 high	5	72			
CC6-35	35	30							
CC6-38	38	30							
CC6-42	42	30							
CC7-48	48.25	30	CC7-01 88 x 30 x 3 Nut 7.6 high	CC7-PM 447 x 30 x 4 Nut 6.5 high	5	86			
CC7-50	50.8	30							

# CFx

## Twin Tube Support Weld Plate & Top Plate Configuration

Material: Polypropylene



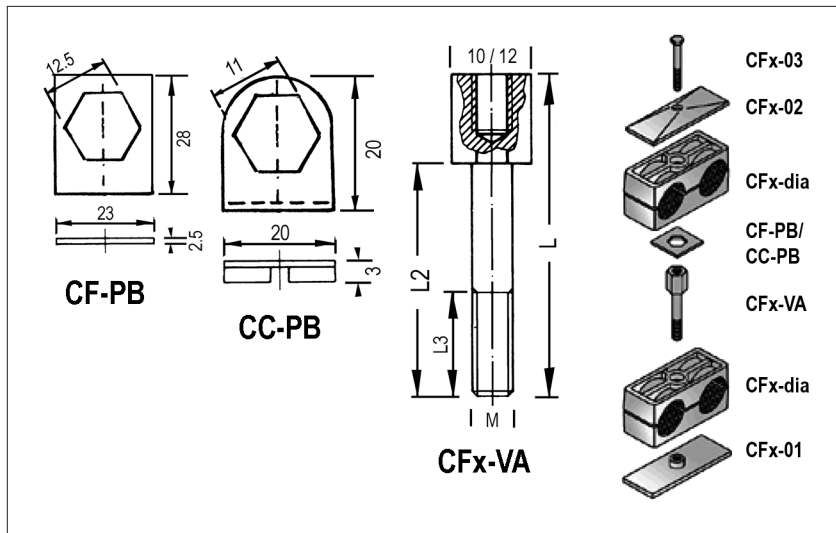
Clamp Jaws Product Code	Product Codes and Dimensions (mm)								
	Ø Tube	b	c	d	f	Width	Weld Plate	Top Plate	Hex. Screw
CF1-07	6.35	36	27	20	0.6	30	CF1-01 37 x 30 x 4 Nut 6.5 high	CF1-02 33.5 x 30 x 7 Hole Ø 7mm	CF1-03 M6 x 35
CF1-08	8	36	27	20	0.6	30			
CF1-09	9.52	36	27	20	0.6	30			
CF1-10	10	36	27	20	0.6	30			
CF1-12	12	36	27	20	0.6	30			
CF1-13	12.7	36	27	20	0.6	30			
CF2-13	12.7	54	27	29	0.8	30	CF2-01 55 x 30 x 4 Nut 6.5 high	CF2-02 50 x 30 x 7 Hole Ø 9 mm	CF2-03 M8 x 35
CF2-13.5	13.5	54	27	29	0.8	30			
CF2-14	14	54	27	29	0.8	30			
CF2-15	15	54	27	29	0.8	30			
CF2-16	16	54	27	29	0.8	30			
CF2-17.2	17.2	54	27	29	0.8	30			
CF2-18	18	54	27	29	0.8	30	CF3-01 70 x 30 x 4 Nut 6.5 high	CF3-02 64 x 30 x 7 Hole Ø 9 mm	CF3-03 M8 x 45
CF3-19	19.05	67	37	36	1	30			
CF3-20	20	67	37	36	1	30			
CF3-21.3	21.3	67	37	36	1	30			
CF3-22	22	67	37	36	1	30	CF4-01 85 x 30 x 4 Nut 6.5 high	CF4-02 79 x 30 x 7 Hole Ø 9 mm	CF4-03 M8 x 50
CF3-25	25	67	37	36	1	30			
CF4-26.9	26.9	81	42	45	1	30			
CF4-28	28	81	42	45	1	30	CF5-01 110 x 30 x 3 Nut 6.5 high	CF5-02 103 x 30 x 7	CF5-03 M8 x 65
CF4-30	30	81	42	45	1	30			
CF5-32	31.75	106	53	56	1.2	30			
CF5-38	38	106	53	56	1.2	30			
CF5-42	42	106	53	56	1.2	30			

**\*\*NEW\*\* - NOW AVAILABLE - STAINLESS STEEL HARDWARE FOR STANDARD SERIES SINGLE CLAMPS and TWIN CLAMPS - WELD PLATES, COVER PLATES, SCREWS & STACKING SCREWS AISI 316L GRADE. See Page D21**

# CFx

## Twin Tube Support Stacked Configuration

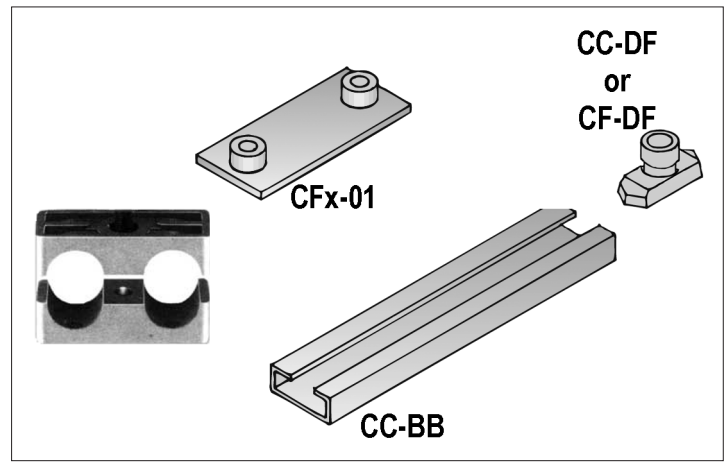
Material: Polypropylene



Twin PP Jaws Product Code	Product Codes and Dimensions (mm)					
	Ø Tube	Twin Weld Plate	Cover Plate	Hex. Screw	Stacking Screw	Lock Washer
CF1-07	6.35	CF1-01 37 x 30 x 4 Nut 6.5 high	CF1-02 33.5 x 30 x 7 Hole Ø 7mm	CF1-03 M6 x 35	CF1-VA M6 x 21 L = 35 L2 = 21 L3 = 14	CC-PB 20 x 20 with 11 mm AF Hex. Hole
CF1-08	8					
CF1-09	9.52					
CF1-10	10					
CF1-12	12					
CF1-13	12.7	CF2-01 55 x 30 x 4 Nut 6.5 high	CF2-02 50 x 30 x 7 Hole Ø 9 mm	CF2-03 M8 x 35	CF2-VA M8 x 19.5 L = 30.5 L2 = 19.5 L3 = 15.0	CF-PB 28 x 23 with 12.5 mm AF Hex Hole
CF2-13	12.7					
CF2-13.5	13.5					
CF2-14	14					
CF2-15	15					
CF2-16	16	CF3-01 70 x 30 x 4 Nut 6.5 high	CF3-02 64 x 30 x 7 Hole Ø 9 mm	CF3-03 M8 x 45	CF3-VA M8 x 29 L = 44.5 L2 = 29.0 L3 = 15.0	CF-PB 28 x 23 with 12.5 mm AF Hex Hole
CF2-17.2	17.2					
CF2-18	18					
CF3-19	19.05					
CF3-20	20					
CF3-21.3	21.3	CF4-01 85 x 30 x 4 Nut 6.5 high	CF4-02 79 x 30 x 7 Hole Ø 9 mm	CF4-03 M8 x 50	CF4-VA M8 x 33 L = 48.5 L2 = 39.0 L3 = 15.0	CF-PB 28 x 23 with 12.5 mm AF Hex Hole
CF3-22	22					
CF3-25	25					
CF4-28	28					
CF4-30	30					
CF5-32	33.7	CF5-01 110 x 30 x 3 Nut 6.5 high	CF5-02 103 x 30 x 7 Hole Ø 9 mm	CF5-03 M8 x 65	CF5-VA M8 x 45 L = 60.5 L2 = 45.0 L3 = 15.0	CF-PB 28 x 23 with 12.5 mm AF Hex Hole
CF5-38	35					
CF5-42	38					

# CFx

Twin Tube Support  
Bottom Mount Options

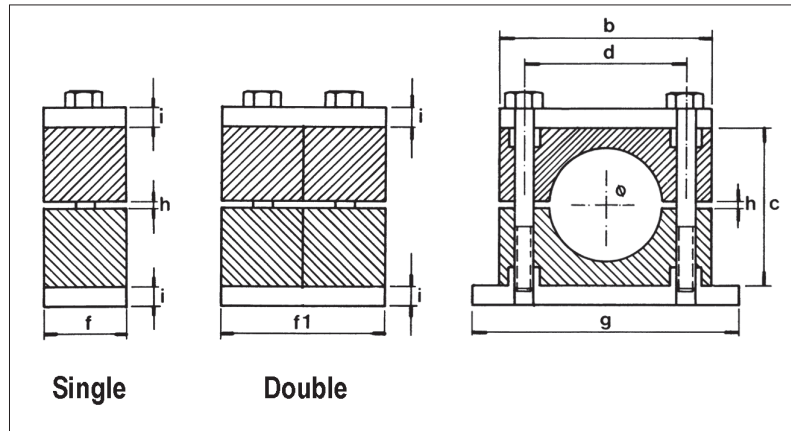


Twin PP Jaws Product Code	Product Codes and Dimensions (mm)							
	Ø Tube	Jaw Width	Weld Plate			Rail Mount (fully variable)		
			Twin Weld Plate	Cover Plate	Hex. Screw	Mounting Nut	O Ring	Rail
CF1-07	6.35	30	CF1-01 37 x 30 x 4 Nut 6.5 high	CF1-02 33.5 x 30 x 7 Hole Ø 7mm	CF1-03 M6 x 35	CF-DF Rhombus with 6 mm Nut	CC-AG O Ring NBR 70 15 OD x 10 ID	CC-BB Channel 28 x 14 2 mm thick 2 meter long
CF1-08	8	30						
CF1-09	9.52	30						
CF1-10	10	30						
CF1-12	12	30						
CF1-13	12.7	30						
CF2-13	12.7	30						
CF2-14	14	30	CF2-01 55 x 30 x 4 Nut 6.5 high	CF2-02 50 x 30 x 7 Hole Ø 9 mm	CF2-03 M8 x 35	CF-DF Rhombus with 8 mm Nut	CC-AG O Ring NBR 70 15 OD x 10 ID	
CF2-15	15	30						
CF2-16	16	30						
CF2-18	18	30						
CF3-19	19.05	30	CF3-01 70 x 30 x 4 Nut 6.5 high	CF3-02 64 x 30 x 7 Hole Ø 9 mm	CF3-03 M8 x 45	CF-DF Rhombus with 8 mm Nut	CC-AG O Ring NBR 70 15 OD x 10 ID	
CF3-20	20	30						
CF3-22	22	30						
CF3-25	25	30						
CF4-28	28	30	CF4-01 85 x 30 x 4 Nut 6.5 high	CF4-02 79 x 30 x 7 Hole Ø 9 mm	CF4-03 M8 x 50	CF-DF Rhombus with 8 mm Nut	CC-AG O Ring NBR 70 15 OD x 10 ID	
CF4-30	30	30						
CF5-32	31.75	30	CF5-01 110 x 30 x 3 Nut 6.5 high	CF5-02 103 x 30 x 7 Hole Ø 9 mm	CF5-03 M8 x 65	CF-DF Rhombus with 8 mm Nut	CC-AG O Ring NBR 70 15 OD x 10 ID	
CF5-38	38	30						
CF5-42	42	30						

# CPx

## Heavy Tube Support Weld Plate & Top Plate Configuration

Material: Polypropylene



Clamp Jaws Product Code	Dimensions (mm)									Weld Plate		Cover Plate		Hex. Screw
	Ø Tube	b	c	d	g	h	i	f	f1	Single	Double	Single	Double	
CP1-13	12.7	57	33	33	70	1	8	30	60	CP1-01	CP1-DP	CP1-02	CP1-DC	CP1-03 M10 x 45
CP1-16	16	57	33	33	70	1	8	30	60					
CP2-19	19.05	69	49	45	87	1	8	30	60					
CP2-20	20	69	49	45	87	1	8	30	60	CP2-01	CP2-DP	CP2-02	CP2-DC	CP2-03 M10 x 60
CP2-21	21.25	69	49	45	87	1	8	30	60					
CP2-25	25	69	49	45	87	1	8	30	60					
CP2-26	26.75	69	49	45	87	1	8	30	60	CP3-01	CP3-DP	CP3-02	CP3-DC	CP3-03 M10 x 70
CP3-30	30	84	60	60	105	1.2	8	30	60					
CP3-32	31.75	84	60	60	105	1.2	8	30	60					
CP3-33	33.5	84	60	60	105	1.2	8	30	60					
CP3-36	36	84	60	60	105	1.2	8	30	60					
CP3-38	38	84	60	60	105	1.2	8	30	60					
CP3-42	42	84	60	60	105	1.2	8	30	60	CP4-01	CP4-DP	CP4-02	CP4-DC	CP4-03 M12 x 100
CP4-45	45	117	88	91	140	2	10	45	90					
CP4-48	48	117	88	91	140	2	10	45	90					
CP4-50	50.8	117	88	91	140	2	10	45	90					
CP4-53	53	117	88	91	140	2	10	45	90					
CP4-54	53.74	117	88	91	140	2	10	45	90					
CP4-56	56	117	88	91	140	2	10	45	90	CP5-01	CP5-DP	CP5-02	CP5-DC	CP5-03 M16 x 130
CP4-60	60	117	88	91	140	2	10	45	90					
CP4-63	63	117	88	91	140	2	10	45	90					
CP5-66	66	155	118	122	180	3	10	60	120					
CP5-73 †	73.0	155	118	122	180	3	10	60	120					
CP5-76 †	75.5	155	118	122	180	3	10	60	120					
CP5-80	80.0	155	118	122	180	3	10	60	120	CP6-01	not available	CP6-02	not available	CP6-03 M20 x 190
CP5-88	88.25	155	118	122	180	3	10	60	120					
CP6-101	101.2	205	165	168	226	3	15	80	160					
CP6-114	113.5	205	165	168	226	3	15	80	160	CP7-01	not available	CP7-02	not available	CP7-03 M20 x 220
CP6-127	126.5	205	165	168	226	3	15	80	160					
CP7-139	139	245	200	205	270	4	15	80	160					
CP7-152	152	245	200	205	270	4	15	80	160	CP8-01	not available	CP8-02	not available	CP8-03 M30 x 300
CP7-168	168	245	200	205	270	4	15	80	160					
CP8-203	203	320	270	265	340	4	25	120	240					
CP8-219	219	320	270	265	340	4	25	120	240	CP9-01	not available	CP9-02	not available	CP9-03 M30 x 450
CP9-219	219	470	410	395	520	10	30	160	320					

† 2 1/2" NB can be either 73mm OD for ANSI / ASME B36.10M pipe or 76mm OD if DIN 2248 pipe is used

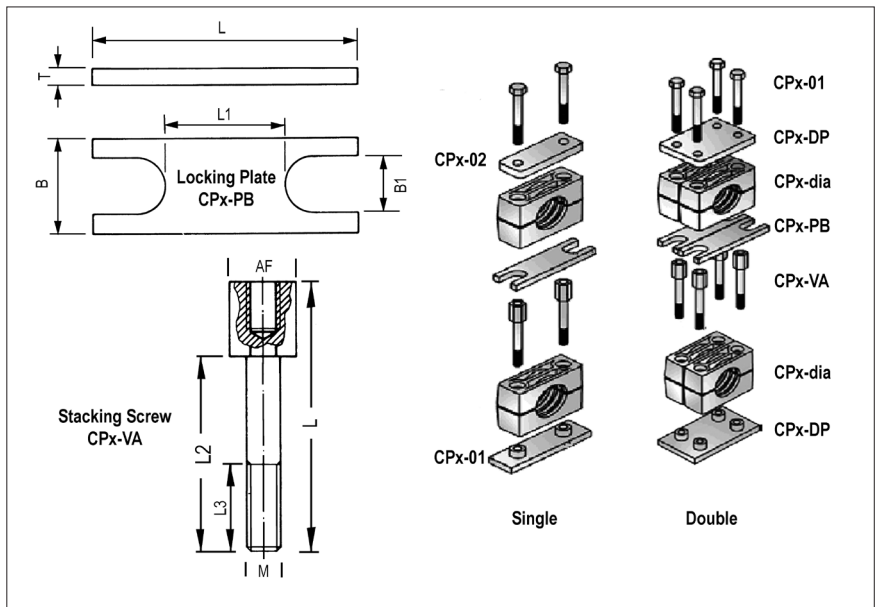


Please enquire about our range of clamp shells with vibration dampening rubber inserts Available in the CPx Series to a maximum tube size of 103mm for heavy duty applications Available as a special order only

# CPx

## Heavy Tube Support Stacked Configuration (Single or Double)

Material: Polypropylene



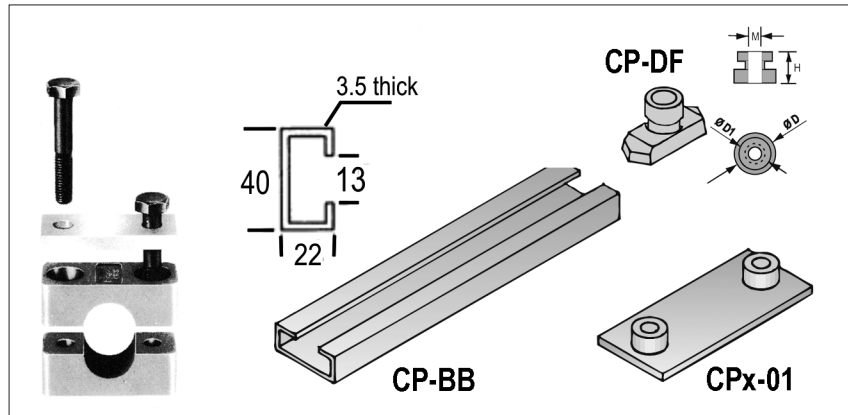
Clamp Jaws Product Code	Product Codes and Dimensions (mm)								
	Ø Tube	Jaw Width	Weld Plate		Cover Plate		Screws		Locking Plate
			Single	Double	Single	Double	Hex.	Stacking	
CP1-13	12.7	30	CP1-01	CP1-DP	CP1-02	CP1-DC	CP1-03 M10 x 45	CP1-VA M10 x 49 L = 49 L2 = 28 L3 = 20 AF = 15	CP1-PB L = 55 L1 = 11 B = 30 B1 = 16 T = 6
CP1-16	16	30							
CP2-19	19.05	30	CP2-01	CP2-DP	CP2-02	CP2-DC	CP2-03 M10 x 60	CP2-VA M10 x 65 L = 65 L2 = 42 L3 = 20 AF = 15	CP2-PB L = 69 L1 = 25 B = 30 B1 = 16 T = 6
CP2-20	20	30							
CP2-21	21.25	30							
CP2-25	25	30							
CP2-26	26.75	30							
CP3-30	30	30	CP3-01	CP3-DP	CP3-02	CP3-DC	CP3-03 M10 x 70	CP3-VA M10 x 75 L = 75 L2 = 52 L3 = 20 AF = 15	CP3-PB L = 83 L1 = 39 B = 30 B1 = 16 T = 6
CP3-32	31.75	30							
CP3-33	33.5	30							
CP3-38	38	30							
CP3-42	42	30							
CP4-45	45	45	CP4-01	CP4-DP	CP4-02	CP4-DC	CP4-03 M12 x 100	CP4-VA M12 x 108 L = 108 L2 = 78 L3 = 25 AF = 17	CP4-PB L = 114 L1 = 66 B = 45 B1 = 18 T = 6
CP4-48	48	45							
CP4-50	50.8	45							
CP4-54	53.74	45							
CP4-60	60	45							
CP4-63	63	45							
CP5-66	66	60	CP5-01	CP5-DP	CP5-02	CP5-DC	CP5-03 M16 x 130	CP5-VA M16 x 139 L = 139 L2 = 105 L3 = 25 AF = 21	CP5-PB L = 148 L1 = 95 B = 60 B1 = 22 T = 6
CP5-73 †	73.0	60							
CP5-76 †	75.5	60							
CP5-88	88.25	60							

† 2 1/2" NB can be either 73mm OD for ANSI / ASME B36.10M pipe or 76mm OD if DIN 2248 pipe is used



# CPx

## Heavy Tube Support Bottom Mount Options



Clamp Jaws Product Code	Product Codes and Dimensions (mm)							
	Ø Tube	Jaw Width	Weld Plate	Cover Plate	Hex Screws	Rail Mount (fully variable)		
						Mounting Nut	O Ring	Rail
CP1-13	12.7	30	CP1-01	CP1-02	CP1-03 M10 x 45	CP-DF10 (2 req'd per clamp) M = M10 D = 26 D1 = 17.7 H = 20.5	CP-AG O Ring NBR 70 20.24 OD x 15 ID (2 req'd per clamp)	CP-BB Channel 40 x 22 3.5 mm thick 2 meter long
CP1-16	16	30						
CP2-19	19.05	30	CP2-01	CP2-02	CP2-03 M10 x 60			
CP2-20	20	30						
CP2-21	21.25	30						
CP2-25	25	30						
CP2-26	26.75	30						
CP3-30	30	30	CP3-01	CP3-02	CP3-03 M10 x 70			
CP3-32	31.75	30						
CP3-33	33.5	30						
CP3-38	38	30						
CP3-42	42	30						
CP3-45	45	45				CP4-01	CP4-02	CP4-03 M12 x 100
CP4-48	48	45						
CP4-50	50.8	45						
CP4-54	53.74	45						
CP4-60	60	45						
CP4-63	63	45						
CP4-66	66	60	CP5-01	CP5-02	CP5-03 M16 x 130			
CP5-73 †	73.0	60						
CP5-76 †	75.5	60						
CP5-88	88.25	60						
CP6-101	101.2	80				CP6-01	CP6-02	CP6-03 M20 x 190
CP6-114	113.5	80						
CP6-127	126.5	80						
CP7-139	139	80	CP7-01	CP7-02	CP7-03 M20 x 220			
CP7-152	152	80						
CP7-168	168	80						
CP8-203	203	120	CP8-01	CP8-02	CP8-03 M30 x 300			
CP8-219	219	120						
CP9-219	219	160	CP9-01	CP9-02	CP9-03 M30 x 450	Rail Mounting not available in these sizes		

† 2 1/2" NB can be either 73mm OD for ANSI / ASME B36.10M pipe or 76mm OD if DIN 2248 pipe is used

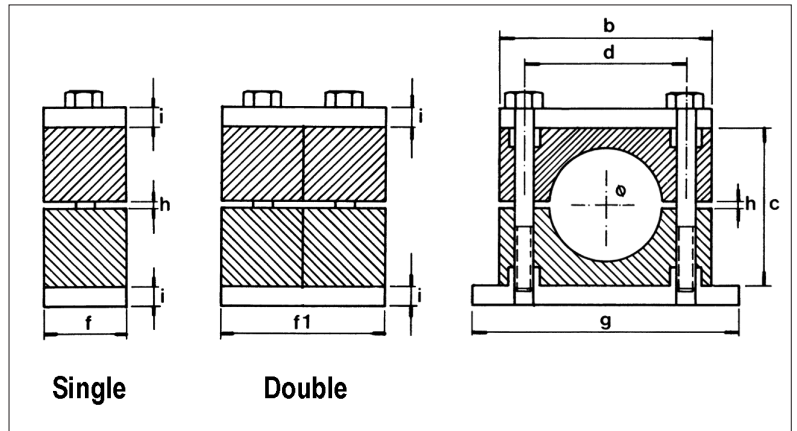
# CHx

## Heavy Tube Support Weld Plate & Top Plate Configuration

Material: Aluminium Jaws

### PLEASE NOTE:

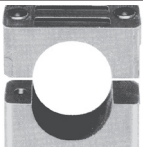






All mounting configurations (weld plate, rail, and stack configurations) are for heavy duty polypropylene PP clamps, but limited to the tube sizes given below



Aluminium Jaws Product Code	Dimensions (mm)									Weld Plate		Cover Plate		Hex. Screw
	Ø Tube	b	c	d	g	h	i	f	f1	Single	Double	Single	Double	
CH2-20	20	69	49	45	87	1	8	30	60	CP2-01	CP2-DP	CP2-02	CP2-DC	CP2-03 M10 x 60
CH2-25	25	69	49	45	87	1	8	30	60					
CH3-32	31.75	84	60	60	105	1.2	8	30	60	CP3-01	CP3-DP	CP3-02	CP3-DC	CP3-03 M10 x 70
CH3-38	38	84	60	60	105	1.2	8	30	60					
CH3-42	42	84	60	60	105	1.2	8	30	60					

# TECHNICAL

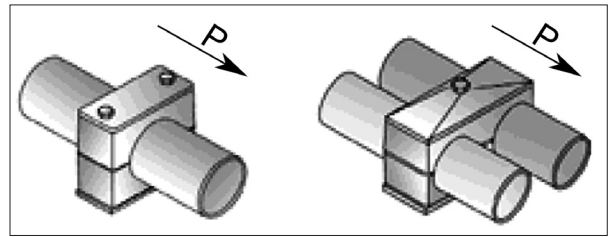
## Material Specifications of Components

Component	Appearance	Product Code	Material	Composition	Applicable Standard	Corrosion Prevention
Clamps Light		CCA, CCB	Polypropylene	-	-	-
Clamp Jaws		CC2 - CC7 (Std.) CF1 - CF5 (Twin) CP1 - CP9 (Hvy.)	Polypropylene	Vibration dampening polypropylene shells with NBR70 rubber inserts are available in the CCx and CPx Series		
Clamp Jaws		CH2 - CH3 (Alum)	Aluminium	-	-	-
Bottom Weld Plate Standard		CC2-01 to CC7-01	Steel	Fe P11	UNI EN 10111	CF6 Free
Bottom Weld Plate Heavy		CP2-01 to CP9-01 CP2-DP to CP9-DP	Steel	Fe 430 B	UNI EN 10025	CF6 Free
Cover Plate Standard		CC2-02 to CC7-02	Steel	Fe P11	UNI EN 10111	CF6 Free
Cover Plate Heavy		CP1-02 to CP9-02 CP1-DC to CP9-DC	Steel	Fe 430 B	UNI EN 10025	CF6 Free
Mounting Rail Standard		CC - BB	Steel	Fe 360	UNI EN 10025	Galvanised Sendizimir
Mounting Rail Heavy		CP - BB	Steel	Fe P11	UNI EN 10111	CF6 Free
Mounting Nuts Standard		CC - DF CC - DF	Pressure die-cast alloy Zinc	Gp-ZN AL4 Cu1	UNI 3718	-
Mounting Nuts Heavy		CP - DF10 CP - DF12	Steel AVP	-	UNI EN 10277-3	CF6 Free
O-Rings		CC - AG CP - AG	Rubber	NBR 70	UNI ISO 3601-1	-
Locking Plates Standard		CC - PB CF - PB	Steel	Fe P11	UNI EN 10111	CF6 Free
Locking Plates Heavy		CP1 - PB to CP5 - PB	Steel	Fe 430 B	UNI EN 10025	CF6 Free
Hex. Screws		CC2-03 to CC7-03 CF1-03 to CF5-03	Steel	-	UNI 24014	-
Stacking Screws Standard		CC2-VA to CC7-VA CF1-VA to CF5-VA	Steel AVP	-	UNI EN 10277-3	CF6 Free
Stacking Screws Heavy		CP1-VA to CP5-VA	Steel AVP	-	UNI EN 10277-3	CF6 Free
Flat Washers Standard		CC - RP	Steel	-	UNI 6592	-
Bushings Standard		CC - B	Steel AVP	-	UNI EN 10277-3	CF6 Free

# TECHNICAL

## Clamp Shear Force Capability

The tabulated data applies for steel pipe St. 35.4.  
In each case, hex screws and cover plates have been used to maximize the load capability.

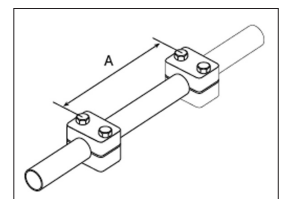


Sliding starts when the shear force 'P' is reached.

Clamp Series	Type	Jaw Material	Bolt	Tightening Torque	Max. Shear Force P in the direction of the pipe
				(Nm)	(kN)
CC2	Standard Single	Polypropylene	M6	8	1.2
CC3	Standard Single		M6	8	1.5
CC4	Standard Single		M6	8	1.7
CC5	Standard Single		M6	8	1.8
CC6	Standard Single		M6	8	2
CC7	Standard Single		M6	8	2.2
CF1	Standard Twin		Polypropylene	M6	6
CF2	Standard Twin	M8		13	2.5
CF3	Standard Twin	M8		13	2.1
CF4	Standard Twin	M8		13	2.9
CF5	Standard Twin	M8		9	2.2
CP1	Heavy Single	Polypropylene	M10	13	1.8
CP2	Heavy Single		M10	13	3
CP3	Heavy Single		M10	15	3.5
CP4	Heavy Single		M12	30	8.5
CP5	Heavy Single		M16	46	11.5
CP6	Heavy Single		M20	80	15
CP7	Heavy Single		M20	100	30
CP8	Heavy Single		M30	190	41
CP9	Heavy Single		M30	210	125
CH2	Heavy Single	Aluminium	M10	32	16
CH3	Heavy Single		M10	37	16.5

## Recommended Clamp Spacings

Tabulated data represents standard values for static loads.  
Clamps should always be applied at each side of a bend.



Clamp Series / Pipe OD (mm)	Clamp pitch A (m)
CC2 6 - 13.25	1
CC3 14 - 18	1.2
CC4 20 - 25.4	1.5
CC5 28 - 32	1.5
CC6 32 - 45	2.2
CC7 45 - 54	2.7

Clamp Series / Pipe OD (mm)	Clamp pitch A (m)
CP1 6 - 20	1.0
CP2 20 - 30	1.5
CP3 / CP4 30 - 50	2.2
CP4 / CP5 53 - 73	3
CP5 80 - 90	3.5
CP6 100 - 121	4.5
CP7 133 - 168	5
CP8 / CP9 168 - 219	6

**NEW** - STAINLESS STEEL HARDWARE FOR STANDARD SERIES SINGLE CLAMPS  
and TWIN CLAMPS - WELD PLATES, COVER PLATES, SCREWS & STACKING  
SCREWS - AISI 316L GRADE

Product Code	Description
CC2SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC2SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC2SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC2SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CC3SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC3SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC3SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC3SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CC4SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC4SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC4SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC4SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CC5SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC5SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC5SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC5SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CC6SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC6SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC6SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC6SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CF1SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF1SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF1SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF1SS-VA	T.C. STACKING SCREW - STAINLESS STEEL
CF2SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF2SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF2SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF2SS-VA	T.C. STACKING SCREW - STAINLESS STEEL
CF3SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF3SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF3SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF3SS-VA	T.C. STACKING SCREW - STAINLESS STEEL
CF4SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF4SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF4SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF4SS-VA	T.C. STACKING SCREW - STAINLESS STEEL
CF5SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF5SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF5SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF5SS-VA	T.C. STACKING SCREW - STAINLESS STEEL

S.D. = Standard Duty Single Clamp

T.C. = Twin Clamp - Standard Duty



This page is part of a complete catalog containing technical and safety data.  
All data must be reviewed when selecting a product.  
PIRTEK reserves the right to change technical specifications without notice.

<p>Cutting Rings</p>  <p>B3 D 31 B4</p>	<p>Tightening Nut</p>  <p>M D 30</p>	<p>Male Tapered Stud</p>  <p>GE-NPT D 31 -BSPT D 32</p>	<p>Male Tapered Stud</p>  <p>GE-Metric D 34</p>	<p>Male Parallel Stud Metal Seal</p>  <p>GE-BSPP D 33</p>	<p>Male Parallel Stud Elastomer Seal</p>  <p>GE-BSPP D 33</p>
<p>Male Parallel Stud O-Ring Seal</p>  <p>GE-UNO D 36</p>	<p>Male Parallel Stud Female Nut</p>  <p>EVGE-BSPP D 43 -Metric D 43</p>	<p>Straight Tube Coupling</p>  <p>G equal D 36 GV reducing D 37</p>	<p>Straight Equal Female Coupling</p>  <p>EDKO D 38</p>	<p>Female Stud Coupling</p>  <p>GAI-BSPP D 50</p>	<p>Male-Female Adapter</p>  <p>KOR D 45-46</p>
<p>Weld Nipple Male</p>  <p>AS D 40</p>	<p>Weld Nipple Female (Nut excluded)</p>  <p>SKA D 41</p>	<p>Reducing Bush BSPP Elast. Seal</p>  <p>RI D 42</p>	<p>Socket Head Plugs Elastomer Seal</p>  <p>VSTI Metric D 47 VSTIR BSPP D 47</p>	<p>Blanking Plug Metric</p>  <p>ROV D 49</p>	<p>Blanking Cap Metric (Nut excluded)</p>  <p>BUZ D 48</p>
<p>Bulkhead Coupling Straight</p>  <p>SV D 39</p>	<p>Bulkhead Coupling Elbow</p>  <p>WSV D 58</p>	<p>Male Stud Elbow</p>  <p>WE-NPT D 55 -BSPT D 56</p>	<p>Adjustable Female Elbow</p>  <p>EVW D 61</p>	<p>Banjo Coupling</p>  <p>DSVW BSPP D 59 Metric D 60</p>	<p>Male Elbow Coupling</p>  <p>W D 57</p>
<p>Male Stud Barrel Tee</p>  <p>LE-BSPT D 63</p>	<p>Male Stud Branch Tee</p>  <p>TE-BSPT D 62</p>	<p>Adjustable Barrel Tee</p>  <p>EVL D 65</p>	<p>Adjustable Branch Tee</p>  <p>EVT D 64</p>	<p>Equal Tee Coupling</p>  <p>T D 66</p>	<p>Equal Cross Coupling</p>  <p>K D 67</p>
<p>Gauge Coupling Male</p>  <p>MAV D 51</p>	<p>Gauge Coupling Female</p>  <p>MAVE D 51</p>	<p>Non Return Valve</p>  <p>NRV D 52</p>	<p>Lock Nut</p>  <p>GM D 54</p>	<p>Elastomeric Seal</p>  <p>EZ D 53 Viton</p>	<p>Adjustable Elbow 45°</p>  <p>EVF D 64</p>

**Standards**

PIRTEK metric compression fittings are manufactured by Cast S.p.A. to ISO 8434-1 / DIN 2353 Standards.

Two cutting rings are available for use with the fittings, both of which incorporate double cutting edges, but only one of which incorporates additional elastomeric seals to enhance sealing performance in adverse conditions (DB4 ring at right).

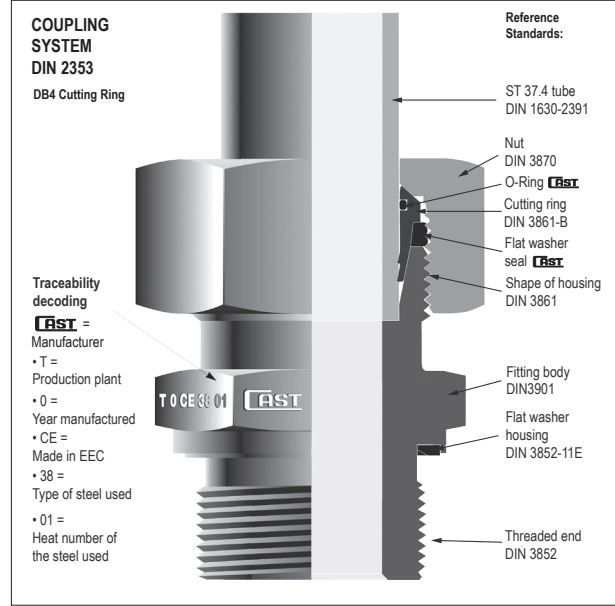
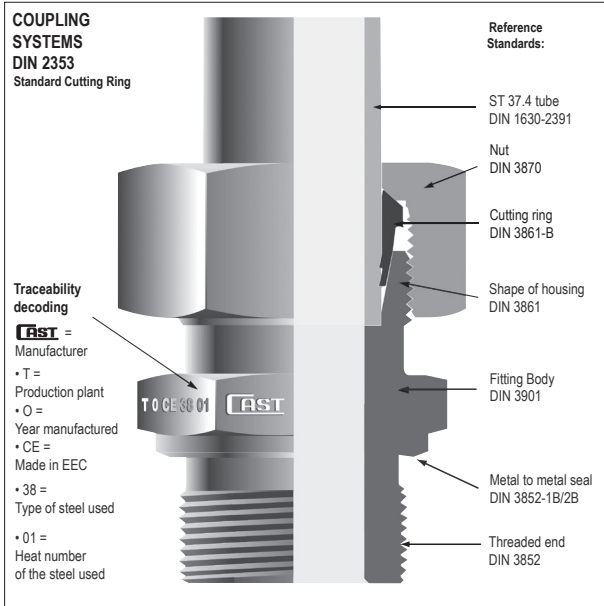


**Approvals**

All components are manufactured in a Quality Assured environment, and carry the following approvals:

DVGW Certificate No. NG-4502AU0117

Det Norske Veritas (DNV) Certificate No. P-10963



**Materials**

Carbon steel fittings are manufactured from steels with the following compositions:

Component	Material specification				Reference
Ring /sleeve	CF9SMnPb36	CF9SMnPb28	CF9SMnPb36	CF9SMnPb28	UNI 4838
	11SMnPb37	11SMnPb30	11SMnPb37	11SMnPb30	EN10087
Nut	CF9SMnPb36	CF9SMnPb28	CF9SMnPb36	CF9SMnPb28	UNI 4838
	11SMnPb37	11SMnPb30	11SMnPb37	11SMnPb30	EN10087
Straight body	CF9SMnPb36	CF9SMnPb28	CF9SMnPb36	CF9SMnPb28	UNI 4838
	11SMnPb37	11SMnPb30	11SMnPb37	11SMnPb30	EN10087
Forged body	CF9SMnPb36	CF9SMnPb28	CF9SMnPb36	CF9SMnPb28	UNI 4838
	11SMnPb37	11SMnPb30	11SMnPb37	11SMnPb30	EN10087

**Working Temperatures**

Carbon steel -4° F to +248° F as per ISO 8434

**O Rings**

All O Rings are supplied as NBR (Nitrile) with the properties:

Temp. range -31° F to +212° F

Hardness 80-90 Shore

Viton seals are recommended for higher temperatures. Please contact PIRTEK for assistance. Viton properties:

Temp. range -13° F to +392° F

Hardness 80-90 Shore

**Storage**

All fittings incorporating O Rings should be stored in accordance with the provisions of DIN 7716 to avoid problems induced by deterioration of the O Ring

**Surface Treatment**

Steel fittings are zinc plated to UNI ISO 2081 and 4520

Plating thickness 8 - 12 microns

400 hours resistance to saline fog as per UNI ISO 9227

**Anti seize compound**

An anti-seize compound with nickel base is recommended for use when tightening compression fittings.

**Support Sleeves**

Fittings being assembled on thin-walled tubes require the use of support sleeves. Consult the metric tube table on page E 7 for affected sizes

**Safety Factors**

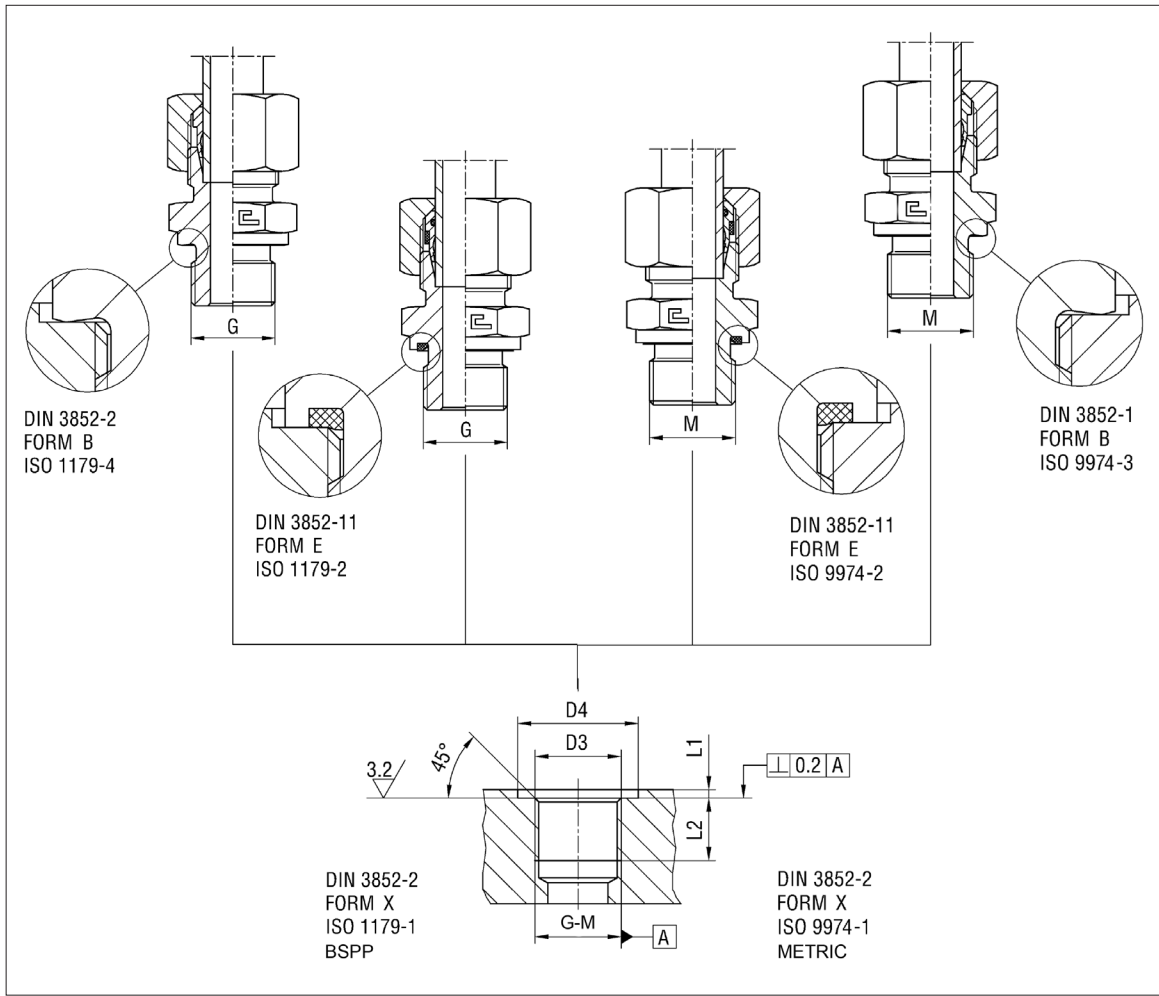
The nominal working pressures tabulated for the fittings indicate the maximum working pressures including pressure peaks. Higher working pressures should only be contemplated after consultation with PIRTEK for specific applications.

The safety factor is 4:1 in the case of static load at a temperature as per DIN 3861 (24° cone). The 4:1 safety factor applies also to parallel threaded port connections with elastomeric seal. Tapered stud fittings or parallel threaded studs with metal to metal sealing faces have only a 2.5:1 safety factor

**Tightening Torques**

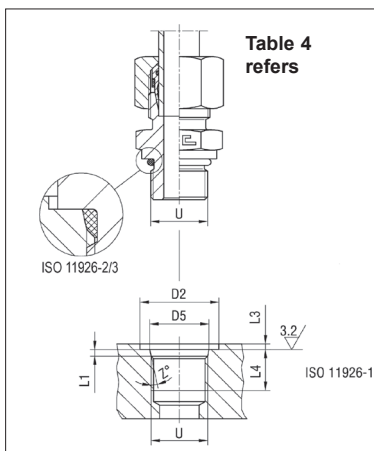
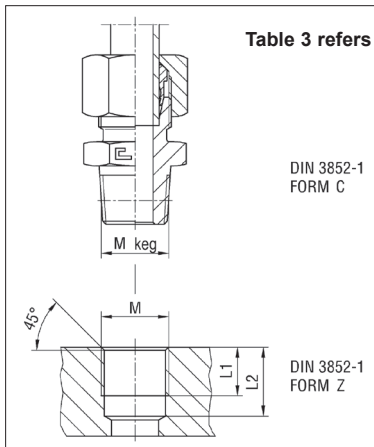
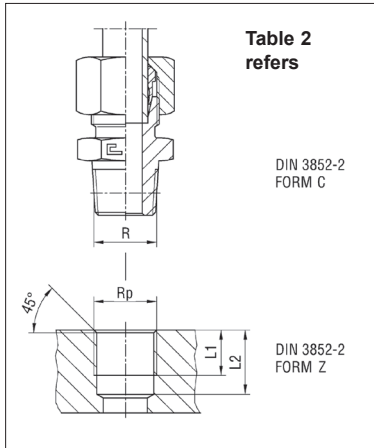
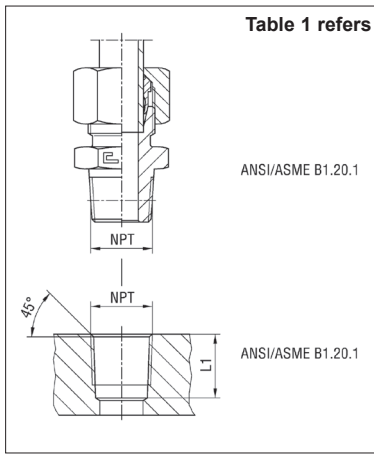
Refer to the tables following





Series	Ø Tube	BSPP Thread								Metric Parallel Thread							
		Dimensions						Tightening Torque ft lbs		Dimensions						Tightening Torque ft lbs	
		Thread	D3	D4 min form B/E	L1 max	L2 min	L rif	form B	form E	Thread	D3	D4 min form B/E	L1 max	L2 min	L rif	form B	form E
L	6	G 1/8	9.8	15	1	8	7.5	15	15	M10x1	10	15	1	8	7.6	15	15
	8	G 1/4	13.2	20	1.5	12	10.2	33	33	M12x1.5	12	18	1.5	12	9.7	22	22
	10	G 1/4	13.2	20	1.5	12	10.2	33	33	M14x1.5	14	20	1.5	12	9.7	33	33
	12	G 3/8	16.7	23	2	12	10.4	52	52	M16x1.5	16	23	1.5	12	10.2	44	41
	15	G 1/2	21	28	2.5	14	13.1	96	63	M18x1.5	18	25	2	12	10.9	59	52
	18	G 1/2	21	28	2.5	14	13.1	96	63	M22x1.5	22	28	2	14	12	96	89
	22	G 3/4	26.5	33	2.5	16	13.5	125	125	M26x1.5	26	33	5	16	-	133	125
	28	G 1	33.3	41	2.5	18	14.7	243	243	M33x2	33	41	2.5	18	13.8	243	243
	35	G 1.1/4	42	51	2.5	20	14.7	317	317	M42x2	42	51	2.5	20	13.8	347	317
	42	G 1.1/2	47.9	56	2.5	22	14.7	443	376	M48x2	48	56	2.5	22	15.3	443	376
S	6	G 1/4	13.2	20	1.5	12	10.2	41	41	M12x1.5	12	18	1.5	12	9.7	30	30
	8	G 1/4	13.2	20	1.5	12	10.2	41	41	M14x1.5	14	20	1.5	12	9.7	41	41
	10	G 3/8	16.7	23	2	12	10.4	59	59	M16x1.5	16	23	1.5	12	10.2	59	52
	12	G 3/8	16.7	23	2	12	10.4	63	59	M18x1.5	18	25	2	12	10.9	77	63
	14	G 1/2	21	28	2.5	14	13.1	111	81	M20x1.5	20	27	2	14	12	111	89
	16	G 1/2	21	28	2.5	14	13.1	111	81	M22x1.5	22	28	2.5	14	12	125	96
	20	G 3/4	26.5	33	2.5	16	13.5	207	125	M27x2	27	33	2.5	16	13.8	148	125
	25	G 1	33.3	41	2.5	18	14.7	243	243	M33x2	33	41	2.5	18	13.8	288	244
	30	G 1.1/4	42	51	2.5	20	14.7	376	317	M42x2	42	51	2.5	20	13.8	376	317
	38	G 1.1/2	47.9	56	2.5	22	14.7	502	376	M48x2	48	56	2.5	22	15.3	502	376





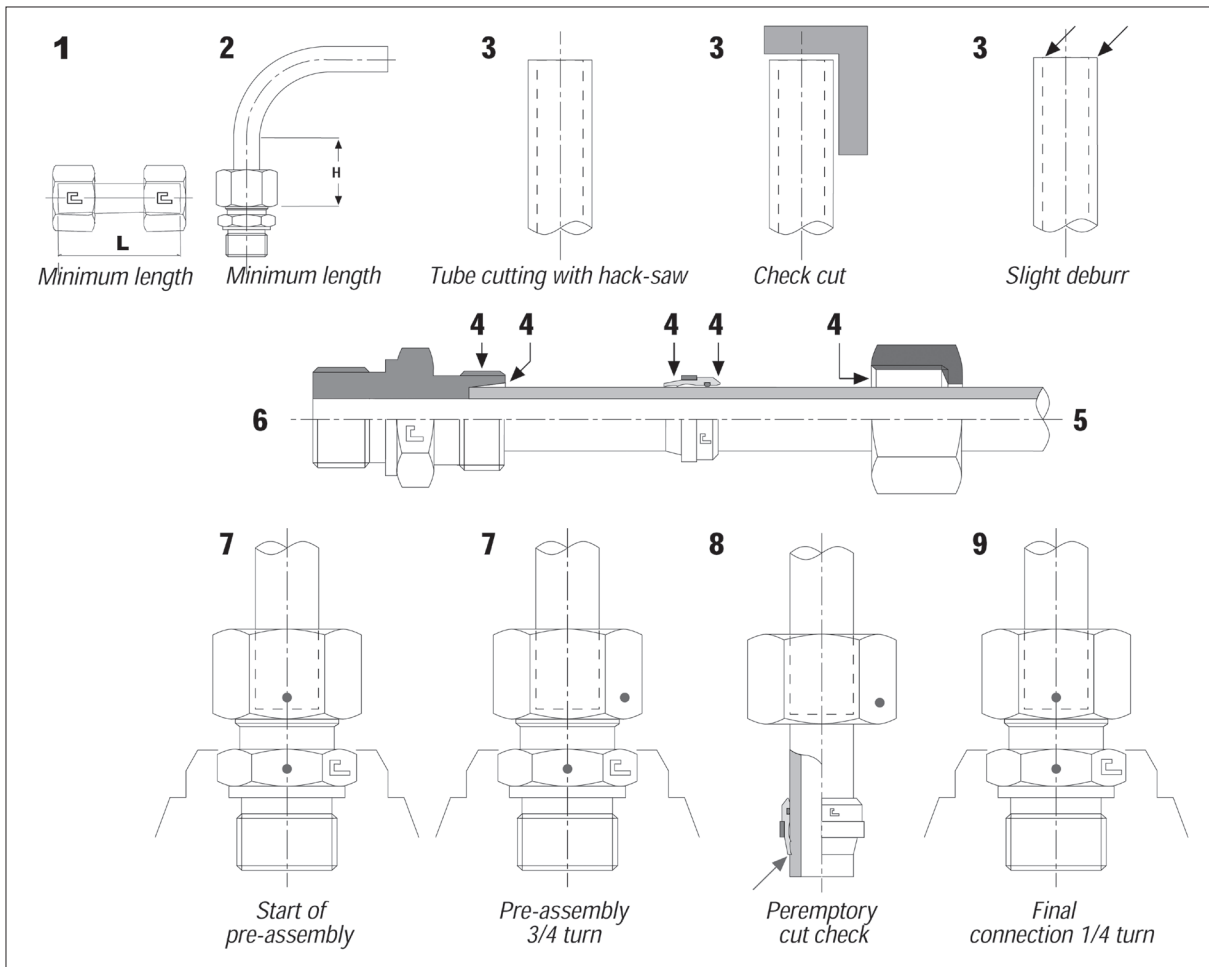
Series	Tube	Table 1 NPT Thread		Table 2 BSPT Thread		
		Dimensions mm		Dimensions mm		
		NPT	L1	R	L1	L2
L	6	1/8-18 NPT	11.6	R 1/8	5.5	9.5
	8	1/4-18 NPT	16.4	R 1/4	8.5	13.5
	10	1/4-18 NPT	16.4	R 1/4	8.5	13.5
	12	3/8-18 NPT	17.4	R 3/8	8.5	13.5
	15	1/2-14 NPT	22.6	R 1/2	10.5	16.5
	18	1/2-14 NPT	22.6	R 1/2	10.5	16.5
	22	3/4-14 NPT	23.1	R 3/4	13	19
	28	1-11.5 NPT	27.8	R 1	-	-
	35	1.1/4-11.5 NPT	28.3	R 1.1/4	-	-
	42	1.1/2-11.5 NPT	28.3	R 1.1/2	-	-
S	6	1/4-18 NPT	16.4	R 1/4	8.5	13.5
	8	1/4-18 NPT	16.4	R 1/4	8.5	13.5
	10	3/8-18 NPT	17.4	R 3/8	8.5	13.5
	12	3/8-18 NPT	17.4	R 3/8	8.5	13.5
	14	1/2-14 NPT	22.6	R 1/2	10.5	16.5
	16	1/2-14 NPT	22.6	R 1/2	10.5	16.5
	20	3/4-14 NPT	23.1	R 3/4	13	19
	25	1-11.5 NPT	27.8	R 1	-	-
	30	1.1/4-11.5 NPT	28.3	R 1.1/4	-	-
	38	1.1/2-11.5 NPT	28.3	R 1.1/2	-	-

Series	Tube	Table 3 Metric Taper		
		Dimensions mm		
		Metric Taper †	L1	L2
L	6	M10x1 keg	5.5	10
	8	M12x1.5 keg	8.5	13.5
	10	M14x1.5 keg	8.5	13.5
	12	M16x1.5 keg	8.5	13.5
	15	M18x1.5 keg	8.5	13.5
	18	M22x1.5 keg	10.5	15.5
S	6	M12x1.5 keg	8.5	13.5
	8	M14x1.5 keg	8.5	13.5
	10	M16x1.5 keg	8.5	13.5
	12	M18x1.5 keg	8.5	13.5
	14	M20x1.5 keg	10.5	15.5
	16	M22x1.5 keg	10.5	15.5

† 'keg' denotes the German 'kegelig' meaning 'tapered'

Series	Tube	Table 4 UNF/UN-2A Thread								
		U	Dimensions							Torque ft lbs
			D2 min	D5	L1	L3 max	L4 min	L rif	Z	
L	6	7/16-20 UNF-2A	21	12.45	2.4	1.6	11.5	9.9	12	15
	8	1/2-20 UNF-2A	23	14.05	2.4	1.6	11.5	9.9	12	18
	10	1/2-20 UNF-2A	23	14.05	2.4	1.6	11.5	9.9	12	18
	12	9/16-18 UNF-2A	25	15.7	2.5	1.6	12.7	11.1	12	22
	15	3/4-16 UNF-2A	30	20.65	2.5	2.4	14.3	12.5	15	33
	18	3/4-16 UNF-2A	30	20.65	2.5	2.4	14.3	12.5	15	33
	18	7/8-14 UNF-2A	34	24	2.5	2.4	16.7	14.5	15	41
	22	1.1/16-12 UNF-2A	41	29.2	3.3	2.4	19	16.8	15	63
	28	1.5/16-12 UNF-2A	49	35.55	3.3	3.2	19	16.8	15	96
	35	1.5/8-12 UNF-2A	58	43.55	3.3	3.2	19	16.8	15	126
S	42	1.7/8-12 UNF-2A	65	49.9	3.3	3.2	19	16.8	15	133
	6	1/2-20 UNF-2A	23	14.05	2.4	1.6	11.5	9.9	12	18
	8	1/2-20 UNF-2A	23	14.05	2.4	1.6	11.5	9.9	12	18
	10	9/16-18 UNF-2A	25	15.7	2.5	1.6	12.7	11.1	12	26
	12	9/16-18 UNF-2A	25	15.7	2.5	1.6	12.7	11.1	12	26
	14	3/4-16 UNF-2A	30	20.65	2.5	2.4	14.3	12.5	15	44
	16	3/4-16 UNF-2A	30	20.65	2.5	2.4	14.3	12.5	15	44
	16	7/8-14 UNF-2A	34	24	2.5	2.4	16.7	14.5	15	63
	20	1.1/16-12 UNF-2A	41	29.2	3.3	2.4	19	16.8	15	111
	25	1.5/16-12 UNF-2A	49	35.55	3.3	3.2	19	16.8	15	170
30	1.5/8-12 UNF-2A	58	43.55	3.3	3.2	19	16.8	15	184	
38	1.7/8-12 UNF-2A	65	49.9	3.3	3.2	19	16.8	15	236	

# ASSEMBLY INSTRUCTIONS

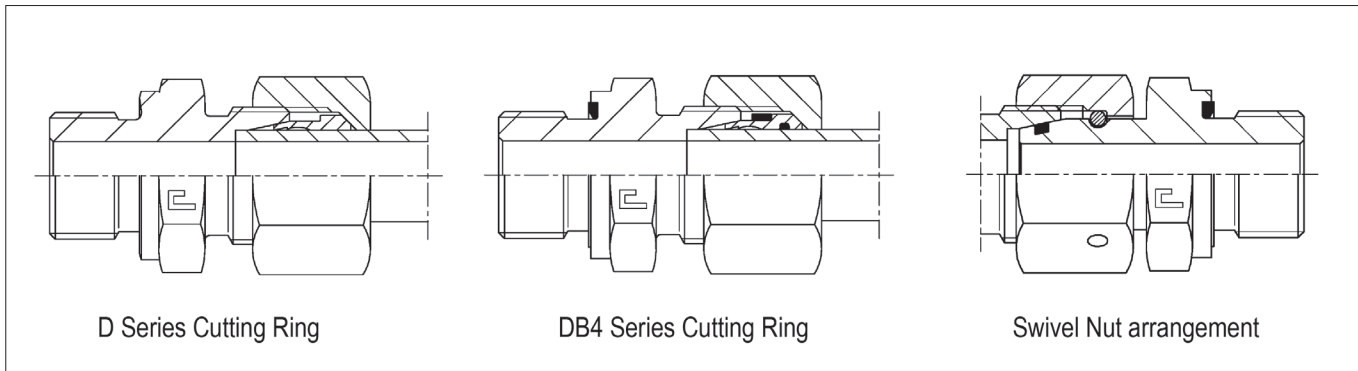


Ø Tube	LL				L								S											
	4	5	6	8	6	8	10	12	15	18	22	28	35	42	6	8	10	12	14	16	20	25	30	38
H min	24	25	25	26	31	31	33	33	36	38	42	42	48	48	35	35	37	37	43	43	50	54	58	65
L min	30	32	32	33	39	39	42	42	45	48	53	53	60	60	44	44	47	47	54	54	63	68	73	82

- Consult the table above for minimum length requirements.
- Cut the tube square with a hacksaw (*not a rolling wheel cutter*).
- Check that the cut is square.
- Deburr the ends internally and externally.
- Slide the cutting ring and nut on the tube as depicted above.
- Oil all components.
- For wall thicknesses thicker than 2.5mm use a setting tool. Use a new adapter in wall thicknesses less than 2.5mm. Must use setting tool when using stainless steel components
- Insert the oiled tube end into the assembly piece.
- Hold the tube end firmly against the internal ledge.
- Hand tighten the nut and ring onto the assembly piece.
- Use a spanner to engage the cutting ring onto the tube (about 1/2 turn). This takes up the clearances and prevents tube rotation.
- Place reference marks on the opposing nut and assembly piece - see Start point #7 illustrated.
- Use the reference marks to tighten a further 3/4 turn.
- Disassemble and check that the cutting ring is buried to at least 80% of its leading edge - Check point #8 illustrated.
- Repeat pre assembly if 80% embedment is not achieved.
- Install the pre-assembled tube into its final location and tighten a further 1/4 turn - Final installation point #9.
- The procedure is the same for all sizes of tube.

Cast S.p.A. have developed indicative tightening torques for the pre-assembly of cutting ring fittings based on practical tests in the laboratory, and they are detailed overleaf. If the tables are to be used for shop pre-assembly, the results should be checked as in Step 14 above before final installation and tightening.

# Tightening Torques



D Series Cutting Ring

DB4 Series Cutting Ring

Swivel Nut arrangement

Series	Ø	Metric Thread	Cutting Ring Pre-assembly <sup>a</sup>		Swivel Nut Fittings
			Tightening Torque ft lbs		Torque ft lbs
			Carbon Steel	Stainless Steel †	Carbon Steel
L	6	M12x1.5	15	22	15
	8	M14x1.5	18	41	26
	10	M16x1.5	22	63	30
	12	M18x1.5	30	89	33
	15	M22x1.5	44	96	41
	18	M26x1.5	66	162	81
	22	M30x2	125	236	96
	28	M36x2	155	369	148
	35	M45x2	266	715	148
	42	M52x2	361	819	177
S	6	M14x1.5	18	33	30
	8	M16x1.5	22	41	33
	10	M18x1.5	30	66	37
	12	M20x1.5	37	77	44
	14	M22x1.5	52	111	59
	16	M24x1.5	59	133	74
	20	M30x2	103	251	118
	25	M36x2	170	391	177
	30	M45x2	221	450	192
	38	M52x2	317	627	258

† Only available to special order

<sup>a</sup> Refers to pre-assembly tightening only. Please consult the assembly instructions on the previous page for clarification

# Nomenclature

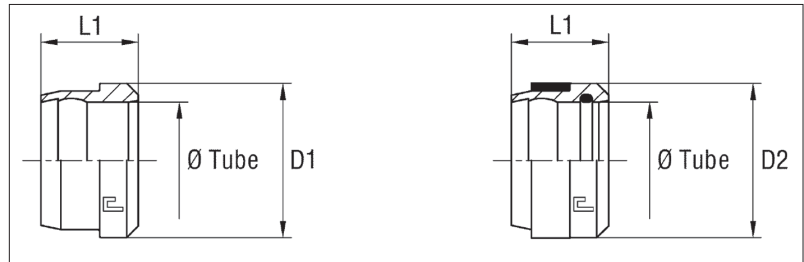
The metric compression part numbering adopted by PIRTEK is a derivation of a commonly adopted International system. Its basis is to be found within the German language, and is elaborated below to allow the interested reader to perhaps better understand the logic behind the Product Codes. Codes are aligned where possible with those used by PIRTEK in Europe

Product Code	German derivation	English equivalent
<b>AS</b>	Anschweissen	Weld on
<b>BUZ</b>	Not derived from German	Sometimes called VKA (German for Verschlusskegel-Adapter or stopper cone)
<b>B3</b>	Doppel	Double (also called DS for Doppel-Schneid or double cutting ring)
<b>B4</b>	No direct derivation	Used by Cast® to differentiate the elastomeric seal form of cutting ring
<b>DSVW</b>	Drehschenk-Verschraubung-Winkel	Turn swivel screw together angle (Banjo coupling)
<b>ED</b>	Elastomerisch-Dichtung	Elastomeric seal (soft seal)
<b>EZ</b>	E=elastomerisch (Z suggests Z series bonded seals)	Elastomeric bonded seals for banjo type metric fittings DSVW
<b>WD</b>	Weich-Dichtung	Soft Seal
<b>EDKO</b>	Elastomerisch-Dichtung-Konus	Straight female joiner with elastomeric seals (konus = cone)
<b>EDKOR</b>	Elastomerisch-Dichtung-Konus-Reduzierung	Straight female reducing joiner with elastomeric seals (konus = cone)
<b>EVGE</b>	Einstellbar-Gerade-Einschraubung	Adjustable straight thread (Male stud coupling)
<b>EVGER</b>	Einstellbar-Gerade-Einschraubung-Reduzierung	Adjustable straight reducing thread (Male stud reducing coupling)
<b>EVL</b>	Einstellbar-Verschraubung 'L' pattern	Adjustable screw Tee with L configuration (adjustable barrel tee)
<b>EVT</b>	Einstellbar-Verschraubung 'T' pattern	Adjustable screw Tee with T configuration (adjustable branch tee)
<b>EVW</b>	Einstellbar-Verschraubung-Winkel	Adjustable screw elbow (adjustable elbow)
<b>G</b>	Gerade	Straight (Male Joiner)
<b>GAI</b>	Gerade-Adapter-Innengewinde	Straight adapter with internal thread (female stud coupling)
<b>GE</b>	Gerade-Einschrauben	Straight screw in (male stud coupling)
<b>GE-BSPP ED</b>	ED suffix (elastomerisch Dichtung)	BSPP thread uses an elastomeric soft seal
<b>GE-BSPP Form B</b>	Form B suffix	BSPP thread uses a Form B type seal (see page E25)
<b>GM</b>	Gegen-Mutter	Against Nut (lock nut)
<b>GSV</b>	Gerade-Schott-Verschraubung	Straight bulkhead screw (straight bulkhead coupling)
<b>GV</b>	Gerade-Verschraubung	Straight threaded connection (reserved for reducing G series within PIRTEK)
<b>KOR</b>	Konus-Reduzieranschlusse	Straight conical reducing connector (male female)
<b>LE-BSPT</b>	L configuration Einschraub-Verschraubung	L configuraion screw in BSPT threaded Tee (male stud barrel tee)
<b>M</b>	Mutter	Nut
<b>MAV</b>	Manometer-Anschlussverschraubung	Gauge connection screw thread (gauge coupling male thread)
<b>MAVE</b>	Manometer-Anschlussverschraubung-Einstellbar	Gauge connection adjustable screw thread (gauge coupling female thread)
<b>NRV</b>	Ruckschlag-Ventile	Non return valve
<b>RI</b>	Reduzierung-Innengewinde	Reducing Bush
<b>ROV</b>	Rohr-Verschluss	Tube blanking plug
<b>SKA</b>	Schweisskegel-Adapter	Weld taper adapter (weld nipple)
<b>T</b>	Tee	Equal Tee Coupling
<b>TE-BSPT</b>	T configuration Einschraub-Verschraubung	T configuraion screw in BSPT threaded Tee (male stud branch tee)
<b>VSTI</b>	Verschlusschrauben	Socket Head Port Plug (metric thread)
<b>VSTIR</b>	R suffix	Rohr (BSPP pipe thread)
<b>W</b>	Winkel	Elbow
<b>WE-BSPT</b>	Winkel-Einschrauben	Screw in elbow with BSPT thread
<b>WSV</b>	Winkel-Schott-Verschraubung	Elbow bulkhead threaded connection
<b>'k' or 'keg' Suffix</b>	kegelig	tapered
<b>'R' Suffix</b>	Rohr	BSPT pipe thread (the meaning changes in some contexts to reducing)
<b>'ED' Suffix</b>	Elastomerisch-Dichtung	Elastomeric seal (soft seal)
<b>'N' or 'NPT' Suffix</b>	NPT	NPT thread
<b>'G' Suffix</b>	Gas	BSPP thread

- Metric tube sizes are expressed in millimetres using 2 digits in association with the tube weight eg 12L or 14S
- Metric threads are expressed in the form M27x2 indicating thread diameter and pitch in millimetres
- Standard thread sizes are expressed as fractions of an inch (eg R1/4 or 1/2NPT) to avoid the use of Dash Sizes that may otherwise resemble metric tube sizes
- Tube weights are denoted as LL, L and S  
LL = super light    L = light (from the German 'leicht')    S = heavy (from the German 'schwer')

# B3 Cutting Ring

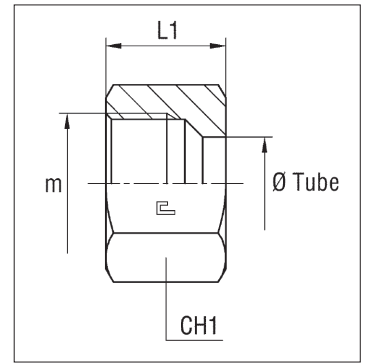
# B4 Cutting Ring Soft Seal



Series	Max. W.P. psi	Product Code		Dimensions mm			
		Standard Ring	Cutting Ring Soft Seal	Ø Tube	L1	D1	D2
LL	1450	B3-04LL	-	4	6	6	-
		B3-06LL	-	6	7	8	-
		B3-08LL	-	8	7	10	-
L	4568	B3-06L/S	B4-06L/S†	6	9.5	10	10
		B3-08L/S	B4-08L/S†	8	9.5	12	12
		B3-10L/S	B4-10L/S†	10	10	14	14
		B3-12L/S	B4-12L/S†	12	10	16	16
		B3-15L	B4-15L†	15	10	19	20
		B3-18L	B4-18L†	18	10	23	23
	2320	B3-22L	B4-22L†	22	10.5	27	27
		B3-28L	B4-28L†	28	11	33	33
		B3-35L	B4-35L†	35	13	41	41
		B3-42L	B4-42L†	42	13	48	48
S	9137	B3-06L/S	B4-06L/S†	6	9.5	10	10
		B3-08L/S	B4-08L/S†	8	9.5	12	12
		B3-10L/S	B4-10L/S†	10	10	14	14
		B3-12L/S	B4-12L/S†	12	10	16	16
		B3-14S	B4-14S†	14	10	19	19
	5801	B3-16S	B4-16S†	16	10.5	21	21
		B3-20S	B4-20S†	20	12	26	26
		B3-25S	B4-25S†	25	12	32	32
		B3-30S	B4-30S†	30	13	36	38
	4568	B3-38S	B4-38S†	38	13	44	48

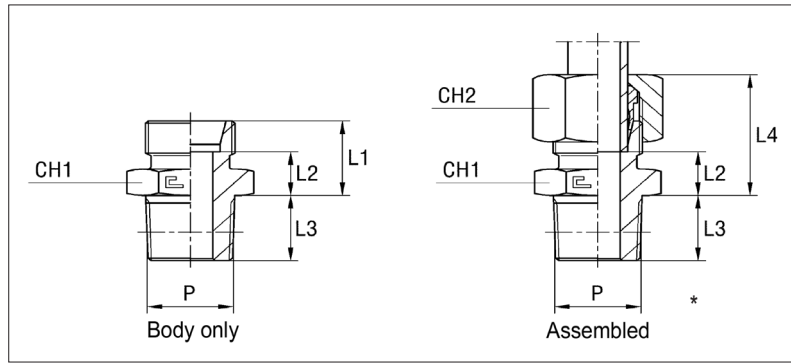
† Limited stock available

## M Tightening Nut



Series	Max. W.P. psi	Product Code	Dimensions mm			
			Ø Tube	m	L1	CH1
LL	1450	M-04LL	4	8x1	11	10
		M-06LL	6	10x1	11.5	12
		M-08LL	8	12x1	12	14
L	4568	M-06L	6	12x1.5	14.5	14
		M-08L	8	14x1.5	14.5	17
		M-10L	10	16x1.5	15.5	19
		M-12L	12	18x1.5	15.5	22
		M-15L	15	22x1.5	17	27
		M-18L	18	26x1.5	18	32
		M-22L	22	30x2	20	36
	2320	M-28L	28	36x2	21	41
		M-35L	35	45x2	24	50
		M-42L	42	52x2	24	60
		M-06S	6	14x1.5	16.5	17
S	9137	M-08S	8	16x1.5	16.5	19
		M-10S	10	18x1.5	17.5	22
		M-12S	12	20x1.5	17.5	24
		M-14S	14	22x1.5	20.5	27
		M-16S	16	24x1.5	20.5	30
	5801	M-20S	20	30x2	24	36
		M-25S	25	36x2	27	46
		M-30S	30	42x2	29	50
		M-38S	38	52x2	32.5	60
	4568					

# GE Male Stud Coupling NPT Thread

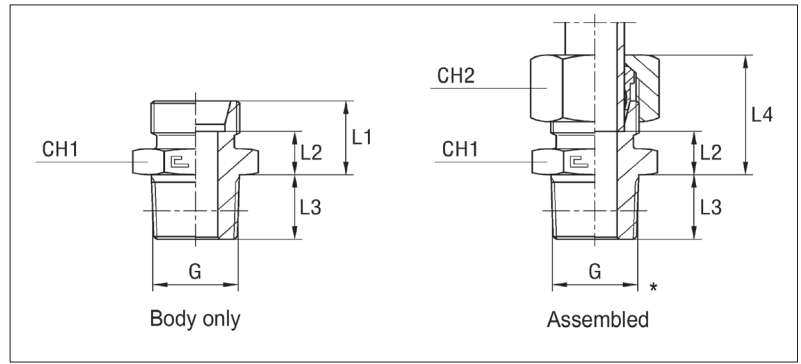


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg GE-12L3/8NPTC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			Ø Tube	P (NPT)	L1	L2	L3	L4	CH1	CH2
LL	1450	GE-04LL1/8NPT †	4	1/8	-	-	-	-	-	-
		GE-08LL1/8NPT †	8	1/8	-	-	-	-	-	-
L	4568	GE-06L1/8NPT	6	1/8	14	7	10	22	12	14
		GE-06L1/4NPT	6	1/4	15	8	15	22.5	14	14
		GE-08L1/4NPT	8	1/4	15	8	15	23	17	17
		GE-10L1/4NPT †	10	1/4	16	9	15	24	17	19
		GE-10L3/8NPT	10	3/8	17	10	15	25	19	19
		GE-12L1/4NPT †	12	1/4	17	10	15	24.5	19	22
		GE-12L3/8NPT	12	3/8	17	10	15	24.5	19	22
		GE-12L1/2NPT †	12	1/2	17.5	10.5	19.5	25	22	22
		GE-15L1/2NPT	15	1/2	18.5	11.5	19.5	26.5	24	27
		GE-18L1/2NPT	18	1/2	19.5	12	19.5	28.5	27	32
	2320	GE-22L3/4NPT †	22	3/4	21	13.5	20	30	32	36
		GE-28L1NPT	28	1	22	14.5	25	31	41	41
		GE-35L11/4NPT †	35	1.1/4	25.5	15	25.5	36.5	46	50
		GE-42L11/2NPT	42	1.1/2	27	16	26	39	55	60
S	9137	GE-06S1/4NPT	6	1/4	-	-	-	-	-	-
		GE-08S1/4NPT	8	1/4	20	13	15	28	17	19
		GE-10S1/4NPT †	10	1/4	-	-	-	-	-	-
		GE-10S3/8NPT	10	3/8	20	12.5	15	28.5	19	22
		GE-10S3/8NPT	10	3/8	20	12.5	15	28.5	19	22
		GE-12S1/2NPT †	12	1/2	22.5	15	19.5	31	22	24
		GE-12S3/8NPT	12	3/8	22	14.5	15	30.5	22	24
		GE-14S1/2NPT †	14	1/2	24.5	16.5	19.5	34.5	24	27
	5801	GE-16S1/2NPT	16	1/2	24.5	16	19.5	34.5	27	30
		GE-20S3/4NPT	20	3/4	28	17.5	20	39	32	36
		GE-25S1NPT	25	1	32	20	25	44	41	46
		GE-30S11/4NPT	30	1.1/4	34.5	21	25.5	47.5	46	50
	4568	GE-38S11/2NPT	38	1.1/2	39	23	26	54	55	60

† Limited stock available

# GE Male Stud Coupling BSPT Thread



\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg GE-12LRK3/8C

Series	Max. W.P psi	Product Code (Body only)	Dimensions mm							
			Ø Tube	G (BSPT)	L1	L2	L3	L4	CH1	CH2
L	4568	GE-06LRK1/8	6	1/8	14	7	8	22	12	14
		GE-08LRK1/4	8	1/4	15	8	12	23	17	17
		GE-10LRK1/4	10	1/4	16	9	12	24	17	19
		GE-10LRK3/8 †	10	3/8	17	10	12	25	19	19
		GE-12LRK1/4 †	12	1/4	17	10	15	24.5	19	22
		GE-12LRK3/8	12	3/8	17	10	12	24.5	19	22
		GE-12LRK1/2 †	12	1/2	17	10	14	24.5	22	22
		GE-15LRK1/2	15	1/2	18	11	14	26	24	27
		GE-18LRK1/2	18	1/2	19	11.5	14	28	27	32
	2320	GE-22LRK3/4 †	22	3/4	21	13.5	16	30	32	36
		GE-28LRK1 †	28	1	22	14.5	18	31	41	41
		GE-35LRK11/4 †	35	1 1/4	25	14.5	20	36	46	50
		GE-42LRK11/2 †	42	1 1/2	27	16	22	39	55	60

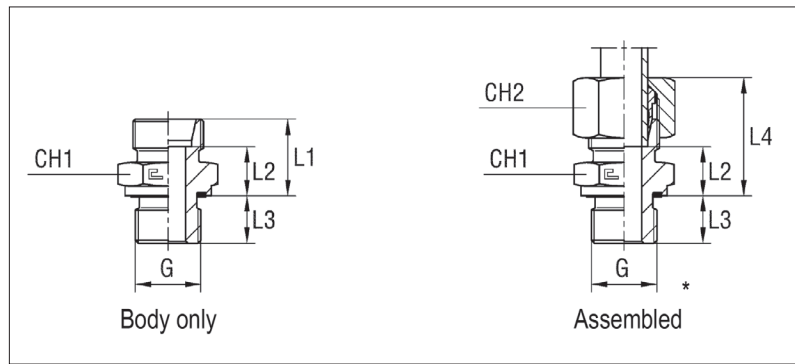
† Limited stock available



# GE Male Stud Coupling

## BSPP Thread

### Elastomer Seal (ED)

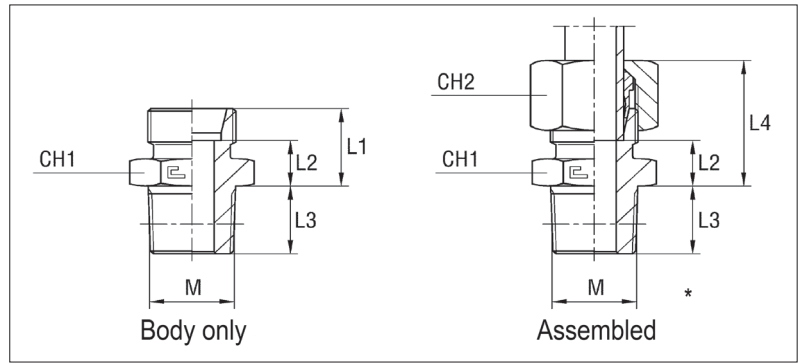


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg GE-12LR1/2EDC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			∅ Tube	G (BSPP)	L1	L2	L3	L4	CH1	CH2
LL	1450	GE-04LLR1/8ED †	4	1/8	13.5	9.5	8	20	14	10
		GE-06LLR1/8ED †	6	1/8	13.5	8	8	20	14	12
		GE-08LLR1/8ED †	8	1/8	14.5	9	8	21	14	14
L	4568	GE-06LR1/8ED	6	1/8	15.5	8.5	8	23	14	14
		GE-06LR1/4ED	6	1/4	17	10	12	24.5	19	14
		GE-06LR3/8ED	6	3/8	18.5	11.5	12	26	22	14
		GE-08LR1/8ED	8	1/8	16.5	9.5	8	24.5	14	17
		GE-08LR1/4ED	8	1/4	17	10	12	25	19	17
		GE-08LR3/8ED	8	3/8	18.5	11.5	12	26.5	22	17
		GE-10LR1/4ED	10	1/4	18	11	12	26	19	19
		GE-10LR3/8ED	10	3/8	19.5	12.5	12	27.5	22	19
		GE-10LR1/2ED	10	1/2	20	13	14	28	27	19
		GE-12LR1/4ED	12	1/4	19	12	12	26.5	19	22
		GE-12LR3/8ED	12	3/8	19.5	12.5	12	27	22	22
		GE-12LR1/2ED	12	1/2	20	13	14	27.5	27	22
		GE-15LR3/8ED	15	3/8	20.5	13.5	12	28.5	24	27
		GE-15LR1/2ED	15	1/2	21	14	14	29	27	27
	GE-15LR3/4ED	15	3/4	22	15	16	30	32	27	
	GE-18LR1/2ED	18	1/2	22	14.5	14	31	27	32	
	GE-18LR3/4ED	18	3/4	22	14.5	16	31	32	32	
	2320	GE-22LR1/2ED †	22	1/2	24	16.5	14	33	32	36
		GE-22LR3/4ED	22	3/4	24	16.5	16	33	32	36
		GE-28LR3/4ED	28	3/4	25	17.5	16	34	41	41
GE-28LR1ED		28	1	25	17.5	18	34	41	41	
GE-35LR11/4ED		35	1.1/4	28	17.5	2	39	50	50	
GE-42LR11/2ED		42	1.1/2	30	19	22	42	55	60	
S	9137	GE-06SR1/4ED	6	1/4	20	13	12	28	19	17
		GE-08SR1/4ED	8	1/4	22	15	12	30	19	19
		GE-10SR1/4ED	10	1/4	22	14.5	12	30.5	19	22
		GE-10SR3/8ED	10	3/8	22.5	15	12	31	22	22
		GE-12SR1/4ED	12	1/4	24	16.5	12	32.5	22	24
		GE-12SR3/8ED	12	3/8	24.5	17	12	33	22	24
		GE-12SR1/2ED	12	1/2	25	17.5	14	33.5	27	24
		GE-14SR1/2ED	14	1/2	26.5	18	12	36.5	27	30
	5801	GE-16SR3/8ED	16	3/8	26.5	18	12	36.5	27	30
		GE-16SR1/2ED	16	1/2	27	18.5	14	37	27	30
		GE-16SR3/4ED	16	3/4	29	20.5	16	39	32	30
		GE-20SR1/2ED	20	1/2	31	20.5	14	42	32	36
		GE-20SR3/4ED	20	3/4	31	20.5	16	42	32	36
		GE-25SR3/4ED	25	3/4	35	23	16	47	41	46
		GE-25SR1ED	25	1	35	23	18	47	41	46
		GE-30SR1ED	30	1	37	23.5	18	50	46	50
	4568	GE-30SR11/4ED	30	1.1/4	37	23.5	20	50	50	50
		GE-38SR11/4ED	38	1.1/4	42	26	20	57	55	60
		GE-38SR11/2ED	38	1.1/2	42	26	22	57	55	60

† Limited stock available

# GE Male Stud Coupling Metric Taper Thread



\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg GE-04LLMK8x1C

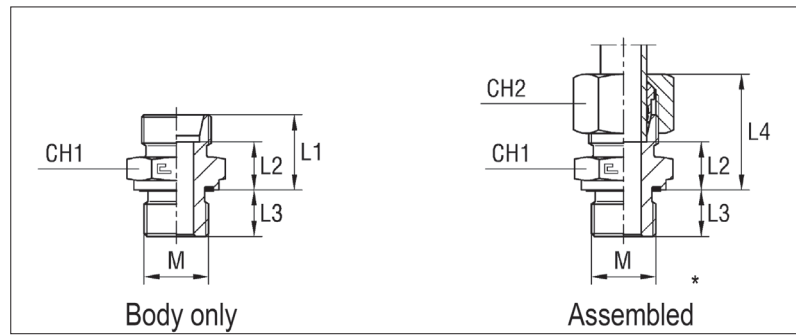
Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			∅ Tube	M	L1	L2	L3	L4	CH1	CH2
LL	1450	GE-04LLMK8x1	4	8 x 1	12	8	-	18.5	12	10
		GE-06LLMK8x1 †	6	8 x 1	12	6.5	-	18.5	12	12
		GE-08LLMK10x1	8	10 x 1	14	8.5	-	20.5	12	14

† Limited stock available

# GE Male Stud Coupling

## Metric Parallel Thread

### Elastomer Seal (ED)

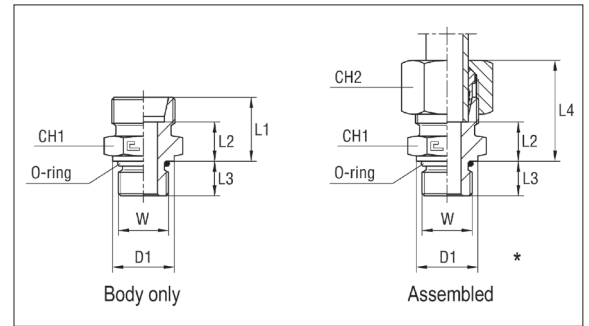


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg GE-15LM18x1.5EDC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			Ø Tube	M	L1	L2	L3	L4	CH1	CH2
LL	1450	GE-04LLM8X1ED	4	8 x 1	13.5	9.5	8	20	12	10
		GE-08LLM10X1ED	8	10 x 1	14.5	9	8	21	14	14
L	4568	GE-06LM10x1.5ED	6	10 x 1	15.5	8.5	8	23	14	14
		GE-08LM12x1.5ED	8	12 x 1.5	17	10	12	25	17	17
		GE-10LM14x1.5ED	10	14 x 1.5	18	11	12	26	19	19
		GE-12LM16x1.5ED	12	16 x 1.5	19.5	12.5	12	27	22	22
		GE-12LM18x1.5ED	12	18 x 1.5	20.5	12.5	12	27	22	27
		GE-15LM16x1.5ED	15	16 x 1.5	20.5	13.5	12	29	24	27
		GE-15LM18x1.5ED	15	18 x 1.5	20.5	13.5	12	29	24	27
		GE-15LM22x1.5ED	15	22 x 1.5	20.5	13.5	14	29	24	32
		GE-18LM22x1.5ED	18	22 x 1.5	22	14.5	14	31	27	32
	2320	GE-22LM22x1.5ED	22	22 x 1.5	24	16.5	16	33	32	36
		GE-22LM26x1.5ED	22	26 x 1.5	24	16.5	16	33	32	36
		GE-28LM33x2ED	28	33 x 2	25	17.5	18	34	41	41
		GE-35LM42x2ED	35	42 x 2	28	17.5	20	39	50	50
		GE-42LM48x2ED	42	48 x 2	30	19	22	42	55	60
S	9137	GE-06SM12x1.5ED	6	12 x 1.5	20	13	12	28	17	17
		GE-08SM14x1.5ED	8	14 x 1.5	22	15	12	30	19	19
		GE-10SM16x1.5ED	10	16 x 1.5	22.5	15	12	31	22	22
		GE-12SM18x1.5ED	12	18 x 1.5	24.5	17	12	33	24	24
		GE-14SM20x1.5ED	14	20 x 1.5	27	19	14	37	27	27
	5801	GE-16SM22x1.5ED	16	22 x 1.5	27	18.5	14	37	27	30
		GE-20SM27x2ED	20	27 x 2	31	20.5	16	42	32	36
		GE-25SM33x2ED	25	33 x 2	35	23	18	47	41	46
		GE-30SM42x2ED	30	42 x 2	37	23.5	20	50	50	50
	4568	GE-38SM48x2ED †	38	48 x 2	42	36	22	57	55	60

† Limited stock available

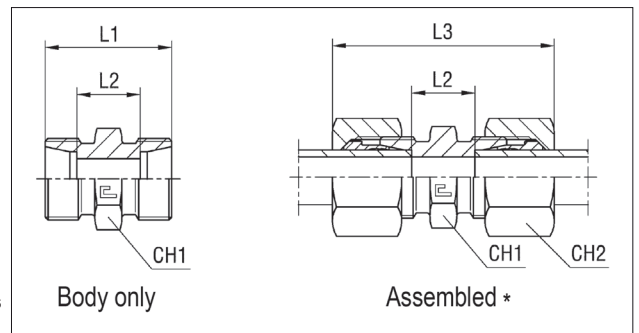
# GE Male Stud Coupling UN-O Thread



\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg GE-18L3/4UNFC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm								
			∅ Tube	W	D1	L1	L2	L3	L4	CH1	CH2
L	4568	GE-12L9/16UNF	12	9/16 - 18	18.8	18	11	10	25.5	19	22
		GE-12L3/4UNF	12	3/6 - 16	21.8	19.9	12.9	11.1	27.5	22	22
		GE-12L7/8UNF	12	7/8 - 14	26.8	21.3	14.3	12.7	29	27	22
		GE-18L3/4UNF	18	3/4 - 16	21.8	21.9	14.4	11.1	31	27	32
S	5801	GE-16S3/4UNF	16	3/4 - 16	21.8	23.9	15.4	11.1	34	27	30
		GE-16S7/8UNF	16	7/8 - 14	26.8	27.3	18.8	12.7	37.5	27	30
		GE-20S3/4UNF	20	3/4 - 16	21.8	30.9	20.4	11.1	42	32	36
		GE-20S7/8UNF	20	7/8 - 14	26.8	31.3	20.8	12.7	42.5	32	36
		GE-20S11/16UNF	20	1.1/16 - 12	31.8	30.9	20.4	15.1	42	32	36

# G Straight Tube Coupling

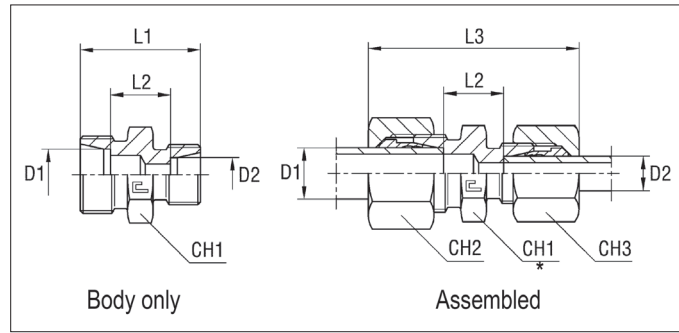


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg G-12LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm					
			∅ Tube	W	D1	L1	L2	L3
LL	1450	G-04LL †	4	20	12	31	12	10
		G-06LL	6	20	9	32	12	12
		G-08LL	8	23	12	35	12	14
L	4568	G-06L	6	24	10	39	12	14
		G-08L	8	25	11	40	14	17
		G-10L	10	27	13	42	17	19
		G-12L	12	28	14	43	19	22
		G-15L	15	30	16	46	24	27
		G-18L	18	31	16	48	27	32
		G-22L	22	35	20	52	32	36
	2320	G-28L	28	36	21	54	41	41
		G-35L	35	41	20	63	46	50
		G-42L	42	43	21	66	55	60
S	630	G-06S	6	30	16	45	14	17
		G-08S	8	32	18	47	17	19
		G-10S	10	32	17	49	19	22
		G-12S	12	34	19	51	22	24
		G-14S	14	38	22	57	24	27
	400	G-16S	16	38	21	57	27	30
		G-20S	20	44	23	66	32	36
		G-25S	25	50	26	74	41	46
		G-30S	30	54	27	80	46	50
		G-38S	38	61	29	90	55	60
315	G-38S	38	61	29	90	55	60	

† Limited stock available

# GV Straight Reducing Coupling



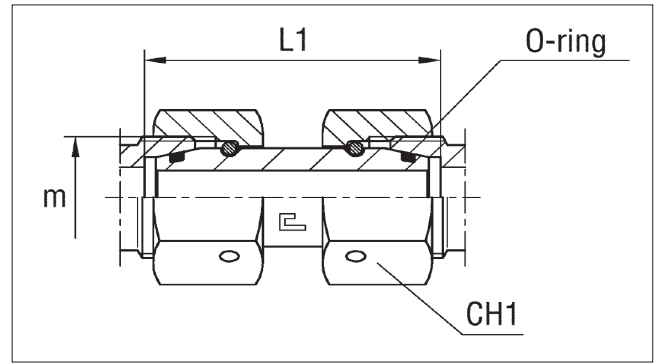
\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if nuts and Cutting Rings are required. eg GV-12L/10LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			Ø Tube		L1	L2	L3	CH1	CH2	CH3
			D1	D2						
LL	1450	GV-06LL/04LL †	6	4	-	-	-	-	-	-
		GV-08LL/04LL †	8	4	-	-	-	-	-	-
		GV-08LL/06LL †	8	6	-	-	-	-	-	-
L	4568	GV-08L/06L †	8	6	25	11	40.5	14	17	14
		GV-10L/06L †	10	6	26	12	41.5	17	19	14
		GV-10L/08L †	10	8	26	12	42	17	19	17
		GV-12L/06L †	12	6	27	13	42	19	22	14
		GV-12L/08L †	12	8	27	13	42.5	19	22	17
		GV-12L/10L †	12	10	28	14	43.5	19	22	19
		GV-15L/10L †	15	10	29	15	45	24	27	19
		GV-15L/12L †	15	12	29	15	44.5	24	27	22
		GV-18L/10L †	18	10	30	15.5	47	27	32	19
		GV-18L/12L †	18	12	30	15.5	46.5	27	32	22
	GV-18L/15L †	18	15	31	16.5	48	27	32	27	
	2320	GV-22L/12L †	22	12	32	17.5	48.5	32	36	22
		GV-22L/15L †	22	15	33	18.5	50	32	36	27
		GV-22L/18L †	22	18	33	18	51	32	36	32
		GV-28L/18L †	28	18	34	19	52	41	41	32
GV-28L/22L †		28	22	36	21	54	41	41	36	
GV-35L/22L †		35	22	39	21	59	46	50	36	
S	9137	GV-08S/06S †	8	6	32	18	48	17	19	17
		GV-10S/06S †	10	6	32	17.5	48.5	19	22	17
		GV-10S/08S †	10	8	32	17.5	48.5	19	22	19
		GV-12S/06S †	12	6	34	19.5	50.5	22	24	17
		GV-12S/08S †	12	8	34	19.5	50.5	22	24	19
		GV-12S/10S †	12	10	34	19	51	22	24	22
		GV-14S/10S †	14	10	36	20.5	54.5	24	27	22
	5801	GV-14S/12S †	14	12	36	20.5	54.5	24	27	24
		GV-16S/12S †	16	12	36	20	54.5	27	30	24
		GV-16S/14S †	16	14	38	21.5	58	27	30	27
		GV-20S/10S †	20	10	40	22	59.5	32	36	22
		GV-20S/12S †	20	12	40	22	59.5	32	36	24
		GV-20S/16S †	20	16	42	23	63	32	36	30
		GV-25S/16S †	25	16	46	25.5	68	41	46	30
		GV-25S/20S †	25	20	48	25.5	71	41	46	36
4568	GV-30S/20S †	30	20	50	26	74	46	50	36	
	GV-30S/25S †	30	25	52	26.5	77	46	50	46	
4568	GV-38S/30S †	38	30	59	29.5	87	55	60	50	

† Possible future stock - not currently available

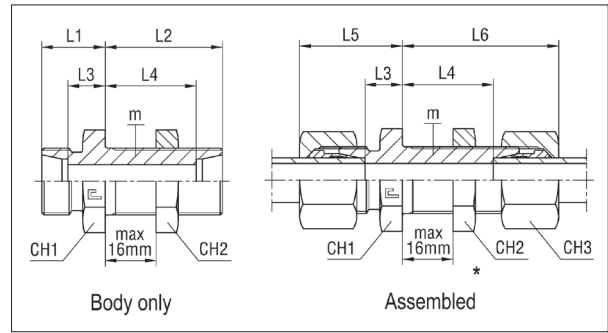
# EDKO Straight Female Coupling

Equal Ends



Series	Max. W.P. psi	Product Code (Assembled)	Dimensions mm			
			∅ Tube	m	L1	CH1
L	4568	EDKO-06L	6	12 x 1.5	40	14
		EDKO-08L	8	14 x 1.5	40	17
		EDKO-10L	10	16 x 1.5	39	19
		EDKO-12L	12	18 x 1.5	39	22
		EDKO-15L	15	22 x 1.5	45	27
		EDKO-18L	18	26 x 1.5	43	32
	2320	EDKO-22L	22	30 x 2	48	36
		EDKO-28L	28	36 x 2	49	41
		EDKO-35L	35	45 x 2	60	50
		EDKO-42L	42	52 x 2	60	60
S	9137	EDKO-06S	6	14 x 1.5	37	17
		EDKO-08S	8	16 x 1.5	38	19
		EDKO-10S	10	18 x 1.5	44	22
		EDKO-12S	12	20 x 1.5	41	24
		EDKO-14S	14	22 x 1.5	44	27
	5801	EDKO-16S	16	24 x 1.5	51	30
		EDKO-20S	20	30 x 2	56	36
		EDKO-25S	25	36 x 2	60	46
		EDKO-30S	30	42 x 2	62	50
	5801	EDKO-38S	38	52 x 2	70	60

# SV Straight Bulkhead Coupling

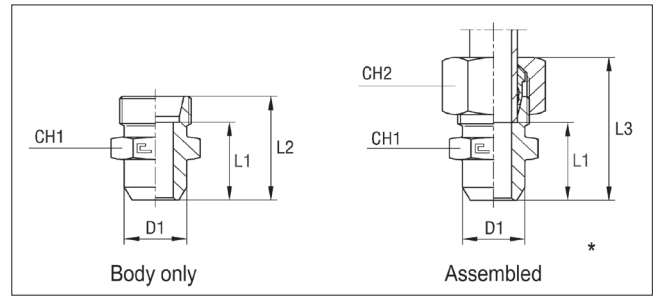


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg SV-15LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm										
			Ø Tube	m	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3
L	4568	SV-06L	6	12 x 1.5	14	34	7	27	22	42	17	17	14
		SV-08L	8	14 x 1.5	15	34	8	27	23	42	19	19	17
		SV-10L	10	16 x 1.5	17	35	10	28	25	43	22	22	19
		SV-12L	12	18 x 1.5	17	36	10	29	25	44	24	24	22
		SV-15L	15	22 x 1.5	19	38	12	31	27	46	27	30	27
		SV-18L	18	26 x 1.5	21	40	13.5	32.5	30	49	32	36	32
	2320	SV-22L	22	30 x 2	24	42	16.5	34.5	33	51	36	41	36
		SV-28L	28	36 x 2	26	43	18.5	35.5	35	52	41	46	41
		SV-35L †	35	45 x 2	29	47	18.5	36.6	40	58	50	55	50
S	9137	SV-06S	6	14 x 1.5	19	36	12	29	27	44	19	19	17
		SV-08S	8	16 x 1.5	20	36	13	29	28	44	22	22	19
		SV-10S	10	18 x 1.5	22	37	14.5	29.5	31	46	24	24	22
		SV-12S	12	20 x 1.5	22	38	14.5	30.5	31	47	27	27	24
		SV-14S	14	22 x 1.5	25	40	17	32	35	50	30	30	27
		SV-16S	16	24 x 1.5	25	40	16.5	31.5	35	50	32	32	30
	5801	SV-20S	20	30 x 2	28	44	17.5	33.5	39	55	41	41	36
		SV-25S	25	36 x 2	32	47	20	35	44	59	46	46	46
		SV-30S	30	42 x 2	35	51	21.5	37.5	48	64	50	50	50
		SV-38S	38	52 x 2	38	53	22	37	53	68	65	65	60
	4568	SV-38S	38	52 x 2	38	53	22	37	53	68	65	65	60

† Limited stock available

# AS Welding Boss



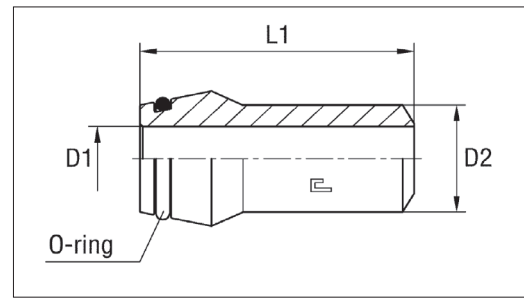
\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg AS-18LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm						
			Ø Tube	D1	L1	L2	L3	CH1	CH2
L	4568	AS-06L †	6	10	14	21	29	12	14
		AS-08L	8	12	16	23	31	14	17
		AS-10L †	10	14	18	25	33	17	19
		AS-12L †	12	16	18	25	33	19	22
		AS-15L †	15	19	22	29	37	22	27
	AS-18L	18	22	23.5	31	40	27	32	
	2320	AS-22L †	22	27	28.5	36	45	32	36
		AS-28L †	28	32	30.5	38	47	41	41
		AS-35L †	35	40	32.5	43	54	46	50
		AS-42L †	42	46	35	46	58	55	60
S	9137	AS-06S	6	11	19	26	34	14	17
		AS-08S	8	13	21	28	36	17	19
		AS-10S	10	15	22.5	30	39	19	22
		AS-12S	12	17	24.5	32	41	22	24
		AS-14S †	14	19	27	35	45	24	27
	5801	AS-16S	16	21	26.5	35	45	27	30
		AS-20S	20	26	29.5	40	51	32	36
		AS-25S	25	31	32	44	56	41	46
		AS-30S	30	36	35.5	49	62	46	50
	4568	AS-38S	38	44	38	54	69	55	60

† Limited stock available



# SKA Welding Nipple



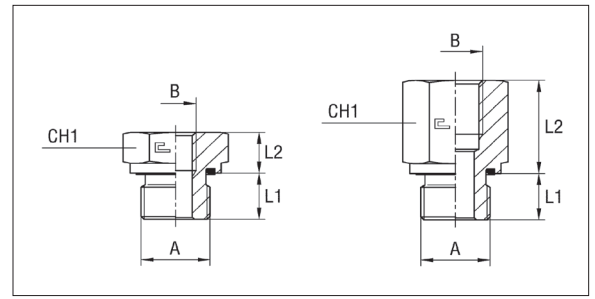
\* Supplied disassembled

Series	Max. W.P. psi	Product Code (Nipple only)	Dimensions mm				
			$\varnothing$ x Wall Thickness	$\varnothing$ Tube	D1	D2	L1
L / S	-	SKA6x1 †	6x1	6	-	-	-
	9137	SKA6x1.75 †	6x1.75	6	2.5	6	31
	-	SKA8x1.5 †	8x1.5	8	-	-	-
	9137	SKA8x2 †	8x2	8	4	8	31
	4568	SKA10X1.5 †	10X1.5	10	7	10	32.5
	4568	SKA12X1.5 †	12X1.5	12	9	12	32.5
	-	SKA18x2 †	18x2	18	-	-	-
	-	SKA22x2 †	22x2	22	-	-	-
L	-	SKA15x1.5 †	15x1.5	15	-	-	-
	4568	SKA15x2.5 †	15x2.5	15	10	15	34
	4568	SKA18x2.5 †	18x2.5	18	13	18	35.5
	2320	SKA22x2.5 †	22x2.5	22	17	22	38.5
	2320	SKA28X2.5 †	28X2.5	28	23	28	41.5
	2320	SKA35X3 †	35X3	35	29	35	47.5
S	-	SKA14X2 †	14X2	14	-	-	-
	5801	SKA14X3 †	14X3	14	8	14	38.5
	3625	SKA16X2	16X2	16	12	16	39
	3625	SKA20X2.5	20X2.5	20	15	20	45
	4568	SKA20X3 †	20X3	20	14	20	45
	-	SKA25X2.5 †	25X2.5	25	-	-	-
	3625	SKA25X3 †	25X3	25	19	25	49.5
	2320	SKA30X3	30X3	30	24	30	52
	3625	SKA38X5 †	38X5	38	-	-	-
	4568	SKA38X6 †	38X6	38	26	38	56.5

† Limited stock available

# RI Reducing Coupling BSPP

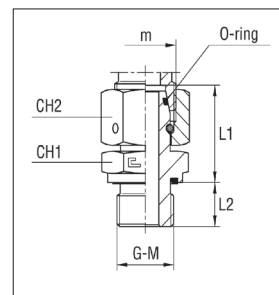
Elastomeric Seal



Series	Max. W.P. psi	Product Code	Schematic		A	B	L1	L2	CH1	
			Left	Right						
L / S	9137	RI-02-04		*	1/8	1/4	8	23	19	
		RI-02-06		*	1/8	3/8	8	24	24	
		RI-04-02		*	1/4	1/8	12	16	19	
		RI-04-06		*	1/4	3/8	12	24	24	
		RI-04-08		*	1/4	1/2	12	28	30	
		RI-04-12		*	1/4	3/4	12	31	36	
		RI-06-02				3/8	1/8	12	10.5	22
		RI-06-04		*		3/8	1/4	12	24	22
	RI-06-08		*		3/8	1/2	12	29	30	
	5801	RI-06-12		*	3/8	3/4	12	32	36	
	9137	RI-08-02 †	*		1/2	1/8	14	10	27	
		RI-08-04	*		1/2	1/4	14	10	27	
		RI-08-06		*	1/2	3/8	14	22	27	
	5801	RI-08-12		*	1/2	3/4	14	32	36	
		RI-08-16		*	1/2	1	14	35	41	
		RI-08-20		*	1/2	1.1/4	14	39	55	
		RI-12-04	*		3/4	1/4	16	10	32	
		RI-12-06	*		3/4	3/8	16	10	32	
		RI-12-08		*	3/4	1/2	16	26	32	
		RI-12-16		*	3/4	1	16	35	41	
		RI-12-20		*	3/4	1.1/4	16	39	55	
	4568	RI-12-24		*	3/4	1.1/2	16	41	60	
	5801	RI-16-04	*		1	1/4	18	11	41	
		RI-16-06	*		1	3/8	18	11	41	
		RI-16-08	*		1	1/2	18	11	41	
		RI-16-12		*	1	3/4	18	29	41	
		RI-16-20		*	1	1.1/4	18	39	55	
	4568	RI-16-24		*	1	1.1/2	18	41	60	
	5801	RI-20-08	*		1.1/4	1/2	20	12	50	
		RI-20-12	*		1.1/4	3/4	20	12	50	
		RI-20-16		*	1.1/4	1	20	31	50	
	4568	RI-20-24		*	1.1/4	1.1/2	20	40	60	
RI-24-08		*		1.1/2	1/2	22	14	55		
RI-24-12		*		1.1/2	3/4	22	14	55		
RI-24-16-		*		1.1/2	1	22	14	55		
	RI-24-20		*	1.1/2	1.1/4	22	46	50		

† Limited stock available

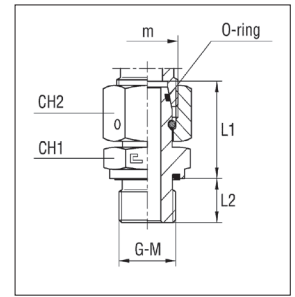
# EVGE Male Stud Coupling with Swivel Nut - Metric / BSPP Elastomer Seal (ED)



Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			Ø Tube	m	M	L1	L2	CH1	CH2	
L	4568	EVGE-06LM12x1.5ED †	6	12 x 1.5	10 x 1	24.5	8	14	14	
		EVGE-08LM14x1.5ED †	8	14 x 1.5	12 x 1.5	26.5	12	17	17	
		EVGE-10LM14x1.5ED	10	16 x 1.5	14 x 1.5	27.5	12	19	19	
		EVGE-10LM16x1.5ED †	10	16 x 1.5	16 x 1.5	27.5	12	19	19	
		EVGE-12LM18x1.5ED †	12	18 x 1.5	16 x 1.5	30.5	12	22	22	
		EVGE-15LM22x1.5ED †	15	22 x 1.5	18 x 1.5	31.5	12	24	27	
		EVGE-18LM26x1.5ED †	18	26 x 1.5	22 x 1.5	31.5	14	27	32	
	2320	EVGE-22LM30x2ED †	22	30 x 2	26 x 1.5	32.5	16	32	36	
		EVGE-28LM36x2ED †	28	36 x 2	33 x 2	35	18	41	41	
		EVGE-35LM45x2ED †	35	45 x 2	42 x 2	42.5	20	50	50	
		EVGE-42LM52x2ED †	42	52 x 2	48 x 2	46.5	22	55	60	
	S	630	EVGE-06SM14x1.5ED †	6	14 x 1.5	12 x 1.5	27	12	17	17
			EVGE-08SM16x1.5ED †	8	16 x 1.5	14 x 1.5	29.5	12	19	19
			EVGE-10SM18x1.5ED †	10	18 x 1.5	16 x 1.5	32	12	22	22
EVGE-12SM20x1.5ED †			12	20 x 1.5	18 x 1.5	34	12	24	24	
EVGE-14SM22x1.5ED †			14	22 x 1.5	20 x 1.5	36.5	14	27	27	
400		EVGE-16SM24x1.5ED †	16	24 x 1.5	22 x 1.5	37	14	27	30	
		EVGE-20SM30x2ED †	20	30 x 2	27 x 2	43	16	32	36	
		EVGE-25SM36x2ED †	25	36 x 2	33 x 2	48	18	41	46	
		EVGE-30SM42x2ED †	30	42 x 2	42 x 2	51	20	50	50	
315		EVGE-38SM52x2ED	38	52 x 2	48 x 2	60	22	55	60	

# EVGE Male Stud Coupling with Swivel Nut - Metric / BSPP

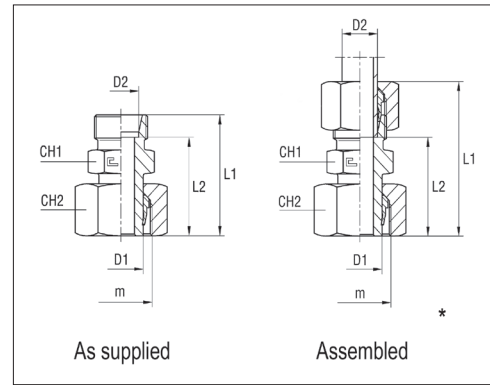
## Elastomer Seal (ED) Continued



Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm (except G)						
			∅ Tube	m	G (ins)	L1	L2	CH1	CH2
L	4568	EVGE-06LR1/8ED	6	12 x 1.5	1/8	24.5	8	14	14
		EVGE-08LR1/4ED	8	14 x 1.5	1/4	29.5	12	19	17
		EVGE-10LR1/4ED	10	16 x 1.5	1/4	27.5	12	19	19
		EVGE-12LR3/8ED	12	18 x 1.5	3/8	34	12	22	22
		EVGE-15LR1/2ED	15	22 x 1.5	1/2	32	14	27	27
		EVGE-18LR1/2ED	18	26 x 1.5	1/2	31.5	14	27	32
	2320	EVGE-22LR3/4ED	22	30 x 2	3/4	32.5	16	32	36
		EVGE-28LR1ED	28	36 x 2	1	35	18	41	41
		EVGE-35LR11/4ED †	35	45 x 2	1.1/4	42.5	20	50	50
S	9137	EVGE-06SR1/4ED	6	14 x 1.5	1/4	27	12	19	17
		EVGE-08SR1/4ED	8	16 x 1.5	1/4	29.5	12	19	19
		EVGE-10SR3/8ED	10	18 x 1.5	3/8	32	12	22	22
		EVGE-12SR3/8ED	12	20 x 1.5	3/8	34	12	22	24
		EVGE-14SR1/2ED	14	22 x 1.5	1/2	36.5	14	27	27
	5801	EVGE-16SR1/2ED	16	24 x 1.5	1/2	37	14	27	30
		EVGE-20SR3/4ED	20	30 x 2	3/4	43	16	32	36
		EVGE-25SR1ED	25	36 x 2	1	48	18	41	46
	4568	EVGE-30SR11/4ED	30	42 x 2	1.1/4	51	20	50	50
		EVGE-38SR11/2ED	38	52 x 2	1.1/2	60	22	55	60

† Limited stock available

# KOR Standpipe Tube Reducer L Series



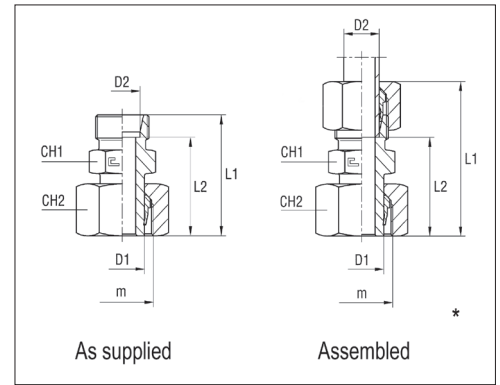
\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg KOR-15L/06LC

Series	Max. W.P. psi	Product Code (Body only)	Ø Tube		Dimensions mm					
			D1	D2	m	L1	L2	CH1	CH2	
L	4568	KOR-08L/06L	8	6	14 x 1.5	32.5	25.5	12	17	
		KOR-10L/06L	10	6	16 x 1.5	33	26	12	19	
		KOR-12L/06L	12	6	18 x 1.5	34	27	14	22	
		KOR-15L/06L	15	6	22 x 1.5	34	27	17	27	
			KOR-18L/06L †	18	6	26 x 1.5	36.5	29.5	19	32
	2320	KOR-22L/06L †	22	6	30 x 2	37.5	30.5	24	36	
		KOR-28L/06L †	28	6	36 x 2	39	32	30	41	
		KOR-35L/06L †	35	6	45 x 2	45.5	38.5	36	50	
		KOR-42L/06L †	42	6	52 x 2	46.5	39.5	46	60	
	4568	KOR-10L/08L	10	8	16 x 1.5	34	27	14	19	
		KOR-12L/08L	12	8	18 x 1.5	34	27	14	22	
		KOR-15L/08L	15	8	22 x 1.5	34	27	17	27	
		KOR-18L/08L	18	8	26 x 1.5	36.5	29.5	19	32	
	2320	KOR-22L/08L †	22	8	30 x 2	37.5	30.5	34	36	
		KOR-28L/08L †	28	8	36 x 2	39	32	30	41	
		KOR-35L/08L †	35	8	45 x 2	45.5	38.5	36	50	
		KOR-42L/08L †	42	8	52 x 2	46.5	39.5	46	60	
	4568	KOR-12L/10L	12	10	18 x 1.5	35	28	17	22	
		KOR-15L/10L	15	10	22 x 1.5	35	28	17	27	
		KOR-18L/10L	18	10	26 x 1.5	37.5	30.5	19	32	
	2320	KOR-22L/10L	22	10	30 x 2	38.5	31.5	24	36	
		KOR-28L/10L †	28	10	36 x 2	40	33	30	41	
		KOR-35L/10L †	35	10	45 x 2	46.5	39.5	36	50	
		KOR-42L/10L †	42	10	52 x 2	47.5	40.5	46	60	
	4568	KOR-15L/12L	15	12	22 x 1.5	36	29	19	27	
		KOR-18L/12L	18	12	26 x 1.5	37.5	30.5	19	32	
	2320	KOR-22L/12L	22	12	30 x 2	38.5	31.5	24	36	
		KOR-28L/12L	28	12	36 x 2	40	33	30	41	
		KOR-35L/12L †	35	12	45 x 2	46.5	39.5	36	50	
		KOR-42L/12L †	42	12	52 x 2	47.5	40.5	46	60	
	4568	KOR-18L/15L	18	15	26 x 1.5	38.5	31.5	24	32	
	2320	KOR-22L/15L	22	15	30 x 2	39.5	32.5	24	36	
KOR-28L/15L		28	15	36 x 2	41	34	30	41		
KOR-35L/15L		35	15	45 x 2	47.5	40.5	36	50		
KOR-42L/15L †		42	15	52 x 2	48.5	41.5	46	60		
KOR-22L/18L		22	18	30 x 2	40	32.5	27	36		
KOR-28L/18L		28	18	36 x 2	41	33.5	30	41		
KOR-35L/18L		35	18	45 x 2	47.5	40	36	50		
KOR-42L/18L		42	18	52 x 2	48.5	41	46	60		
KOR-28L/22L		28	22	36 x 2	43	35.5	32	41		
KOR-35L/22L		35	22	45 x 2	49.5	42	36	50		
KOR-42L/22L		42	22	52 x 2	50.5	43	46	60		
KOR-35L/28L		35	28	45 x 2	49.5	42	41	50		
KOR-42L/28L		42	28	52 x 2	50.5	43	46	60		
KOR-42L/35L		42	35	52 x 2	52.5	42	46	60		

† Limited stock available

# KOR Standpipe Tube Reducer

## S Series



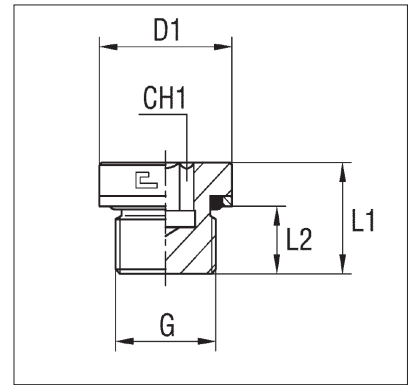
\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg KOR-16S/06SC

Series	Max. W.P. psi	Product Code (Body only)	Ø Tube		Dimensions mm				
			D1	D2	m	L1	L2	CH1	CH2
S	9137	KOR-08S/06S	8	6	14 x 1.5	-	-	-	-
		KOR-10S/06S	10	6	18 x 1.5	-	-	-	-
		KOR-12S/06S †	12	6	20 x 1.5	38	31	14	24
		KOR-14S/06S	14	6	22 x 1.5	42	35	17	27
	5801	KOR-16S/06S †	16	6	24 x 1.5	43	36	17	30
		KOR-20S/06S †	20	6	30 x 2	48.5	41.5	22	36
		KOR-25S/06S †	25	6	36 x 2	51	44	27	46
		KOR-30S/06S †	30	6	42 x 2	55.5	48.5	32	50
	4568	KOR-38S/06S †	38	6	52 x 2	61.5	54	41	60
	9137	KOR-10S/08S	10	8	18 x 1.5	40.5	33.5	17	22
		KOR-12S/08S	12	8	20 x 1.5	40	33	17	24
		KOR-14S/08S	14	8	22 x 1.5	42	35	17	27
	5801	KOR-16S/08S	16	8	24 x 1.5	43	36	17	30
		KOR-20S/08S	20	8	30 x 2	48.5	41	22	36
		KOR-25S/08S †	25	8	36 x 2	51	44	27	46
		KOR-30S/08S †	30	8	42 x 2	55.5	48.5	32	50
	4568	KOR-38S/08S †	38	8	52 x 2	61.5	54.5	41	60
	9137	KOR-12S/10S	12	10	20 x 1.5	40	32.5	19	24
		KOR-14S/10S	14	10	22 x 1.5	42	34.5	19	27
	5801	KOR-16S/10S	16	10	24 x 1.5	43	35.5	19	30
		KOR-20S/10S	20	10	30 x 2	48.5	41	22	36
		KOR-25S/10S †	25	10	36 x 2	51	43.5	27	46
	3625	KOR-30S/10S †	30	10	42 x 2	55.5	48	32	50
		KOR-38S/10S †	38	10	52 x 2	61.5	54	41	60
	9137	KOR-14S/12S	14	12	22 x 1.5	44	36.5	22	27
	5801	KOR-16S/12S	16	12	24 x 1.5	45	37.5	22	30
		KOR-20S/12S	20	12	30 x 2	48.5	41	22	36
		KOR-25S/12S †	25	12	36 x 2	51	43.5	27	46
		KOR-30S/12S	30	12	42 x 2	55.5	48	32	50
	4568	KOR-38S/12S †	38	12	52 x 2	61.5	54	41	60
5801	KOR-16S/14S	16	14	24 x 1.5	47	39	24	30	
	KOR-20S/14S	20	14	30 x 2	50.5	42.5	24	36	
	KOR-25S/14S	25	14	36 x 2	53	45	27	46	
3625	KOR-30S/14S	30	14	42 x 2	57.5	49.5	32	50	
	KOR-38S/14S †	38	14	52 x 2	63.5	55.5	41	60	
5801	KOR-20S/16S	20	16	30 x 2	50.5	42	27	36	
	KOR-25S/16S	25	16	36 x 2	53	44.5	27	46	
	KOR-30S/16S	30	16	42 x 2	57.5	49	32	50	
4568	KOR-38S/16S †	38	16	52 x 2	63.5	55	41	60	
5801	KOR-25S/20S	25	20	36 x 2	57	46.5	32	46	
	KOR-30S/20S	30	20	42 x 2	59.5	49	32	50	
	KOR-38S/20S	38	20	52 x 2	65.5	55	41	60	
	KOR-30S/25S	30	25	42 x 2	63.5	51.5	41	50	
4568	KOR-38S/25S	38	25	52 x 2	67.5	55.5	41	60	
	KOR-38S/30S	38	30	52 x 2	69.5	56	46	60	

† Limited stock available

# VSTIR Socket Head Port Plug - BSPP

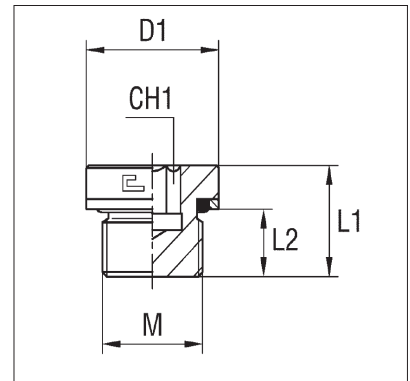
## Elastomer Seal (ED)



Series	Max. W.P. psi	Product Code	Dimensions mm				
			G	D1	L1	L2	CH1
S	5801	VSTIR-1/8	1/8	14	12	8	5
		VSTIR-1/4	1/4	19	17	12	6
		VSTIR-3/8	3/8	22	17	12	8
		VSTIR-1/2	1/2	27	19	14	10
		VSTIR-3/4	3/4	32	21	16	12
	VSTIR-1	1	40	22.5	16	17	
	3625	VSTIR-11/4	1.1/4	50	22.5	16	22
		VSTIR-11/2	1.1/2	55	22.5	16	24

# VSTI Socket Head Port Plug - Metric

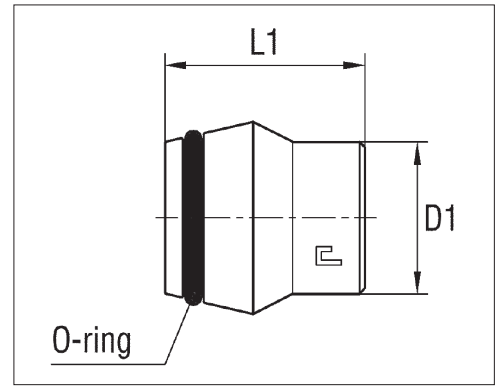
## Elastomer Seal (ED)



Series	Max. W.P. psi	Product Code	Dimensions mm				
			M	D1	L1	L2	CH1
S	5801	VSTI-10x1	10 x 1	14	12	8	5
		VSTI-12x1.5	12 x 1.5	17	17	12	6
		VSTI-14x1.5	14 x 1.5	19	17	12	6
		VSTI-16x1.5	16 x 1.5	22	17	12	8
		VSTI-18x1.5	18 x 1.5	24	17	12	8
		VSTI-20x1.5	20 x 1.5	26	19	14	10
		VSTI-22x1.5	22 x 1.5	27	19	14	10
		VSTI-26x1.5	26 x 1.5	32	21	16	12
		VSTI-27x2.0	27 x 2	32	21	16	12
		VSTI-33x2.0	33 x 2	40	22.5	16	17
	3625	VSTI-42x2.0	42 x 2	50	22.5	16	22
		VSTI-48x2.0	48 x 2	55	22.5	16	24

# BUZ Blanking Cap

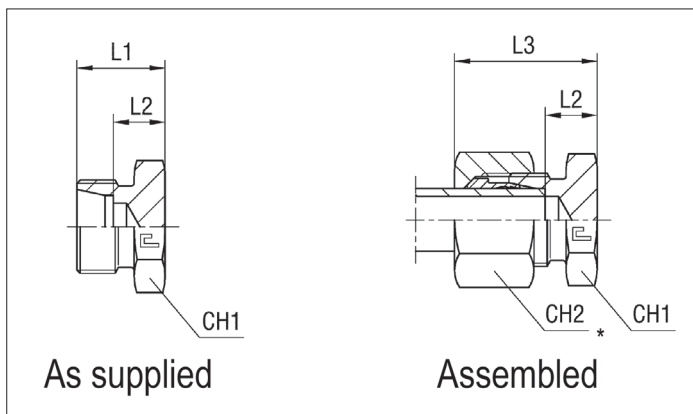
(Tightening nut not included)



Series	psi	Product Code	Dimensions mm		
			∅ Tube	D1	L1
L	4568	BUZ-06L/S	6	6	17
		BUZ-08L/S	8	8	17
		BUZ-10L/S	10	10	20
		BUZ-12L/S	12	12	21
		BUZ-15L	15	15	21
		BUZ-18L	18	18	23
	2320	BUZ-22L	22	22	23
		BUZ-28L	28	28	25
		BUZ-35L	35	35	29
		BUZ-42L	42	42	30
S	9137	BUZ-06L/S	6	6	17
		BUZ-08L/S	8	8	17
		BUZ-10L/S	10	10	20
		BUZ-12L/S	12	12	21
		BUZ-14S	14	14	23
	5801	BUZ-16S	16	16	24
		BUZ-20S	20	20	28
		BUZ-25S	25	25	31
		BUZ-30S	30	30	34
	4568	BUZ-38S	38	38	38



# ROV Blanking Plug for Tube Ends (Standpipe End Plug)



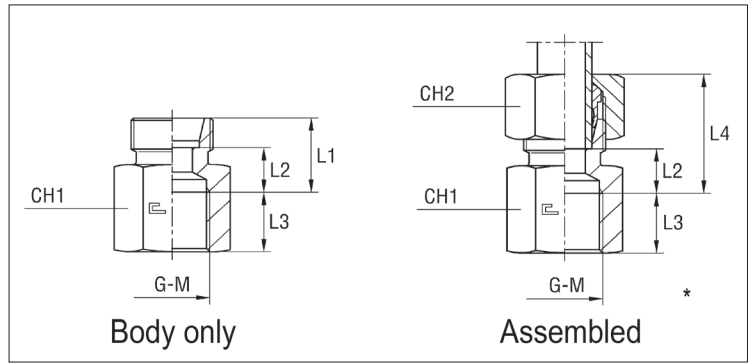
\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg ROV-12LC

Series	Max. W.P. psi	Product Code (Plug only)	Dimensions mm					
			∅ Tube	L1	L2	L3	CH1	CH2
L	4568	ROV-06L	6	14	7	21.5	12	14
		ROV-08L	8	15	8	23	14	17
		ROV-10L	10	16	9	24	17	19
		ROV-12L	12	17	10	24.5	19	22
		ROV-15L	15	18	11	26	24	27
		ROV-18L	18	19	11.5	28	27	32
	2320	ROV-22L	22	21	13.5	30	32	36
		ROV-28L	28	22	14.5	31	41	41
		ROV-35L	35	25	14.5	36	46	50
		ROV-42L	42	27	16	39	55	60
S	9137	ROV-06S	6	18	11	26	14	17
		ROV-08S	8	20	13	28	17	19
		ROV-10S	10	20	12.5	28.5	19	22
		ROV-12S	12	22	14.5	30.5	22	24
		ROV-14S	14	24	16	34	24	27
	5801	ROV-16S	16	24	15.5	34	27	30
		ROV-20S	20	28	17.5	39	32	36
		ROV-25S	25	32	20	44	41	46
		ROV-30S	30	34	20.5	47	46	50
	4568	ROV-38S	38	39	23	54	55	60

† Limited stock available

# GAI Female Stud Coupling

## BSPP Thread

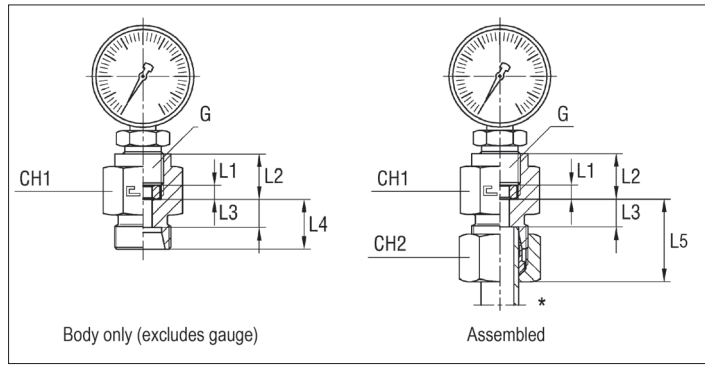


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg GAI-15LR1/2C

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			Ø Tube	G	L1	L2	L3	L4	CH1	CH2
L	4568	GAI-06LR1/8	6	1/8	16	9	10	23.5	14	14
		GAI-08LR1/4	8	1/4	17	10	14	25	19	17
		GAI-10LR1/4	10	1/4	18	11	14	26	19	19
		GAI-12LR3/8	12	3/8	19	12	14	26.5	24	22
		GAI-15LR1/2	15	1/4	21	14	17	29	27	27
	2320	GAI-18LR1/2	18	1/2	21	13.5	17	30	27	32
		GAI-22LR3/4	22	3/4	24	16.5	19	33	36	36
		GAI-28LR1	28	1	23.5	16	21.5	32.5	41	41
S	9137	GAI-35LR11/4	35	1.1/4	28.5	18	23.5	39.5	55	50
		GAI-42LR11/2	42	1.1/2	28.5	17.5	25.5	40.5	60	60
		GAI-06SR1/4	6	1/4	19	12	14	27	19	17
		GAI-08SR1/4	8	1/4	19	12	14	27	19	19
	5801	GAI-10SR3/8	10	3/8	20	12.5	14	28.5	24	22
		GAI-12SR3/8	12	3/8	20	12.5	14	28.5	24	24
		GAI-14SR1/2	14	1/2	23	15	17	33	30	27
		GAI-16SR1/2	16	1/2	23	14.5	17	33	30	30
		GAI-20SR3/4	20	3/4	26	15.5	19	37	36	36
		GAI-25SR1	25	1	27.5	15.5	21.5	39.5	41	46
4568	GAI-30SR11/4	30	1.1/4	32.5	19	23.5	45.5	55	50	
	GAI-38SR11/2	38	1.1/2	34.5	18.5	25.53	49.5	60	60	

† Limited stock available

# MAV Gauge Coupling Male Metric

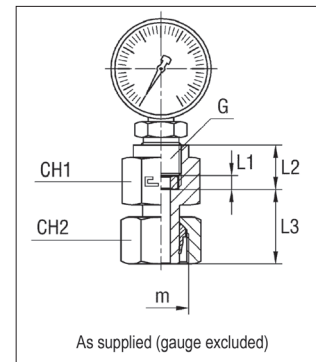


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg MAV-12LR1/4C

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm								
			∅ Tube	G	L1	L2	L3	L4	L5	CH1	CH2
L	4568	MAV-06LR1/4	6	1/4	4.5	14.5	7.5	14.5	22.5	19	14
		MAV-08LR1/4†	8	1/4	4.5	14.5	7.5	14.5	22.5	19	17
		MAV-10LR1/4	10	1/4	4.5	14.5	8.5	15.5	23.5	19	19
		MAV-12LR1/4	12	1/4	4.5	14.5	8.5	15.5	23.5	19	0.22
S	9137	MAV-06SR1/2	6	1/2	5	20	11	18	26	30	17
		MAV-08SR1/2	8	1/2	5	20	11	18	26	30	19
		MAV-10SR1/2 †	10	1/2	5	20	10.5	18	26.5	30	22
		MAV-12SR1/2	12	1/2	5	20	10.5	18	26.5	30	24

† Limited stock available

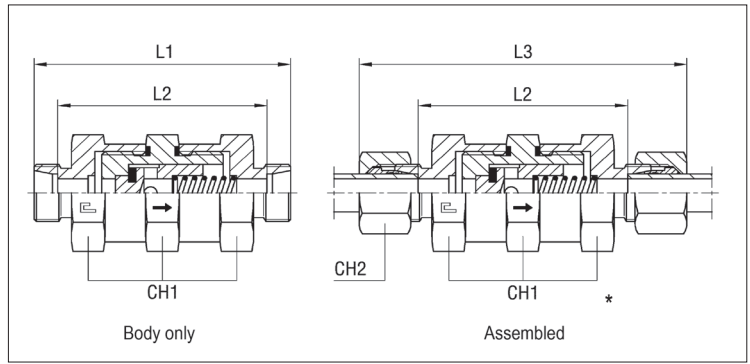
# MAVE Gauge Coupling Female Metric



Series	Max. W.P. psi	Product Code	Dimensions mm							
			∅ Tube	G	m	L1	L2	L3	CH1	CH2
L	4568	MAVE-06LR1/4 †	6	1/4	12 x 1.5	4.5	14.5	23.5	19	14
		MAVE-08LR1/4 †	8	1/4	14 x 1.5	4.5	14.5	25	19	17
		MAVE-10LR1/4 †	10	1/4	16 x 1.5	4.5	14.5	25	19	19
		MAVE-12LR1/4 †	12	1/4	18 x 1.5	4.5	14.5	26.5	19	22
S	9137	MAVE-06SR1/2 †	6	1/2	14 x 1.5	5	20	25	30	17
		MAVE-08SR1/2 †	8	1/2	16 x 1.5	5	20	25.5	30	19
		MAVE-10SR1/2 †	10	1/2	18 x 1.5	5	20	27.5	30	22
		MAVE-12SR1/2 †	12	1/2	20 x 1.5	5	20	27.5	30	24

† Limited stock available

# NRV Non Return Valve Male Metric Coupling



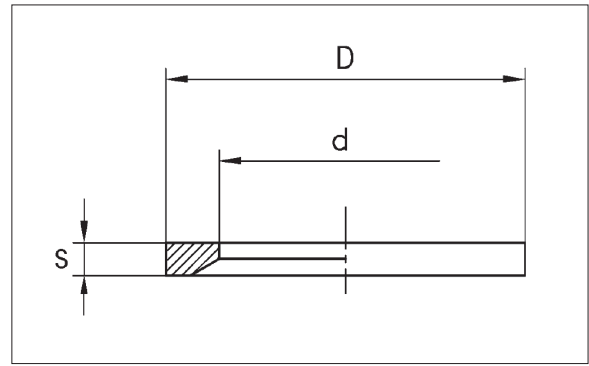
\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg NRV-18LC

Series	psi	Product Code (Body only)	Dimensions mm						
			∅ Tube	L1	L2	L3	CH1	CH2	∅ passage
L	3625	NRV-06L	6	68	54	83	19	14	4
		NRV-08L †	8	68	54	83	19	17	4
		NRV-10L †	10	70	56	85	19	19	4
		NRV-12L †	12	76	62	91	32	22	8
		NRV-15L	15	81	67	97	41	27	11
	2320	NRV-18L	18	81	66	98	41	32	11
		NRV-22L †	22	94	79	111	50	36	18
	1450	NRV-28L †	28	94	79	112	50	41	18
		NRV-35L †	35	116	95	138	70	50	29
		NRV-42L †	42	116	94	139	70	60	29
S	5801	NRV-06S †	6	72	58	87	19	17	4
		NRV-08S †	8	72	58	87	19	19	4
		NRV-10S †	10	78	63	95	32	22	7
		NRV-12S	12	78	63	95	32	24	8
		NRV-14S †	14	85	69	104	41	27	10
		NRV-16S	16	85	68	104	41	30	11
		NRV-20S	20	98	77	120	50	36	16
	3625	NRV-25S †	25	102	78	126	50	46	18
		NRV-30S †	30	124	97	150	70	50	25
		NRV-38S †	38	128	96	157	70	60	29

† Limited stock available

# EZ Elastomer Seal

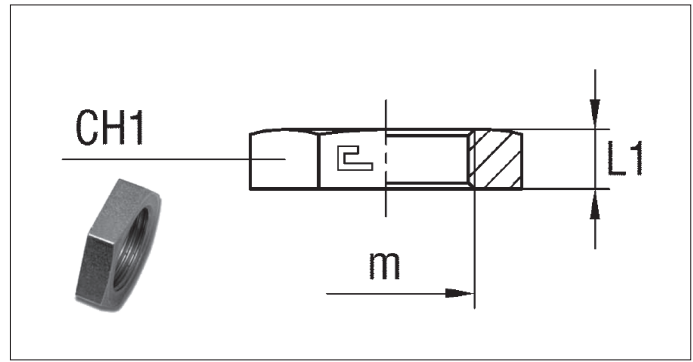
## Viton



Product Code	Interchange †	Dimensions mm				
		M Metric	G BSPP	D	d	s
<b>Metric Studs</b>						
EZ-M14x1.5	1	14 x 1.5	1/4	16.5	11.6	1.5
EZ-M26x1.5/M27x2	2	26 x 1.5 27 x 2	3/4	29.2	23.9	1.5
EZ-M33x2	3	33 x 2	1	35.7	29.7	2
EZ-M42x2	4	42 x 2	1.1/4	45.8	38.8	2
EZ-R1.1/2	5	48 x 2	1.1/2	50.7	44.7	2
<b>BSPP Studs</b>						
EZ-M14x1.5	1	14 x 1.5	1/4	16.5	11.6	1.5
EZ-R3/8	-	-	3/8	18.9	14.7	1.5
EZ-R1.1/2	-	-	1/2	23.9	18.5	1.5
EZ-M26x1.5/M27x2	2	26 x 1.5 27 x 2	3/4	29.2	23.9	1.5
EZ-M33x2	3	33 x 2	1	35.7	29.7	2
EZ-M42x2	4	42 x 2	1.1/4	45.8	38.8	2
EZ-R1.1/2	5	48 x 2	1.1/2	50.7	44.7	2

† Numbered Product Codes are interchangeable between BSPP and the corresponding Metric size

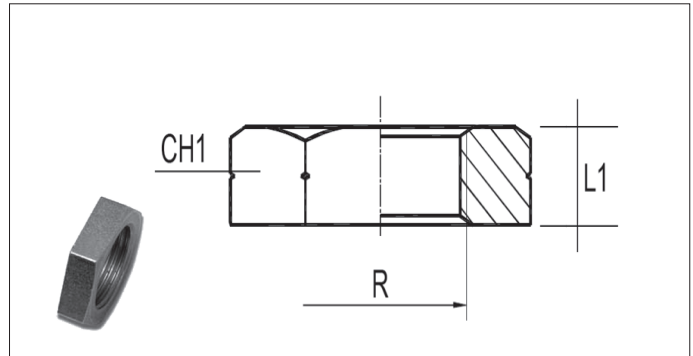
# GM Hexagonal Lock Nut Metric



Series	Product Code	Dimensions mm				
		m	L1	CH1	Tube	Tube
L / S	GM-6L †	12 x 1.5	6	17	6L	-
	GM-6S/8L †	14 x 1.5	6	19	8L	6S
	GM-8S/10L †	16 x 1.5	6	22	10L	8S
	GM-10S/12L †	18 x 1.5	6	24	12L	10S
	GM-12S †	20 x 1.5	6	27	-	12S
	GM-14S/15L †	22 x 1.5	7	30	15L	14S
	GM-16S †	24 x 1.5	7	32	-	16S
	GM-18L †	26 x 1.5	8	36	18L	-
	GM-20S/22L †	30 x 2	8	41	22L	20S
	GM-25S/28L †	36 x 2	9	46	28L	25S
	GM-30S †	42 x 2	9	50	-	30S
	GM-35L †	45 x 2	9	55	35L	-
GM-38S/42L †	52 x 2	10	65	42L	38S	

† Limited stock available

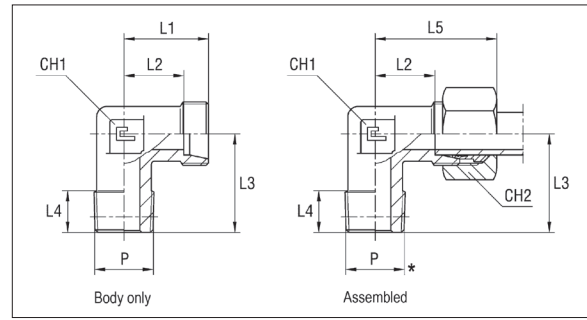
# GM Hexagonal Lock Nut BSPP



Series	Product Code	Dimensions mm (except R)		
		R (ins)	L1	CH1
BSPP	GM-R1/4 †	1/4 - 19	6.5	19
	GM-R1 †	1 - 11	10.5	41
	GM-R1 1/4 †	1.1/4 - 11	10.5	50
	GM-R1 1/2 †	1.1/2 - 11	10.5	55

† Limited stock available

# WE Male Stud Elbow Coupling - NPT

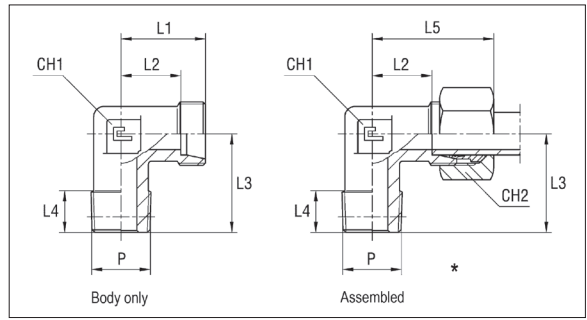


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg WE-12L3/8NPTC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm								
			Ø Tube	P	L1	L2	L3	L4	L5	CH1	CH2
LL	1450	WE-04LL1/8NPT †	4	1/8	15	11	17	8	21	9	10
		WE-06LL1/8NPT †	6	1/8	15	9.5	17	8	21	9	12
		WE-08LL1/8NPT †	8	1/8	17	11.5	20	8	23	12	14
L	4568	WE-06L1/8NPT	6	1/8	19	12	20	10	27	12	14
		WE-08L1/4NPT	8	1/4	21	14	26	15	29	12	17
		WE-10L1/4NPT	10	1/4	22	15	27	15	30	14	19
		WE-12L3/8NPT	12	3/8	24	17	28	15	32	17	22
		WE-15L1/2NPT †	15	1/2	28	21	34	19.5	36	19	27
		WE-18L1/2NPT †	18	1/2	31	23.5	36	19.5	40	24	32
	2320	WE-22L3/4NPT	22	3/4	35	27.5	42	20	44	27	36
		WE-28L1NPT †	28	1	38	30.5	48	25	47	36	41
		WE-35L11/4NPT †	35	1.1/4	45	34.5	57	25.5	56	41	50
		WE-42L11/2NPT †	42	1.1/2	51	40	61	26	63	50	60
S	9137	WE-06S1/4NPT †	6	1/4	23	16	26	15	31	12	17
		WE-08S1/4NPT †	8	1/4	24	17	27	15	32	14	19
		WE-10S3/8NPT †	10	3/8	25	17.5	28	15	34	17	22
		WE-12S3/8NPT †	12	3/8	29	21.5	28	15	38	17	24
		WE-14S1/2NPT †	14	1/2	30	22	34	19.5	40	19	27
	5801	WE-16S1/2NPT †	16	1/2	33	24.5	36	19.5	43	24	30
		WE-20S3/4NPT †	20	3/4	37	26.5	42	20	48	27	36
		WE-25S1NPT †	25	1	42	30	48	25	54	36	46
	4568	WE-30S11/4NPT †	30	1.1/4	49	35.5	57	25.5	62	41	50
		WE-38S11/2NPT †	38	1.1/2	57	41	61	26	72	50	60

† Limited stock available

# WE Male Stud Elbow Coupling - BSPT



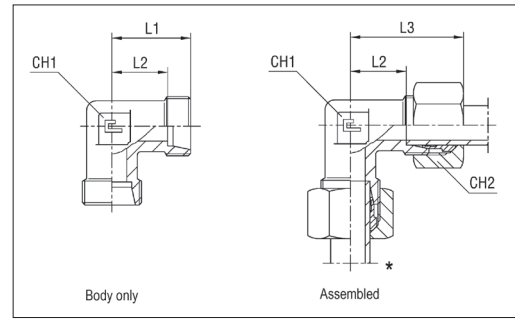
\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg WE-10LRK1/4C

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm								
			Ø Tube	P	L1	L2	L3	L4	L5	CH1	CH2
LL	1450	WE-04LLRK1/8 †	4	1/8	15	11	17	8	21	9	10
		WE-06LLRK1/8	6	1/8	15	9.5	17	8	21	9	12
		WE-08LLRK1/8 †	8	1/8	17	11.5	20	8	23	12	14
L	4568	WE-06LRK1/8	6	1/8	19	12	20	8	27	12	14
		WE-08LRK1/4	8	1/4	21	14	26	12	29	12	17
		WE-10LRK1/4	10	1/4	22	15	27	12	30	14	19
		WE-10LRK3/8	10	3/8	24	17	28	12	32	17	19
		WE-12LRK3/8	12	3/8	24	17	28	12	32	17	22
		WE-12LRK1/2	12	1/2	27	20	34	14	34	19	22
		WE-15LRK1/2	15	1/2	28	21	34	14	36	19	27
WE-18LRK1/2	18	1/2	31	23.5	36	14	40	24	32		
	2320	WE-28LRK1	28	1	38	30.5	48	18	47	36	41
S	9137	WE-06SRK1/4	6	1/4	23	16	26	12	31	12	17
		WE-08SRK1/4	8	1/4	24	17	27	12	32	14	19
		WE-10SRK3/8	10	3/8	25	17.5	28	12	34	17	22
		WE-12SRK3/8	12	3/8	29	21.5	28	12	38	17	24
		WE-14SRK1/2	14	1/2	30	22	32	14	40	19	27
	5801	WE-16SRK1/2	16	1/2	33	24.5	32	14	43	24	30
		WE-20SRK3/4	20	3/4	37	26.5	42	16	48	27	36

† Limited stock available



# W Equal Elbow Tube Coupling

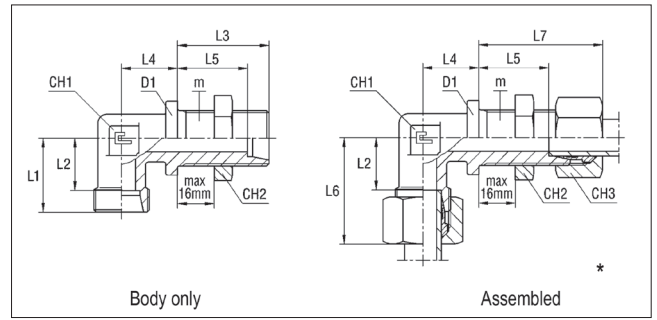


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg W-12LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm					
			∅ Tube	L1	L2	L3	CH1	CH2
LL	1450	W-04LL †	4	15	11	21	9	10
		W-06LL †	6	15	9.5	21	9	12
		W-08LL †	8	17	11.5	23	12	14
L	4568	W-06L	6	19	12	27	12	14
		W-08L	8	21	14	29	12	17
		W-10L	10	22	15	30	14	19
		W-12L	12	24	17	32	17	22
		W-15L	15	28	21	36	19	27
		W-18L	18	31	23.5	40	24	32
		W-22L	22	35	27.5	44	27	36
	2320	W-28L	28	38	30.5	47	36	41
		W-35L	35	45	34.5	56	41	50
		W-42L	42	51	40	63	50	60
S	9137	W-06S	6	23	16	31	12	17
		W-08S	8	24	17	32	14	19
		W-10S	10	25	17.5	34	17	22
		W-12S	12	29	21.5	38	17	24
	5801	W-14S	14	30	22	40	19	27
		W-16S	16	33	24.5	43	24	30
		W-20S	20	37	26.5	48	27	36
		W-25S	25	42	30	54	36	46
		W-30S	30	49	35.5	62	41	50
		W-38S	38	57	41	72	50	60

† Limited stock available

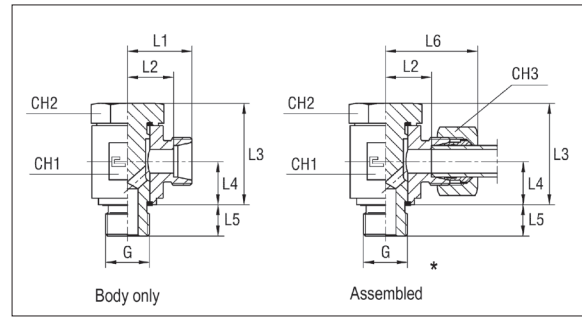
# WSV Bulkhead Elbow Coupling



\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg WSV-12LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm												
			∅ Tube	m	L1	L2	L3	L4	L5	L6	L7	D1	CH1	CH2	CH3
L	4568	WSV-06L	6	12 x 1.5	19	12	34	14	27	19	42	17	12	17	14
		WSV-08L	8	14 x 1.5	21	14	34	17	27	21	42	19	12	19	17
		WSV-10L	10	16 x 1.5	22	15	35	18	28	22	43	22	14	22	19
		WSV-12L	12	18 x 1.5	24	17	36	20	29	24	44	24	17	24	22
		WSV-15L	15	22 x 1.5	28	21	38	23	31	28	46	27	19	30	27
	WSV-18L †	18	26 x 1.5	31	23.5	40	24	32.5	31	49	32	24	36	32	
	2320	WSV-22L	22	30 x 2	35	27.5	42	30	34.5	35	51	36	27	41	36
		WSV-28L †	28	36 x 2	38	30.5	43	34	35.5	38	52	42	36	46	41
		WSV-35L †	35	45 x 2	45	34.5	47	39	36.5	45	58	50	41	55	50
WSV-42L †		42	52 x 2	51	40	47	43	36	51	59	60	50	65	60	
S	9137	WSV-06S	6	14 x 1.5	23	16	36	17	29	23	44	19	12	19	17
		WSV-08S	8	16 x 1.5	24	17	36	18	29	24	44	22	14	22	19
		WSV-10S	10	18 x 1.5	25	17.5	37	20	29.5	25	46	24	17	24	22
		WSV-12S	12	20 x 1.5	29	21.5	38	21	30.5	29	47	27	17	27	24
		WSV-14S †	14	22 x 1.5	30	22	40	23	32	30	50	27	19	30	27
	5801	WSV-16S	16	24 x 1.5	33	24.5	40	24	31.5	33	50	30	24	32	30
		WSV-20S	20	30 x 2	37	26.5	44	30	33.5	37	55	36	27	41	36
		WSV-25S	25	36 x 2	42	30	47	34	35	42	59	42	36	46	46
	4568	WSV-30S †	30	42 x 2	49	35.5	51	39	37.5	49	64	50	41	50	50
		WSV-38S	38	52 x 2	57	41	53	43	37	57	68	60	50	65	60

# DSVW Banjo Coupling BSPP

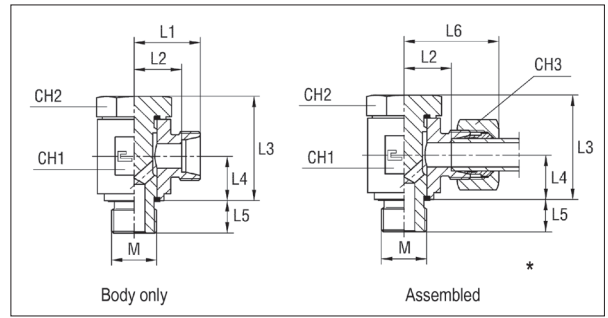


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg DSVW-12LR3/8C

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm										
			∅ Tube	G	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3
L	4568	DSVW-06LR1/8	6	1/8	19	12	18.5	10.5	8	27	17	17	14
		DSVW-08LR1/4	8	1/4	21.5	14.5	25	14	12	29.5	22	19	17
		DSVW-10LR1/4	10	1/4	22.5	15.5	25	14	12	30.5	22	19	19
		DSVW-12LR3/8	12	3/8	25	18	30	16.5	12	33	27	24	22
		DSVW-15LR1/2	15	1/2	29	22	37.5	21.5	14	37	32	30	27
		DSVW-18LR1/2	18	1/2	29	21.5	37.5	21.5	14	38	32	30	32
	2320	DSVW-22LR3/4	22	3/4	34	26.5	44	24	16	43	41	36	36
		DSVW-28LR1	28	1	38.5	31	55.5	30.5	18	47.5	50	46	41
		DSVW-35LR11/4 †	35	1.1/4	45.5	35	65.5	35.5	20	56.5	60	55	50
S	9137	DSVW-06SR1/4	6	1/4	23.5	16.5	25	14	12	31.5	22	19	17
		DSVW-08SR1/4	8	1/4	23.5	16.5	25	14	12	31.5	22	19	19
		DSVW-10SR3/8	10	3/8	26	18.5	30	16.5	12	35	27	24	22
		DSVW-12SR3/8	12	3/8	26	18.5	30	16.5	12	35	27	24	24
		DSVW-14SR1/2	14	1/2	31	23	37.5	21.5	14	41	32	30	27
		DSVW-16SR1/2	16	1/2	31	22.5	37.5	21.5	14	41	32	30	30
	5801	DSVW-20SR3/4	20	3/4	36	25.5	44	24	16	47	41	36	36
		DSVW-25SR1	25	1	42.5	31.5	55.5	30.5	18	54.5	50	46	46
		DSVW-30SR11/4	30	1.1/4	49.5	36	65.5	35.5	20	62.5	60	55	50
	4568	DSVW-38SR11/2 †	38	1.1/2	56.5	40.5	75.5	40.5	22	71.5	70	60	60

† Limited stock available

# DSVW Banjo Coupling Metric



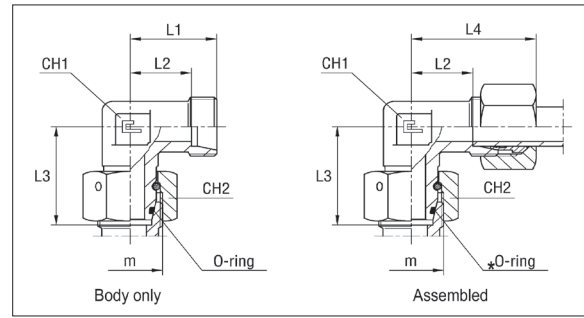
\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg DSVW-12LM16x1.5C

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm										
			∅ Tube	m	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3
LL	1450	DSVW-08LLM10x1 †	6	10x1	18	12.5	18.5	10.5	8	24	17	17	12
L	4568	DSVW-06LM10x1	6	10x1	19	12	18.5	10.5	8	27	17	17	14
		DSVW-08LM12x1.5	8	12x1.5	21.5	14.5	25	14	12	29.5	22	19	17
		DSVW-10LM14x1.5	10	14x1.5	24	17	36	20	29	24	17	24	22
		DSVW-12LM16x1.5	12	16x1.5	25	18	30	16.5	12	33	27	24	22
		DSVW-15LM18x1.5	15	18x1.5	29	22	33.5	18.5	12	37	32	27	27
		DSVW-18LM22x1.5 †	18	22x1.5	29	21.5	37.5	21.5	14	38	32	30	32
	2320	DSVW-22LM26x2 †	22	26x2	34	26.5	44	24	16	43	41	36	36
S	9137	DSVW-06SM12x1.5 †	6	12x1.5	23.5	16.5	25	14	12	31.5	22	19	17
		DSVW-08SM14x1.5	8	14x1.5	23.5	16.5	25	14	12	31.5	22	19	19
		DSVW-10SM16x1.5	10	16x1.5	26	18.5	30	16.5	12	35	27	24	22
		DSVW-12SM18x1.5	12	18x1.5	29	21.5	33.5	18.5	12	38	32	24	24
		DSVW-14SM20x1.5 †	14	20x1.5	31	23	36	20	14	41	32	30	27
	5801	DSVW-16SM22x1.5	16	22x1.5	31	22.5	37.5	21.5	14	41	32	30	30
		DSVW-20SM27x2	20	27x2	36	25.5	44	24	16	47	41	36	36

† Limited stock available

# EVW Adjustable Elbow Coupling

## 90 Degree



\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg EVW-15LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			∅ Tube	m	L1	L2	L3	L4	CH1	CH2
L	4568	EVW-06L	6	12 x 1.5	19	12	26	27	12	14
		EVW-08L	8	14 x 1.5	21	14	27.5	29	12	17
		EVW-10L	10	16 x 1.5	22	15	29	30	14	19
		EVW-12L	12	18 x 1.5	24	17	29.5	32	17	22
		EVW-15L	15	22 x 1.5	28	21	32.5	36	19	27
	2320	EVW-18L	18	26 x 1.5	31	23.5	35.5	40	24	32
		EVW-22L	22	30 x 2	35	27.5	38.5	44	27	36
		EVW-28L	28	36 x 2	38	30.5	41.5	47	36	41
		EVW-35L	35	45 x 2	45	34.5	51.5	56	41	50
S	9137	EVW-42L	42	52 x 2	51	40	56	63	50	60
		EVW-06S	6	14 x 1.5	23	16	27	31	12	17
		EVW-08S	8	16 x 1.5	24	17	27.5	32	14	19
		EVW-10S	10	18 x 1.5	25	17.5	30	34	17	22
		EVW-12S	12	20 x 1.5	29	21.5	31	38	17	24
	5801	EVW-14S	14	22 x 1.5	30	22	35	40	19	27
		EVW-16S	16	24 x 1.5	33	24.5	36.5	43	24	30
		EVW-20S	20	30 x 2	37	26.5	44.5	48	27	36
		EVW-25S	25	36 x 2	42	30	50	54	36	46
		EVW-30S	30	42 x 2	49	35.5	55.5	62	41	50
4568	EVW-38S	38	52 x 2	57	41	63	72	50	60	

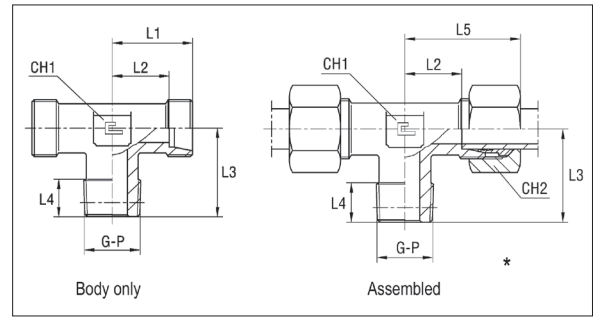
# EVF Adjustable Elbow Coupling

## 45 Degree

\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg EVW-15LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			∅ Tube	M	L1	L2	L3	L4	CH1	CH2
L	4568	EVF-12L	12	18 x 1.5	-	-	-	-	17	22
S	9137	EVF-12S	12	20 x 1.5	-	-	-	-	17	24

# TE Male Stud Branch Tee - BSPT

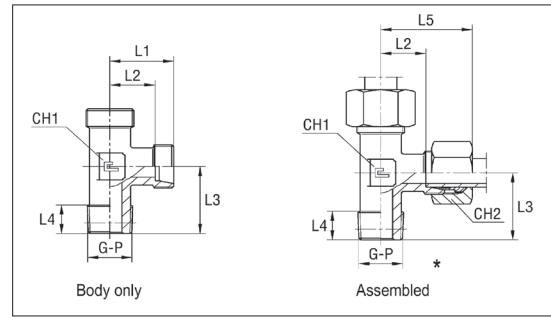


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg TE-15LRK1/2C

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm								
			Ø Tube	G	L1	L2	L3	L4	L5	CH1	CH2
LL	1450	TE-04LLRK1/8 †	4	1/8	15	11	17	8	21	9	10
		TE-06LLRK1/8 †	6	1/8	15	9.5	17	8	21	9	12
		TE-08LLRK1/8 †	8	1/8	17	11.5	20	8	23	12	14
L	4568	TE-06LRK1/8 †	6	1/8	19	12	20	8	27	12	14
		TE-08LRK1/4 †	8	1/4	21	14	26	12	29	12	17
		TE-10LRK1/4 †	10	1/4	22	15	27	12	30	14	19
		TE-12LRK3/8 †	12	3/8	24	17	28	12	32	17	22
		TE-15LRK1/2 †	15	1/2	28	21	34	14	36	19	27
		TE-18LRK1/2 †	18	1/2	31	23.5	36	14	40	24	32
S	9137	TE-06SRK1/4 †	6	1/4	23	16	26	12	31	12	17
		TE-08SRK1/4 †	8	1/4	24	17	27	12	32	14	19
		TE-10SRK3/8 †	10	3/8	25	17.5	28	12	34	17	22
		TE-12SRK3/8 †	12	3/8	29	21.5	28	12	38	17	24
		TE-14SRK1/2 †	14	1/2	30	22	32	14	40	19	27
	5801	TE-16SRK1/2 †	16	1/2	33	24.5	32	14	43	24	30

† Limited stock available

# LE Male Stud Barrel Tee - BSPT

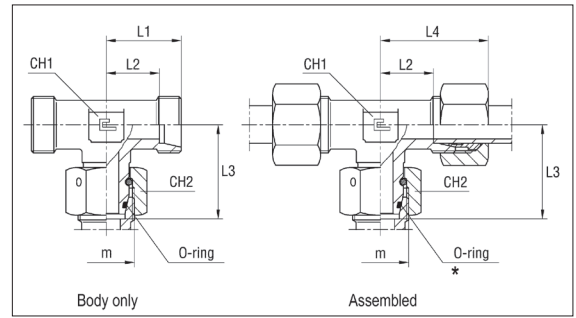


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg LE-12LRK3/8C

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm								
			Ø Tube	G	L1	L2	L3	L4	L5	CH1	CH2
L	1450	LE-04LLRK1/8 †	4	1/8	15	11	17	8	21	9	10
		LE-06LLRK1/8 †	6	1/8	15	9.5	17	8	21	9	12
		LE-08LLRK1/8 †	8	1/8	17	11.5	20	8	23	12	14
	4568	LE-06LRK1/8 †	6	1/8	19	12	20	8	27	12	14
		LE-08LRK1/4 †	8	1/4	21	14	26	12	29	12	17
		LE-10LRK1/4 †	10	1/4	22	15	27	12	30	14	19
		LE-12LRK3/8 †	12	3/8	24	17	28	12	32	17	22
		LE-15LRK1/2 †	15	1/2	28	21	34	14	36	19	27
LE-18LRK1/2 †	18	1/2	31	23.5	36	14	40	24	32		
S	9137	LE-06SRK1/4 †	6	1/4	23	16	26	12	31	12	17
		LE-08SRK1/4 †	8	1/4	24	17	27	12	32	14	19
		LE-10SRK3/8 †	10	3/8	25	17.5	28	12	34	17	22
		LE-12SRK3/8 †	12	3/8	29	21.5	28	12	38	17	2
		LE-14SRK1/2 †	14	1/2	30	22	32	14	40	19	27
		LE-16SRK1/2 †	16	1/2	33	24.5	32	14	43	24	30

† Limited stock available

# EVT Adjustable Branch Tee Coupling

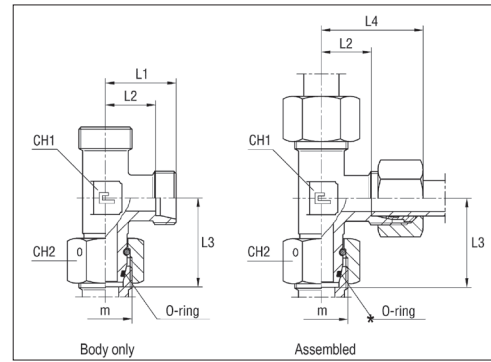


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg EVT-12LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			Ø Tube	m	L1	L2	L3	L4	CH1	CH2
L	4568	EVT-06L	6	12 x 1.5	19	12	26	27	12	14
		EVT-08L	8	14 x 1.5	21	14	27.5	29	12	17
		EVT-10L	10	16 x 1.5	22	15	29	30	14	19
		EVT-12L	12	18 x 1.5	24	17	29.5	32	17	22
		EVT-15L	15	22 x 1.5	28	21	32.5	36	19	27
		EVT-18L	18	26 x 1.5	31	23.5	35.5	40	24	32
	2320	EVT-22L	22	30 x 2	35	27.5	38.5	44	27	36
		EVT-28L	28	36 x 2	38	30.5	41.5	47	36	41
		EVT-35L	35	45 x 2	45	34.5	51.5	56	41	50
		EVT-42L	42	52 x 2	51	40	56	63	50	60
S	9137	EVT-06S	6	14 x 1.5	23	16	27	31	12	17
		EVT-08S	8	16 x 1.5	24	17	27.5	32	14	19
		EVT-10S	10	18 x 1.5	25	17.5	30	34	17	22
		EVT-12S	12	20 x 1.5	29	21.5	31	38	17	24
		EVT-14S	14	22 x 1.5	30	22	35	40	19	27
	5801	EVT-16S	16	24 x 1.5	33	24.5	36.5	43	24	30
		EVT-20S	20	30 x 2	37	26.5	44.5	48	27	36
		EVT-25S	25	36 x 2	42	30	50	54	36	46
		EVT-30S	30	42 x 2	49	35.5	55.5	62	41	50
	4568	EVT-38S	38	52 x 2	57	41	63	72	50	60



# EVL Adjustable Barrel Tee Coupling

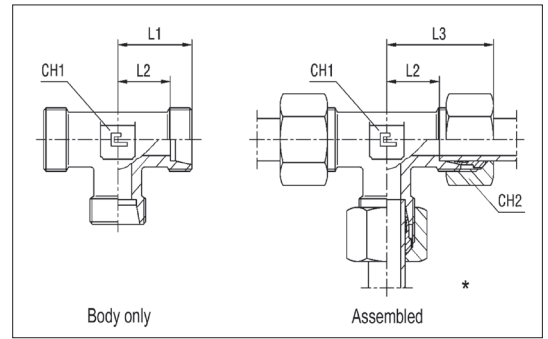


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg EVL-22LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm							
			∅ Tube	m	L1	L2	L3	L4	CH1	CH2
L	4568	EVL-06L	6	12 x 1.5	19	12	26	27	12	14
		EVL-08L	8	14 x 1.5	21	14	27.5	29	12	17
		EVL-10L	10	16 x 1.5	22	15	29	30	14	19
		EVL-12L	12	18 x 1.5	24	17	29.5	32	17	22
		EVL-15L	15	22 x 1.5	28	21	32.5	36	19	27
	160	EVL-18L	18	26 x 1.5	31	23.5	35.5	40	24	32
		EVL-22L	22	30 x 2	35	27.5	38.5	44	27	36
		EVL-28L	28	36 x 2	38	30.5	41.5	47	36	41
		EVL-35L	35	45 x 2	45	34.5	51.5	56	41	50
S	9137	EVL-06S	6	14 x 1.5	23	16	27	31	12	17
		EVL-08S	8	16 x 1.5	24	17	27.5	32	14	19
		EVL-10S	10	18 x 1.5	25	17.5	30	34	17	22
		EVL-12S	12	20 x 1.5	29	21.5	31	38	17	24
		EVL-14S	14	22 x 1.5	30	22	35	40	19	27
	5801	EVL-16S	16	24 x 1.5	33	24.5	36.5	43	24	30
		EVL-20S	20	30 x 2	37	26.5	44.5	48	27	36
		EVL-25S	25	36 x 2	42	30	50	54	36	46
	4568	EVL-30S	30	42 x 2	49	35.5	55.5	62	41	50
		EVL-38S	38	52 x 2	57	41	63	72	50	60

† Limited stock available

# T Equal Tee Coupling

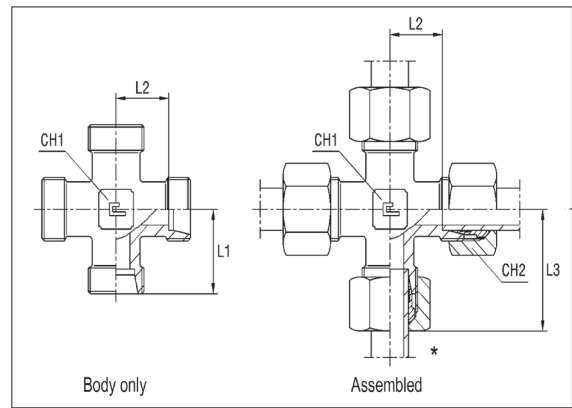


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if Nuts and Cutting Rings are required. eg T-22LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm					
			ø Tube	L1	L2	L3	CH1	CH2
LL	1450	T-04LL †	4	15	11	21	9	10
		T-06LL †	6	15	9.5	21	9	12
		T-08LL †	8	17	11.5	23	12	14
L	4568	T-06L	6	19	12	27	12	14
		T-08L	8	21	14	29	12	17
		T-10L	10	22	15	30	14	19
		T-12L	12	24	17	32	17	22
		T-15L	15	28	21	36	19	27
		T-18L	18	31	23.5	40	24	32
	2320	T-22L	22	35	27.5	44	27	36
		T-28L	28	38	30.5	47	36	41
		T-35L	35	45	34.5	56	41	50
		T-42L	42	51	40	63	50	60
S	9137	T-06S	6	23	16	31	12	17
		T-08S	8	24	17	32	14	19
		T-10S	10	25	17.5	34	17	22
		T-12S	12	29	21.5	38	17	24
		T-14S	14	30	22	40	19	27
	5801	T-16S	16	33	24.5	43	24	30
		T-20S	20	37	26.5	48	27	36
		T-25S	25	42	30	54	36	46
	4568	T-30S	30	49	35.5	62	41	50
		T-38S	38	57	41	72	50	60

† Limited stock available

# K Equal Cross Coupling

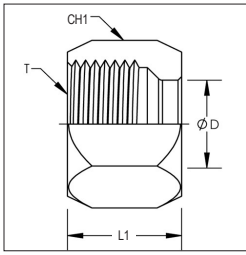


\* Supplied as body only unless otherwise specified. Add 'C' to the end of the Product Code if a Nut and Cutting Ring are required. eg K-12LC

Series	Max. W.P. psi	Product Code (Body only)	Dimensions mm					
			ø Tube	L1	L2	L3	CH1	CH2
L	4568	K-06L	6	19	12	27	12	14
		K-08L †	8	21	14	29	12	17
		K-10L	10	22	15	30	14	19
		K-12L	12	24	17	32	17	22
		K-15L †	15	28	21	36	19	27
	K-18L †	18	31	23.5	40	24	32	
	2320	K-22L †	22	35	27.5	44	27	36
		K-28L †	28	38	30.5	47	36	41
		K-35L †	35	45	34.5	56	41	50
		K-42L †	42	51	40	63	50	60
S	9137	K-06S †	6	23	16	31	12	17
		K-08S †	8	24	17	32	14	19
		K-10S †	10	25	17.5	34	17	22
		K-12S †	12	29	21.5	38	17	24
		K-14S †	14	30	22	40	19	27
	5801	K-16S †	16	33	24.5	43	24	30
		K-20S †	20	37	26.5	48	27	36
		K-25S †	25	42	30	54	36	46
		K-30S †	30	49	35.5	62	41	50
	4568	K-38S †	38	57	41	72	50	60

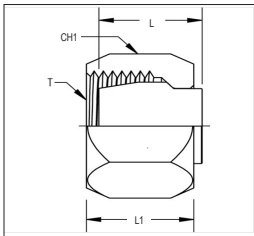
† Limited stock available

## 7105 Tightening Nut



Product Code	Dimensions mm			
	Ø Tube	T	L1	CH1
7105-04	1/4"	7/16" - 20	17.8	14.3
7105-05	5/16"	1/2" - 20	18.3	15.8
7105-06	3/8"	9/16" - 18	19	17.5
7105-08	1/2"	3/4" - 16	21.3	22.2
7105-10	5/8"	7/8" - 14	23.4	25.4
7105-12	3/4"	1.1/16" - 12	24.6	31.7
7105-14	7/8"	1.3/16" - 12	25.4	34.9
7105-16	1"	1.5/16" - 12	26.7	38.1
7105-20	1.1/4"	1.5/8" - 12	26.7	50.8
7105-24	1.1/2"	1.7/8" - 12	26.2	57.2

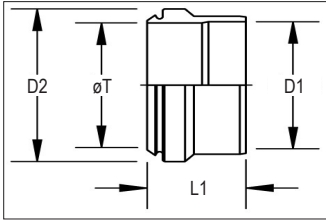
## 7129 FLARELESS BLANKING CAP



Product Code	Dimensions mm				
	Ø Tube	T	L	L1	CH1
7129-04	1/4"	7/16" - 20	18.3	17.8	14.3
7129-06	3/8"	9/16" - 18	19.5	19	17.5
7129-08	1/2"	3/4" - 16	23.6	21.3	22.2
7129-10	5/8"	7/8" - 14	23.8	23.4	25.4
7129-12	3/4"	1.1/16" - 12	23.6	24.6	31.7
7129-14	7/8"	1.3/16" - 12	24.4	25.4	34.9
7129-16	1"	1.5/16" - 12	27.4	26.7	38.1
7129-20	1.1/4"	1.5/8" - 12	30.2	26.7	50.8

# 7165A

## FLARELESS FERRULE FORM A

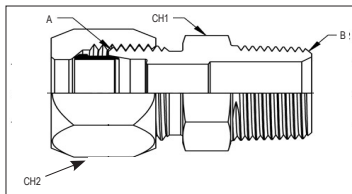


Product Code	Dimensions mm			
	Ø Tube	L1	D1	D2
7165-02 †	1/8"	7.3	3.5	6.0
7165A-03	3/16"	8.3	5.2	7.8
7165A-04	1/4"	9.2	6.8	9.3
7165A-05	5/16"	9.3	8.4	10.9
7165A-06	3/8"	9.9	9.9	12.5
7165A-08	1/2"	10.9	13.2	16.8
7165A-10	5/8"	11.2	16.4	19.8
7165A-12	3/4"	12.1	19.6	23.5
7165-14 †	7/8"	12.1	22.8	27.0
7165A-16	1"	12.1	25.9	30.2
7165A-20	1.1/4"	12.1	32.4	36.7
7165A-24	1.1/2"	12.1	38.7	43.0
7165A-32	2"	12.9	51.4	56.1

† Form B Ferrule

# 7205

## FLARELESS CONNECTOR X MALE NPT



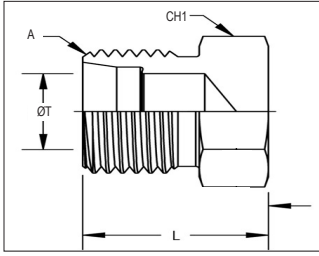
Product Code	Dimensions mm				
	Ø Tube	A	B	CH1	CH2
7205-02-02	1/8"	5/16" - 24	1/8" - 27	11.1	9.5
7205-03-02	3/16"	3/8" - 24	1/8" - 27	11.1	11.1
7205-04-02	1/4"	7/16" - 20	1/8" - 27	12.7	14.3
7205-04-04	1/4"	7/16" - 20	1/4" - 18	14.3	14.3
7205-04-06	1/4"	7/16" - 20	3/8" - 18	19.0	14.3
7205-05-04	5/16"	1/2" - 20	1/4" - 18	14.3	15.9
7205-06-04	3/8"	9/16" - 18	1/4" - 18	15.8	17.5
7205-06-06	3/8"	9/16" - 18	3/8" - 18	19.0	17.5
7205-06-08	3/8"	9/16" - 18	1/2" - 14	22.2	17.5
7205-08-06	1/2"	3/4" - 16	3/8" - 18	20.6	22.2
7205-08-12	1/2"	3/4" - 16	3/4" - 14	28.6	22.2
7205-10-08	5/8"	7/8" - 14	1/2" - 14	23.8	25.4
7205-10-12	5/8"	7/8" - 14	3/4" - 14	28.6	25.4
7205-12-08	3/4"	1.1/16" - 12	1/2" - 14	28.6	31.7
7205-12-12	3/4"	1.1/16" - 12	3/4" - 14	28.6	31.7
7205-14-12	7/8"	1.3/16" - 12	3/4" - 14	28.6	34.9
7205-16-16	1"	1.5/16" - 12	1" - 11 1/2	34.9	38.1
7205-20-20	1.1/4"	1.5/8" - 12	1.1/2" - 11 1/2	42.9	50.8
7205-24-24	1.1/2"	1.7/8" - 12	1.1/2" - 11 1/2	50.8	57.2
7205-32-32	2"	2.1/2" - 12	2" - 11 1/2	66.7	73.0



This page is part of a complete catalog containing technical and safety data.  
All data must be reviewed when selecting a product.  
PIRTEK reserves the right to change technical specifications without notice.

# 7229

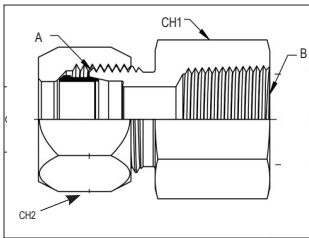
## FLARELESS TUBE PLUG



Product Code	Dimensions mm			
	Ø Tube	A	L	CH1
7229-02	1/8"	5/16" - 24	16.0	6.0
7229-04	1/4"	7/16" - 20	18.0	9.3
7229-05	5/16"	1/2" - 20	18.0	10.9
7229-06	3/8"	9/16" - 18	19.0	12.5
7229-08	1/2"	3/4" - 16	21.6	16.8
7229-10	5/8"	7/8" - 14	24.7	19.8
7229-12	3/4"	1.1/16" - 12	27.9	23.5
7229-16	1"	1.5/16" - 12	27.9	27.0
7165A-16	1"	12.1	25.9	30.2

# 7255

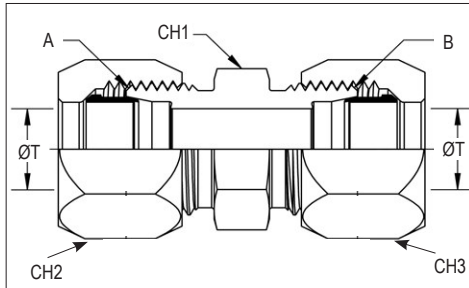
## FLARELESS CONNECTOR X FEMALE NPT



Product Code	Dimensions mm				
	Ø Tube	A	B	CH1	CH2
7255-02-02	1/8"	5/16" - 24	1/8" - 27	14.3	9.5
7255-03-02	3/16"	3/8" - 24	1/8" - 27	14.3	11.1
7255-04-02	1/4"	7/16" - 20	1/8" - 27	14.3	14.3
7255-04-04	1/4"	7/16" - 20	1/4" - 18	19.0	14.3
7255-05-02	5/16"	1/2" - 20	1/8" - 27	14.3	15.9
7255-06-06	3/8"	9/16" - 18	3/8" - 18	22.2	17.5
7255-08-06	1/2"	3/4" - 16	3/8" - 18	22.2	22.2
7255-08-08	1/2"	3/4" - 16	1/2" - 14	28.6	22.2
7255-10-08	5/8"	7/8" - 14	1/2" - 14	28.6	25.4
7255-12-12	3/4"	1.1/16" - 12	3/4" - 14	34.9	31.7
7255-14-12	7/8"	1.3/16" - 12	3/4" - 14	34.9	34.9
7255-16-16	1"	1.5/16" - 12	1" - 11 1/2	41.3	38.1
7255-20-20	1.1/4"	1.5/8" - 12	1.1/2" - 11 1/2	50.8	50.8

# 7305

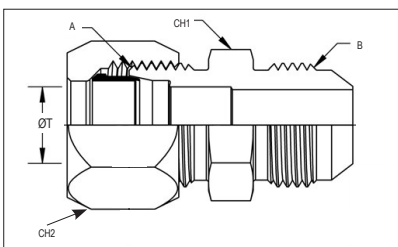
## FLARELESS UNION



Product Code	Dimensions mm					
	Ø Tube	A	B	CH1	CH2	CH3
7305-02-02	1/8"	5/16" - 24	5/16" - 24	11.1	9.5	9.5
7305-03-03	3/16"	3/8" - 24	3/8" - 24	11.1	11.1	11.1
7305-04-04	1/4"	7/16" - 20	7/16" - 20	14.3	14.3	14.3
7305-05-05	5/16"	1/2" - 20	1/2" - 20	14.3	15.9	15.9
7305-06-04	3/8"	9/16" - 18	7/16" - 20	15.8	17.5	14.3
7305-06-06	3/8"	9/16" - 18	9/16" - 18	19	17.5	17.5
7305-08-06	1/2"	3/4" - 16	9/16" - 18	20.6	22.2	17.5
7305-08-08	1/2"	3/4" - 16	3/4" - 16	20.6	22.2	22.2
7305-10-10	5/8"	7/8" - 14	7/8" - 14	23.8	25.4	25.4
7305-12-12	3/4"	1.1/16" - 12	1.1/16" - 12	28.6	31.8	31.8
7305-14-14	7/8"	1.3/16" - 12	1.3/16" - 12	28.6	34.9	34.9
7305-16-16	1"	1.5/16" - 12	1.5/16" - 12	34.9	38.1	38.1
7305-20-20	1.1/4"	1.5/8" - 12	1.5/8" - 12	42.9	50.8	50.8
7305-24-24	1.1/2"	1.7/8" - 12	1.7/8" - 12	50.8	57.1	57.1
7305-32-32	2"	2.1/2" - 12	2.1/2" - 12	66.7	73.0	73.0

# 7316

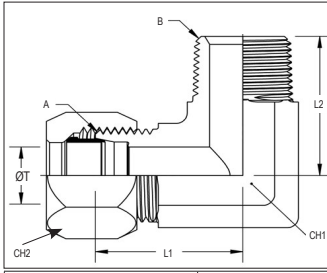
## FLARELESS CONNECTOR X MALE JIC



Product Code	Dimensions mm				
	Ø Tube	A	B	CH1	CH2
7316-04-04	1/4"	7/16" - 20	7/16" - 20	12.7	14.3
7316-06-06	3/8"	9/16" - 18	9/16" - 18	15.9	17.5
7316-08-08	1/2"	3/4" - 16	3/4" - 16	20.6	22.2
7316-10-10	5/8"	7/8" - 14	7/8" - 14	23.8	25.4
7316-12-12	3/4"	1.1/16" - 12	1.1/16" - 12	28.6	31.8
7316-16-16	1"	1.5/16" - 12	1.5/16" - 12	34.9	38.1

# 7405

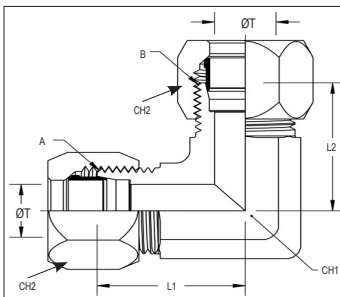
## FLARELESS ELBOW X MALE NPT



Product Code	Dimensions mm						
	∅ Tube	A	B	L1	L2	CH1	CH2
7405-02-02	1/8"	5/16" - 24	1/8" - 27	19.6	18.3	11.1	11.1
7405-03-02	3/16"	3/8" - 24	1/8" - 27	21.1	18.3	11.1	11.1
7405-04-04	1/4"	7/16" - 20	1/4" - 18	22.6	27.7	14.3	14.3
7405-05-04	5/16"	1/2" - 20	1/4" - 18	26.2	27.7	14.3	14.3
7405-06-04	3/8"	9/16" - 18	1/4" - 18	26.7	27.7	14.3	15.8
7405-06-06	3/8"	9/16" - 18	3/8" - 18	28.9	31.0	19	19.0
7405-08-08	1/2"	3/4" - 16	1/2" - 14	34.3	37.3	22.2	22.2
7405-10-08	5/8"	7/8" - 14	1/2" - 14	34.1	37.3	22.2	23.8
7405-12-12	3/4"	1.1/16" - 12	3/4" - 14	40.1	40.4	27	28.6
7405-14-12	7/8"	1.3/16" - 12	3/4" - 14	42.2	42.9	33.3	28.6
7405-16-16	1"	1.5/16" - 12	1" - 11 1/2	43.9	50.0	33.3	34.9
7405-20-20	1.1/4"	1.5/8" - 12	1.1/2" - 11 1/2	48.0	60.5	41.3	42.9
7405-24-24	1.1/2"	1.7/8" - 12	1.1/2" - 11 1/2	51.3	67.1	47.6	50.8
7405-32-32	2"	2.1/2" - 12	2" - 11 1/2	62.2	76.2	63.5	66.7

# 7505

## FLARELESS EQUAL ELBOW

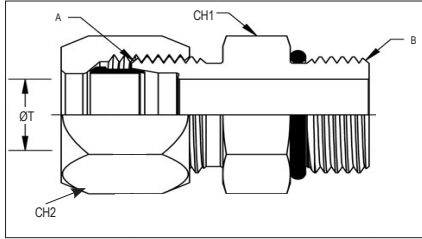


Product Code	Dimensions mm						
	∅ Tube	A	B	L1	L2	CH1	CH2
7405-04-04	1/4"	7/16" - 20	7/16" - 20	22.6	22.6	11.1	14.3
7505-05-05	5/16"	1/2" - 20	1/2" - 20	22.6	22.6	14.3	15.9
7505-06-06	3/8"	9/16" - 18	9/16" - 18	28.9	28.9	14.3	17.5
7505-08-08	1/2"	3/4" - 16	3/4" - 16	31.7	31.7	19.1	22.2
7505-10-10	5/8"	7/8" - 14	7/8" - 14	36.1	36.1	22.2	25.4
7505-12-12	3/4"	1.1/16" - 12	1.1/16" - 12	40.1	40.1	27.0	31.8
7505-14-14	7/8"	1.3/16" - 12	1.3/16" - 12	42.2	42.2	33.4	34.9
7505-16-16	1"	1.5/16" - 12	1.5/16" - 12	43.9	43.9	33.4	38.1
7505-20-20	1.1/4"	1.5/8" - 12	1.5/8" - 12	48.0	48.0	41.3	50.8



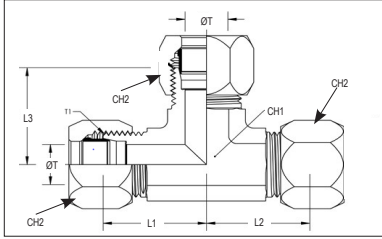
# 7315

## FLARELESS CONNECTOR X MALE UNO



Product Code	Dimensions mm				
	Ø Tube	A	B	CH1	CH2
7315-04-04	1/4"	7/16" - 20	7/16" - 20	12.7	14.3
7315-04-06	1/4"	7/16" - 20	9/16" - 18	17.5	14.3
7315-05-05	5/16"	1/2" - 20	1/2" - 20	15.9	15.8
7315-06-06	3/8"	9/16" - 18	9/16" - 18	15.9	17.5
7315-08-06	1/2"	3/4" - 16	9/16" - 18	20.6	22.2
7315-08-08	1/2"	3/4" - 16	3/4" - 16	20.6	22.2
7315-08-10	1/2"	3/4" - 16	7/8" - 14	25.4	22.2
7315-10-10	5/8"	7/8" - 14	7/8" - 14	23.8	25.4
7315-12-12	3/4"	1.1/16" - 12	1.1/16" - 12	28.6	31.8
7315-14-14	7/8"	1.3/16" - 12	1.3/16" - 12	34.9	34.9
7315-16-16	1"	1.5/16" - 12	1.5/16" - 12	38.1	38.1
7315-20-20	1.1/4"	1.5/8" - 12	1.5/8" - 12	47.6	50.8
7315-24-24	1.1/2"	1.7/8" - 12	1.7/8" - 12	53.9	57.2
7315-32-32	2"	2.1/2" - 12	2.1/2" - 12	69.9	73.0

# 7705 FLARELESS EQUAL TEE



Product Code	Dimensions mm						
	Ø Tube	A	L1	L2	L3	CH1	CH2
7705-02-02-02	1/8"	5/16" - 24	19.6	19.6	19.6	11.1	9.5
7705-03-03-03	3/16"	3/8" - 24	21.1	21.1	21.1	11.1	11.1
7705-04-04-04	1/4"	7/16" - 20	22.6	22.6	22.6	11.1	14.3
7705-05-05-05	5/16"	1/2" - 20	24.1	24.1	24.1	14.3	15.9
7705-06-06-06	3/8"	9/16" - 18	26.7	26.7	26.7	14.3	17.5
7705-08-08-08	1/2"	3/4" - 16	31.7	31.7	31.7	19.1	22.2
7705-10-10-10	5/8"	7/8" - 14	36.1	36.1	36.1	22.2	25.4
7705-12-12-12	3/4"	1.1/16" - 12	40.1	40.1	40.1	27.0	31.8
7705-14-14-14	7/8"	1.3/16" - 12	42.2	42.2	42.2	33.4	34.9
7705-16-16-16	1"	1.5/16" - 12	43.9	43.9	43.9	33.4	38.1

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