



Tube-O-Flex

Your flexible Hoses, Fittings & Couplers Specialist for 40 years



Tel: 021-534 7051

Fax:086 754 5244 / 021-534 7058

Email:info@flex-it.co.za

Website:www.flex-it.co.za

Member: Shamiel Naidoo

Company Profile



OUR BEGINNINGS:

FLEX-IT Engineering and General Suppliers was established in 2007, a registered 125% BBBEEQSE owner driven Company where the owner is hands on at all times. Our name and reputation are synonymous with quality, performance and customer's satisfaction. FLEX-IT continues to be recognized throughout the industry as a supplier of stainless steel, PVC and Rubber flexible hoses to customer's specialized fluid requirements.

OUR GROWTH:

In 2011 TUBE-O-FLEX, a company that has been in existence for over 35 years at the time and well known in the industry for service delivery, merged with FLEX-IT under one roof, together became one of the largest hose distributors and hose assembly manufacturers in the WESTERN CAPE. In 2015 our business was extended to Durban Kwazulu Natal where we have a fully stocked factory and also provide a sales and technical service to its industry.

OUR SERVICES:

FLEX-IT services a vast range of industries, amongst others, the Shipping-, Food-, Oil-, Gas-, Wine, automotive, Mining and Agricultural industries, etc. We specialize in the manufacturing and supply of all flexible hoses such as, Rubber, PVC, Stainless Steel braided flexible hoses, Steam and Exhaust expansion bellow, hand built specialized hoses and all associated couplers, flanges, fittings in all material, sizes and for all applications. At FLEX-IT all our assemblies are pressure tested, and certified on request. Third party witnessing is also done on request ensuring customer's satisfaction of hassle and leak free hose assemblies. Our dedication is driven by passion to maintain the outstanding service that we provide to all our customers, who are also prepared to bear testimony to our service and support. Customer satisfaction has always been FLEX-IT's strength, strategy and key focus.

OUR MISSION:

To build long term relationships with our customers and provide exceptional customers service.

OUR VISION:

To provide quality, service and delivery that exceeds the expectations of our esteemed customers.

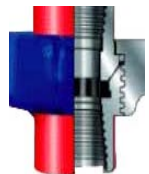
OUR CORE VALUES:

We believe in treating our customers fair and with respect.

We grow through creativity, invention and innovation.

We integrate honesty, integrity and business ethics into all aspects of our business functions.

We will always walk the road with the customer for as long as he has a hose problem to ensure customer satisfaction.



CAPE TOWN

Tel: +27 (0) 21-534 7051

Fax: 086 754 5247

Email: infoct@flex-it.co.za

DURBAN

Tel: +27 (0) 31 301 4019

Fax: 086 754 5246

Email: infodbn@flex-it.co.za

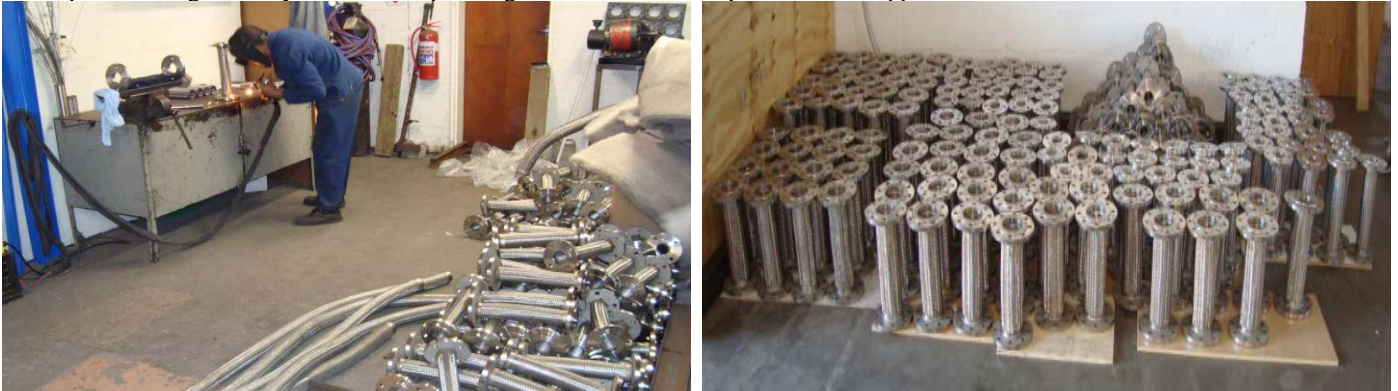
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Stainless Steel & Teflon Braided Flexible Hose

We manufacture stainless steel hose assemblies in all sizes ranging from 6mm (1/4") to 250mm (10"). We do in-house welding and have highly trained welders to ensure the end products be of the highest quality. At Flex-It we also adapt any size fitting, coupler or flanges to any size hose depending on the customer requirements or application.





- * High physical strength, fire and moisture resistant.
- * Good corrosion characteristics.
- * Resistant to abrasion, penetration and damage.
- * Connects misaligned rigid pipe lines, absorbs and dampens vibration.
- * A flexible connection in rigid pipe lines and difficult locations.

Modes of movements static installations

When the flexible hose is used to connect Misaligned pips and remain in static position.

Occasional flexing

Where the hose is required to flex occasionally, Such as manually operated equipment.

Constant flexing

when the hose is required to flex continuously, Usually in moving machinery.

Vibration

High frequency, low amplitude movement e.g. On a compressor.

Table – 1 Technical Data

Nominal Bore N.B.	Minimum Bend Radius		Without Braid		Single Braid		Double Braid	
	Static	Flexing	MAX. Working Pressure	TEST Pressure	MAX. Working Pressure	TEST Pressure	MAX. Working pressure	TEST Pressure
mm	mm	mm	Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2
6	25	100	4	6	120	180	192	288
10	40	150	4	6	90	135	144	216
12	50	200	3	4.5	75	112.5	120	180
16	50	200	3	4.5	70	105	112	168
20	70	200	2	3	64	96	102.5	153.5
25	90	200	2	3	50	75	80	120
32	110	250	1.5	2.3	40	60	64	96
40	130	250	1.5	2.3	35	52.5	56	84
50	175	350	1	1.5	30	45	48	72
65	200	410	1	1.5	24	36	38.5	57.5
80	205	450	1	1.5	18	27	29	43
100	230	560	0.8	1.2	16	24	25.5	38.5
125	280	660	0.6	0.9	14	21	22.5	33.5
150	320	815	0.6	0.9	10	15	16	24
200	435	1015	0.5	0.75	8	12	12.5	19

The above values are applicable for the stainless steel hose company's braided hoses and assemblies only. The above mentioned pressure ratings are for fluid and ambient temperature of 20° C. For Higher temperatures apply correction factors as per Table II. * The above data for 250 mm and 300 mm N.B.can be supplied on request. * The burst pressure is 4 times the maximum working pressure. * The above technical data is subject to change on account of design improvement.

Temperature Correction Factor

When hoses are required to work at a higher Temperature, The working pressure given in Table 1 should be multiplied by the correction factor. This will determine the pressure rating of the hoses for higher temperatures.

Example

A 50 NB hose is required for a temperature of 200°C and working pressure of 19 kg/ cm². The specified pressure for 50NB Single wire braid hose as per table is 28 Kg/cm². The correction factor at 200°C is 0.69. Hence the working pressure permissible is 28 x 0.69=19.32 kg/cm². This is higher than the required pressure i.e. 19 kg/cm². Hence single braided hose is recommended.

TABLE: 2

Temp (*C)	-200	-150	-100	-50	0	20	50	100	150	200	250	300	350	400	450	500	550	600	650	700
Corr. Fact.	1.0	1.0	1.0	1.0	1.0	1.0	0.92	0.83	0.75	0.69	0.65	0.61	0.58	0.56	0.54	0.53	0.52	0.34	0.19	0.10



Stainless Steel Bellows

Flex-It manufactures stainless steel bellows in all sizes ranging from 15mm to 1,5 meters in diameter. Any size larger would be manufactured on request. We do in-house welding and have highly trained welders to ensure the end products are of the highest quality. At Flex-It we also adapt any size flanges, fittings or pipe ends to any size bellows depending on the customer requirements and application. We do a vast range of bellows ranging from SINGLE HINGED, DOUBLE HINGED, ARTICULATED and many more.

1



2



3



4



5



6



7



8



9





Rubber Bellows

Rubber Bellows are mainly used to connect two pipe lines that are misaligned. It is also used to take up vibration or any surge that may occur and can be used in many applications, to name a few, water, acid, chemicals and even food lines. We do a vast range of bellows ranging from NBR, TEFLON COATED/LINED, EPDM and many more.





Fuel, Gas and Oil Hoses

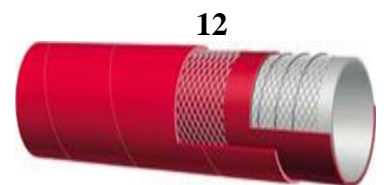
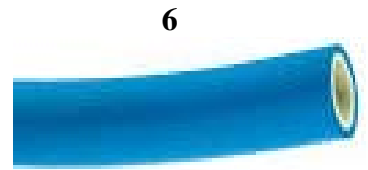
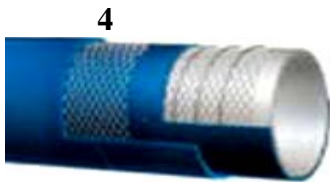
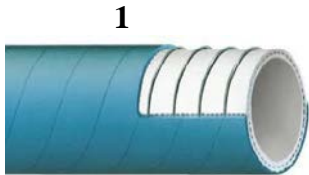
We offer fuel, gas and oil suction or delivery hoses / hose assemblies in rubber or PVC in all sizes to customers requirements. We do a wide range of fuel hoses ranging from composite, rubber suction, rubber delivery, bunker, hand built hoses and many more. At flex-It we also adapt or reduce any fitting to our hoses by means of crimping or strapping depending on the customer's requirements. We also have a vast range of fittings for your fuel and oil application eg. Barrett Couplers, Camlock couplers, Swaged nipples, Dry break couplers and many more.





Rubber Food - Grade Hoses

We stock a wide range of rubber food-grade hoses, suction or delivery, which is used to transfer wet or dry food products. We also manufacture hand built hoses to customer's specifications ranging from Wine, Milk, Beer, Flour, Drinking water etc. At Flex-It we adapt or reduce any fitting to our hoses by means of crimping or safety strapping depending on the customer's requirements. We also have a vast range of fittings for your applications eg. camlock couplers, swaged nipples, stortz couplers, dairy fittings and many more.

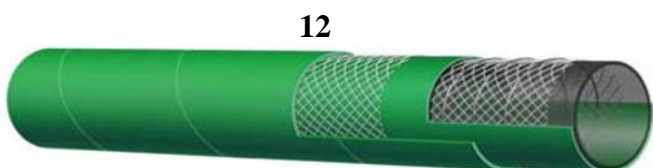
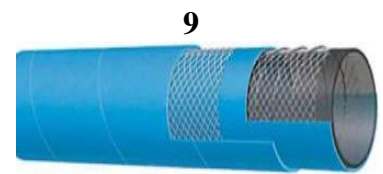
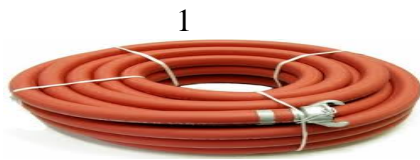




Rubber

Steam, Water, Chemical, Air and Slurry

We stock rubber, suction and delivery Steam, Water, Chemical, and Air hoses in all diameters. We also do a wide range of hand build hoses to customers specifications ranging from SLURRY, High pressure HOT and COLD WATER, High pressure STEAM, CHEMICALS, ACIDS and high pressure HOT and COLD AIR etc.

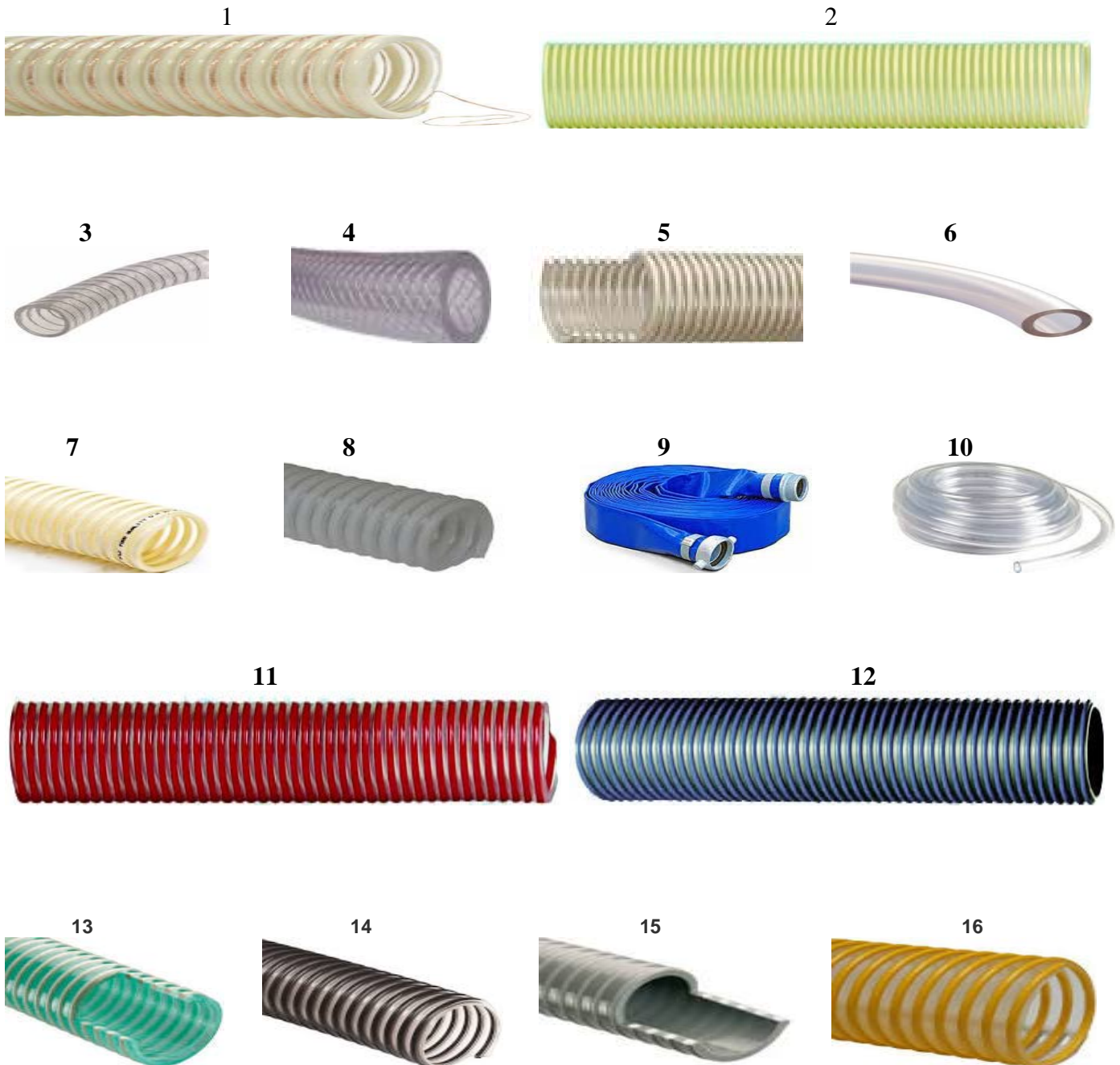




P.V.C

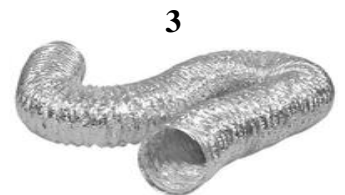
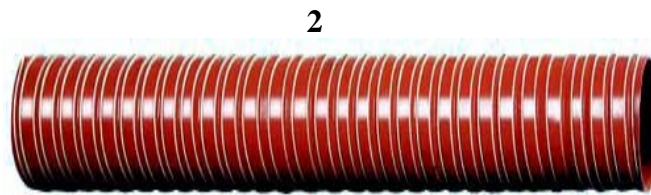
Water , Slurry , Air and Food Grade-Hoses

PVC Water, Slurry and Food-grade hoses, in all diameters ranging from 6mm (1/4") to 200mm (8"). These hoses are mainly used for suction.





Rubber , P.V.C and Aluminium Ducting





Camlock Couplers and Adaptors

Camlock couplers are manufactured in all diameters ranging from 1/2" to 8". We can also manufacture these couplers in carbon steel and bronze but on request only. The seals (gaskets) are manufactured in Buna-n (Nitrile), Viton, EPDM and Teflon (PTFE).



A

MATERIAL: aluminium, stainless steel, brass & (polypropylene- 95°C)
SPECIAL : carbon steel & bronze



B



F

GASKETS : Buna-n (nitrile), viton, ept, Teflon (ptfe)
MAX, TEMPERATURE: 110°C 180°C 180°C 230°C



D



E

SIZE : 12mm (1/2") to 150mm ("6")
SPECIAL: 200mm ("8")



C



DP

ENDS: BSP, NPT, hose tails or flanged



DC



RECOMMENDED WORKING PRESSURE (BAR)

	12mm	20mm	25mm	32mm	38mm	50mm	65mm	75mm	100mm	150mm	200mm
Aluminium	: 17	17	17	17	17	17	10	9	7	5	3
Brass/Bronze	: 17	17	17	17	17	17	10	9	7	5	-
Stainless Steel	: 17	17	17	17	17	17	14	14	10	5	-
Polypropylene	: -	17	7	-	7	7	-	4	4	-	-



Dry Break Couplers

1



DRY BREAK HOSE UNIT

2



DRY BREAK FLANGED ADAPTOR

3



DRY BREAK HOSE UNIT

4



DRY BREAK FLANGED ADAPTOR

5



DRY BREAK HOSE UNIT

6



DRY BREAK HOSE UNIT



Dry Break Couplers



DRY BREAK DUST CAP



DRY BREAK TANK UNIT



BARRETT CONVERTER



BARRETT ADAPTOR



DRY BREAK HOSE UNIT



DRY BREAK DUST CAP



DRY BREAK TANK UNIT



DRY BREAK TANK UNIT



DRY BREAK HOSE UNIT



Irrigation Fittings





Pipe and Hose Fittings





Pipe and Hose Fittings

1



Black steam union

2



stainless steel steam union

3



Copper pipe connector

4



Brass hex nipple

5



Hex nipple

6



Male plug

7



Male to male reducer

8



Galv. "T"

9



Blank geka

10



Female geka

11



Male geka

12



Geka hose tail

13



Claw Snap on coupler

14



Claw snap on tail coupler

15



Weld on reducer

16



Geka gasket (Seal)



Pipe and Hose Fittings





Fittings, Couplers and Flanges



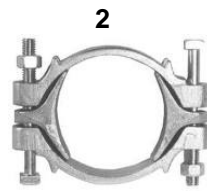


Valves





Clamps





Dairy Fittings





Hammer Unions

Figure No.	Assembly colour key standard service	pressure rating (PSI)				Nominal Pipe Size												
		Standard Service		Sour Gas Service		In	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12"
		Cold Working	Test	Cold Working	Test	mm	25	32	40	50	65	80	100	125	150	200	250	300
100		1,000	1,500	N/A	N/A													
200		2,000	3,000	N/A	N/A													
206		2,000	3,000	N/A	N/A													
207		2,000	3,000	N/A	N/A													
300		2,000	3,000	N/A	N/A													
400		2,500	3,750	2,500	3,750													
400		4,000	6,000	4,000	6,000													
600		6,000	9,000	N/A	N/A													
602		6,000	9,000	6,000	9,000													
1002		10,000	15,000	7,500	11,250													
1003		10,000	15,000	7,500	11,250													
1502		15,000	22,500	10,000	15,000													
2202		N/A	N/A	15,000	22,500													

N/A= Not available

Flex-it recommends butt weld unions for sour gas applications.

Figure 100



Low pressure union:
1000psi (69 Bar)

Figure 200



Threaded and butt weld
general purpose union:
2000psi (138 Bar)

Figure 300



Flat face union
for vacuum lines:
2000psi (138 Bar)

Figure 400



Mud and slurry union
2" to 4" : 4000psi (276Bar)
5" to 12" : 2500psi (172Bar)

Figure 600



Used in steam lines with bronze seal to
prevent corrosion: 6000psi (414 Bar)

Figure 1002



Used in cementing, fracturing, acidizing,
testing and choke and kill lines
1" to 4" : 10000 psi (690 Bar)
5" and 6" : 7500psi (517 Bar)



Hammer Unions

Figure 1003



Used where pipe lines are misaligned
7* misalignment is excepted.
2" to 3" 10000psi (690 Bar)
4" and 5" 7500 psi (517 Bar)

Figure 1502



Used in cementing, fracturing, acidizing,
testing and choke and kill lines.
15000psi (1034 Bar)

Figure 206

Female Stem with nut



Figure 206

Male Stem



Figure 207



Threaded and weld-on end cap
Cold working pressure
2000 psi (138 Bar)

Figure 2202



Painted green for easy identification
15000psi (1034 Bar)



Material

Our unions are manufactured from steel forgings using materials appropriate to specific pressure ratings.

End Connections

Sara unions are available in a choice of end connections. API line pipe threads are standard. Butt weld ends can be provided. Customer to specify schedule of pipe while ordering.

Sour Service

Sour service is available and all H S service 2 parts of Sara unions conform to the latest NACE specifications.

Hammer Union Quick Reference Chart

Fig. No.	Assembly Colour Key for Standard Service	Pressure Rating (psi)				Nominal Pipe Size (In mm.)											
		Standard Service		Sour Gas Service		1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
		Cold Working	Test	Cold Working	Test	25	32	40	50	65	80	100	125	150	200	250	300
50		500	750	NA	NA							✓	✓				
100		1,000	1,500	NA	NA				✓	✓	✓	✓	✓	✓	✓		
200		2,000	3,000	NA	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
206		2,000	3,000	NA	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
207		2,000	3,000	NA	NA					✓	✓		✓				
211		2,000	3,000	NA	NA			✓		✓							
400		2,500	3,750	2,500	3,750									✓	✓	✓	✓
400		4,000	6,000	4,000	6,000				✓		✓	✓					
600		6,000	9,000	NA	NA	✓			✓		✓	✓					
602		6,000	9,000	6,000	9,000	✓	✓	✓	✓		✓	✓					
1002		10,000	15,000	7,500	12,000	✓	✓	✓	✓		✓	✓	✓	✓			
1003		10,000	15,000	7,500	12,000				✓		✓	✓	✓				
1502		15,000	22,500	10,000	15,000	✓			✓		✓	✓	✓				
2002		20,000	30,000	NA	NA				✓		✓	✓					
2202		NA	NA	15,000	22,500				✓		✓	✓					



Low Temperature Service

Sara unions can be supplied for low temperature applications with suitable impact value testing.

Interchange ability

All our union components of the same size and figure number are Weco interchangeable. All Sara union nuts have three hammer lugs.

Traceability

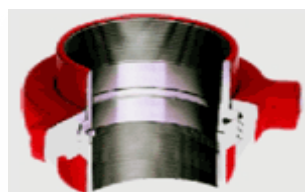
Flex-It's unions are supplied with full traceability documentation for each component.

Maximum Non-shock Test Pressure (PSI)

Figure No.	Temperature (Degrees F)									
	-20 +100	150	200	250	300	350	400	450	500	550
50*	500	464	437	409	382	355				
100/101*	1,000	927	873	818	764	709	655	600	546	509
200/201*/206*/207*	2,000	1,855	1,745	1,636	1,527	1,418	1,309	1,200	1,091	1,018
400/401*/402*	4,000	3,709	3,491	3,273	3,054	2,836	2,618	2,400	2,182	2,036
600/601*/602*	6,000	5,564	5,236	4,909	4,582	4,255	3,927	3,600	3,273	3,055
1002*/1003*	10,000	9,273	8,727	8,182	7,636	7,091				
1502*	15,000	13,910	13,091	12,273	11,454	10,637				

* Limited by rubber seal elements to 3,500 max.

Fig 50 Union 500 PSI CWP



Recommended for air, water, oil, or gas service to 500 PSI NSCWP. Standard subs are threaded for API line pipe.

Size (in.)	Length (in.)	Nut Radius (in.)	Weight (Kg.)
5"	5 1/2"	5 1/4"	10.80

Fig 100 Union 1,000 PSI CWP



Recommended for air, water, oil, or gas service to 1,000 PSI NSCWP. Standard subs are threaded for API line pipe and are Weco interchangeable. Also available with butt weld ends.

Size (in.)	Length (in.)	Nut Radius (in.)	Weight (Kg.)
2"	3 5/8"	2 29/32"	2.60
2 1/2"	4 9/32"	3 5/8"	5.20
3"	5 1/8"	4"	6.20
4"	5 3/4"	4 11/16"	10.20
5"	6 33/64"	5 9/16"	13.80
6"	6 7/8"	6 7/8"	23.20
8"	7 5/16"	7 13/16"	32.20



Fig 200 Union 2,000 PSI CWP



Recommended for air, water, oil, or gas service to 2000 PSI NSCWP. A union of great utility meeting most requirements in the medium pressure ranges. Precision seating surfaces assure dependable pressure seal. Standard subs are threaded for API line pipe and are Weco interchangeable. Sizes of 2" and above also available with butt weld end connections.

Size (in.)	Length (in.)	Nut Radius (in.)	Weight (Kg.)
1 a"	2 ^{19/32} "	2"	1.00
1 1/4"	2 ^{25/32} "	2 ^{5/32} "	1.60
1 1/2"	2 ^{29/32} "	2 ^{13/32} "	1.60
2"	3 1/4"	2 ^{29/32} "	2.40
2 1/2"	4 1/4"	3 ^{5/8} "	4.50
3"	4 ^{17/32} "	4 1/4"	6.60
4"	4 ^{15/16} "	5"	9.60
5"	7 ^{3/64} "	5 ^{23/32} "	19.00
6"	6 ^{25/32} "	6 1/2"	22.00
8"	7 ^{5/16} "	7 ^{13/16} "	29.10
10"	9 ^{3/32} "	9 1/16"	41.36



Flex-It Tube-O-Flex t/a Hammer Unions

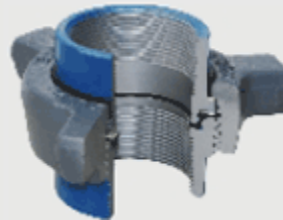
Fig 207 Union 2,000 PSI CWP



Recommended for air, water, oil, or gas service to 2,000 PSI NSCWP. A blanking cap with Buna-N 'O' ring seal provides an efficient and dependable closure. The threaded sub is interchangeable with Fig. 200 threaded sub. Also available with butt weld ends.

Size (in.)	Length (in.)	Nut Radius (in.)	Weight (Kg.)
3"	3 ³ / ₄ "	2 ³ / ₄ "	4.45
4"	4 ⁴⁵ / ₆₄ "	3 ¹⁷ / ₃₂ "	7.38
6"	5 ³⁷ / ₆₄ "	4 ²⁷ / ₃₂ "	17.10

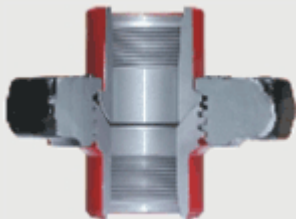
Fig 211 Union 2,000 PSI CWP



Recommended for production systems with electrolytic corrosion problems. Laminated insulating rings provide 35 million Ohms resistance across the union. O-ring in male sub provides a positive primary seal. Seal ring in female sub delivers a positive secondary seal.

Size (in.)	Length (in.)	Nut Radius (in.)	Weight (Kg.)
2"	3 ²⁹ / ₆₄ "	3 ¹ / ₁₆ "	3.00
3"	4 ³⁵ / ₆₄ "	4 ¹⁷ / ₆₄ "	6.40

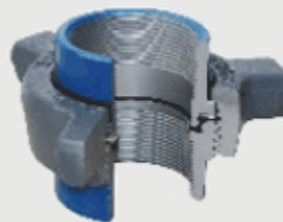
Fig 400 Union 4,000 PSI CWP



Recommended for air, water, oil, or gas service to 4,000 PSI NSCWP. Utilizes precision ball and cone seating surfaces for easy alignment and dependable pressure seal. Sizes over 4" are rated to 2,500 PSI NSCWP. Also available with a lip-type seal in 2" size only as Fig 402.

Size (in.)	Length (in.)		Nut Radius (in.)	Weight (Kg.)
	Total	CTR. BR.		
2"	5 ¹ / ₄ "	1/4"	3 ⁹ / ₁₆ "	5.80
3"	6"	3/8"	4 ¹ / ₄ "	9.40
4"	8 ⁷ / ₃₂ "	3/8"	5"	14.40
6"	11 ¹ / ₃₂ "	3/8"	6 ⁵ / ₈ "	28.80
8"	11 ¹³ / ₃₂ "	3/8"	7 ⁵ / ₈ "	42.70
10"	10 ³⁷ / ₆₄ "	-	9 ⁴⁹ / ₆₄ "	56.80
12"	10 ⁷ / ₈ "	3/8"	10 ¹ / ₄ "	74.43

Fig 600 Union 6,000 PSI CWP



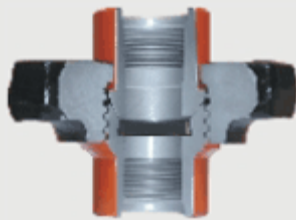
Recommended for air, oil, and gas or steam service to 6,000 PSI NSCWP. Rugged and fast 2 pitch acme thread makes this the quickest union to makeup or break out (only two turns). The threaded sub is fitted with a bronze seat insert for added effectiveness in pressure sealing.

Size (in.)	Length (in.)		Nut Radius (in.)	Weight (Kg.)
	Total	CTR. BR.		
1"	3 ⁹ / ₁₆ "	1/4"	2 ²⁵ / ₃₂ "	1.59
1 1/2"	4 ⁷ / ₈ "	1/4"	3 ⁷ / ₃₂ "	4.30
2"	6 ⁷ / ₁₆ "	1/4"	3 ³ / ₄ "	6.80
2 1/2"	7 ⁹ / ₁₆ "	3/8"	4 ¹ / ₄ "	9.10
3"	8 ¹¹ / ₁₆ "	3/8"	4 ¹ / ₂ "	13.18
4"	10 ¹ / ₁₆ "	3/8"	5 ¹ / ₄ "	18.63



Fig 602 Union 6,000 PSI CWP

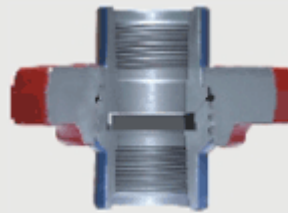
Recommended for air, water, and oil, gas or mud service to 6,000 PSI NSCWP. This union has a replaceable lip-type seal ring of Buna-N specifically designed to minimize fluid flow turbulence. Lip-type ring provides a pressure seal and protection for metal-to metal seating surfaces. Smaller and lighter than Fig. 600 unions and are recommended for manifold and truck mounting where size and weight are critical.



Size (in.)	Length (in.)		Nut Radius (in.)	Weight (Kg.)	Length Butt. Weld Sch. 80
	Total	CTR. BR.			
1"	3 ^{17/32} "	1/4"	2 ^{5/32} "	1.59	3 ^{17/32} "
1 ^{1/4} "	4 ^{29/32} "	1/4"	3 ^{7/32} "	4.54	4 ^{11/16} "
1 ^{1/2} "	4 ^{29/32} "	1/4"	3 ^{7/32} "	4.10	4 ^{11/16} "
2"	5 ^{1/4} "	1/4"	3 ^{3/4} "	5.90	5 ^{1/32} "
3"	6 ^{1/4} "	3/8"	4 ^{1/2} "	10.45	5 ^{7/16} "
4"	8 ^{1/4} "	3/8"	5 ^{7/32} "	15.00	6 ^{1/16} "

Fig 1002 Union 10,000 PSI CWP

Recommended for air, water, oil, gas and mud service to 10,000 PSI NSCWP. This union has a replaceable lip-type seal ring of Buna-N specifically designed to minimize fluid flow turbulence. The lip-type ring works similarly as in the Fig. 602 union. These unions are for use on high pressure systems and trucks.

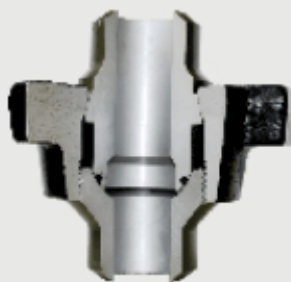


Size (in.)	Length (in.)		Nut Radius (in.)	Weight (Kg.)	Length Butt. Weld Sch. 80 XX HVY	
	Total	CTR. BR.				
1"	3 ^{17/32} "	1/4"	2 ^{5/32} "	1.59	3 ^{17/32} "	-
1 ^{1/4} "	4 ^{7/8} "	1/4"	3 ^{7/32} "	4.54	-	-
1 ^{1/2} "	4 ^{7/8} "	1/4"	3 ^{7/32} "	4.10	4 ^{11/16} "	-
2"	5 ^{1/4} "	1/4"	3 ^{3/4} "	6.00	5 ^{1/32} "	-
2 ^{1/2} "	6 ^{1/8} "	3/8"	4 ^{1/4} "	7.95	5 ^{1/8} "	-
2 ^{1/2} "EUE	5 ^{15/16} "	3/8"	4 ^{1/4} "	7.95	-	-
3"	6 ^{1/4} "	3/8"	4 ^{1/2} "	10.00	5 ^{3/8} "	5 ^{3/8} "
4"	8 ^{1/4} "	3/8"	5 ^{7/32} "	17.95	5 ^{11/16} "	-
5"	-	-	6 ^{1/4} "	25.90	5 ^{15/16} "	6 ^{1/8} "

5" size rated at 7,500 PSI CWP and 12,000 PSI test, 5" unions for sour gas rated at 5,000 PSI CWP and 7,500 PSI test.



Fig 1003 Union 10,000 PSI CWP

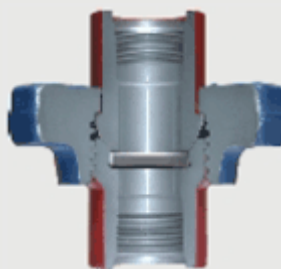


Recommended for high pressure manifolding and drilling rig use where alignment of piping components is a problem. Recommended for air, water, and oil, gas or mud service to 10,000 PSI NSCWP. This union has a ball seat that allows a total of 15 ($\pm 7\frac{1}{2}$) angular adjustment. An 'O' ring seal in addition to the metal-to-metal seat assures a pressure tight connection.

Size (in.)	Length (in.)		Nut Radius (in.)	Weight (Kg.)
	Total	CTR. BR.		
2"	4 ^{3/4} "	-	3 ^{1/2} "	05.64
3" LP THD	9 ^{1/8} "	3/8"	4 ^{7/8} "	20.45
3" SCH 160	8 ^{7/8} "	-	4 ^{7/8} "	21.60
3" XX HVY	9 ^{1/8} "	-	4 ^{7/8} "	22.00
4" LP THD	10 ^{15/16} "	1/2"	6"	32.95
4" SCH 160	10 ^{11/16} "	-	6"	34.54
4" XX HVY	10 ^{15/16} "	-	6"	35.45
5" SCH 160	10 ^{9/16} "	-	6"	33.63
5" XX HVY	10 ^{15/16} "	-	6"	34.77

5" size rated at 7,500 PSI CWP and 12,000 test.
5" unions for sour gas rated at 5,000 PSI CWP and 7,500 PSI test

Fig 1502 Union 15,000 PSI CWP



Recommended for air, water, oil, gas and mud service to 15,000 PSI NSCWP. This union has a replaceable lip-type seal ring of Buna-N specifically designed to minimize fluid flow turbulence. The lip-type ring also provides a pressure seal and protection for metal to metal seating surface and are recommended for manifold and truck mounting or other installations where high pressure is encountered.

Size (in.)	Length (in.)		Nut Radius (in.)	Weight (Kg.)	Length Butt. Weld XX HVY
	Total	CTR. BR.			
1"	4 ^{3/8} "	1/4"	2 ^{3/4} "	3.82	-
2"	7"	1/4"	4"	9.54	6 ^{1/4} "
3"	7 ^{5/8} "	3/8"	4 ^{13/16} "	14.10	5 ^{1/4} "
4"	8 ^{1/2} "	1/2"	6 ^{1/16} "	34.00	-
5"	9 ^{7/64} "	-	6 ^{45/64} "	44.40	-

Derates to 10,000 PSI WP for sour service

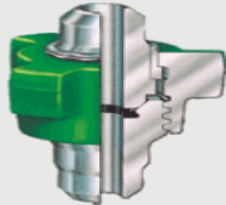


Hammer Unions

Fig 2002 Union
2,000 PSI CWP

Recommended for standard service to 20,000 PSI NSCWP. Available in butt weld end connections only. Available as Fig 2202 for sour service (15,000 PSI WP).

Fig 2202 Union
2,000 PSI CWP



Size (in.)	Length (in.)	Nut Radius (in.)	Weight (Kg.)
2"	7 ³ / ₈ "	3 ²³ / ₃₂ "	10.45
3"	8 ⁵ / ₈ "	6 ⁵ / ₃₂ "	21.80
4"	8 ¹ / ₂ "	6"	34.50

Fig YH 110 Union 500-6,000 PSI CWP

Recommended for use in flow lines to isolate for cathodic protection. The sealing action is provided by 'O' Rings fitted into a machined groove between the two metal mating parts. The metal parts are separated by non-conductor gaskets that avoid penetration to flow. seepage and resistant to acids, chemicals and temperatures encountered in normal service. Maximum temperature is 250° F.



Size (in.)	CWP	TP	Colour	
			Subs	Nut
2" - 3"	500	750	Maroon	Maroon
1" - 4"	1,000	1,500	Maroon	White
1/4" - 4"	2,500	3,750	Orange	Orange
1" - 3"	4,000	6,000	Brown	Brown
1/4" - 1/2"	6,000	9,000	Blue	Blue

Fig YH 210 Blanking Union 1,000-6,000 PSI CWP

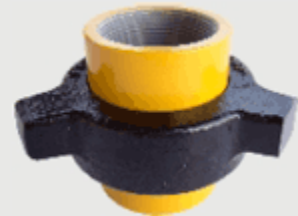
Designed for use on manifolds, jumper assemblies and other installations where a blank cap connection is required. This Union can be interchanged with subs of fig YH-300, if required. The cap is furnished blank as standard, but can be drilled and tapped for a 1/8"-1" NPT for a bleeder plug.



Size (in.)	CWP	TP	Colour	
			Subs	Nut
2" - 3"	500	750	Maroon	Maroon
1" - 4"	1,000	1,500	Maroon	White
1/4" - 4"	2,500	3,750	Orange	Orange
1" - 3"	4,000	6,000	Brown	Brown
1/4" - 1/2"	6,000	9,000	Blue	Blue

Fig YH 300 Union 1,000-6,000 PSI CWP

It is a flat face Union with 'O'-Ring fitted into the groove of the female sub. The 'O'-Ring is completely enclosed with the flat face of mating part and becomes more effective as additional pressure is applied.

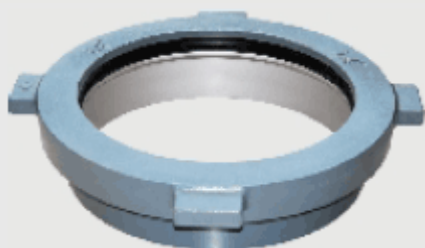


Size (in.)	CWP	TP	Colour	
			Subs	Nut
2" - 8"	500	750	Yellow	Black
1" - 7"	1,000	1,500	Yellow	Gray
1/4" - 6"	2,500	3,750	Pearl Gray	Green
1/4" - 6"	4,000	6000	Pearl Gray	Red
1" - 4"	6,000	9000	Pearl Gray	Blue
1" - 2"	10,000	15000	Pearl Gray	Orange
1/4" - 1"	12,500	18750	Silver	Silver



Hammer Unions

Fig YH 210 Blanking Union 1,000-6,000 PSI CWP



Recommended for

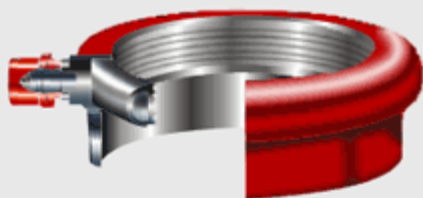
Mud tanks, mud tank connecting lines, and pump suction flanges

- Nitrile seal provides a compression seal.
- Elongated cross-section of seal ring ensures greater sealing surface when in contact with the pipe.
- Accepts up to 7° pipe misalignment.
- 6, 8, and 10-inch sizes require butt-weld.



Size (in.)	Connects Nominal Size Oilfield Pipe	Female Component Welds To	Complete Assembly	O-Ring Only
3"	3-Inch (3 1/2" O.D.)	4-Inch	8.00	0.18
4"	4-Inch (4 1/2" O.D.)	6-Inch	10.50	0.24
6"	6-Inch (6 5/8" O.D.)	8-Inch	14.80	0.36
8"	8-Inch (8 5/8" O.D.)	10-Inch	20.00	0.48
10"	10-Inch (10 3/4" O.D.)	12-Inch	24.00	0.60
12"	12-Inch (12 3/4" O.D.)	14-Inch	27.50	0.72
13"	13-Inch (13 3/8" O.D.)	13-Inch (Casing)	25.50	0.77
14"	14-Inch (14" O.D.)	16-Inch	24.50	0.84
16"	16-Inch (16" O.D.)	18-Inch	44.00	0.96
18"	18-Inch (18" O.D.)	20-Inch	53.00	1.08
20"	20-Inch (20" O.D.)	22-Inch	67.50	1.44

Air Seal Union 150 PSI CWP



Recommended for

Mud suction lines, return lines, low pressure fluid lines.

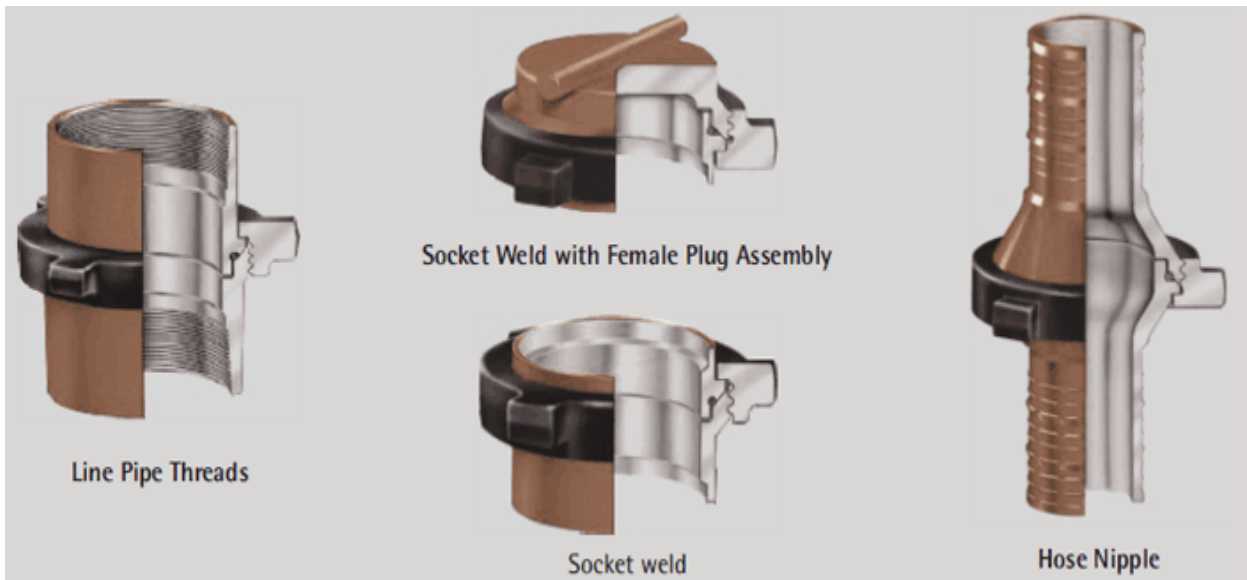
- Inflatable tube is used to provide tight seal.
- Rig air is used to inflate the tube.
- Sealing is maintained even if pipe is mis-aligned.
- Available in 4, 6, 8, 10, 12 and 16".

Size (in.)	Approx. Wt. (Kg.) Complete Union	Approx. Wt. (Kg.) Tube Only
4"	3.20	0.38
6"	8.20	0.67
8"	10.00	0.77
10"	11.80	1.15
12"	13.60	1.54
16"	20.40	1.68

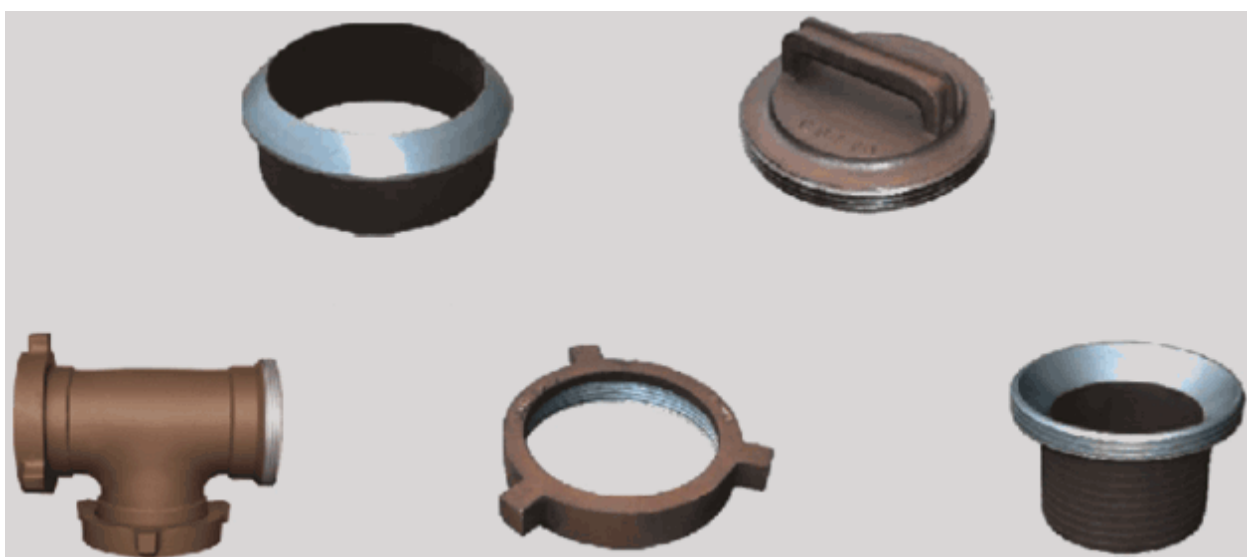
Flex-It **Tube-O-Flex**
Hammer Unions

Suction-Hose Unions

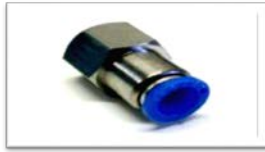
500 PSI (34 bar) Maximum Line Pressure, 4, 5, and 6" sizes



Frac Subs/Hose Unions



Pneumatic Fittings



Part number & Size	Description
PCF-04-1/8	1/8" Female to 4mm Tube
PCF-04-1/4	1/4" Female to 4mm Tube
PCF-06-1/8	1/8" Female to 6mm Tube
PCF-06-1/4	1/4" Female to 6mm Tube
PCF-06-3/8	3/8" Male to 6mm Tube
PCF-08-1/8	1/8" Female to 8mm Tube
PCF-08-1/4	1/4" Female to 8mm Tube
PCF-08-3/8	3/8" Female to 8mm Tube
PCF-08-1/2	1/2" Female to 8mm Tube
PCF-10-1/8	1/8" Female to 10mm Tube
PCF-10-1/4	1/4" Female to 10mm Tube
PCF-10-3/8	3/8" Female to 10mm Tube
PCF-10-1/2	1/2" Female to 10mm Tube
PCF-12-1/4	1/4" Female to 12mm Tube
PCF-12-3/8	3/8" Female to 12mm Tube
PCF-12-1/2	1/2" Female to 12mm Tube



Part number & Size	Description
PL-04-1/8	1/8" Male to 4mm Tube
PL-04-1/4	1/4" Male to 4mm Tube
PL-04-M5	M5 Male to 4mm Tube
PL-06-1/8	1/8" Male to 6mm Tube
PL-06-1/4	1/4" Male to 6mm Tube
PL-06-3/8	3/8" Male to 6mm Tube
PL-06-M5	M5 Male to 6mm Tube
PL-08-1/8	1/8" Male to 8mm Tube
PL-08-1/4	1/4" Male to 8mm Tube
PL-08-3/8	3/8" Male to 8mm Tube
PL-08-1/2	1/2" Male to 8mm Tube
PL-10-1/8	1/8" Male to 10mm Tube
PL-10-1/4	1/4" Male to 10mm Tube
PL-10-3/8	3/8" Male to 10mm Tube
PL-10-1/2	1/2" Male to 10mm Tube
PL-12-1/4	1/4" Male to 12mm Tube
PL-12-3/8	3/8" Male to 12mm Tube



Part number & Size	Description
EHVFF-06-06	6mm Tube to Tube Lever Valve
EHVFF-08-08	8mm Tube to Tube Lever Valve
EHVFF-10-10	10mm Tube to Tube Lever Valve
EHVFF-12-12	12mm Tube to Tube Lever Valve



Part number & Size	Description
PUT-04	4mm Tube
PUT-06	6mm Tube
PUT-08	8mm Tube
PUT-10	10mm Tube
PUT-12	12mm Tube



Part number & Size	Description
PUC-04	4mm Tube
PUC-06	6mm Tube
PUC-08	8mm Tube
PUC-10	10mm Tube
PUC-12	12mm Tube
PUC-14	14mm Tube
PUC-15	15mm Tube
PUC-16	16mm Tube
PUC-1/4"	1/4" Tube
PUC-3/8"	3/8" Tube
PUC-1/2"	1/2" Tube



Part number & Size	Description
PMF-04-1/8	1/8" Female to 4mm Tube
PMF-06-1/8	1/8" Female to 6mm Tube
PMF-06-1/4	1/4" Female to 6mm Tube
PMF-08-1/8	1/8" Female to 8mm Tube
PMF-08-1/4	1/4" Female to 8mm Tube
PMF-08-3/8	3/8" Female to 8mm Tube
PMF-10-1/4	1/4" Female to 10mm Tube
PMF-10-3/8	3/8" Female to 10mm Tube
PMF-12-1/4	1/4" Female to 12mm Tube
PMF-12-3/8	3/8" Female to 12mm Tube
PMF-12-1/2	1/2" Female to 12mm Tube

Pneumatic Fittings



Part number & Size	Description
PUL-04	4mm Tube
PUL-06	6mm Tube
PUL-08	8mm Tube
PUL-10	10mm Tube
PUL-12	12mm Tube
PUL-14	14mm Tube
PUL-15	15mm Tube
PUL-16	16mm Tube



Part number & Size	Description
PGJ-04-06	6mm Stem-4mm Tube
PGJ-04-08	8mm Stem-4mm Tube
PGJ-06-08	8mm Stem-6mm Tube
PGJ-06-10	10mm Stem-6mm Tube
PGJ-08-10	10mm Stem-8mm Tube
PGJ-08-12	12mm Stem-8mm Tube
PGJ-10-12	12mm Stem-10mm Tube



Part number & Size	Description
PMM-04	4mm Tube
PMM-06	6mm Tube
PMM-08	8mm Tube
PMM-10	10mm Tube
PMM-12	12mm Tube



Part number & Size	Description
PG-06-04	6-4mm Tube
PG-08-06	8-6mm Tube
PG-10-08	10-8mm Tube
PG-12-10	12-10mm Tube



Part number & Size	Description
PY-04	4mm Tube
PY-06	6mm Tube
PY-08	8mm Tube
PY-10	10mm Tube
PY-12	12mm Tube



Part number & Size	Description
PZA-04	4mm Tube
PZA-06	6mm Tube
PZA-08	8mm Tube
PZA-10	10mm Tube
PZA-12	12mm Tube

Pneumatic Fittings



Part number & Size	Description
PT-04-1/8	1/8" Male to 4mm Tube
PT-04-1/4	1/4" Male to 4mm Tube
PT-04-M5	M5 Male to 4mm Tube
PT-06-1/8	1/8" Male to 6mm Tube
PT-06-1/4	1/4" Male to 6mm Tube
PT-06-3/8	3/8" Male to 6mm Tube
PT-06-M5	M5 Male to 6mm Tube
PT-08-1/8	1/8" Male to 8mm Tube
PT-08-1/4	1/4" Male to 8mm Tube
PT-08-3/8	3/8" Male to 8mm Tube
PT-10-1/8	1/8" Male to 10mm Tube
PT-10-1/4	1/4" Male to 10mm Tube
PT-10-3/8	3/8" Male to 10mm Tube
PT-10-1/2	1/2" Male to 10mm Tube
PT-12-1/4	1/4" Male to 12mm Tube
PT-12-3/8	3/8" Male to 12mm Tube
PT-12-1/2	1/2" Male to 12mm Tube



Part number & Size	Description
PH04-M5	4mm Tube to M5 Male Banjo Elbow
PH04-G1/8	4mm Tube to 1/8" Male Banjo Elbow
PH04-G1/4	4mm Tube to 1/4" Male Banjo Elbow
PH06-M5	6mm Tube to M5 Male Banjo Elbow
PH06-G1/8	6mm Tube to 1/8" Male Banjo Elbow
PH06-G1/4	6mm Tube to 1/4" Male Banjo Elbow
PH06-G3/8	6mm Tube to 3/8" Male Banjo Elbow
PH08-G1/8	8mm Tube to 1/8" Male Banjo Elbow
PH08-G1/4	8mm Tube to 1/4" Male Banjo Elbow
PH08-G3/8	8mm Tube to 3/8" Male Banjo Elbow
PH08-G1/2	8mm Tube to 1/2" Male Banjo Elbow
PH10-G1/8	10mm Tube to 1/8" Male Banjo Elbow
PH10-G1/4	10mm Tube to 1/4" Male Banjo Elbow
PH10-G3/8	10mm Tube to 3/8" Male Banjo Elbow
PH10-G1/2	10mm Tube to 1/2" Male Banjo Elbow
PH12-G1/4	12mm Tube to 1/4" Male Banjo Elbow
PH12-G3/8	12mm Tube to 3/8" Male Banjo Elbow
PH12-G1/2	12mm Tube to 1/2" Male Banjo Elbow

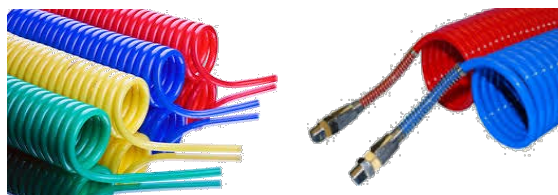


Part number & Size	Description
PC-04-1/8	1/8" Male to 4mm Tube
PC-04-1/4	1/4" Male to 4mm Tube
PC-04-M5	M5 Male to 4mm Tube
PC-06-1/8	1/8" Male to 6mm Tube
PC-06-1/4	1/4" Male to 6mm Tube
PC-06-3/8	3/8" Male to 6mm Tube
PC-06-M5	M5 Male to 6mm Tube
PC-08-1/8	1/8" Male to 8mm Tube
PC-08-1/4	1/4" Male to 8mm Tube
PC-08-3/8	3/8" Male to 8mm Tube
PC-08-1/2	1/2" Male to 8mm Tube
PC-10-1/8	1/8" Male to 10mm Tube
PC-10-1/4	1/4" Male to 10mm Tube
PC-10-3/8	3/8" Male to 10mm Tube
PC-10-1/2	1/2" Male to 10mm Tube
PC-12-1/4	1/4" Male to 12mm Tube
PC-12-3/8	3/8" Male to 12mm Tube
PC-12-1/2	1/2" Male to 12mm Tube
PC-14-04	1/2" Male to 14mm Tube
PC-15-04	1/2" Male to 15mm Tube
PC-16-04	1/2" Male to 16mm Tube
PC1/2-R1/2	1/2" Male to 1/2" Tube
PC1/2-R1/4	1/4" Male to 1/2" Tube
PC1/2-R3/8	3/8" Male to 1/2" Tube
PC1/4-R1/2	1/2" Male to 1/4" Tube
PC1/4-R1/4	1/4" Male to 1/4" Tube
PC1/4-R1/8	1/8" Male to 1/4" Tube
PC1/4-R3/8	3/8" Male to 1/4" Tube
PC3/8-R1/2	1/2" Male to 3/8" Tube
PC3/8-R1/4	1/4" Male to 3/8" Tube
PC3/8-R3/8	3/8" Male to 3/8" Tube



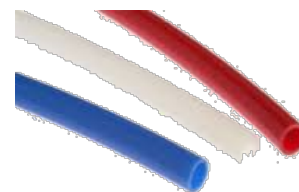
Part number & Size	Description
PL J-04	4mm Tube
PL J-06	6mm Tube
PL J-08	8mm Tube
PL J-10	10mm Tube
PL J-12	12mm Tube

Polyurethane and Nylon Tubing



Part number & Size	Description
PU-04020	4 X 2.0 Tube (Specify Colour)
PU-06040	6 x 4.0 Tube (Specify Colour)
PU-08055	8 x 5.5 Tube (Specify Colour)
PU-10065	10 x 6.5 Tube (Specify Colour)
PU-12090	12 x 9.0 Tube (Specify Colour)
PU-14100	14 x 10.0 Tube (Specify Colour)
PU-16120	16 x 12.0 Tube (Specify Colour)

Part number & Size	Description
PUUB-508060	PU 5mm x 8mm. 6Mtr with 1/4" male swivels
PUUB508090	PU 5mm x 8mm. 9Mtr with 1/4" male swivels
PUUB651060	PU 6.5mm x 10mm. 6Mtr with 1/4" male swivels
PUUB-651090	PU 6.5mm x 10mm. 9Mtr with 1/4" male swivels
PUUB-801275	PU 8mm x 12mm. 7.5Mtr with 1/4" male swivels
PUUB-801295	PU 8mm x 12mm. 9.5Mtr with 1/4" male swivels





SPLIT FLANGES



Grooved Pipe Fittings / Couplers

