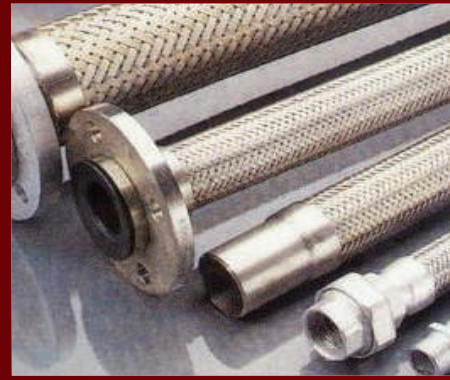
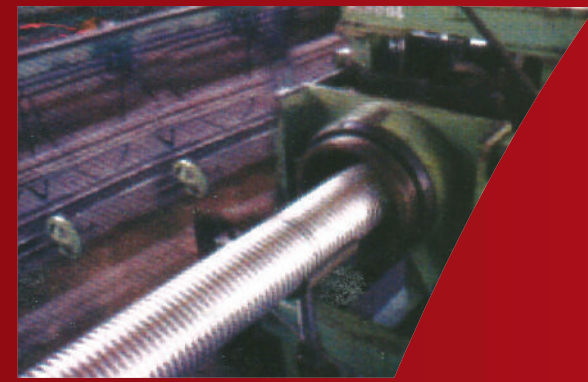


ISO-9001 2015
Certified Company



MORE
FLEXIBILITY
WITH MORE
STRENGTHEN



Office:-
Shop no.6, Kranti Maidan, Surya Nagar No.2, Vikhroli (w), Mumbai - 400083
Contact :- 02225779378 e-mail:-info@flexiflow.in,flexiflow79@gmail.com

Factory:-
Gala No 50,84, Mahesh Agarwal Compound, Kariwal,
Bhiwandi, Dist-Thane - 421302.

www.flexiflow.in

www.flexiflow.in

OUR CLIENT LIST



ABOUT US

A specialized in production of stainless steel corrugated hoses, stainless steel connector and other hoses assemblies in an ultra-modern facility, under the strict supervision of an experienced and qualified team.

To build and consolidate leadership position through successful research, market intelligence and Development. Where standards in quality and services climb new heights of excellence, achievements.

FLEXIFLOW leverages its topnotch capabilities in Design, Quality Assurance and ensure that their products consistently meet customer expectations in terms of quality and reliability. As a result of continual improvement in every aspect of business, within a short span, FLEXIFLOW has become one of the most reliable sources of quality metallic flexible hose assemblies among its customer. exact customers' requirements and strict adherence to the delivery schedule with personal attention to every customer. A full range of metallic flexible hoses & hose assemblies are manufactured in austenitic steel with grades AISI 304, 321, 316 & 316L, conforming to international quality standards.

To build and consolidate leadership position through successful research, market intelligence and Development. Where standards in quality and services climb new heights of excellence, achievements is measured from customers satisfaction, Strength lies in its employees, suppliers and distributors.

QUALITY

Quality Assurance at Flexiflow Industries is of dynamic prominence. Every stage of production is constantly monitored by a qualified team of QC Engineers. Flexiflow Industries has complete in-house testing facilities for various types of tests, as per international standards.

Besides stringent in-house control of quality, raw materials are sourced only from reputed manufacturers and these are regularly counter checked from external independent agencies for

Quality in business, engineering and manufacturing has a pragmatic interpretation as the non-inferiority or superiority of something; it is also defined as fitness for purpose. Quality is a perceptual, conditional, and somewhat subjective attribute and may be understood differently by different people. Consumers may focus on the specification quality of a product/service, or how it compares to competitors in the marketplace. Producers might measure the conformance quality, or degree to which the product/service was produced correctly. Support personnel may measure quality in the degree that a product is reliable, maintainable, or sustainable. Simply put, a quality item (an item that has quality) has the ability to perform satisfactorily in service and is suitable for its intended purpose.

There are five aspects of quality in a business context:

Producing – providing something.

Checking – confirming that something has been done correctly.

Quality Control – controlling a process to ensure that the outcomes are predictable.

Quality Management – directing an organization so that it optimizes its performance through analysis and improvement.

Quality Assurance – obtaining confidence that a product or service will be satisfactory. (Normally performed by a purchaser)



STAINLESS STEEL CORRUGATED FLEXIBLE HOSE AND TUBE

Flexiflow SS Corrugated Flexible Hoses are available in stainless steel of grades AISI 321, 316, 316L, & 304 manufactured on site by Tig welded steel strip and forming annular convolutions so that the tube adopts a high flexibility.

Flexiflow Hose assemblies are manufactured as per BS 6501:Part I and IS 10380 Standard and they are available in A,B and C Type Flexibility in which A and C Type Flexibility are made only by customer's. Temperature range "-200 to +800" degree centigrade.

STAINLESS STEEL BRAID

Flexiflow stainless steel braid is designed for external application around corrugated hose to prevent elongation and increase the internal pressure rating and protection from damages. our braids are also useful for hydraulic rubber hoses, PVC hoses, PTFE (Teflon) Hoses for external protection covering.

Flexiflow braids are available in AISI 304 grade only



BRAID

FLEX FLOW INDUSTRIES PVT LTD. Provides full range of Braiding on Metallic Hoses. it comprises from 1/4" to 12" dia with 96, 48 & 36 Carrier Braiding Machines. These are the latest computerized equipments totally controlled by the software, which gives correct and parallel dimensions on over all lengths of braids. when the corrugated hose is subjected to pressure. it tends to open axially. The wire braid provides prevention against elongation caused by the pressure on the hose and increase hose pressure strength and provides physical protection against damage to the tube. The SS Hose, a braid collar and the braid are joined together by TIG welding process to produce a flexible SS Hose Assembly.

The braid is made of SS wire to AISI 304 or 316. The angle of lay, wire thickness, number of wire ends are carefully selected to meet the various application requirements and these are maintained perfectly due to computerized machines on over all lengths of braids produced. The braid is woven in such a way that line pressure produce braid tension, which provides radial and axial constraint prohibiting elongation of inner tube



METAL FLEXIBLE HOSE MAKING

A Corrugated Flexible metal hose is a tubing made. Flexible by forming convolutions so that it may conveniently bend while remaining liquid and gases tight. FLEXI FLOW IND PVT LTD. Produces metal Flexible hose and hose assemblies of varies types and materials at its modern Manufacturing Plant, Equipped with Latest machines and equipments in New Mumbai, under stringent quality standards.manufacturing



MATERIALS

Corrugated flexible hose (core) is made in Austenitic stainless steel in following grades.

AISI-304,304L,321 316 and 316L.....



BRAIDS

The stainless steel flexible hose is covered with an external braiding made from stainless steel wire. The wire braiding can be either single or double layer according to pressure rating required. Braiding increases the hoop

ADDITIONAL PROTECTIVE COVERING

Hose assemblies can be supplied with additional coverings such as strip wound hose. PVC Shrinkable tubing or asbestos as when needed.

ADVANTAGES OF FLEXIBLE HOSE

- Suitable for wide temperature range (-270°C to 700°C).
- It compensates for thermal expansion or contraction in piping system
- High physical strength.
- Good corrosion characteristics.
- Fire resistant.
- Moisture resistant.
- Long Life
- Resistant to abrasion, penetration and damage.
- Absorbs or dampens vibration and noise from pumps, compressors, engines and similar equipments.
- Connects moving parts of machinery and equipments permit it's a very economical installation against rigid piping in difficult Locations.

Technical Specification

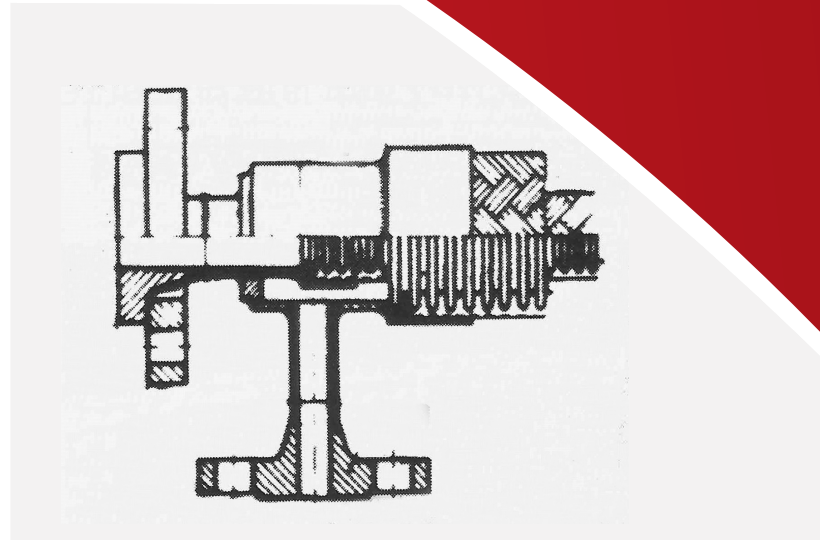
NOMINAL BORE	MINIMUM BEND RADIUS		WITHOUT BRAID		SINGLE BRAID		DOUBLE BRAID	
			MAX. working pressure	TEST pressure	MAX. working pressure	TEST pressure	MAX. working pressure	TEST pressure
N.B.	STATIC	FLEXING	kg/cm ²	kg/cm ²	kg/cm ²	kg/cm ²	kg/cm ²	kg/cm ²
mm	mm	mm						
6	25	100	4	6	100	150	160	240
10	40	150	4	6	90	135	144	216
12	50	200	3	4.5	80	120	128	192
16	50	200	3	4.5	70	105	112	168
20	70	200	2	3	64	96	102	153
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	30	45	48	72
50	175	350	1.0	1.5	28	42	44	66
65	200	410	1.0	1.5	24	36	38	57
80	205	450	1.0	1.5	18	27	28	42
100	230	560	0.8	1.2	16	24	26	39
125	280	660	0.6	0.9	12	18	20	30
150	320	815	0.6	0.9	10	15	16	24
200	435	1015	0.5	0.75	8	12	12	18
250	560	1220	0.5	0.75	8	12	12	18
300	660	1420	0.25	0.5	6	9	9	15

JACKETED FLEXIBLE METAL HOSE (Stainless Steel Corrugated)

For heat treatment to any fluid with steam or hot oil in the jacketed section these are used. By this temprature of the fluid in the inner hoseis raised there by lowering its viscosity and permitting free flow of the liquid. the high flexibility of the hose is apt for angular and offset movements. These can also be used as coolant hose in compressors and engines.

Mainly for use in chemical, pharmaceutical petroleum and engineering industries.

While indenting please specify internal diameter internal and external hose, length and end fittings.



JACKETED FLEXIBLE METAL HOSE



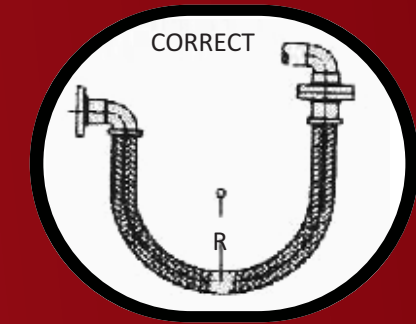
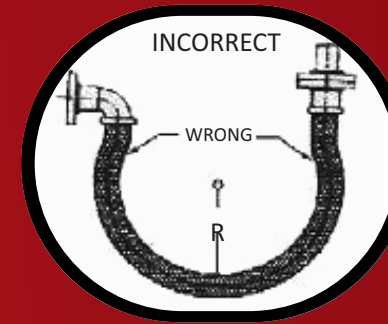
INDUSTRY USES OF HOSES AND BRAID



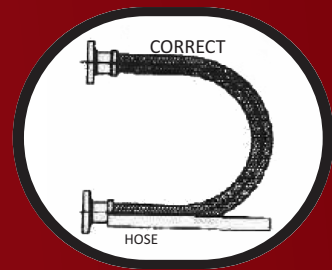
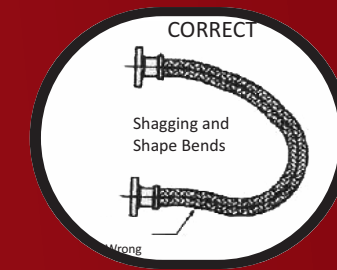
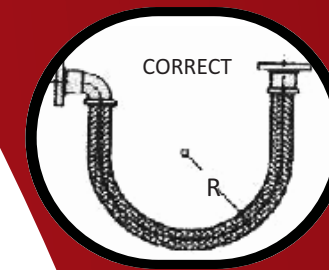
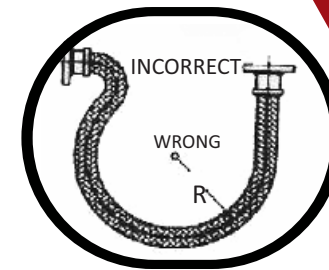
INSTALLATION

In Order to get satisfactory service and longer life Stainless Steel Flexible Hoses, the Hose Assembly should be installed in the right manner. The shrp bending of hose Assembly, particularly at the welded ends, stresses and twisted mounting and excessive fatigues are main causes of premature failure, hence to be avoid.

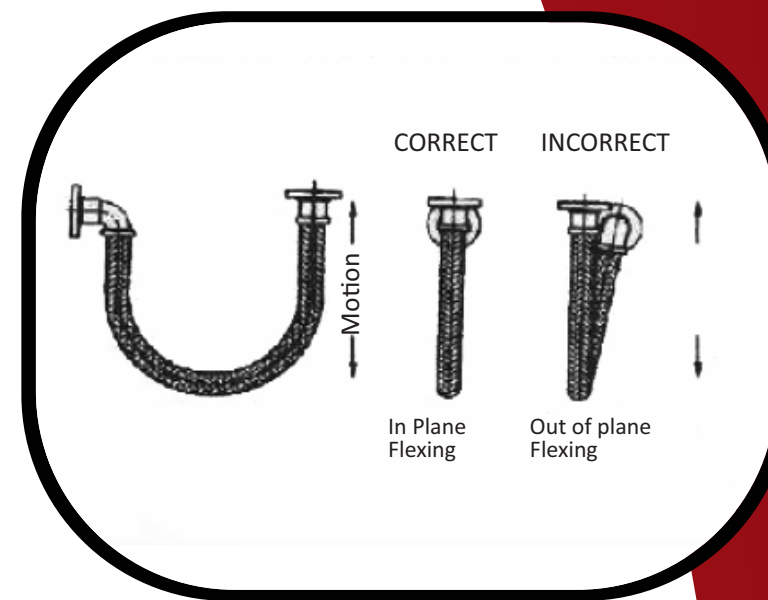
TRAVELLING LOOP INSTALLATION



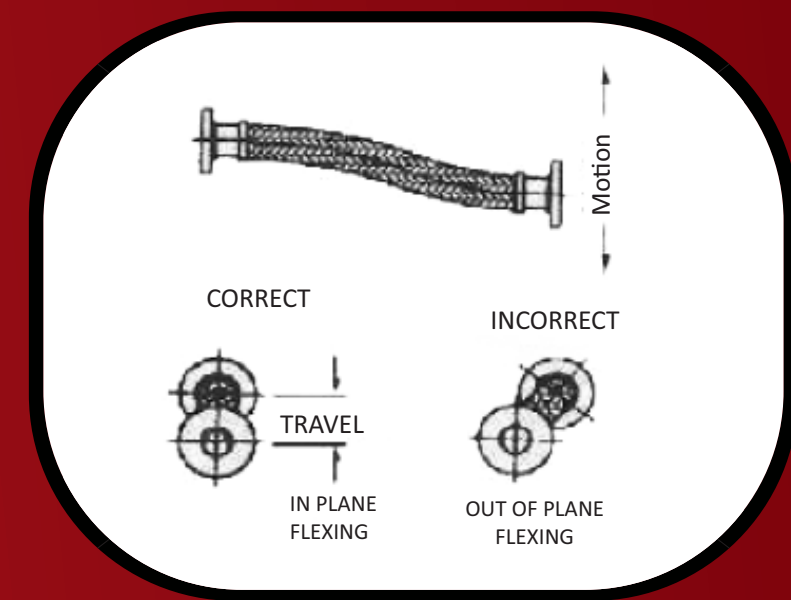
LATERAL OFFSET INSTALLATION



TRAVELLING LOOP INSTALLATION



LATERLA OFFSET INSTALLATION



FLEX FLOW IND. PVT.LTD.

AN ISO: 9001-2008 COMPANY

ALSO MANUFACTURES EXPANSION JOINT (BELLOWS)

BELLOWS

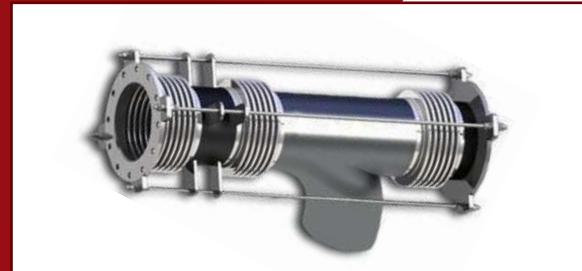
HINGED JOINTS (UNIVERSAL)

Generally Installed in multiples of two or three, these joints are designed for angular movements in one plane only: A hinged mechanism contains the pressure loads and ties back to an integral flange or box restrain log. Limit stop control the degree of angular movements. These units can fitted with either pipe ends ends of flanges, can be supplied with two hinged system also.



PURE BALANCED (ELBOW) JOINTS

Pressure balanced bellow are used in piping systems where pressure loads are critical, and where complex axial and lateral movements are involved When space is Limited. Using a presurised bellow outside the system to counteract forces generated by bellow inside the system, Large axial and lateral movements can be absorbed.



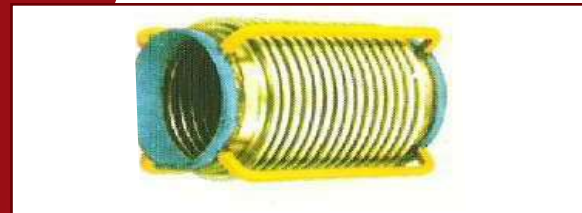
RECTANGULAR EXPANSION JOINTS (AXIAL OR UNIVERSAL)

Rectangular metal Expansion Joint have a variety of applications in the power, petrochemical, refining, chemical and steel industries. these bellow have special application in Cement industries.



AXIAL JOINT

These joints are the simplest form manufactures from single and multi-ply elements and fitted with either flanges or pipe ends connections. these units are suitable for axial movements only, though in certain cases will take care of small lateral offset.



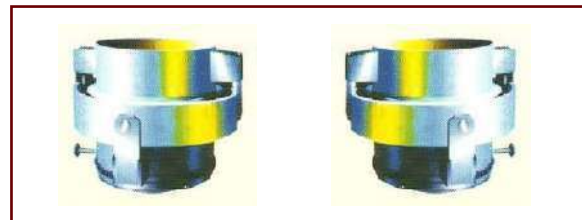
UNIVERSAL JOINTS (UNITED)

Two bellow elements are joined together by a center tube and fitted with either pipe ends or flanges. The assembly is capable of both axial and lateral movements but because of center tube instability, is limited to low pressure applications.



GIMBAL JOINTS

A Gimbal ring arrangement bellow for angular movements in plane. These are usually installed in pairs or with a hinged unit which can accommodate large complex lateral movements at high pressures. Limit stops control degree of angulation. End connections-Flanged or pipes.



EXPANSION JOINT (BELLOWS)

SIZE			PN. 06			PN. 10			PN. 16			PN. 25			
DN	ID	OD	Lt	N	m/conv	Lt	N	m/conv	Lt	N	m/conv	Lt	N	m/conv	
1/2"	13	16.50	22.60	63	14	0.55	54	11	0.55	62	13	0.40	63	13	0.30
5/8"	16	17.50	24.50	63	17	0.55	63	13	0.55	68	14	0.40	58	11	0.40
3/4"	20	22.50	31.90	64	11	0.95	69	12	0.95	71	12	0.60	82	14	0.45
1"	25	28.50	40.40	68	14	1.05	84	12	1.05	81	12	1.05	75	10	1.00
1 1/4"	32	35.50	49.40	86	11	1.45	84	10	1.45	87	10	1.58	106	12	1.05
1 1/2"	40	43.00	58.00	90	11	1.60	88	10	1.60	91	10	1.55	110	12	1.15
2"	50	56.00	78.00	70	6	3.10	83	7	3.10	74	6	3.00	87	7	2.35
2 1/2"	65	72.00	96.00	74	6	3.65	132	10	3.65	112	8	2.00	91	6	2.65
3"	80	87.00	112.00	111	8	3.20	140	10	3.20	107	7	2.85	96	6	2.90
4"	100	112.00	140.00	115	8	3.85	117	8	3.85	111	7	3.75	115	7	2.95
5"	125	138.00	170.00	141	9	4.00	116	7	4.00	108	6	4.65	115	7	2.95
6"	150	166.00	202.00	140	8	4.85	116	6	4.85	134	7	4.85	137	7	3.90
8"	200	216.00	258.00	158	8	5.60	187	9	5.60	152	7	5.50	155	7	4.60
10"	250	270.00	320.00	193	9	6.65	185	8	6.65	146	6	7.20	172	7	5.50
12"	300	320.00	370.00	223	10	6.10	237	10	6.10	195	8	6.60	251	10	4.75

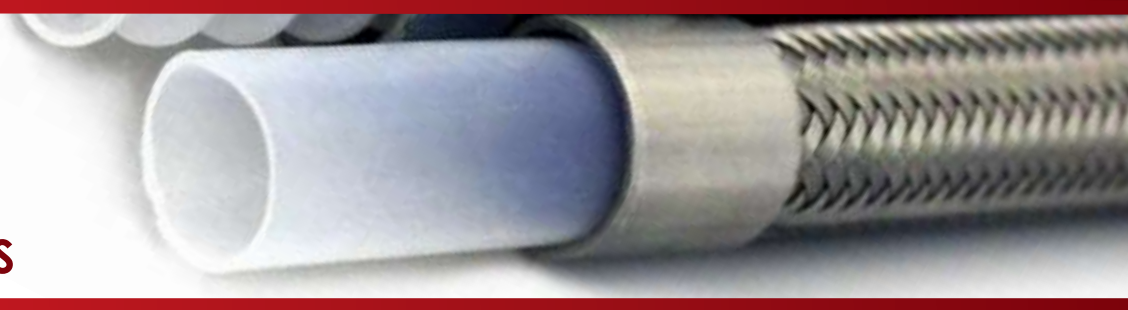
P.T.F.E (TEFLON) HOSES

FF 179-R14

APPLICATION

P.T.F.E hose has an excellent temperatures characteristics both in high and low temperature, Excellent chemical resistance, non contamination properties, low coefficient and resists deternotation. Therefore the hose is used generally in applications where all or one of the aboveproperties is the main criteria.

P.T.F.E (TEFLON) HOSES



Dash Size	Wall THK	Hose.ID (Nom.)		Hose.O.D (Nom.)		Working Pressure		Min. Burst Pressure		Min. Bend Radius	
		(In)	(mm)	(In)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(In)
-3	1.00	1/8	3.0	3.24	6.2	3,260	225	13,040	900	40	1,60
-4	0.70	3/16	4.8	0.30	7.6	2,750	190	11,000	760	50	2.000
-5	0.70	1/4	6.4	0.35	8.8	2,610	180	10,440	720	75	3.00
-6	0.70	5/16	8.0	0.43	11.0	2,540	175	10,160	700	100	4.00
-7	0.70	3/8	9.5	0.48	12.1	2,390	165	9,560	660	120	5.00
-8	0.70	13/32	10.5	0.54	13.7	2,030	140	8,120	560	135	5.40
-10	0.75	1/2	12.7	0.64	16.2	1,740	120	6,960	480	165	6.40
-12	0.90	5/8	16.0	0.74	18.8	1,270	88	5,080	352	200	8.00
-14	0.90	3/4	19.0	0.91	23.1	1,010	70	4,040	280	230	9.20
-16	1.00	7/8	22.2	1.03	23.1	1,010	70	4,040	280	230	9.20
-18	1.20	1	25.4	1.15	29.2	870	60	3,440	240	300	12.00
-18	1.25	1. 1/8	29.0	1.30	33.1	630	44	2,520	176	410	6.40

Working and burst pressure are at 120 degree Celsius Temperature Available in Electrical and drive version also and our part shall be PH 381

APPLICABLE STANDARD

REINFORCEMENT

Single braid of 303/304 series of stainless steel wire

TEMPERATURE RANGE

Continues: -54°C to + 260°C

P.T.F.E (TEFLON) HOSES

FF 370-CONVULATED

APPLICATION

P.T.F.E hose has an excellent temperatures characteristics both in high and low temperature, Excellent chemical resistance, non contamination properties, low coefficient and resists deternotation. Therefore the hose is used generally in applications where all or one of the above properties is the main criteria. in automotive chemical, pharmaceutical & food processing. plastic & rubber molding machines. also for some applications the tube can also be made conductive to dissipate the electric-static charges.

P.T.F.E (TEFLON) HOSES



Dash Size	DN	Hose.ID (Nom.)		Hose.O.D (Nom.)		Working Pressure		Min. Burst Pressure		Min. Bend Radius	
		(In)	(mm)	(In)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(In)
-4	6	1/4	6.4	0.45	11.5	5,300	365	15,900	1,095	20	0.8
-8	0.75	1/2	2.7	0.78	19.8	1,960	135	7,840	540	25	1.0

Working and burst pressure are at 20 degree Celsius Temperature Available in Electrical and drive version also and our part shall be FF 371

APPLICABLE STANDARD

Standard: Polyhose propriety product

CONSTRUCTION

Core : Helically Convuluted sintered tube Polytetrafluoro-ethylene (P.T.F.E)

REINFORCEMENT

Single braid of 303/316 series of stainless steel wire

TEMPERATURE RANGE

Continues: -54°C to + 260°C

FUEL COMPOSITE HOSE composite hose

description

Composite hose made from polypropylene fabrics and films with an abrasion resistant PVC coated fabric cover. Inner and outer wires are galvanized mild steel.

classification

Fuel and Oil Group 1 Hose.

colour code

Available in several colors – Please specify at time of ordering.

principal applications

Flexifuel is the hose mainly for the transfer of petroleum products by road, rail tankers and loading gantries.

manufacture

A Group 1 hose where electrical continuity is maintained by both hose wires being securely connected to the fittings. The hose contains a barrier layer for 100% aromatic hydrocarbons.

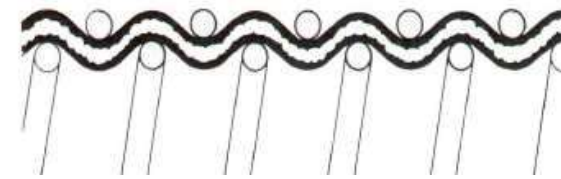
- Manufactured to the specifications where applicable of EN 13765 Type 2 – 10 bars at the specific safety factor 4: 1.
- Also Manufactured to the specifications where applicable of AS 2683 Type 1 Grade 1,2 and 3 – 7 bars at the specific safety factor.

temperature

Depending on the conveyant -30°C to +80°C.

Special application

flexi fuel can be supplied with Stainless Steel outer wire also. This hose is called **flexi fuel S**.



Specifications

nominal bore mm	outside dia mm	bend radius mm	pressure nominal		weight per meter Kg/m	Std. Prod. Length Meter
			psi	bar		
25	32	50	100	7	0.90	20
38	50	75	100	7	1.35	20
50	61	80	100	7	1.70	30
65	76	90	100	7	2.40	30
75	88	125	100	7	2.90	30
100	112	220	100	7	3.90	30

Safety factor of 4 : 1

Complies with BS 5842:1980 Standard on demand.

FLEXI TRANSOIL composite hose

description

Composite hose made from polypropylene fabrics and films with an abrasion resistant PVC coated fabric cover. Inner and outer wires are galvanized mild steel.

classification

Fuel and Oil Group 1 Hose.

colour code

Available in several colors – Please specify at time of ordering.

principal applications

Flexisoil is especially suitable for transfer of petroleum products in in-plant applications, tankes for rail tankers, Tanker Trucks etc. It is an excdnt hose for conveying tallow and high aromatic hydrocarbons.

manufacture

Complies with EN 13765 Type 2 & AS 2117 Type 3 Grade 1 & 2.

temperature

Depending on the conveyant -30°C to +80°C.

Special application

Flexisoil can be supplied with Stainless Steel outer wire also. This hose is called **Flexisoil S**



Specifications

nominal bore mm	outside dia mm	bend radius mm	pressure nominal		weight per meter Kg/m	Std. Prod. Length Meter
			psi	bar		
25	38	90	150	10	0.90	20
38	52	120	150	10	1.45	20
50	64	150	150	10	1.80	30
65	80	180	150	10	2.50	30
75	92	250	150	10	3.00	30
100	115	350	150	10	4.50	30

Safety factor of 4 : 1

Complies with BS 5842:1980 Standard on demand.

CHEMICAL HOSE composite hose

description

Composite hose made from polypropylene fabrics and films with an abrasion resistant PVC coated fabric cover. Inner wire of polypropylene coated steel wire and an outer wire of galvanised mild steel.

classification

Chemical Group 2 Hose.

colour code

Available in several colors – Please specify at time of ordering.

manufacture

Complies with EN 13765 Type 2.

principal applications

Flexichem is suitable for the transfer of chemicals acids and alkalines.

Note: Electrical continuity can be maintained for this hose by baring the inner wire (ie removing the polypropylene coating) near the fitting to allow positive connection of the wire to the fitting. This process however may introduce a potential corrosion path to the inner wire.

temperature

Depending on the conveyant -30°C to +80°C.

special applications

Transchem can be supplied with a stainless steel 316 outer wire for applications involving corrosive atmospheres and splash. This hose is called **Flexichem-S**



Specifications

nominal bore mm	outside dia mm	bend radius mm	pressure nominal		weight per meter Kg/m	Std. Prod. Length Meter
			psi	bar		
25	38	90	150	10	0.90	20
38	52	120	150	10	1.45	20
50	64	150	150	10	1.80	30
65	80	180	150	10	2.50	30
75	92	250	150	10	3.00	30
100	115	350	150	10	4.50	30

Safety factor of 4 : 1

Complies with BS 5842:1980 Standard on demand.

FLEXI composite hose

description

Composite hose made from polypropylene fabrics and films with an abrasion resistant PVC coated fabric cover. The hose has an inner wire of stainless steel 316 and is lined with layers of PTFE film. The outer wire is galvanised mild steel.

classification

Chemical Group 3 Hose.

colour code

Available in several colors – Please specify at time of ordering.

manufacture

Complies with EN 13765 Type 2.

principal applications

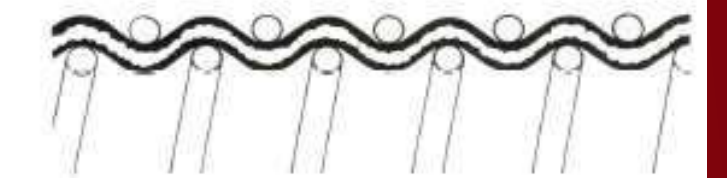
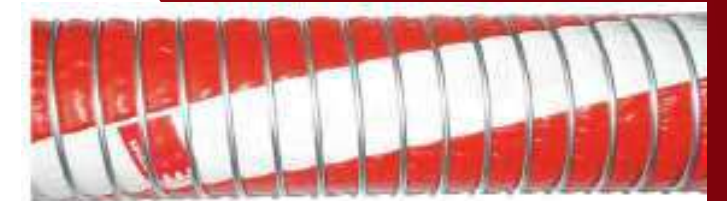
Flexiflon is suitable for the transfer of the most aggressive chemicals and searching solvents. The PTFE liner has a low co-efficient of friction making the hose also suitable for the conveyance of high viscosity products such as paint. Electrical continuity is maintained by the hose wires being securely connected to the fittings.

temperature

Depending on the conveyant -30°C to + 140°C.

special applications

Solfon can be supplied with a stainless steel 316 outer wire for applications involving corrosive atmospheres and splash. This hose is called **Flexiflon -S.**



Specifications

nominal bore mm	outside dia mm	bend radius mm	pressure nominal		weight per meter Kg/m	Std. Prod. Length Meter
			psi	bar		
25	38	90	150	10	0.90	20
38	52	120	150	10	1.45	20
50	64	150	150	10	1.80	30
65	80	180	150	10	2.50	30
75	92	250	150	10	3.00	30
100	115	350	150	10	4.50	30

Safety factor of 4 : 1

Complies with BS 5842:1980 Standard on demand.

Flexi marine composite hose

description

Composite hose made from heavy duty polypropylene fabrics and films with layer of abrasion resistant PVC coated fabric cover. Inner and outer wires are galvanised mild steel. Transmarine with outer Stainless steel wire is called as **Fleximarine S**.

Classification

Fuel and Oil Group 1 Hose

colour code

Available in several colors – Please specify at time of ordering.

principal applications

Transmarine is suitable for the heavy duty suction and discharge transfer of petroleum products in dockside and ship to shore applications.

manufacture

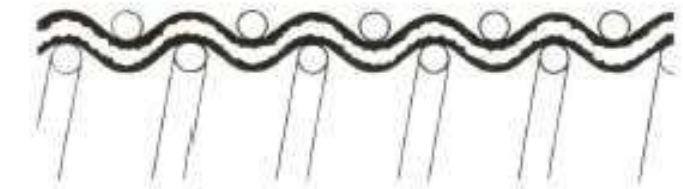
Complies with EN 13765 Type 3 and AS 2117 Type 2 . where electrical continuity is maintained by both hose wires being securely connected to the fittings.

assemblies

Marine hose assemblies are also supplied with factory fitted externally swaged end connections.

temperature

Depending on the conveyant -30°C to +80°C.



Specifications

nominal bore mm	outside dia mm	bend radius mm	pressure nominal psi	bar	weight per meter Kg/m	Std. Prod. Length Meter
25	41	110	200	14.0	1.05	20
38	56	150	200	14.0	1.25	20
50	68	180	200	14.0	2.20	30
65	82	225	200	14.0	2.75	30
75	95	305	200	14.0	4.10	30
100	125	435	200	14.0	6.60	30
150	180	555	200	14.0	11.00	20
200	245	755	200	14.0	15.10	20
250	295	930	200	10.0	21.00	20

Safety factor of 5 : 1

Transdock with safety factor 4:1 is available

Complies with BS 5842:1980 Standard on demand.

Flexi Fire Retardant Composite Hose

Description

Fire retardant™ Composite Hoses are specially designed to safeguard the hoses and the environment from catastrophic failure. Additional Fire resistant films and fabrics are included in the construction. These hoses are covered with special fiber glass fabric coated with fire retardant PVC to ensure a good thermal insulation and a low conductivity from the outside to the inside.

Fire Retardant Hose™

- Fire Retardant Trans chem
- Fire Retardant Trans oil
- Fire Retardant Solflon
- Fire Retardant Transmarine
- Fire Retardant Chem marine

colour code

CHEMICAL : Gray
 OIL : Blue
 AGGRESSIVE CHEM : Red

principal applications

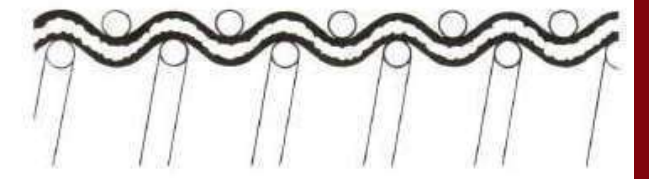
Fire Retardant hoses are used for transferring petroleum products including ship to shore, storage, and in plant installations, bottom loading within the petroleum industry. Fire retardant hose performance meets the criteria to EN 13765:2003 Normative Annex G Standards. It is extremely flexible, easy to handle and bend. Specifically designed to handle chemicals, fuels, petrol, diesel, lubricating oils, hoses are 100% aromatic resistant and perfectly antistatic and can be used for fluid delivery or vapor's suction. The special series of COATED FIRE RETARDANT hose assemblies are fitted with an extensive range of couplings readily available, externally swaged with Stainless Steel or aluminum-ferrules.

manufacture

These hoses are manufactured according to the requirement specified by the European Standards EN 13765:2003 Type 2 (BS 5842:1980), and in accordance with the recommendations of NAHAD Guidelines (NAHAD 600/2005).

assemblies

These hoses assemblies are fitted with our in-house developed special fittings, specifically constructed to allow both inner and outer spiral wires of the hose to be positively connected to fittings for electrical continuity.



Safety

Fire Retardant hoses assemblies are tested at 1 1/2 times rated working pressures for safety and reliability in accordance with BS 5842:1980 clause 6.4 (EN ISO 1402). The Hose is permanently marked on the tape for manufacturer's logo, plus other data as per customer requirement.

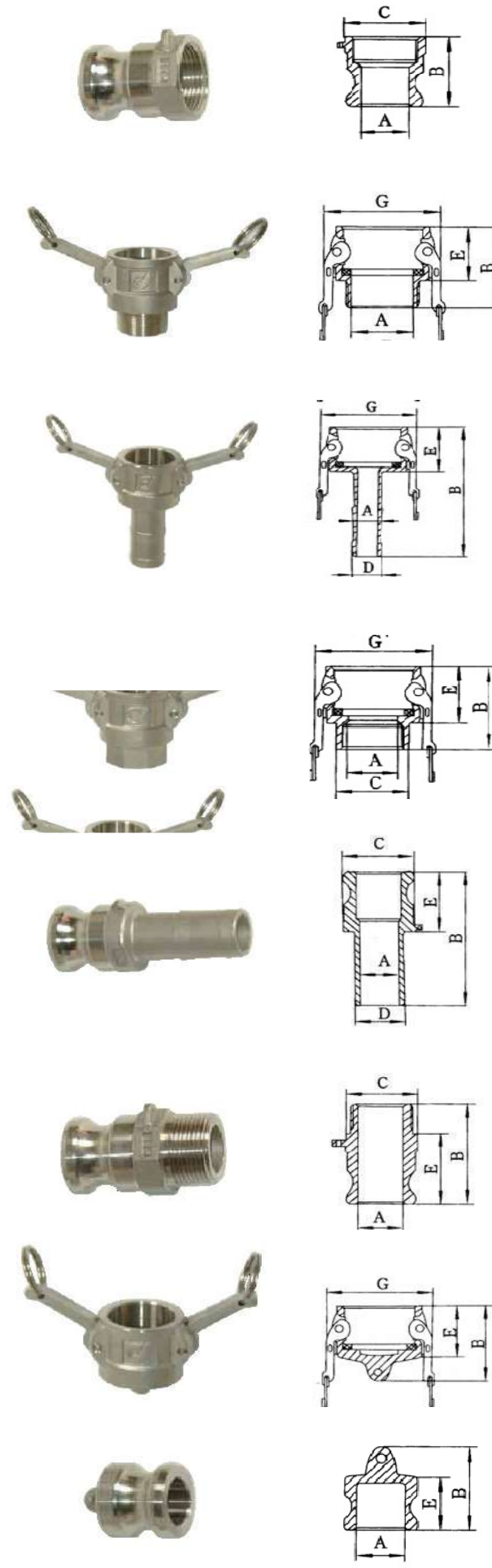
Specifications

nominal bore mm	outside dia mm	bend radius mm	pressure nominal Psi	Bar	weight per meter Kg / m	Std. Prod. Length Meter
25	41	100	200	14	1.00	20
38	54	135	200	14	1.25	20
50	65	175	200	14	2.10	30
65	80	220	200	14	2.65	30
75	94	290	200	14	3.90	30
100	120	430	200	14	6.50	30
150	175	550	200	14	10.50	20
200	240	750	200	14	14.30	20
250	290	920	150	10	20.30	20

Safety factor of 5 : 1

Complies with BS 5842:1980 Standard on demand.

Camlocks - Aluminium / Stainless Steel



Type A Camlock - Male Camlock / Female BSP

Dimensions in millimetres	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	21	21	24	28.5	36	45	56.5	73	98
B	38	38	48	56	60	64	87	73	78
C	32	32	40	48	56	67	83	96	127

Type B Camlock - Female Camlock / Male BSP

Dimensions in millimetres	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	14	14	24	28	35	51	58	72	98
B	52	52	64	72	73	80	90	94	101
E	32	32	40	48	49	54	59	60	62
G	53	53	60	78	85	96	110	127	156

Type C Camlock - Female Camlock / Male Hosebarb

Dimensions in millimetres	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	14	14	20	25	31	43	55	67	92
B	92	92	105	118	121	138	155	164	175
D	20	20	26	33	39	52	65	77	103
E	32	32	40	48	49	54	59	60	62
G	53	53	60	78	85	96	110	127	156

Type D Camlock - Female Camlock / Female BSP

Dimensions in millimetres	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	16	19	26	30	39	50	58	72	98
B	52	52	62	68	71	78	85	91	96
C	32	32	40	48	56	67	83	96	127
E	32	32	40	48	49	54	59	60	62
G	53	53	60	78	85	96	110	127	156

Type E Camlock - Male Camlock / Male Hosebarb

Dimensions in millimetres	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	14	19	24	28	35	48	58	72	98
B	98	98	110	121	125	140	158	170	182
D	20	20	26	33	39	52	65	77	103
E	40	40	46	53	56	61	65	66	70
C	34	34	38	48	56	66	80	102	132

Type F Camlock - Male Camlock / Male BSP

Dimensions in millimetres	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	21	21	24	28.5	36	45	56.5	73	98
B	56	56	72	80	84	88	100	106	114
C	32	32	40	48	56	67	83	96	127
E	39	39	48	56	61	62	69	74	79

Type DC Camlock - Dust Cap

Dimensions in millimetres	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
B	45	45	54	65	69	80	84	85	94
E	32	32	40	48	49	54	59	60	62
G	53	53	60	78	85	96	110	127	156

Type DP Camlock - Dust Plug

Dimensions in millimetres	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	21	21	24	29	36	45	57	73	98
B	37	37	44	55	64	68	70	80	80
E	24	24	30	38	41	43	45	52	48

Leaders in Valves, Hose, Pipes and Fittings

FF01

ISO 16028 Flat face Quick Release Couplings

Standard: ISO 16028
Occlusion: flat face
Locking: radial balls
Materials: steel
Sizes: from DN06 (1/4) to DN50 (2")
Threads: BSP-NPT
Seals: NBR
Working Pressure: from 200 to 250 Bar



QUICK RELEASE COUPLINGS

Ease of Operation | Time Saving | Cost Effective | Multiple Re-use

FF02

ISO 16028-High strength flat face Quick Release Couplings

Standard: ISO 16028
Occlusion: flat face
Locking: radial balls
Materials: steel-stainless steel
Sizes: from Dn04 (1/8) to DN30 (1 1/4)
Threads: BSP-NPT-UNF-Metric
Seals: NBR
Working Pressure: from 350 to 500 Bar



FF03

ISO 7241 -1 B Quick Release Couplings according to ISO B Norm

Standard: ISO 7241-1 B
Occlusion: valve-free flow
Locking: radial balls
Materials: steel-brass-stainless steel
Sizes: from DN04 (1/8) to DN50 (2")
Threads: BSP-NPT
Seals: NBR-Viton™
Working Pressure: from 80 to 400 Bar



FF04

Heavy duty flat face Quick Release Couplings

Occlusion: flat face
Locking: radial balls
Materials: special steel
Sizes: DN06 (1/4) to DN13 (3/8)
Threads: BSP-NPT-UNF
Seals: NBR
Working Pressure: 700 Bar



FF05

Quick Release Couplings according to ISO A Norm

Standard: ISO 7241-1 A
Occlusion: valve-free flow
Locking: radial balls
Materials: steel
Sizes: from DN06 (1/4) to DN50 (2")
Threads: BSP-NPT-BSPT
Seals: NBR
Working Pressure: from 190 to 350 Bar



FF06

Flat face male coupling connectable under pressure

Standard: ISO 16028
Occlusion: flat face
Locking: radial balls
Materials: steel
Sizes: from DN13 (1/2) to DN25 (1")
Threads: BSP-NPT-UNF-metric
Seals: NBR
Working Pressure: 300 to 350 Bar



FF07

Quick Release Couplings valve/ball type

Occlusion: valve-ball
Locking: radial balls
Materials: steel
Sizes: from DN06 (1/4) to DN50 (2")
Threads: BSP-NPT
Seals: NBR
Working Pressure: 100 to 350 Bar



Ff08

Flat face screw couplings

Occlusion: flat face
Locking: screw
Materials: steel
Sizes: from DN13 (1/2) to DN25 (1")
Threads: BSP-NPT-UNF-metric
Seals: NBR
Working Pressure: 350 Bar



FF09

"Push pull" Quick Release Couplings according to ISO A Norm

Standard: ISO 7241-1 A
Occlusion: valve-ball
Sleeve: Push pull
Materials: steel
Sizes: DN 13(1/2)
Threads: BSP-NPT-UNF-Metric
Seals: NBR
Working Pressure: 250 Bar



QUICK RELEASE COUPLINGS

Ease of Operation | Time Saving | Cost Effective | Multiple Re-use

FF01

Hydraulic couplings for trailer brake systems & for accessories on agricultural machines

Standard: ISO 5676 (PFT)
Occlusion: flat face
Locking: radial balls - screw
Materials: steel
Sizes: DN13 (1/2)
Threads: BSP-Metric
Seals: NBR
Working Pressure: from 150 to 200 Bar



FF02

Male connectable under pressure

Standard: ISO 7241-1 A
Occlusion: special valve
Locking: radial balls
Materials: steel
Sizes: DN13 (1/2)
Threads: BSP-NPT-Metric
Seals: NBR
Working Pressure: 250 Bar



Ff03

Screw Coupling valve type for high pressure

Occlusion: valve
Locking: screw
Materials: steel
Sizes: DN13 (1/2) and DN25 (1")
Threads: Metric
Seals: NBR
Working Pressure: 350 Bar



FF04

"Push-pull" Quick Release Couplings with DIN threads

Standard: ISO 7241-1 A
Occlusion: valve
Sleeve: push pull
Materials: steel
Sizes: from DN10 (3/8) to DN25 (1")
Threads: BSP-NPT-Metric
Seals: NBR
Working Pressure: from 225 to 270 Bar



FF05

Wing nut Screw Couplings

Occlusion: flat face
Locking: screw
Materials: steel-brass
Sizes: DN25 (1")
Threads: NPT
Seals: NBR
Working Pressure: 210 Bar



FF06

Quick Release Screw Couplings with DIN threads

Occlusion: valve
Locking: Screw
Materials: steel
Sizes: from DN10 (3/8) to DN25 (1")
Threads: BSP-NPT-Metric
Seals: NBR
Working Pressure: from 300 to 450 Bar



FF07

Stainless steel Quick Release Screw Couplings

Occlusion: valve
Locking: screw
Materials: stainless steel
Sizes: from DN10 (3/8) to DN25 (1")
Threads: BSP-NPT
Seals: Viton™
Working Pressure: from 250 to 650 Bar



FF08

Quick Release Screw Couplings heavy duty

Occlusion: valve-ball
Locking: screw
Materials: steel-stainless steel
Sizes: from DN06 (1/4) to DN10 (3/8)
Threads: BSP-NPT
Seals: NBR
Working Pressure: from 700 to 1000Bar



FF09

Stainless steel check valves

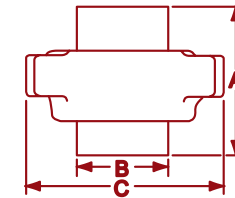
Occlusion: valve
Materials: stainless steel
Sizes: from DN 06 (1/4) to DN 39 (1 1/2)
Threads: BSP-NPT
Seals: Viton™
Working Pressure: from 250 to 350 Bar



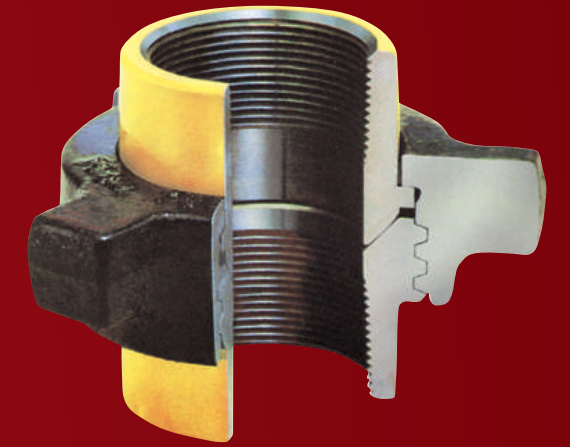
HAMMAR UNION COUPLING

Figure 100* | 1,000 PSI CWP — 1,500 PSI TEST

Low pressure service. Manifold and general service. NPT Threaded Female ends. 2" available with 8RD threaded ends, consult factory.

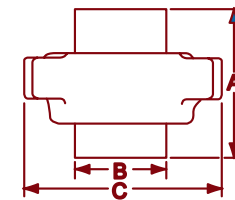


Size Weight						ACME	Material	
IN	MM	Lbs	A	B	C	TPI	Nuts	Subs
2 1/2	65	6.25	3.940	2.840	6.250	3 MOD	DI	DI
3	80	13.65	5.000	4.030	9.000	3 MOD	DI	DI
4	100	22.00	5.940	5.230	10.560	3 MOD	DI	DI
6	150	45.85	6.800	7.390	13.810	3 STD	DI	DI
8	200	66.65	7.230	9.700	16.125	3 STD	DI	DI



Figures 200* & 206 | 2,000 PSI CWP — 3,000 PSI TEST

Fig. 200 is a general purpose union, while the Fig. 206 has an O-ring in male sub for improved sealing. NPT threaded ends standard.



Size Weight						ACME	Material	
IN	MM	Lbs	A	B	C	TPI	Nuts	Subs
1	25	1.75	2.670	1.640	4.065	6 STD	DI	SF
1 1/4	32	2.25	2.730	1.935	4.635	6 STD	DI	SF
1 1/2	40	2.75	2.770	2.250	4.750	6 STD	DI	SF
1 3/4	50	4.90	3.275	2.825	5.900	4 STD	DI	†DI
2 1/2	65	10.00	4.250	3.400	7.900	4 STD	DI	SF
3	80	13.25	4.660	4.170	8.100	4 STD	DI	SF
4	100	18.35	4.910	5.075	9.060	3 MOD	DI	SF
6	150	46.00	6.610	7.410	12.800	3 STD	DI	SF

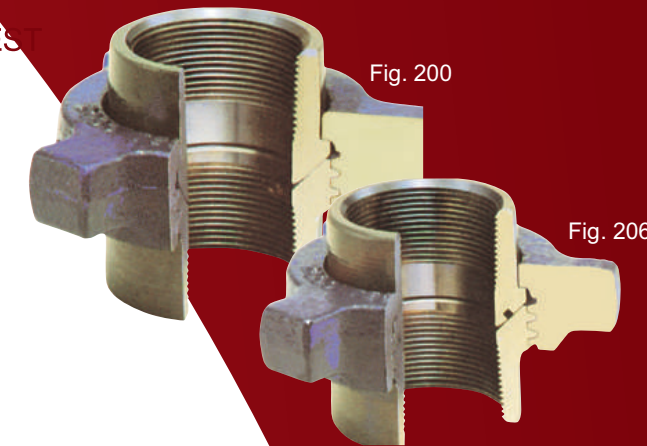


Figure 202 | 2,000 PSI CWP — 3,000 PSI TEST

(Blanking Cap Only with O-Ring)

O-Ring seated dead-end cap. Perfect for transport, completion and stimulation services. Available in 4" size.



FIG. 100 — 2. Also available in import. Contact your Anvil sales rep.
FIG. 200 — 1-2. Also available in import. Contact your Anvil sales rep.

s Weld ends available — Consult Factory
†Steel Forging Subs available/Consult Factory

TPI = Threads per inch
DI = Ductile Iron
SF = Steel Forging

WARNINGS

1. Do not mix Standard Service and Sour Gas Service Unions or parts.
2. Do not make up or break out Unions in pressurized lines.
3. Always use good safety practices, including use of safety glasses, when making up or breaking out Unions.

HAMMAR UNION COUPLING

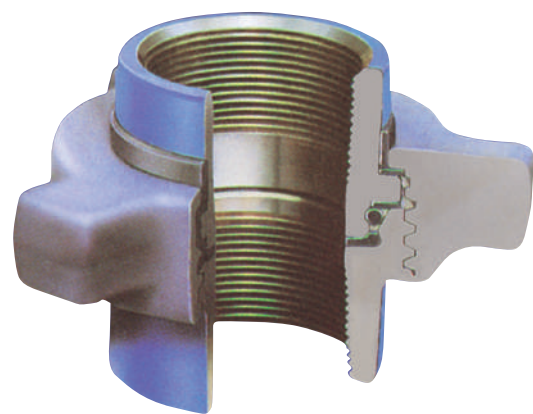
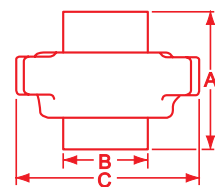


Figure 211 | 2,000 PSI CWP — 3,000 PSI TEST

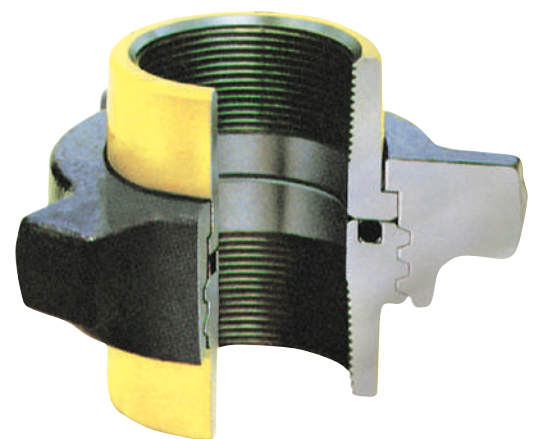
Insulating Union. Laminated rings provide electrical isolation from galvanic corrosion, with a total of 35 million ohms resistance. An O-Ring in male sub and a seal ring in female sub provide primary and secondary seals. All seal rings are field-replaceable.



Size Weight			A	B	C	ACME TPI	Material	
IN	MM	Lbs					Nuts	Subs
1	25	2.34	2.830	1.560	4.660	6 STD	SF	SF
2	50	6.24	3.510	2.880	6.250	6 STD	SF	SF

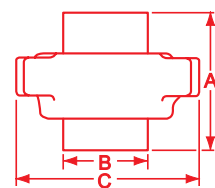
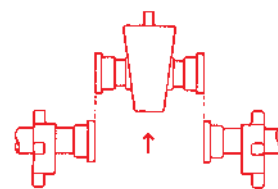
Figure 300 | 2,000 PSI CWP — 3,000 PSI TEST

“Flat Face” design for straight breakout. Unlike Standard Unions, spreading of the line is not required, allowing quick breakout. The Unions seal equally well in low or high pressure liquid or vapor service.



Straight Away Breakout

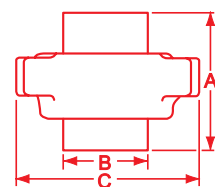
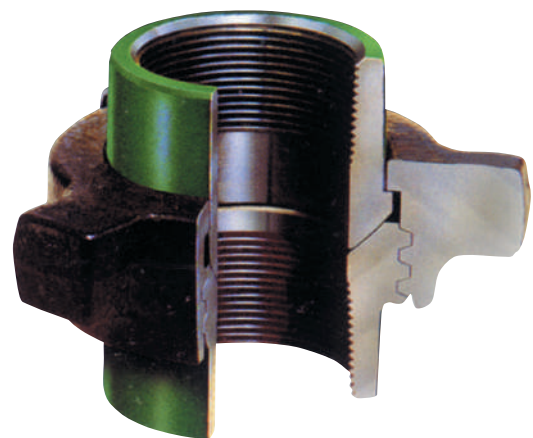
Flat Face Fig. 300 Unions permit lateral removal of valves and other fittings for easy replacement or inspection.



Size Weight			A	B	C	ACME TPI	Material	
IN	MM	Lbs					Nuts	Subs
1	25	2.00	2.625	1.560	4.250	DI	SF	
2	50	5.50	3.750	2.780	5.750	DI	SF	
2½	65	9.00	4.625	3.410	7.000	DI	SF	
3	80	12.00	5.000	4.30	8.000	DI	SF	
4	100	21.00	5.750	5.110	8.875	DI	SF	

Figure 301 | 3,000 PSI CWP — 4,500 PSI TEST

Ideal Steam Service Union.



Size Weight			A	B	C	ACME TPI	Material	
IN	MM	Lbs					Nuts	Subs
1	25	1.75	2.670	1.640	4.065	6 STD	SF	SF
2	50	4.90	3.275	2.825	5.900	1/2 STD	SF	SF
3	80	13.25	4.660	4.170	8.100	4 STD	SF	SF

WARNINGS

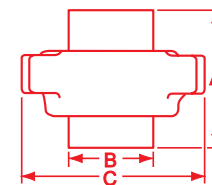
1. Do not mix Standard Service and Sour Gas Service Unions or parts.
2. Do not make up or break out Unions in pressurized lines.
3. Always use good safety practices, including use of safety glasses, when making up or breaking out Unions.

TPI = Threads per inch
DI = Ductile Iron
SF = Steel Forging
s Weld ends available

HAMMAR UNION COUPLING

Figure 400 | 4,000 PSI CWP — 6,000 PSI TEST

Ideal for manifold and pumping service.



Size Weight			A	B	C	ACME TPI	Material	
IN	MM	Lbs					Nuts	Subs
3	75	11.40	3.000	2.250	8.750	3 STD	SF	SF
4	100	29.15	3.275	2.910	9.100	3 STD	SF	SF

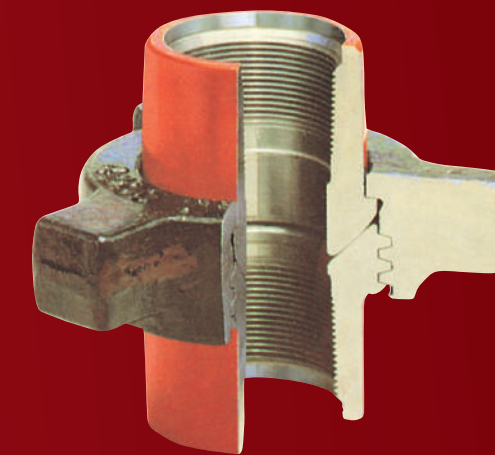
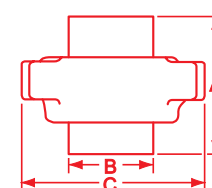


Figure 600 | 6,000 PSI CWP — 9,000 PSI TEST

Features a bronze seat for the primary seal to prevent rust and corrosion in well servicing and drilling.



Size Weight			A	B	C	ACME TPI	Material	
IN	MM	Lbs					Nuts	Subs
1	25	3.65	3.565	1.750	4.500	6 STD	SF	BS
1½	40	**	**	**	**	4 STD	SF	BS
2	50	15.64	6.440	3.010	7.160	2 STD	SF	(F)ST(M)SF
3	80	27.25	8.875	4.1875	8.750	2 STD	SF	SF
4	100	40.00	10.0625	5.250	10.625	2 STD	SF	SF

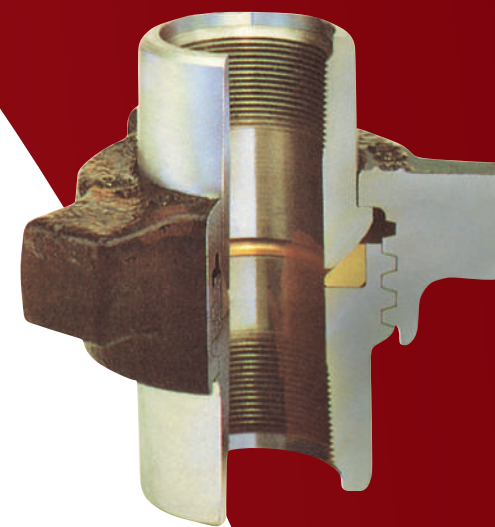
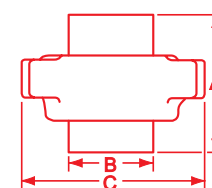
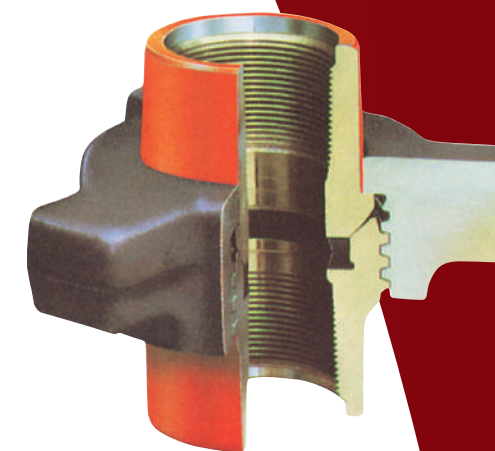


Figure 602 | 6,000 PSI CWP — 9,000 PSI TEST

Compact design is well-suited for manifold service. Employs a double seal that combines an elastomeric gasket with a metal-to-metal connection.



Size Weight			A	B	C	ACME TPI	Material	
IN	MM	Lbs					Nuts	Subs
1	25	3.55	6.625	1.750	4.500	6 STD	SF	SF
1½	40	9.54	4.600	2.570	5.520	STD	SF	SF
2	50	12.25	5.300	2.970	6.875	MOD	SF	SF
3	80	22.30	6.310	4.250	8.875	MOD	SF	SF
4	100	32.18	8.300	5.200	10.040	3MOD	SF	SF



Consult Factory
s Weld ends available

TPI = Threads per inch
DI = Ductile Iron
SF = Steel Forging
BS = Bar Stock
ST = Steel Tubing

WARNINGS

1. Do not mix Standard Service and Sour Gas Service Unions or parts.
2. Do not make up or break out Unions in pressurized lines.
3. Always use good safety practices, including use of safety glasses, when making up or breaking out Unions.

CARBON & STAINLESS STEEL FLANGES STANDARD

DIMENSIONS & WEIGHTS

Class 150 Flanges to ASME B 16.5

NOMINAL SIZE		DIMENSIONS		WEIGHT (KG)		
NPS (Inches)	DN (mm)	FLANGE OD A MM	FLANGE THICKNESS D MM	SOW SW	WN	BLIND
1/2	15	88.9	11.2	0.4	0.5	0.4
3/4	20	98.6	12.7	0.6	0.7	0.6
1	25	108	14.2	0.8	1	0.9
1 1/4	32	117.3	15.7	1	1.3	1.2
1 1/2	40	127	17.5	1.3	1.7	1.5
2	50	152.4	19.1	2.1	2.6	2.4
2 1/2	65	177.8	22.4	3.3	4.1	3.9
3	80	190.5	23.9	3.9	4.9	4.9
3 1/2	90	215.9	23.9	4.8	6.1	6.2
4	100	228.6	23.9	5.3	6.8	7.0
5	125	254	23.9	6.1	8.6	8.6
6	150	279.4	25.4	7.5	10.6	11.3
8	200	342.9	28.4	12.1	17.6	19.6
10	250	406.4	30.2	16.5	24	28.6
12	300	482.6	31.8	26.2	36.5	43.2
14	350	533.4	35.1	34.6	48.4	58.1
16	400	596.9	36.6	44.8	60.6	76.1
18	450	635	39.6	48.9	68.3	93.7
20	500	698.5	42.9	61.9	84.5	122.0
24	600	812.8	47.8	86.9	115	185.0

Class 300 Flanges to ASME B 16.5

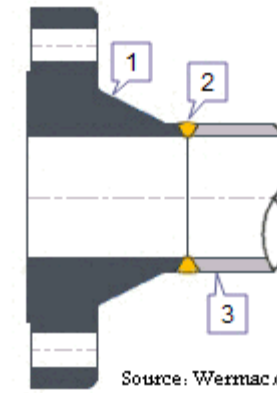
NOMINAL SIZE		DIMENSIONS		WEIGHT (KG)		
NPS (Inches)	DN (mm)	FLANGE OD A MM	FLANGE THICKNESS D MM	SOW SW	WN	BLIND
1/2	15	95.3	14.2	0.6	0.8	0.6
3/4	20	117.3	15.7	1.1	1.3	1.1
1	25	124	17.5	1.4	1.5	1.4
1 1/4	32	133.4	19.1	1.7	2.0	1.8
1 1/2	40	155.5	20.6	2.5	2.9	2.7
2	50	165.1	22.4	2.9	3.4	3.2
2 1/2	65	190.5	25.4	4.3	5.2	4.9
3	80	215.9	28.4	5.9	6.9	6.8
3 1/2	90	228.6	30.2	7.3	8.7	8.7
4	100	254	31.8	9.6	11.2	11.5



Control Valve End Connection

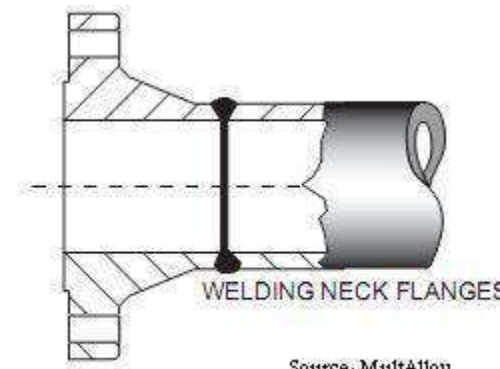
The control valve end connection may have flange connection, threaded, or even welded end. Flange connection is the most common control valve end connection in the oil & gas application. Other connection such as threaded or welded end is only used in particular application.

The type of the control valve end connection shall refer to any project specification or a piping class data sheet. In general the valve size 2" and above usually shall have a flange connection, threaded connection is acceptable for 2" and below. Welded end control valve connection is rarely used except for an application that requires no leakage in the connection between valve and pipe line or any pipe stress consideration.

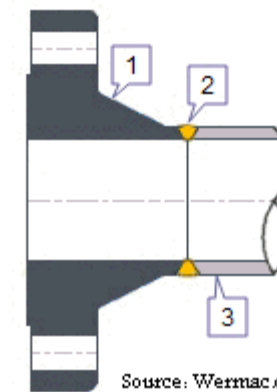


Source: Wermac.org

1. Welding Neck flange
2. Buttweld
3. Pipe or Fitting



Source: MultAlloy



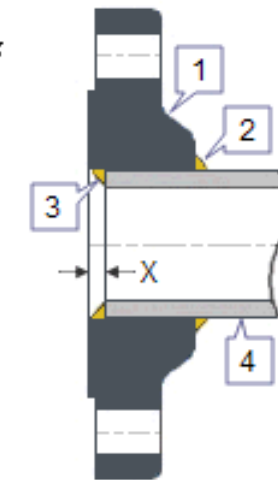
Source: Wermac.org

1. Welding Neck flange
2. Buttweld
3. Pipe or Fitting

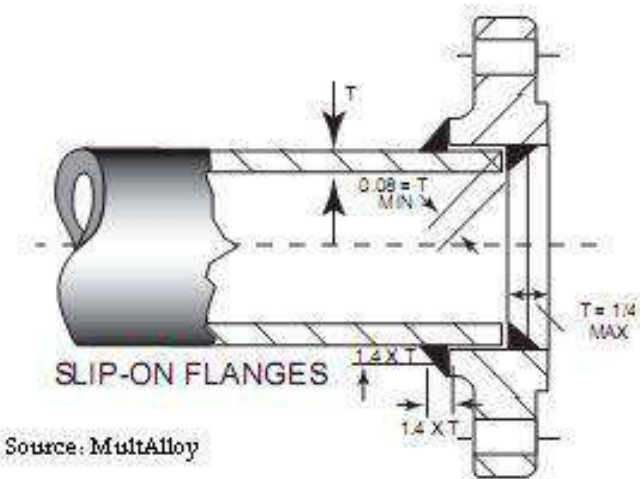


Source: MultAlloy

Source: Wermac.org



1. Slip On Flange
2. Fillet Weld (outside)
3. Fillet Weld (inside)
4. Pipe



Source: MultAlloy