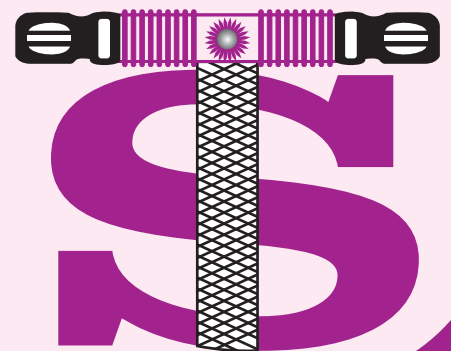
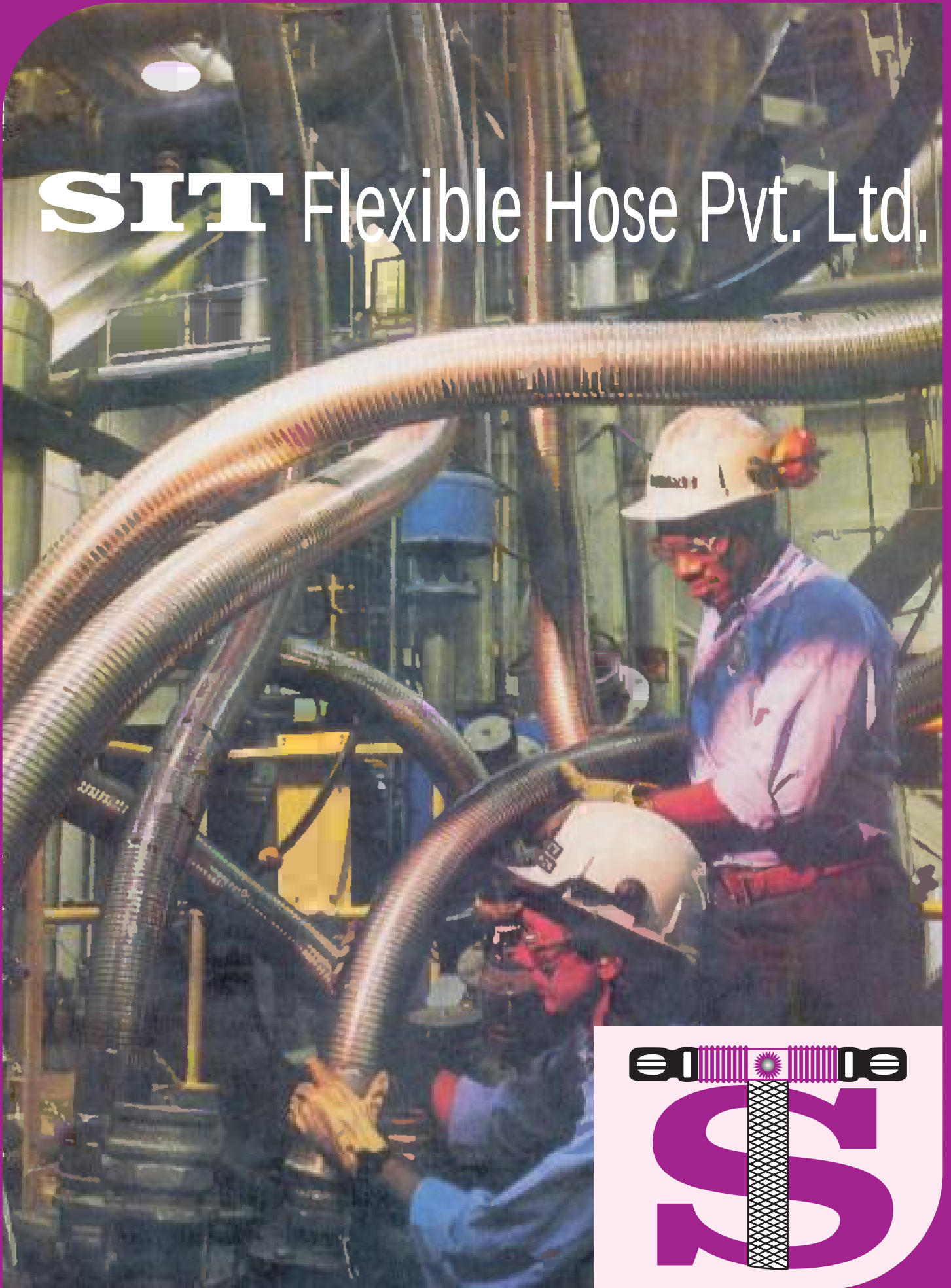


SIT Flexible Hose Pvt. Ltd.





The foundation of the SIT family was established in early 90s at India's commercial capital Mumbai. The company started with activity of manufacturing assemblies of various types of hoses as per the requirement of esteemed customers.

In 1998 the associate office of SIT was established in VADODARA namely SIT Hydraulic Engineers an ISO 9001-2000 Company and the journey started with upward movement years together



In 2005 management inserted the seed of Manufacturing of Stainless Steel Flexible Corrugated Hose.

Year 2007 established a full flanged production unit for manufacturing of **SITCOFLEX** Stainless Steel Annular Corrugated Flexible Hose, Braiding & Hose Assemblies at it's modern facility at Waghodia Industrial Area 20 Km. away from Vadodara, the Chemical Hub of Western India.

SITCOFLEX products are made in austenitic steel AISI 304,321,316 & 316L grades conforming to BS6501 part I & related international quality standards. The new manufacturing facility **SIT Flexible Hose Pvt. Ltd.**, is under process of ISO-9001 Certification.

SITCOFLEX

STAINLESS STEEL CORRUGATED FLEXIBLE HOSE

SITCOFLEX PRODUCT RANGE:

A complete range of Stainless Steel flexible hoses and hose assemblies made of ASTM A-240-Gr 304, 321, 316, & 316-L etc. duly braided. All hoses are conforming to BS 6501: 2004/ISO-10380: 2003.

Sizes manufactured: Dia.. 8mm NB to 200mmNB

And up to 400 mm NB on request.

SITCOFLEX MANUFACTURING PROCESS:

- Mechanical corrugation
- Hydraulic forming
- Braiding



SITCOFLEX CONSTRUCTION:

The Stainless Steel Flexible Hose is manufactured by using tested stainless steel strip as per ASTM standard. The selection of the strip material is according to the design requirements of end - use applications.

The Corrugated hoses when subjected to pressure tends to open axially. The wire braid is provided to prevent elongation caused by the pressure on the hose. Over and above the major advantage of increased hose strength the braid provides physical protection against damage to the tube along with absorption of vibration and movements



SITCOFLEX ASSEMBLY:

Hose assemblies are made to the required sizes/ ratings with end fittings as per the customer's application requirements.

SITCOFLEX Assemblies are welded by qualified welders duly approved by International inspection agency in accordance with established WPS and PQR. As per ASME Section - IX



STAINLESS STEEL CORRUGATED FLEXIBLE HOSE

ADVANTAGES OF SITCOFLEX HOSES

SITCOFLEX hose assemblies are made through an innovative technology and to the accepted quality in the hose industry both Domestic as well as Overseas market. We can supply the hose assemblies tailor made to the customer's requirement with required fittings as per ANSI / BS or other applicable standard Fittings as per the customer's requirements.

Salient features of **SITCOFLEX** hose & hose assemblies are

- Suitable for Wide range (-270 deg.C to 700 deg.c)
- Compensates thermal expansion Or contraction in the piping system.
- High Physical strength.
- Good Corrosion resistance.
- Fire Resistant
- Long Life
- Abrasion resistance
- Connects easily with misaligned rigid piping.
- Economical installation as against rigid piping.

APPLICATIONS

- Air conditioning & Refrigeration systems
- Automotive exhaust systems
- Chemical industry
- Compressed air & pneumatic applications
- Cryogenic equipment
- Fertilizer industry
- Food & Beverage industry
- Gas burner systems
- Lubrication systems
- Nuclear plants
- Steel industry
- Steam & hot water
- Sugar & Paper industry
- Ships & Aircrafts

TABLE - 1

NOMINAL BORE N.B.	MINIMUM BEND RADIUS		WITHOUT BRAID		SINGLE BRAID		DOUBLE BRAID	
	STATIC	FLEXING	Max. Working Pressure Kg/cm ²	Test Pressure Kg/cm ²	Max. Working Pressure Kg/cm ²	Test Pressure Kg/cm ²	Max. Working Pressure Kg/cm ²	Test Pressure 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

The above values are applicable to SITCOFLEX hoses and assemblies. The above pressure ratings are for fluid at ambient temperature of 20°C. For higher temperatures apply correction factor as per Table - B. The above data for NB 250 mm to NB 400 mm can be supplied on request. The above technical data is subject to change on account of design improvements.

TABLE - II

Temp (°C)	Corr. Factor
- 200	1.0
- 150	1.0
- 100	1.0
- 50	1.0
0	1.0
20	1.0
50	0.95
100	0.83
150	0.75
200	0.69
250	0.65
300	0.61
350	0.58
400	0.56
450	0.54
500	0.53
550	0.52
600	0.34
650	0.19
700	0.10

TEMPERATURE CORRECTION FACTOR

The Recommended Maximum Working Pressure ratings given in Table-I are at a temperature of . Where Hoses are required to operate at a temperature above 20°C, a correction factor should be applied to the specified working pressure of the selected Hose. The correction factors are given in Table II.

EXAMPLE

A 50 NB Hose is required for a temperature of 300°C and working pressure of 17kg/cm². The specified pressure for 50 NB Single Braid Hose as per Table I is 28 kg/cm². The correction factor at 300°C is 0.61.

Hence the working pressure permissible is 28 x 0.61=17.08 kg/cm². This is higher than the required pressure i.e. 17 kg/cm² Hence Single Braided Hose is recommended.



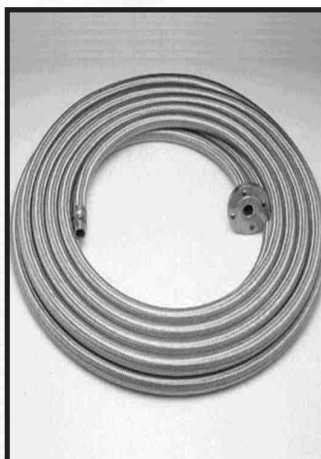
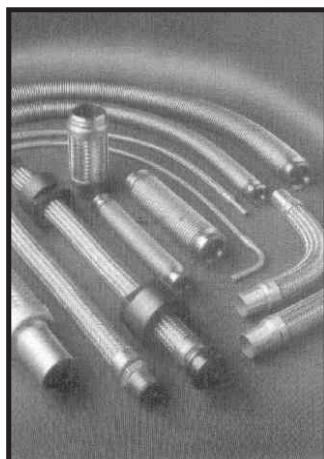
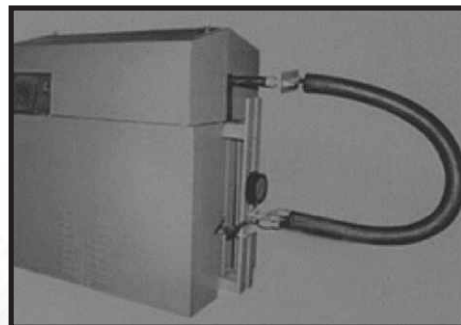
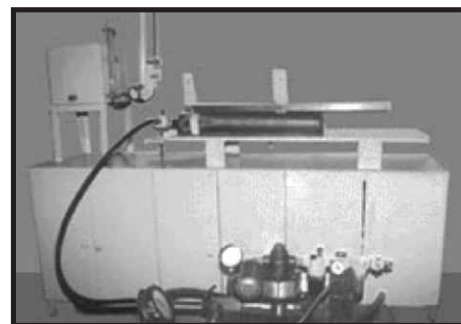
STAINLESS STEEL CORRUGATED FLEXIBLE HOSE

QUALITY ASSURANCE:

At SIT, Product quality is monitored from the stage of raw material receipt up to the final hose production including braiding followed by assemblies by qualified Engineers supervised by management representative.

We have complete in house testing facilities for various types of tests so as to stay in accordance to the International Standards (BS 6501: part 1/ ISO 10380:1994) specified for metallic flexible hoses. The following are the routine tests carried out at SIT.

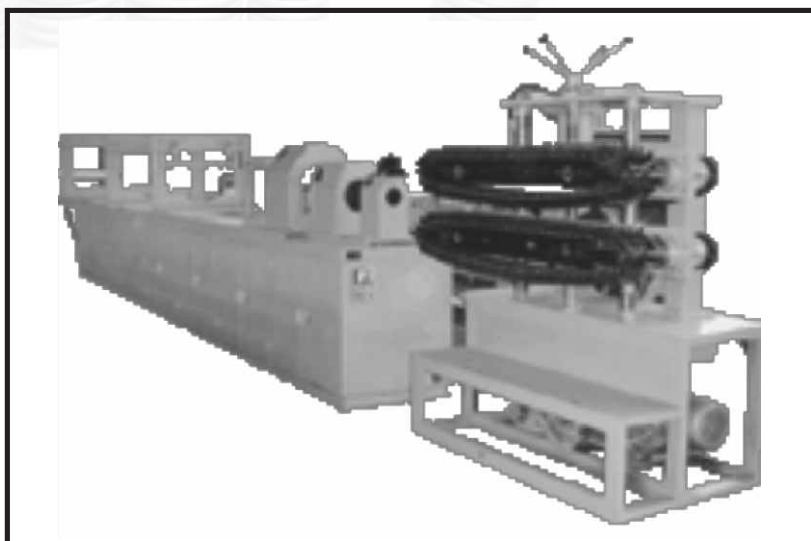
- Burst pressure / yield test
- Bend radius test
- Flame test
- Life cycle test /Flex fatigue test
- All assemblies are subjected to dimensional check, leak detection test over and above the tests recommended by the Inspection standard.



PRESSURE LOSS

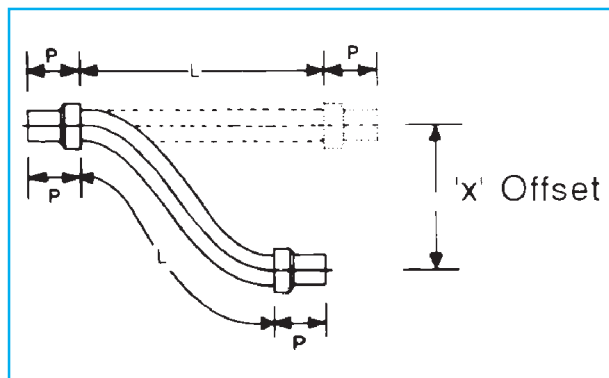
As a rough estimate, it can be assumed that the pressure loss in Corrugated Hoses is 100% higher than in new welded steel pipes. In stripwound Hoses, it is 20% higher. This means that in the case of Corrugated Hoses an increase in diameter of 15% and in the case of stripwound Hoses of only 4%, is sufficient to reduce the pressure loss to the value of the pressure loss in steel pipes.

Because of the nature of the bore of a Corrugated Hose, the pressure drops due to greater friction than that of a smooth bore pipe. The chart shows the approximate pressure drop for each size of Corrugated Hose related to a flow rate where water is the fluid. To utilize the chart, read off on the base line the flow rate required. Where a vertical line from the selected point on the base line intersects the nominal bore line, the pressure drop is shown on the vertical axis, corresponding to the point of intersection.





STAINLESS STEEL CORRUGATED FLEXIBLE HOSE



STATIC FLEXING

Minimum Overall Length = L (Static) + $(2 \times P)$

P - Dimension of end fittings.

INTERMITTENT FLEXING

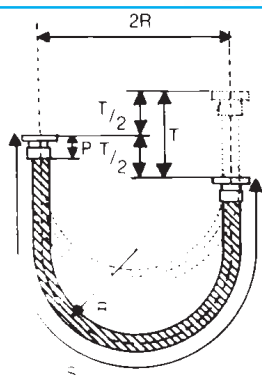
Minimum Overall Length = L (Flexing) + $(2 \times P)$

L - Dimension from chart below relative to Offset Motion ' X '

P - Dimension of end fittings.

LENGTH ' L ' mm (FREE HOSE LENGTH)

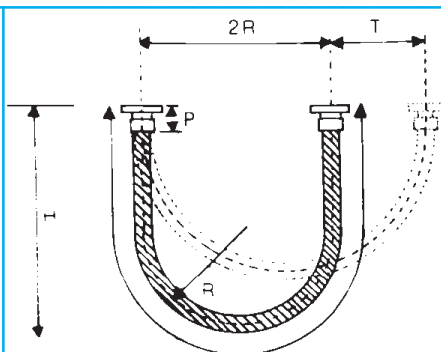
NOMINAL BORE mm	STATIC	DIMENSIONS ' X ' mm (OFFSET MOTION)											
		25	35	50	75	100	125	150	175	200	225	250	
0	15												
6	85	140	180	215									
10,12	90	150	190	225	290								
20	95	170	220	255	310								
25	105	185	240	280	335	425							
32	110	205	260	305	365	450							
40	140	250	320	370	440	530	610						
50	170	300	380	440	520	630	730	800	870	940			
65	200	340	430	500	590	720	830	920	1000	1070	1130	1190	
80	215	380	500	580	680	820	940	1040	1140	1230	1310	1380	1450
100	230	405	525	610	720	875	1005	1120	1225	1325	1415	1490	1560
125	245	430	550	640	760	930	1070	1200	1310	1420	1520	1590	1670
150	280	510	650	760	910	1100	1270	1420	1560	1690	1800	1900	1990
200	320	560	710	830	990	1210	1400	1560	1720	1860	1990	2100	2210
250	360	620	780	900	1070	1320	1510	1690	1820	2010	2160	2290	2340



Vertical loop (Maximum travel about fixed point)

VERTICAL MOVEMENT

$$S = 1.2 \pi R + T/2 + 2P$$



Vertical loop (short horizontal travel)
HORIZONTAL MOVEMENT

$$S = 1.2 \pi (R + T/2) + 2P$$

$$H = \frac{S - \pi R}{2} + R$$

- S = Overall Length
 R = Bend Radius which must not be less than the minimum shown in Table I.
 P = Length over End Fitting & Ferrule.
 H = Height
 π = 3.142

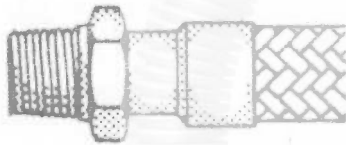


Hose Fitting Corrugated Metal Hose

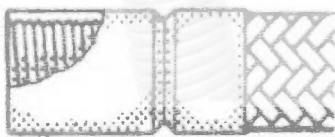
This Data Sheet shows examples of a range of fittings suitable for use with our corrugated metal hoses. However, a large percentage of our production is in manufacturing special hose assemblies which require custom produced fittings.

SITCOFLEX are leaders in producing high quality special assemblies such as refrigeration assemblies, blow-out preventer assemblies, cryogenic assemblies and "COMBI" oxygen lance hoses, all manufactured to the most exacting quality assurance standards.

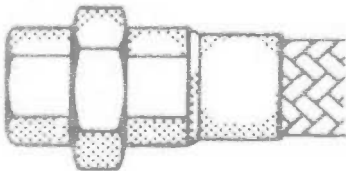
Threaded Male Hex Pipe Nipple - BSP



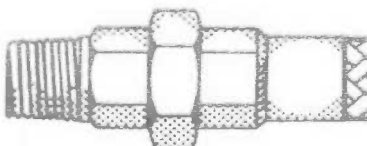
Threaded Female Coupling - BSP



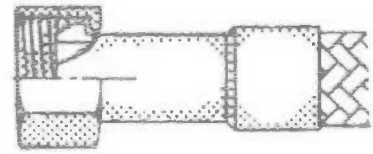
Female Union - BSP



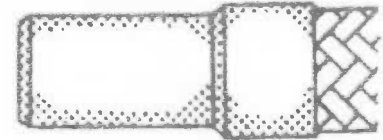
Male Union - BSP



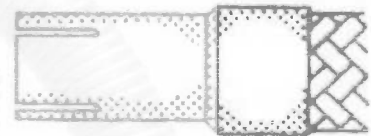
Swivel Female - BSP



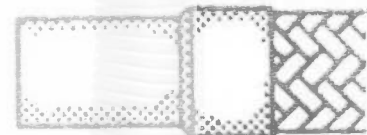
Welding Nipple Sch.40 Pipe



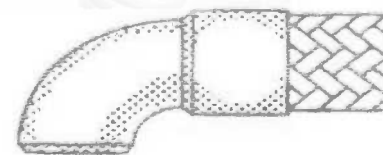
Clamp On



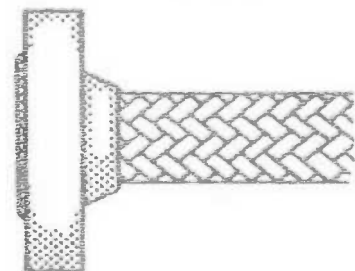
Male Tube - O.D. x S.W.G



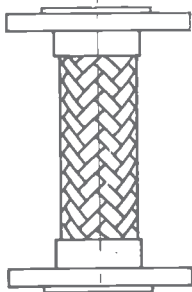
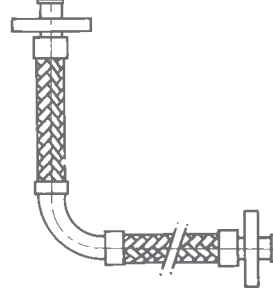
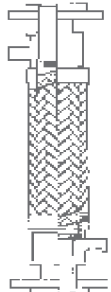
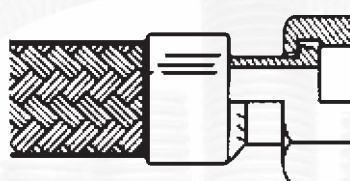
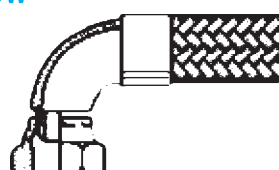
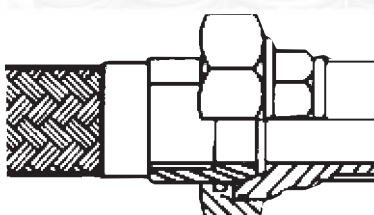
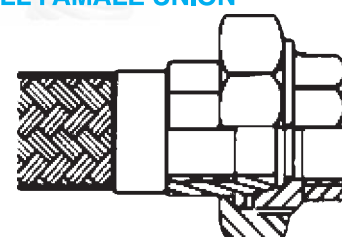
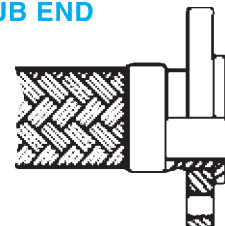
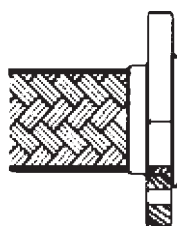
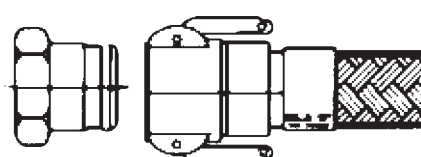
Welding Nipple - 90°



Fixed Flange



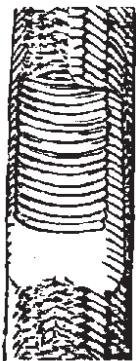
STAINLESS STEEL CORRUGATED FLEXIBLE HOSE TYPICAL HOSE ASSEMBLIES / END CONNECTIONS

VIBRATION ABSORBER 	ELBOW BEND 	JACKETED HOSE ASSLY. 	PUMP CONNECTOR 
FIXED MALE (HEXGON) 	FIMALE UNION NUT/NIPPLE 	PLAIN PIPE END 	
WELDING STUB 	THREADED PIPE END 	FIX FEMALE HEXAGON 	
90° FEMALE SWIVEL ELBOW 	FULL MALE UNION 	FULL FEMALE UNION 	
ROTATING FLANGE WITH STUB END 	FIXED FLANGE (RF) 	CAMLOCK COUPLING 	



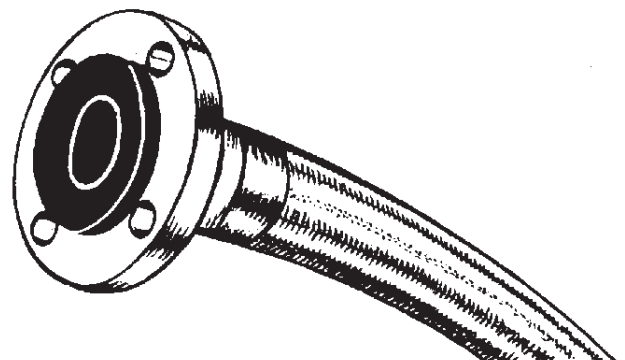
High Temperature (PTFE) Hoses

DJE TP -Teflon (PTFE)		HOSE SIZE				WORKING PRESSURE	TESTING PRESSURE	MIN BEND RADIUS
	DJE TP-TEFLON (PTFE) APPLICATION. Dilute of concentrated acids, Solvents, caustics, Hot-lacquers, axiaising agents, Fuels, Oils, Steam, Gases, Duregs, Footd, Unaffected by Most chemicals except molten alkali Metals. CONSTRUCTION : Inner Teflon(PTFE) tube with onebraid of high tensile stainless steel (SS 304) wire.Also available in two othree braid for higher pressure application TRMPERATURE RANGE : -73° C to + 260° C.	I.D.		O.D.		LBS/PSI	LBS/PSI	
		IN	MM	IN	MM	IN	IN	IN
		3/16	4.8	5/16	7.9	2500	5000	1
		1/4	6.4	3/8	9.5	2300	4600	3
		5/16	7.9	15/32	11.9	2000	4000	4
		3/8	9.5	19/32	15.0	1400	2800	5.1
		1/2	12.7	21/32	16.6	1300	2600	6.5
		5/8	15.9	3/4	19.0	1200	2400	7.8
		3/4	19.0	31/32	24.6	1000	2000	10.8
		1	25.4	1.1/4	31.8	700	1400	15.5

DJE TC -Teflon (PTFE)		I.D.MM	WORKING PRESSURE KG / CM2	TESTING PRESSURE	BUST PRESSURE	MINIMUM BEND RADIUS MM
	SIT TP-TEFLON (PTFE) APPLICATION. CONSTRUCTION : Innercore of virgin corrugated Teflon (PTFE) and overbraid of hightensite stainless steelwire (SS 304) desined toyield maximum pressure ratings.Each Corrugation has a low-profile shape to promote easy cleaning. TRMPERATURE RANGE : -70° C to + 260° C.	12	102	204	408	75
		20	85	170	340	95
		25	85	170	340	127
		32	68	136	272	155
		38	51	102	204	190
		50	34	68	136	255
		75	17	34	68	380

Teflon (PTFE) Corrugated Hose with Teflon (PTFE) fitting

In addition we can Offer Teflon Hose Assemblies with STUB ends made entirely of TEFLON instead of Coating on STUB ends where due to handing of Assemblies or dismanting more often, the Coatings are likely to giveaway.This is recommended in apapplication where highly corrosive materials are used.



Strip Wound Interlock Hose Technical Specification

NB In Inches	NB in mm.	ID in mm.	OD in mm.	Minimum bend Radius in mm.
1/4"	6.35	6.5	8.5	115
3/8"	9.5	9.5	11.5	150
1/2"	12.70	12.7	15.5	175
5/8"	15.87	15.9	21.0	185
3/4"	19.05	19.0	25.0	200
1"	25.4	25.4	31.0	225
1" - 1/2"	38	38.0	48.5	350
2"	50.8	50.8	61.5	380
2 - 1/2"	63	63.5	73.5	450
3"	76.2	76.2	86.2	485
3 - 1/2"	88.9	88.9	98.9	530
4"	100	101.6	111.6	700

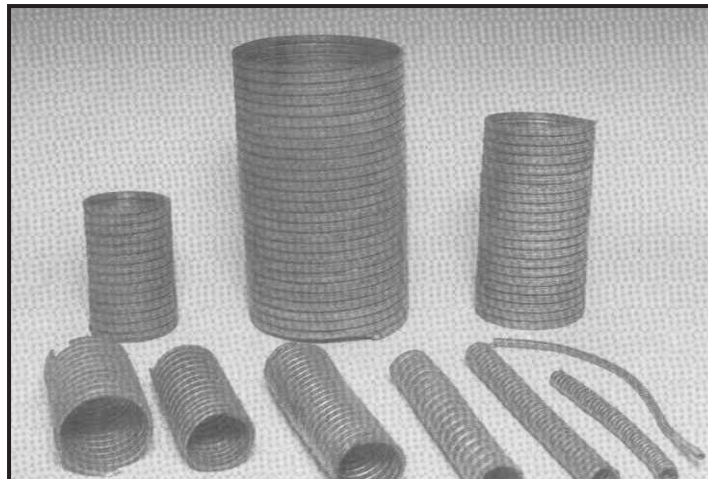
S.I.T. SQUARE LOCK WITH PACKING

Manufacturing Range : From 1/4" ID to 10" ID.

Material : Galvanised steel, Stainless steel, Copper, Aluminium or as specified by the customer.

Braid : Conduit can be provided with wire Brading, PVC or Synthetic Rubber sleeving.

Applications : As conduit for Electrical Cables.





STRIP WOUND INTERLOCK HOSE TECHNICAL DATA

- CONSTRUCTION** : Flexible metallic tubing obtained by spirally winding a pre-profiled strip of metal
- PROFILE** : Interlocked with a groove for rotorining of high seal.
- MANUFACTURING RANGE** : From NB 6mm to NB 200 mm
- PRESSURE RANGE** : Upto 50 Kg./Cm. ² according to diameter, temperature and braid.
- TEMPERATURE** : For pressure tubing upto 400 °c
For suction tubing upto 600 °c (Stainless steel)
- PACKING** : Asbestos yarn, special quality.
- MATERIAL** : Electro Galvanised carbon Steel, Austentic Stainless Steel AISI 304/321 Cop-
per, Aluminium.
- BRAID** : Without braid or with single Galvanised Steel or Stainless Steel braid.
- APPLICATIONS** : Exhaust hoses, steam hoses, Soot blower hoses, tar spraying hoses, filling
hoses, Suction hoses, transfer of petrolium, Neptha, Oils, Greases, Food
grains cereals, tight protection of electrical installations.

TECHNICAL DATA

Nominal Bore NB mm.	Bend Radius Const Flexure mm.	Tubing without Braid		Tubing with one Braid	
		OD mm.	Max. working pressure Kg./cm ²	Max. working pressure OD mm.	Kg./cm ²
12	120	16.0	25	17.6	50
20	160	24.5	20	26.1	32
25	200	29.5	16	31.1	25
32	230	37.0	16	39.1	25
40	300	45.0	12.5	47.0	20
50	320	55.0	10	57.3	20
65	420	72.0	8	75.0	16
80	465	87.0	8	90.0	12.5
100	850	108.0	6	111.0	12.5
125	1000	134.0	6	137.0	12.5
150	1150	159.0	2.5	162.0	10
175	1350	182.0	2.5	184	50
200	1550	208.0	2.5	210	5.0

S.I.T. SQUARE LOCK WITHOUT PACKING

QUICK - RELEASE COUPLERS



FOR HIGH PRESSURE & LOW PRESSURE APPLICATIONS

Quick-Release Couplings eliminate valves and screw-on fittings in many pneumatic, Hydraulic and chemical systems. They permit easy, safe, quick and reliable connection between delivery lines. Pressure hoses and a wide range of equipment. "Quick-Release Couplings make Connection (or disconnection) of fluid systems as easy as plugging in an electrical outlet.

Couplings are available in various materials, sizes and connections: for 29.70 Hg vacuum to 10,000 PSI pressure ratings: in three basic types: Straight Through (Type ST); Onw way Sealing (Type SC) and Two Way Sealing (Type DC).

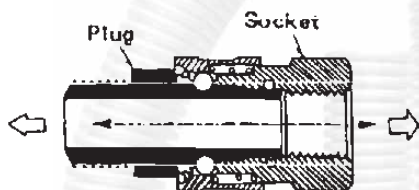
"Quick-Release' couplings are ideal for Compressed air installations, hydraulic equipment, pneumatic instrumentation, Fluid transfer lines, Refrigeration Industry, Fuel Supply installations, Fuel Oil burners, Bulk loding and unloading and test benches etc. In fact, Whatever your applications, we have a 'quick-Release' Coupling for your needs.

Unique feature of these Couplers is that these are interchangeable.

Basic Types

STRAIGHT THROUGH (TYPE ST)

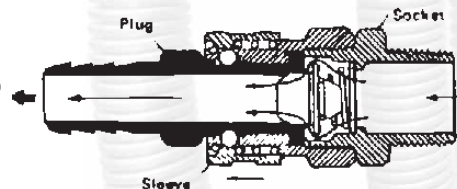
(Type ST)



Do not have built-in check valves. Used where quickly delachable and ratable connections are needed where regulation and closure of lines is achieved by back-up valves. Permit full flow capability due to their smooth and accurately finished bores.

One Way Sealing (Type SC)

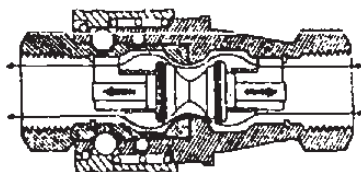
(Type SC)



With One check Valve built into the Coupling only whereas plugs do not have any check valves. can be advantageosly used where one side of flow systems needs to be sealed on disconnection.

Two Way Sealing (Type DC)

(Type DC)



Both coupling and plug have buit-in check valves; on disconnection, both ends of the system are sealed. No premature flow is possible during connection.

Materials used for making of quick release coupling carbon Steel duly plated; Stainless Steel 304,316; Brass Etc

Size Range 1/8"; 1/4"; 3/8"; 1/2"; Up to 6"
End Connections Pipe Thread Male/Female. Hose Shank etc.

Pressure Ratings

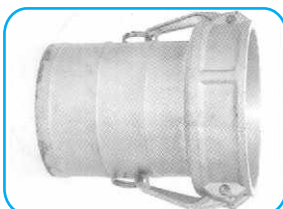
- For Pressures upto 35 kg/cm² or 500 PSI
- For Pressures upto 205 kg/cm² or 3000 PSI
- For Pressures upto 900 kg/cm² or 13000PSI

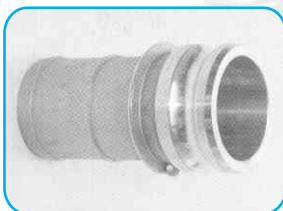
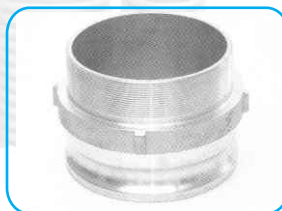
Temperature :- 218°C to 232°C

CAM & GROOVE COUPLINGS

FEMALE ADAPTOR - TYPE A

MALE COUPLER - TYPE B

HOSE COUPLER - TYPE C

FEMALE COUPLER - TYPE D

HOSE ADAPTOR - TYPE E

MALE COUPLER - TYPE F

DUST PLUG - DP

DUST CAP - DC


SS 304/321 ("C" class higly flexible, "B" class standart flexible) corrugated flexible hose with SS 304 wire braiding															
		"C" class	"B" class	"C" class		"B" class		"C" class	"B" class	"C" class	"B" class	"C" class	"B" class	"C" class	"B" class
Nom.ID (MM)	Braiding type	Hose OD (MM)		Bend Radius (MM)				Max.Working Pressure(Bar)		Test Pressure(Bar)		Burst Pressure (Bar)		Weight Kg/ Mtr	
				Static	Dynamic	Static	Dynamic								
6	Without	9.5	9.5	25	100	25	100	4	4	6	6	NO	NO	0.1092	0.091
	Single	11.20	11.20	25	100	25	100	100	100	150	150	300	300	0.2092	0.191
	Double	13.00	13.00	25	100	25	100	160	160	240	240	480	480	0.3092	0.291
	Triple	14.50	14.50	25	100	25	100	256	256	384	384	768	768	0.4092	0.391
8	Without	11	11	30	125	30	125	4	4	6	6	NO	NO	0.132	0.11
	Single	12.50	12.50	30	125	30	125	95	95	142.5	142.5	285	285	0.232	0.21
	Double	14.00	14.00	30	125	30	125	155	155	232.5	232.5	465	465	0.332	0.31
	Triple	15.30	15.30	30	125	30	125	248	248	372	372	744	744	0.442	0.42
10	Without	14	14	40	130	40	130	3	3	4.5	4.5	NO	NO	0.1572	0.131
	Single	15.50	15.50	40	130	40	130	90	90	135	135	270	270	0.2862	0.26
	Double	17.20	17.20	40	130	40	130	144	144	216	216	432	432	0.4162	0.39
	Triple	19.00	19.00	40	130	40	130	230.4	230.4	345.6	345.6	691.2	691.2	0.5462	0.52
12	Without	17	17	50	200	50	200	3	3	4.5	4.5	NO	NO	0.1692	0.141
	Single	18.10	18.10	50	200	50	200	80	80	120	120	240	240	0.3032	0.275
	Double	19.50	19.50	50	200	50	200	128	128	192	192	384	384	0.4392	0.411
	Triple	21.00	21.00	50	200	50	200	204.8	204.8	307.2	307.2	614.4	614.4	0.5822	0.554
16	Without	21.5	21.5	50	200	50	200	3	3	4.5	4.5	NO	NO	0.18	0.15
	Single	23.00	23.00	50	200	50	200	70	70	105	105	210	210	0.34	0.31
	Double	24.50	24.50	50	200	50	200	112	112	168	168	336	336	0.5	0.47
	Triple	26.00	26.00	50	200	50	200	179.2	179.2	268.8	268.8	537.6	537.6	0.66	0.63
20	Without	26.4	26.4	70	200	70	200	2	2	3	3	NO	NO	0.216	0.18
	Single	28.00	28.00	70	200	70	200	65	65	97.5	97.5	195	195	0.411	0.375
	Double	29.50	29.50	70	200	70	200	102	102	153	153	306	306	0.606	0.57
	Triple	31.00	31.00	70	200	70	200	163.2	163.2	244.8	244.8	489.6	489.6	0.826	0.79
25	Without	34	34	90	200	90	200	2	2	3	3	NO	NO	0.306	0.255
	Single	35.40	35.40	90	200	90	200	50	50	75	75	150	150	0.583	0.532
	Double	36.90	36.90	90	200	90	200	80	80	120	120	240	240	0.871	0.82
	Triple	38.40	38.40	90	200	90	200	128	128	192	192	384	384	1.166	1.115
32	Without	43	43	110	250	110	250	1.5	1.5	2.25	2.25	NO	NO	0.468	0.39
	Single	44.60	44.60	110	250	110	250	40	40	60	60	120	120	0.798	0.72
	Double	46.30	46.30	110	250	110	250	64	64	96	96	192	192	1.128	1.05
	Triple	47.80	47.80	110	250	110	250	102.4	102.4	153.6	153.6	307.2	307.2	1.508	1.43
40	Without	51	51	130	250	130	250	1.5	1.5	2.25	2.25	NO	NO	0.564	0.47
	Single	52.70	52.70	130	250	130	250	30	30	45	45	90	90	1.074	0.98
	Double	54.30	54.30	130	250	130	250	48	48	72	72	144	144	1.584	1.49
	Triple	56.00	56.00	130	250	130	250	76.8	76.8	115.2	115.2	230.4	230.4	2.195	2.101



SIT Flexible Hose Pvt. Ltd.

Reg. Office: 243-16/17, G.I.D.C Industrial Estate,
Waghodia – 390 761, Dist: Vadodara (Gujarat) (India)

Tele: +91-2668-263121, +91-2668-263122, Fax: +91-2668-262103

SITCOFLEX
SITCOFLEX

**SS 304/321 ("C" class highly flexible, "B" class standart flexible) corrugated flexible hose
with SS 304 wire braiding**

		"C" class	"B" class	"C" class		"B" class		"C" class	"B" class	"C" class	"B" class	"C" class	"B" class	"C" class	"B" class
Nom.ID (MM)	Braiding type	Hose OD (MM)		Bend Radius (MM)				Max.Working Pressure(Bar)		Test Pressure(Bar)		Burst Pressure (Bar)		Weight Kg / Mtr	
				Static	Dynamic	Static	Dynamic								
50	Without	63	63	175	350	175	350	1	1	1.5	1.5	NO	NO	0.708	0.59
	Single	64.70	64.70	175	350	175	350	28	28	42	42	84	84	1.408	1.29
	Double	66.40	66.40	175	350	175	350	44	44	66	66	132	132	2.118	2.00
	Triple	68.00	68.00	175	350	175	350	70.4	70.4	105.6	105.6	211.2	211.2	2.948	2.83
65	Without	81	81	200	410	200	410	1	1	1.5	1.5	NO	NO	1.068	0.89
	Single	83.10	83.10	200	410	200	410	24	24	36	36	72	72	2.168	1.99
	Double	85.20	85.20	200	410	200	410	38	38	57	57	114	114	3.368	3.19
	Triple	87.10	87.10	200	410	200	410	60.8	60.8	91.2	91.2	182.4	182.4	4.678	4.5
80	Without	96	96	205	450	205	450	1	1	1.5	1.5	NO	NO	1.332	1.11
	Single	98.20	98.20	205	450	205	450	18	18	27	27	54	54	2.667	2.445
	Double	100.20	100.20	205	450	205	450	28	28	42	42	84	84	4.337	4.115
	Triple	102.30	102.30	205	450	205	450	44.8	44.8	67.2	67.2	134.4	134.4	5.974	5.752
100	Without	119	119	230	560	230	560	0.8	0.8	1.2	1.2	NO	NO	1.68	1.4
	Single	102.10	102.10	230	560	230	560	16	16	24	24	48	48	3.43	3.15
	Double	104.00	104.00	230	560	230	560	26	26	39	39	78	78	5.38	5.1
	Triple	106.20	106.20	230	560	230	560	41.6	41.6	62.4	62.4	124.8	124.8	7.495	7.215
125	Without	148	148	280	660	280	660	0.6	0.6	0.9	0.9	NO	NO	3.384	2.82
	Single	150.60	150.60	280	660	280	660	12	12	18	18	36	36	5.634	5.07
	Double	153.00	153.00	280	660	280	660	20	20	30	30	60	60	8.044	7.48
	Triple	156.00	156.00	280	660	280	660	32	32	48	48	96	96	10.944	10.38
150	Without	172	172	320	815	320	815	0.6	0.6	0.9	0.9	NO	NO	4.03	3.1
	Single	175.00	175.00	320	815	320	815	10	10	15	15	30	30	6.82	5.89
	Double	177.80	177.80	320	815	320	815	16	16	24	24	48	48	9.685	8.755
	Triple	180.20	180.20	320	815	320	815	25.6	25.6	38.4	38.4	76.8	76.8	12.785	11.855
200	Without	228	228	435	1015	435	1015	0.6	0.6	0.9	0.9	NO	NO	8.125	6.25
	Single	231.00	231.00	435	1015	435	1015	8	8	12	12	24	24	12.125	10.25
	Double	234.10	234.10	435	1015	435	1015	12	12	18	18	36	36	16.63	14.755
	Triple	237.20	237.20	435	1015	435	1015	19.2	19.2	28.8	28.8	57.6	57.6	21.628	19.753
250	Without	278	278	510	1220	510	1220	0.5	0.5	0.75	0.75	NO	NO	10.66	8.2
	Single	281.00	281.00	510	1220	510	1220	6	6	9	9	18	18	14.86	12.4
	Double	284.00	284.00	510	1220	510	1220	9	9	13.5	13.5	27	27	19.415	16.955
	Triple	287.00	287.00	510	1220	510	1220	14.4	14.4	21.6	21.6	43.2	43.2	23.97	21.51
300	Without	338	338	680	1580	680	1580	0.5	0.5	0.75	0.75	NO	NO	13.767	10.59
	Single	341.00	341.00	680	1580	680	1580	6	6	9	9	18	18	19.397	16.22
	Double	344.50	344.50	680	1580	680	1580	9	9	13.5	13.5	27	27	25.392	22.215
	Triple	347.80	347.80	680	1580	680	1580	14.4	14.4	21.6	21.6	43.2	43.2	31.627	28.45

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SITCOFLEX
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Corrosion Resistance Guide

R = resistant to corrosion

C = partial corrosion occurs

N = not recommended

	% Concentration	°C Temperature	Mild steel	304 stainless steel	321 stainless steel	316 stainless steel	Incoloy 825	Incoloy 600	Incoloy 625	Incoloy 800	Monel 400	Nickel 200	Aluminium	Titanium
acetic acid	100	20	N	C	R	R	R	C	R	R	C	N	C	R
acetic acid	50	100	N	N	N	R	R	C	R	C	C	N	N	R
acetic acid	100	100	N	N	N	C	C	N	C	C	C	N	N	R
acetone		100	C	R	R	R	R	R	R	R	R	R	R	R
alcohol		70	R	R	R	R	R	R	R	R	R	R	R	R
aluminium chloride	0 to 30	30	N	N	N	N	C	C	R	N	C	C		
ammonia, wet	all	30	N	R	R	R	R	C	R	R	N	N		R
ammonia, dry	all	hot	N	N	N	N	R	C	R	R	N	N	R	R
benzene	100	30	C	R	R	R	R	R	R	R	C	R	R	R
calcium chloride	0 to 25	30	N	N	N	C	R	R	R	C	R	R	N	R
calcium hydroxide	0 to 30	100	N	R	R	R	R	R	R	C	R	R	R	R
carbon monoxide	100	450	R	R	R	R	R	R	R	R	R	R	R	R
carbon dioxide	100	450	R	R	R	R	R	R	R	R	R	R	R	R
caustic soda	0 to 75	30	C	R	R	R	R	C	R	C	R	R	N	
chlorine, dry	100	550	N	N	N	N	N	C	R	C	C	C		
chlorine, wet	100	70	N	N	N	N	N	N	N	N	N	N		
citric acid	100	30	N	C	C	C	R	C	R	C	C	C		
coke oven gas			N	C	C	C	R	C	R	C	N	N	N	
combustion gas		<450	N	C	C	C	R	C	R	C	N	N	N	
		>450	N	C	C	C	C	C	R	R	N	N	N	
ethyl acetate		30	N	C	C	R	R	C	R	C	C	C		
ethylene glycol	100	30	N	C	C	C	R	C	C	C	C	C		
ferric chloride		30	N	N	N	N	C	N	C	N	N	N	N	R
fluorine, dry			C	C	C	C	C	R	C	R	C	C	N	R
fluorine, wet	0 to 100		N	N	N	N	N	N	N	N	N	C	N	
formic acid		100	N	N	N	N	R	C	R	N	C	C		
fuel oil		30	N	N	N	N	R	N	R	R	R	N		
hydrazine	0 to 37	35	N	N	N	N	N	N	N	N	N	N	N	
hydrochloric acid	10 to 100	35	N	N	N	N	N	N	N	N	N	N	N	
hydrochloric acid	0 to 20	35	N	N	N	N	C	C	R	N	R	C	N	
hydrogen sulphide, dry	0 to 20	150	N	R	R	R	R	C	R	C	C			
hydrogen sulphide, wet	5	20	N	C	C	C	R	C	R	C	C	R	R	
lead acetate	0 to 50	30	N	R	R	R	R	R	R	R	R	R		
magnesium chloride		30	N	N	N	N	R	R	R	R	R	R	N	R
methanol		100	C	R	R	R	R	R	R	R	R	R	C	R
muratic acid	65		N	N	N	N	N	N	C	N	C	N	N	C
nitric acid	100	30	N	C	C	R	R	C	R	R	N	N	C	R
nitric acid	5	80	N	N	N	N	R	N	R	C	N	N	N	R
nitrous acid	100	20	N	R	R	R	R	C	R	C	N	N	N	R
oxalic acid	100	30	N	N	N	N	C	N	C	N	C	N		
petrol	0 to 25	30	C	R	R	R	R	R	R	R	R	R	N	R
phenol	25 to 85	30	N	R	R	R	R	C	R	C	C	R		
phosphoric acid	all	30	N	N	N	N	R	R	R	C	R	C		
phosphoric acid	0 to 50	85	N	N	N	N	R	N	R	N	R	R		
potassium chloride	0 to 50	30	N	C	C	C	R	R	R	R	R	R	C	R
potassium hydroxide		30	N	R	R	R	C	C	C	C	R	R		R
potassium hydroxide	all	100	N	C	C	C	C	C	C	C	R	R		R
potassium nitrate	10	30	N	R	R	R	R	C	R	C	C	C		R
potassium sulphate	all	30	N	R	R	R	R	R	R	R	C	C		R
sodium bicarbonate	all	30	N	R	R	R	R	C	R	C	R	C		R
sodium chloride		3.0	N	N	N	N	C	R	C	R	R	C	N	R
sulphur dioxide, wet		70	N	N	N	N	C	R	R	R	R	R	N	R
sulphur dioxide, dry	0 to 15	300	N	C	C	R	R	R	R	R	R	R	N	R
sulphuric acid	15 to 75	30	N	N	N	N	C	R	C	C	C	C	N	N
sulphuric acid	75 to 96	30	N	N	N	N	R	N	R	C	N	N	N	N
sulphuric acid	0 to 60	30	C	C	C	C	R	N	R	N	N	N	N	N
sulphurous acid		100	N	N	N	N	C	N	C	N	R	N	N	N
trichloroethylene		100	N	C	C	C	C	C	C	C	R	R		R
water, clean		100	C	R	R	R	R	R	R	R	R	R		R
water, sea		100	N	N	N	C	R	R	R	R	R	R	N	R



Temperature Conversion Table

The numbers in **bold** refer to the temperature either in degrees Celsius or Fahrenheit which it is desired to convert into the other scale. If converting from Fahrenheit degrees to Celsius degrees the equivalent temperature will be found in the left column, while if converting from degrees Celsius to degrees Fahrenheit, the answer will be found in the column on the right.

°C	°F	°C	°F	°C	°F
-40.0	-40	-40	68.3	155	311
-37.2	-35	-31	71.1	160	320
-34.4	-30	-22	73.9	165	329
-31.7	-25	-13	76.7	170	338
-28.9	-20	-4	79.4	175	347
-26.1	-15	5	82.2	180	356
-23.3	-10	14	85.0	185	365
-20.6	-5	23	87.8	190	374
-17.8	05	32	90.6	195	383
-15.0	10	41	93.3	200	392
-12.2	15	50	96.1	205	401
-9.4	20	59	98.9	210	410
-6.7	25	68	100	212	414
-3.9	30	77	104	220	426
-1.1	35	86	110	230	446
1.7	40	95	116	240	464
4.4	45	104	121	250	482
7.2	50	113	127	260	500
10.0	55	122	132	270	518
12.8	60	131	138	280	536
15.6	65	140	143	290	554
18.3	70	149	149	300	572
21.1	75	158	154	310	590
23.9	80	167	160	320	608
26.7	85	176	166	330	626
29.4	90	185	171	340	644
32.2	95	194	177	350	662
35.0	100	203	182	360	680
37.8	105	212	188	370	698
40.6	110	221	193	380	716
43.3	115	230	199	390	734
46.1	120	239	204	400	752
48.9	125	248	210	410	770
51.7	130	257	216	420	788
54.4	135	266	221	430	806
57.2	140	275	227	440	824
60.0	145	284	232	450	842
62.8	150	293	238	460	860
65.6		302	243	470	878
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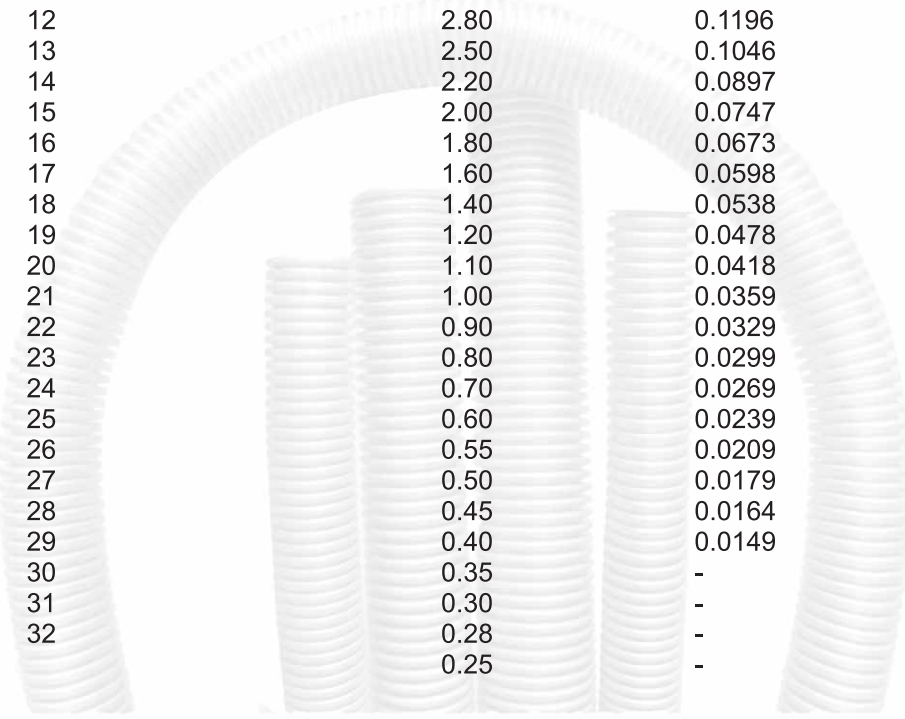


Steam Pressure/temperature

Temperature Equivalents of Saturated Steam at Sea Level

Gauge Pressure		Approx Temperature		Gauge Pressure		Approx Temperature	
psi	bars	°C	°F	psi	bars	°C	°F
05	0	100	212	130	8.70	178	352
10	0.35	109	227	135	9.19	180	356
15	0.70	115	239	140	9.49	181	358
20	1.06	121	250	145	9.84	183	361
22	1.41	125	258	150	10.55	184	363
24	1.55	127	261	155	10.90	186	366
26	1.69	129	265	160	11.25	187	368
28	1.83	131	268	165	11.60	188	370
30	1.97	133	271	170	11.95	190	376
32	2.11	134	274	175	12.30	191	378
34	2.25	136	277	180	12.65	192	380
36	2.39	138	280	185	13.01	193	381
38	2.53	139	282	190	13.36	194	384
40	2.67	140	285	195	13.71	196	387
42	2.81	141	287	200	14.06	197	388
44	2.95	143	290				
46	3.09	144	292				
48	3.23	145	294				
50	3.37	147	296				
52	3.51	148	298				
54	3.66	149	300				
56	3.80	150	302				
58	3.94	151	304				
60	4.08	152	305				
62	4.22	153	307				
64	4.36	154	311				
66	4.50	155	312				
68	4.64	156	312				
70	4.78	157	314				
75	4.92	158	316				
80	5.27	160	320				
85	5.62	162	324				
95	5.98	164	327				
100	6.33	166	330				
105	6.68	168	334				
110	7.03	170	337				
115	7.38	172	340				
120	7.73	173	344				
125	8.09	176	347				
	8.49	177	350				

Gauge Thickness Chart



Gauge Number	Birmingham Gauge (mm)	US Manufacturers Gauge (inches)
89	4.00	0.1644
10	3.50	0.1495
11	3.00	0.1345
12	2.80	0.1196
13	2.50	0.1046
14	2.20	0.0897
15	2.00	0.0747
16	1.80	0.0673
17	1.60	0.0598
18	1.40	0.0538
19	1.20	0.0478
20	1.10	0.0418
21	1.00	0.0359
22	0.90	0.0329
23	0.80	0.0299
24	0.70	0.0269
25	0.60	0.0239
26	0.55	0.0209
27	0.50	0.0179
28	0.45	0.0164
29	0.40	0.0149
30	0.35	-
31	0.30	-
32	0.28	-
	0.25	-



Metric Conversion Tables

Quantity	Metric Unit and Symbol	Conversion Factors Imperial to Metric Units	Metric to Imperial Units
Length	Millimetre (mm) Metre (m, 100cm) Kilometre (km, 1000m)	1 in = 25.4 mm 1 ft = 304.8 mm 1 mile = 1.61 km	1 mm = 0.0394 in 1 m = 3.28 ft 1km = 0.62 mile
Mass / Weight	Gram (g) Kilogram (kg, 1000g) tonne (t, 1000kg) 1	1 oz = 28.3 g 1 lb = 454 g 1 ton = 1.02 t	1 g = 0.0353 oz 1kg = 2.2 lb 1 t = 0.98 ton metric ton = 2200lbs
Pressure 1	Kilopascal (kPa)	1 psi = 6.895 kPa 1 bar = 14.5 psi kgf/cm ² = 98.07kPa 1 in Water Gauge = 0.250 kPa	1 kPa = 0.145 psi 100 kPa = 14.5 psi 1000kPa = 1 mPa 1 bar = 100 kPa
Atmospheric Pressure		14.696 psi = 101.32 kPa	100 kPa absolute
Temperature	Degree Celsius (°C) Kilowatt	°C = 5/9 (°F 32)	°F = 9 x °C/5 + 32
Linear Expansion		1in/100ft = 0.833 mm/m	1mm/m = 1.20 in
Force		1 lb force = 4.448 N 1 lb force = 0.0044 Kn	1 N = 0.102 kg force 1kN = 101.97 kg force
Power	Kilowatt (kW)	1 hp = 0.746 kw	1 kW = 1.34 hp
Speed	Kilometer per hour (km/h)	1 mph = 1.66 km/h	1 km/h = 0.621 mph



ENGINEERING DATA

INCH/MILIMETER CONVERSION TABLE

Inches	Milimeters	Inches	Milimeters	Inches	Milimeters
Fractions Decimats	Decimats	Fractions Decimats	Decimats	Fractions Decimats	Decimats
1/64... .016	.397	25/64... .391	9.222	49/64... .766	19.447
1/32... .031	.794	13/32... .406	10.319	25/32... .781	19.844
3/64... .047	1.191	27/64... .422	10.716	51/64... .797	20.241
1/32... .063	1.588	7/16... .438	11.113	13/16... .813	20.638
5/64... .078	1.984	29/64... .453	11.509	53/64... .828	21.034
1/32... .094	2.381	15/32... .469	11.906	27/32... .844	21.431
7/64... .109	2.778	31/64... .484	12.303	55/64... .859	21.828
1/8... .125	3.175	1/2... .500	12.700	1/8... .875	22.225
9/64... .141	3.572	33/64... .516	13.097	57/64... .891	22.622
5/32... .155	3.969	17/32... .531	13.494	29/32... .906	23.019
11/64... .172	4.366	35/64... .547	13.891	59/64... .922	23.416
3/16... .188	4.763	9/16... .563	14.288	15/16... .938	23.813
13/64... .203	5.159	37/64... .578	14.684	61/64... .958	24.209
7/32... .219	5.556	19/32... .594	15.081	31/32... .969	24.606
15/64... .234	5.953	39/64... .609	15.478	63/64... .984	25.003
1/4... .250	6.350	5/8... .625	15.875	1... .1.000	25.400
17/64... .266 9 /	6.747	41/64... .641	16.272		
32... .281	7.144	21/32... .656	16.669		
19/64... .297	7.541	43/64... .672	17.066		
5/16... .313	7.938	11/16... .688	17.463		
21/64... .328	8.334	45/64... .703	17.859		
11/32... .344	8.731	23/32... .719	18.256		
23/64... .359	9.128	47/64... .734	18.653		
3/8... .375	9.525	3/4... .750	19.050		

POUNDS PER SQUARE INCH INTO MEGAPASCAL

PSI	0	1	2	3	4	5	6	7	8	9
	MPa	MPa	MPa	MPa	MPa	MPa	MPa	MPa	MPa	MPa
0	-	.007	.014	.021	.028	.035	.041	.048	.055	.067
10	.069	.076	.083	.090	.097	.103	.110	.117	.124	.131
20	.138	.145	.152	.159	.165	.172	.179	.186	.193	.200
30	.207	.214	.221	.228	.235	.241	.248	.255	.262	.269
40	.276	.283	.290	.297	.303	.310	.317	.324	.331	.338
50	.345	.352	.359	.366	.372	.379	.386	.393	.400	.407
60	.414	.421	.428	.435	.441	.448	.455	.462	.469	.476
70	.483	.490	.497	.503	.510	.517	.524	.531	.538	.545
80	.552	.559	.566	.572	.579	.586	.593	.600	.607	.614
90	.621	.628	.635	.641	.648	.655	.662	.669	.676	.683
100	.690	.697	.703	.710	.717	.724	.731	.738	.745	.752

Note : Columns headed 0 thru 9 in above table represent increments of figures listed in first column of left. For example: In converting from PSI to MPa. 18 PSI = 124 MPa.

POUNDS PER SQUARE INCH INTO MEGAPASCAL

PSI	0	1	2	3	4	5	6	7	8	9
	Bar	Bar	Bar	Bar	Bar	Bar	Bar	Bar	Bar	Bar
0	-	.069	.138	.207	.276	.345	.414	.483	.552	.671
10	.689	.759	.828	.897	.966	1.034	1.103	1.172	1.241	1.310
20	1.379	1.448	1.517	1.586	1.652	1.724	1.793	1.862	1.931	2.000
30	2.069	2.138	2.207	2.276	2.345	2.414	2.483	2.552	2.621	2.689
40	2.759	2.828	2.897	2.966	3.034	3.103	3.172	3.241	3.310	3.379
50	3.448	3.517	3.586	3.655	3.724	3.793	3.862	3.931	4.000	4.069
60	4.138	4.207	4.276	4.345	4.414	4.483	4.552	4.621	4.689	4.759
70	4.828	4.897	4.966	5.034	5.103	5.172	5.241	5.310	5.379	5.448
80	5.517	5.586	5.655	5.724	5.793	5.862	5.931	6.000	6.069	6.138
90	6.207	6.276	6.345	6.414	6.483	6.552	6.621	6.689	6.759	6.828
100	6.897	6.966	7.034	7.103	7.172	7.241	7.310	7.379	7.448	7.517

Note : Columns headed 0 thru 9 in above table represent increments of figures listed in first column of left. For example: In converting from PSI to Bar. 18 PSI = 124 Bar.



SIT Flexible Hose Pvt. Ltd.

**Reg. Office & Works :
(Hose - Div.)**

243/16-17, G.I.D.C., Waghodia, Dist. Vadodara-391760. Gujarat, INDIA.
Phone : +91 - 2668 - 263121 · Telefax : +91 - 2668 - 263122 · Website : www.sitflexible.com
Email : sales@sitflexible.com, info@sitflexible.com, devang@sithydraulic.com

Hose Assembly Div. :

323-A/7, G.I.D.C. Industrial Estate, Makarpura, Vadodara - 390 010. INDIA.
Ph.: +91-265-2632305, 6534722 TeleFax: +91-265-2647133 www.sithydraulic.com, www.sitflexible.com
Email : info@sithydraulic.com, sitcoflex@sithydraulic.com, devang@sithydraulic.com

Manufacturers

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