





## **About Corrugated Metal Hose**

Corrugated metal hose is constructed from various grades and thickness of Austenitic cold formed stainless steel. Rolled and butt welded into tube, It is then hydraulically formed into Parallel corrugations, which are evenly spaced along the entire length of the hose.

The Profile, material, wall thickness, depth and spacing of the corrugations, determines the flexibility, application and pressure rating of the hose.

FlexPress' range of corrugated metal hose is available in 3 different profiles depending on the application.

## These profiles include;

- GenFlex shown above- Annular Corrugations which are evenly spaced good flexibility and cycle life at medium pressures.
- BendFlex Annular Corrugations which are closely spaced / close pitch 'tear drop' shaped Highest flexibility and cycle life at medium pressures.
- UltraFlex- Annular Corrugations which are evenly spaced and formed from heavy wall butt welded tube- good flexibility at high pressures.

Depending on the pressure, the hose assembly is manufactured with one or two layers of stainless steel woven braid. The braid is applied tightly to the hose and TIG welded to the end fittings, by AS1796 qualified staff. The braid not only resists pressure, it prevent elongation (expansion of the hose through internal pressure) and protects the exterior of the hose.

FlexPress' range of corrugated tube is manufactured from SS316L with SS304 braid as standard, however we can manufacture hoses in different grade combinations including SS321.



## **Technical**

FlexPress' range of corrugated hose is manufactured in accordance with ISO 10380. Hoses are manufactured with a 4:1 safety factor for example the burst pressure is 4 times the maximum working pressure. The hose test pressure is 1.5 times the maximum working pressure. Various operating conditions affect the service life and pressure resistance of corrugated hose such as:

Temperature - the working pressure of corrugated hose is calculated at 20°c, as the temperature of the hose increases, the working pressure is reduced. The reduction in pressure can be calculated, using the temperature correctional factor chart, which is located on the data specification sheet of the different profile hoses.

#### **Pressure**

*Pressure Loss* - when installed in a piping system, pressure is lost due to the corrugations of the hose causing friction with the medium, reducing the flow rate. This problem can be alleviated by increasing the diameter of the hose. The Operating pressure of the hose determines the service life (lifetime of the hose) this can also be affected by the following:

#### **Pressure Fluctuations**

Pressure surge is a sudden increase in pressure, which causes the hose to violently shake which fatigues the corrugations, leading to premature failure.

*Pressure pulsing* - where the pressure of the hose constantly rises and reduces, also fatigues the corrugations and leads to premature hose failure.

#### Mechanical

*Torsion* – Corrugated hoses have high pressure and temperature resistance, however, they have no torsion strength. Twisting a corrugated hose will lead to premature failure almost immediately.

Bending – Corrugated hoses are highly flexible, however, bending the hose beyond the nominated dynamic bend radius causes the hose to heavily fatigue and prematurely failure. Using elbows as opposed to bending the hose will increase the service life of the hose.

*Velocity* – excessive medium flow rates causes a vortex effect inside the hose. This is due to friction between the corrugations and the medium. This problem can be alleviated by including a PTFE or Interlock liner inside the hose.



## **PROFILE SELECTION**

# Hose work

## **HOSE INSTALLATION**

#### The Right Hose

It is important when choosing a FlexPress corrugated hose, the right profile hose is used for the relevant application. To help you gain the most from your hose, FlexPress' sales team always ask STAMP.....

S-Size

**T** - Temperature

A - Application

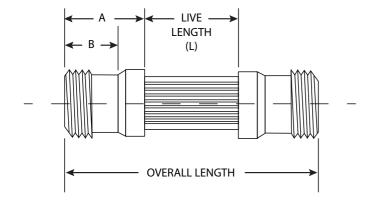
M - Medium Conveyed

P - Pressure (Working)

With this in mind they can recommend the most suitable hose for your application. The service life of FlexPress' corrugated hose depends on a number of factors such as profile, working pressure, temperature, length, bend radius (static, dynamic) and correct installation.

#### **Hose lengths**

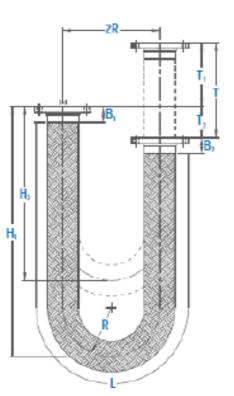
The hose length is crucial in the ensuring you maximise the service life from your FlexPress assembly. The hose is measured at various intervals as shown below;



Use the overall length, when ordering a hose. Other values displayed are important in calculating the offset and motion installations as shown in FL-OI1301-04.

## **Constant Radius Travelling Loops**

Use the following equations to calculate hose lengths in offset installations.

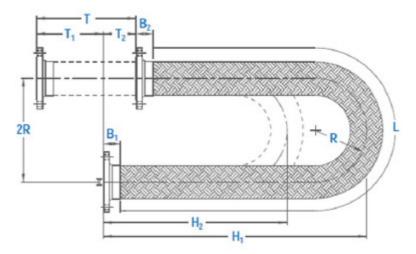


#### Vertical Travel

#### Variables

L (mm) = Minimum Live Length required For travel (T)
R (mm) = Radius From Dynamic Minimum Centre-Bend radius
T (mm) = Total Travel
T<sub>1</sub> T<sub>2</sub> (mm) = Travel
H<sub>1</sub> (mm) = Maximum Drop Of 180° Loop
H<sub>2</sub> (mm) = Minimum Drop Of 180° Loop
B<sub>12</sub> (mm) = Fitting Length

# $$\begin{split} &\textit{Equations} \\ &\textit{T} = \textit{T}_1 + \textit{T}_2 \\ &\textit{L} = 4 R + \text{MAX} \left( \, \textit{T}_1 + \textit{T}_2 \, \right) \\ &\textit{H}_1 = 1.43 R + \text{MAX} \left( \, \textit{T}/2.\,\, \textit{T}_2 \, \right) + \textit{B}_1 \\ &\textit{IF} \,\, \textit{T}_2 > \textit{T}_1 \,\, \textit{THEN} \,\, \textit{H}_2 = 1.43 R + \textit{T}_2 - \textit{T}/2 + \textit{B}_1 \\ &\textit{OTHERWISE} \,\, \textit{H}_2 = 1.43 R + \textit{B}_1 \\ &\textit{Developed Length} = \textit{L} + \textit{B}_1 + \textit{B}_2 \end{split}$$



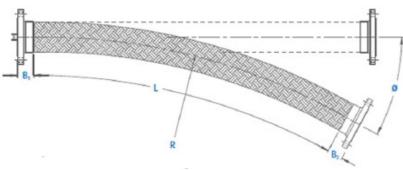
Horizontal Travel
\*Loop Must Be Properly Supported

## HOSE INSTALLATION

# Hosework

## **HOSE INSTALLATION**

## **Angular Movement**



#### Vertical Travel

## Variables

L (mm) = Minimum Live Length required For travel (T)

R (mm) = Radius From Dynamic Minimum Centre-Line Bend Radius

 $B_{12}$  (mm) = Fitting Length

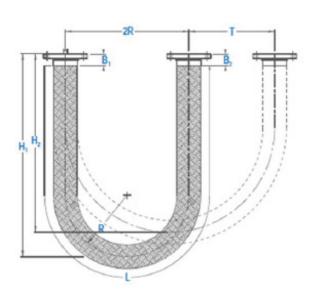
Ø Degrees = Angle Of Bend

### Equations

L = 01745Rø

Developed Length =  $L + B_1 + B_2$ 

## **Variable Radius Travelling Loops**



#### Horizontal Travel

#### Variables

L (mm) = Minimum Live Length required For travel (T)

R (mm) = Radius From Dynamic Minimum Centre-Bend

radius

T (mm) = Travel

H<sub>1</sub> (mm) = Maximum Drop Of 180° Loop

 $H_2$  (mm) = Minimum Drop Of 180° Loop

 $B_{12}$  (mm) = Fitting Length

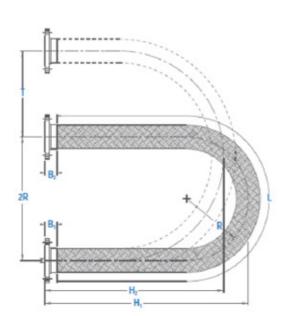
#### Equations

L = 4R + 1.57T

 $H_1 = 1.43R + 0.785T + B_1$ 

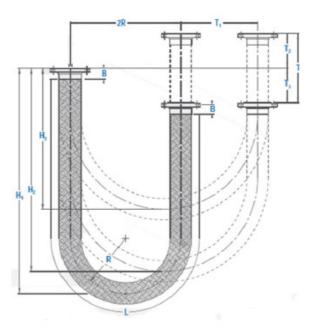
 $H_2 = 1.43R + T/2 + B_1$ 

Developed Length =  $L + B_1 + B_2$ 



## Vertical Travel \*Loop Must Be properly Supported

## **Vertical Loop With travel In Two Directions**



#### Variables

L (mm) = Minimum Live Length Required For Travel R (mm) = Radius From Dynamic Minimum Centreline

Bend Radius

T (mm) = Total Vertical Travel

T<sub>1</sub> (mm) = Total Horizontal Travel

T<sub>2</sub> (mm) = Upward Vertical Travel

T<sub>3</sub> (mm) = Downward Vertical Travel

H<sub>2</sub> (mm) = Maximum Drop Of 180°

Bend With Horizontal Travel ( $T_1$ )

 $H_3$  (mm) = Minimum Drop Of 180°

Bend With Horizontal Travel (T<sub>1</sub>)

B (mm) = Fitting Length

#### Equations

 $T = T_2 + T_3$ 

 $L = \Pi R + 1.57T + T/2$ 

 $H_1 = R + 0.785T_1 + T/2 + B$ 

 $H_2 = R + T_1/2 + B$ 

 $H_3 = R - T_1 / 2 + B$ 

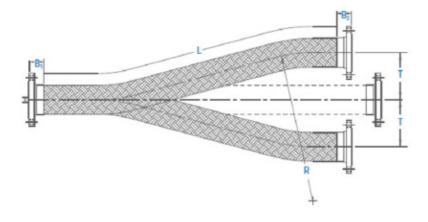
Developed Length = L + 2B

Note : Use the largest Value Of  $T_2$  or  $T_3$  If Either Is Greater Than T/2



## **HOSE INSTALLATION**

#### **Offset Motion**



#### Variables

L (mm) = Minimum Live Length Required For Travel

R (mm) = Radius From Dynamic Minimum Centre-Line Bend Radius

T (mm) = Travel

 $B_{12}$  (mm) = Fitting Length

#### Equations

 $L = \sqrt{T_2 + 6TR}$ 

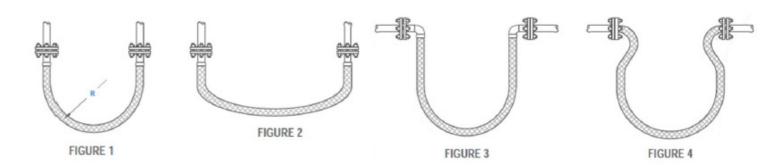
Developed Hose Length =  $L + B_1 + B_2$ 



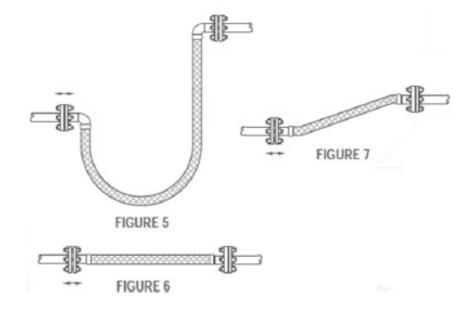
## **INSTALLATION INSTRUCTIONS**

It is important to follow this guideline to maximise the service life of your FlexPress assembly. It is especially important that you never twist or incorrectly flex a corrugated hose.

## Intermittent and static flexing loops



Hose loops must be installed with a proper live length and bend radius (fig. 1) the live length can be determined from the formulas in FLOI1301-04. The live length distance is based on the distance between the two pipes and the proper bend radius. Inadequate live hose length is shown in figure 2.



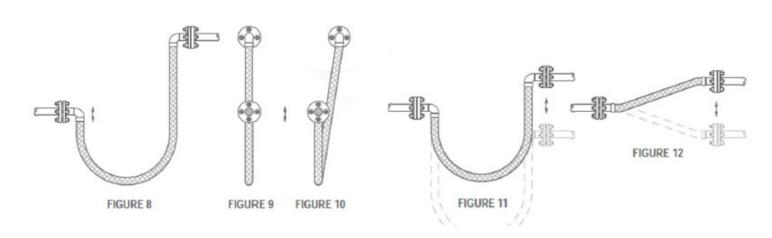
Avoid bending the hose at the end connections (fig. 4) install 90° pipe elbows in horizontal pipe runs with hose loops (fig.3). The proper live length and bend radius must be taken into the horizontal movement of a hose loop (fig. 5) must be directed in the same plane as the loop (fig. 6). Movement out of plane or with the loop offset (fig. 7) will result in unnecessary torsion on the hose. The torsional stress will result in a hose failure.



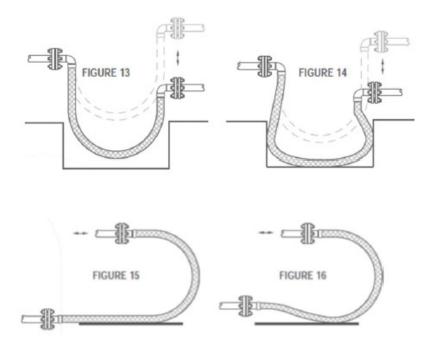
## **INSTALLATION INSTRUCTIONS**

# Hosework

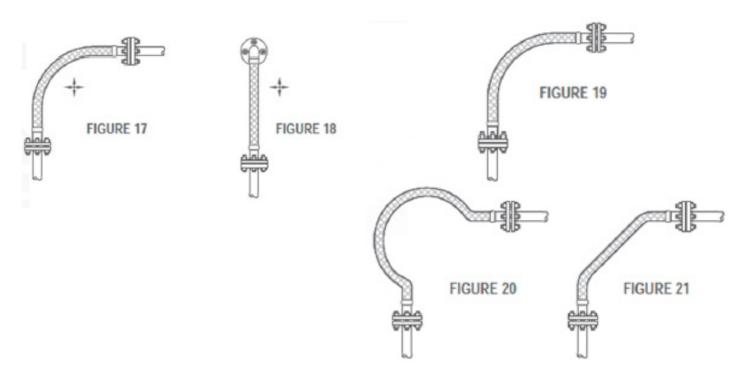
## **INSTALLATION INSTRUCTIONS**



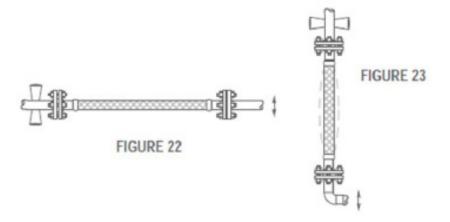
The vertical movement of a hose loop (fig. 8) must be directed in the same plane as the loop (fig. 9). Movement out of place or with the loop offset (fig. 10) will result in unnecessary torsion on the hose. The torsional stress will result in a hose failure. A hose loop with elbows (fig. 11) is more suited for vertical movement than a straight hose (fig.12). The vertical movement will cause bending stresses at the hose ends, resulting in a failure.



A hose loop (fig. 13) should be installed to ensure that the hose at the full offset is free from the interference and all obstacles (fig. 14). A horizontally travelling hose loop (fig. 15) should be supported to keep the hose from sagging (fig. 16).



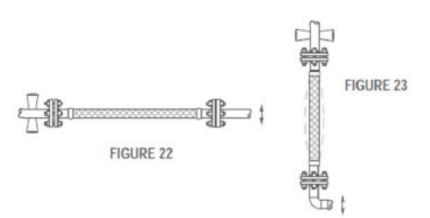
For vibration, the hose should be installed so the movement will be in the plane of the bend (fig. 17). If the hose bend is installed for vibrations so that the movement is out of the plane of the hose bend (fig. 18), a torque will be imposed upon the hose, resulting in a hose failure. For vibration, the proper hose live length for the intermittent flexing should be determined (fig. 19) if the hose live length is too long (fig. 20) or too short (fig. 21), a hose failure could occur. Also, unnecessary flow restriction could result from the awkward bend.



For vibration in one plane, a straight hose should be used and installed perpendicular to the source of the vibration (fig. 22) installing the hose parallel to the source of the vibration (fig. 23) will cause the hose to be placed in a compression extension which is not allowed and may cause a hose failure.

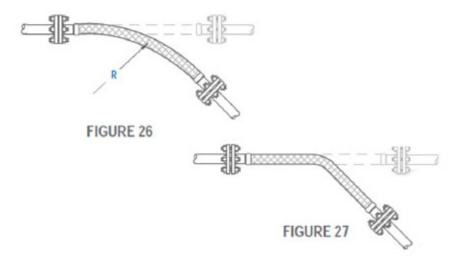


## **INSTALLATION INSTRUCTIONS**



For multi-plane vibration a double hose assembly should be installed (fig. 24). Installing a single hose for multi-plane vibration (fig. 25) will cause the hose to be placed in compression or extension in axial directions. Compression and/or extension is not allowed and cause a hose failure.

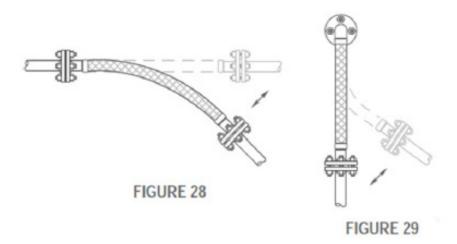
## **Angular Bending**



The hose must have the proper live length to withstand angular bending (fig. 26). Installing a hose that does not have the proper live length for that angular rotation, can cause the hose to be permanently bent in the direction of the angular rotation (fig. 27) or can cause hose failure if the bend is severe enough.

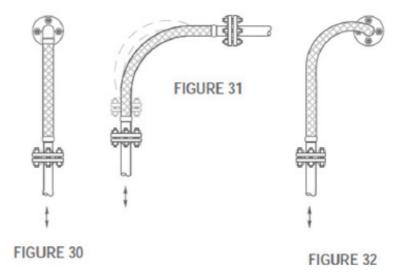


## **INSTALLATION INSTRUCTIONS**



The direction of the angular rotation must be in the bending plane (fig. 28). Angular movement on a hose that is perpendicular to the bending plane (fog. 29) will cause torsional stress on the hose or hose failure if the hose bend is severe enough.

## **Thermal Expansion**

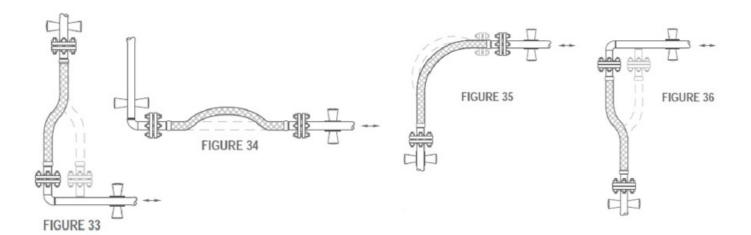


Thermal Expansion of a pipeline should be absorbed by a 90° hose bend (fig. 30&31). The movement should be in the directions of the bend plane. A single hose should not be installed in a multi-plane system and then be subjected to thermal expansion (fig. 32). This type of installation will cause a torsion on the hose which could result in hose failure.

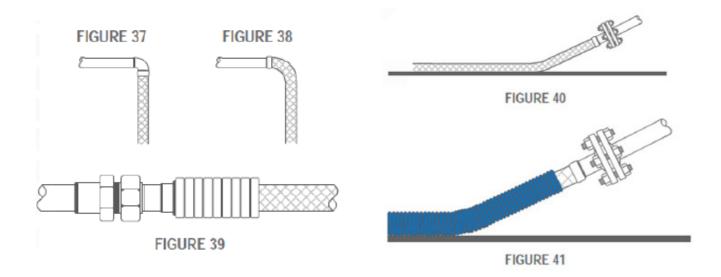
Lateral Movement or intermittent offset is permissible as long as the proper live length of the hose is used (fig. 33) the movement should be 90° to the hose. The hose should not be installed in the same direction as the expansion (fig. 34). This type of installation will place the hose in compression and/or extension, which is not allowed and could result in a failure of the hose.



## **INSTALLATION INSTRUCTIONS**

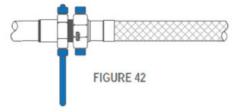


Always use pipe elbows (fig. 37) to avoid bending the hose at a sharp angle (fig. 38). When the hose will be subjected to manual connections to other equipment an interlock bend restrictor can be placed at each end to restrict over bending the hose at the fittings. (fig. 39)



Never drag the hose across a surface (fig.40). The braid could be worn or damaged resulting in a hose failure. If there is a possibility that the hose will be dragged across a surface the hose should be protected with of the options found in FL-PO1301-07. Shown if (fig. 40) is a hose fitted with a interlock guard.

To avoid twisting the hose, always use two wrenches when tightening a swivel fitting. (fig.42)





## **PROTECTION**

There are many protection options which can be fitted to help prolong the life of your hose assembly and reducing the risk the operator. Protection may be required against extreme temperature, dragging, excessive user bending, careless handling, extreme pressure etc.

Below are some of the options available, if the protection you would like is not listed, please contact our sales team.

## **Spring Guard**



Fitted to the hose during manufacture, and fixed to the ends by welding. This spring forms a barrier between the hose and any rough surface the hose may be exposed to. Available in galvanised and stainless steel, in standard pitch and with close pitch ends – which offer excellent protection to the ends of the hose.

## **Abrasion Sleeve**



This nylon woven abrasive sleeve is fitted to the hose after manufacture and fixed to the ends by crimping or heat shrink. This sleeve is used in applications where hoses may be exposed to damage by rubbing. Also used as burst suppression, creating a barrier between medium and personnel. (Not suitable for cryogenic applications)

## **PROTECTION**

# Hosework

## **FINISHING OPTIONS**

## **Plastic Spiral Guard**



Fitted to the hose after manufacture, by wrapping around the hose. This plastic wrapping has excellent abrasion and crush resistance. Also helps to prevent over bending and kinking. Commonly used on delivery hoses due to its light weight and high protection properties. (Not suitable for cryogenic applications)

## **Interlock Guard**



Stainless steel interlock hose can not only be used inside the hose to create a smooth bore and reduce velocity, but it can be used on the outside as a excellent form of protection. Its thick and durable stainless steel construction makes it ideal for the most demanding applications. Commonly used for cryogenic delivery assemblies.

## Silicone-fibreglass Sleeve



Manufactured In accordance with AS1072, this silicone coated, fibreglass braided sleeve is designed to protect the hose against exposure from fire/flame, exhaust, steam and even molten metals- up to1200°c. Also used to protect users from handling while hot. Fixed to the hose after manufacture using crimp rings. (Not suitable for cryogenic applications)

All hoses manufactured by FlexPress are tested in accordance with FL-MP1201-03. A Pneumatic test is carried out on each assembly up to ensure there are no leaks. FlexPress also offer a variety of different testing methods such as;

- · Dye / Penetrant test
- Nitro Test up to 350 BAR
- Hydrostatic testing up to 1000 BAR
- NATA accredited Hydrostatic testing up to 4000 BAR

All hoses that are tested and tagged are recorded in FlexPress' hose management system. These hoses are fitted with a stainless steel tag and given an individual ID number, providing total traceability and making re-ordering simple. Tags also contain other relevant information such as test pressure and the date the hose was tested. All tagged hoses come with test certificates. (Material certificates available upon request.)

Once tested, all hoses are then either painted if they have steel ends or polished for stainless, brass and other materials.

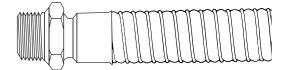
FlexPress specialises in Oxygen cleaning hoses. FlexPress can oxygen clean and certify any hose assembly in various methods including Vapour degreasing, Aqueous and ultrasonic. To many different international and local standards.

All oxygen cleaned hoses are sealed with dry nitrogen using plastic caps and are double bagged for to ensure they remain clean. All bags are marked 'cleaned for oxygen service'.



## **END FITTINGS**

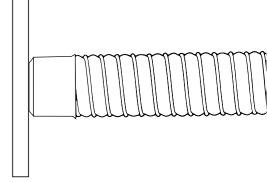
AF1 - Fixed Hex Male



AF2 - Swivel Female



AF3 - Fixed Flange

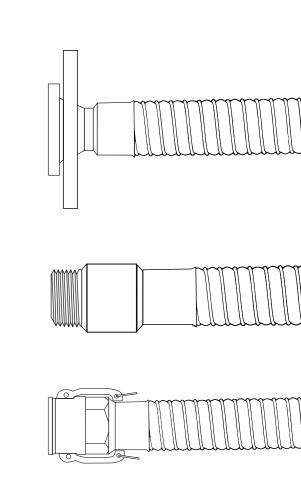


AF4 - Swivel Flange

AF5 - Toe Nipple



AF6 - Camlock



## **End Fittings**

All FlexPress' end fittings are manufactured In accordance with ISO Hose can be manufactured with the following standard threaded end fittings

## Male

- BSPT Hex and Pipe Nipple
- BSPP -Hex Nipple
- JIC Hex Nipple
- NPT Hex and Pipe Nipple
- SAE Hex Nipple

#### Female

- BSPT –Fixed female socket
- BSPP –Female swivel cone seat
- JIC- Female swivel
- NPT Fixed female socket
- · SAE- Female swivel Frost free nut end-

(Cryogenic applications)

## **Standard industrial Fittings**

- ANSI Flange Slip-on, Weld neck and floating flanges
- Table Water flanges (D & E ) –Slip-on and floating
- DIN Flanges Slip on and floating
- · Camlok- Male & Female, internal and external thread
- 3 piece unions- Male & Female NPT and BSPT
- Open end tube (suit Swagelok / compression fittings)
- Welding stub pipe end
- **Custom Bent Tube Ends**

These fittings are stocked and readily available in Carbon steel, stainless steel and brass. Both cast and machined options are available. These are just a small selection of the common fittings FlexPress stock.

#### Cryogenic

FlexPress also manufacture hose with cryogenic ends to suit liquid transfer. We stock every cryogenic fitting in various materials and can manufacture to any specification.

#### Copper ends

FlexPress can manufacture vibration eliminators for air conditioning systems using CNC bent Australian copper tube. These hoses can be manufactured to any specifications.

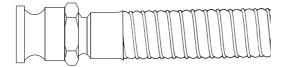
#### **Custom End Fittings**

FlexPress' equipped milling and turning workshop can manufacture any fitting, with the quickest turnaround times, FlexPress has the experience knowledge and tooling to machine ANY fitting.

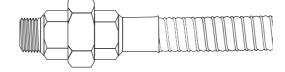


## **END FITTINGS**

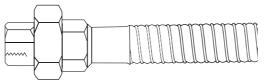
AF7 - Welded Pipe End



AF8 - Male Union



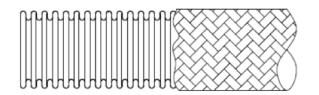
AF9 - Female Union





## **GENFLEX**

## STAINLESS STEEL ANNULAR CORRUGATED TUBE



HOSE	E ID	ID HOSE OD WEIGHT/METER MWP BURST PRESS				BEND RADIUS							
nb	mm	m	m	kg		bar		b	ar	static - mm		dynamic - mm	
		SB	DB	SB	DB	SB	DB	SB	DB	SB	DB	SB	DB
1/4"	6	10.6	10.8	0.14	10.94	98	192	392	768	25	25	100	85
5/16"	8	13.4	14.7	0.159	14.859	93	152	372	608	25	32	100	125
3/8"	10	15.4	16.8	0.192	16.992	88	144	352	576	40	38	150	140
1/2"	12	17.8	19.5	0.216	19.716	78	128	312	512	50	45	200	140
5/8"	16	22.8	24.5	0.387	24.887	68	112	272	448	50	60	200	160
3/4"	20	28	30	0.494	30.494	62	102.4	248	409.6	70	70	200	170
1"	25	33.7	35.5	0.616	36.116	49	80	196	320	90	85	200	190
1 1/4"	32	43	44.5	0.847	45.347	39	64	156	256	110	105	250	260
1 1/2"	40	52.5	52.8	1.172	53.972	29	56	116	224	130	130	250	300
2"	50	67.2	65	1.606	66.606	27	44.8	108	179.2	175	160	350	320
2 1/2"	65	83	85	1.984	86.984	23	38.4	92	153.6	200	180	410	410
3"	80	97	100	2.154	102.154	18	28.8	72	115.2	205	200	450	450
4"	100	119	123	3.001	126.001	15	25.6	60	102.4	230	290	560	560
5"	125	152.5	156	4.887	160.887	11	22.4	44	89.6	280	325	660	710
6"	150	177.5	180.5	5.705	186.205	10	16	40	64	320	380	815	815
8"	200	228	232	9.445	241.445	8	12.8	32	51.2	435	500	1015	1020
10"	250	281	285	13.75	298.75	7	11.2	28	44.8	620	625	1270	1270
12"	300	339	344	18.2	362.2	6	9.6	24	38.4	725	725	1525	1525

Burst pressure measured at 21°c

## 4:1 Safety Factor as per ISO 10380

N	/IWP x	1.00	1.00	0.93	0.93	0.88	0.82	0.79	0.74	0.70	0.67	0.63	0.60	0.58	0.53	0.49	0.45	0.40
	°C	-20	20	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750

**HOSE CONSTRUCTION:** Hydro Formed SS316 Annular Corrugated Hose With Single Or Double Layers Of SS304 Braid. (SS316 Available Upon Request). Medium Flexibility- Medium Pressure.

**TEMPERATURE RATING:** – 270°c – 750°c

SIZES AVAILABLE: 1/4" Up To 12" (Sizes up to 24" Available Upon Request).

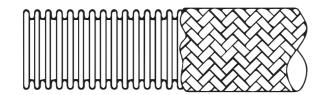
**APPLICATION:** Cryogenic, Steam, Chemical, Oil & Fuel, Water, Hygienic (Food & Medical) And LPG, Natural Gas etc. In Medium Pressure, Static applications.

APPLICABLE STANDARDS: ISO 10380 Hose, ISO 10806 Fittings, AS 4631: 2005 AGA approval.



## **ULTRAFLEX**

## STAINLESS STEEL ANNULAR CORRUGATED TUBE



	Annular Corrugated 316L hose with 316 double braid - ULTRAFLEX												
HOS	E ID	HOSE OD	WEIGHT/METER	MWP	BURST PRESS	BEND RADIUS							
nb	mm	mm	kg	bar	bar	static - mm	dynamic - mm						
1/4"	6	16.00	0.58	365	1461	50.8	209.55						
3/8"	10	20.57	0.78	269	1075	63.5	228.6						
1/2"	12	26.67	1.11	248	992	76.2	266.7						
3/4"	20	36.32	2.42	245	979	101.6	323.85						
1"	25	44.45	3.08	193	772	133.35	381						
1 1/4"	32	52.83	4.36	170	683	165.1	438.15						
1 1/2"	40	61.21	5.38	151	606	203.2	495.3						
2"	50	77.47	6.89	115	461	292.2	609.6						

Burst pressure measured at 21°c

### 4:1 Safety Factor as per ISO 10380

MWP x	1.00	1.00	0.93	0.93	0.88	0.82	0.79	0.74	0.70	0.67	0.63	0.60	0.58	0.53	0.49	0.45	0.40
°C	-20	20	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750

**HOSE CONSTRUCTION:** Hydro Formed SS316 Annular Corrugated Hose With Single Or Double Layers Of SS304 Braid. (SS316 Available Upon Request). Medium Flexibility- Medium Pressure.

**TEMPERATURE RATING:** – 270°c – 750°c

SIZES AVAILABLE: 1/4" Up To 12" (Sizes up to 24" Available Upon Request).

APPLICATION: Cryogenic, Steam, Chemical, Oil & Fuel, Water, Hygienic (Food & Medical) And LPG,

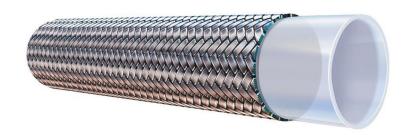
Natural Gas etc. In Medium Pressure, Static applications.

APPLICABLE STANDARDS: ISO 10380 Hose, ISO 10806 Fittings, AS 4631: 2005 AGA approval.



## P.T.F.E HOSE

R14



DESCRIPTION	WALL THICKNESS	HOSE I.D. (NOM.)		HOSE O.D. (NOM.)		WORK PRESS		MIN.BURST PRESSURE		MIN. BEND RADIUS	
	mm	(ln)	(mm)	(ln)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(In)
PTFE HOSE-02	1.00	1/8	3.0	0.24	6.2	3260	225	13,040	900	40	1.60
PTFE HOSE-04	0.70	1/4	6.0	0.35	8.8	2610	180	10,440	720	75	3.00
PTFE HOSE-06	0.70	3/8	9.5	0.48	12.1	2390	165	9,560	660	125	5.00
PTFE HOSE-08	0.75	1/2	12.5	0.64	16.2	1740	120	6,960	480	165	6.60
PTFE HOSE-10	0.90	5/8	16.0	0.74	18.8	1270	88	5,080	352	200	8.00
PTFE HOSE-12	1.20	3/4	19.0	0.91	23.1	1010	70	4,040	280	230	9.20
PTFE HOSE-16	33.7	1	25.0	1.15	29.2	870	60	3,480	240	300	12.00

Burst pressure measured at 21°c

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

**REINFORCEMENT:** Single braid of stainless steel wire

**CORE:** Sintered tube of polytetrafluoroethylene (P.T.F.E)

TEMPERATURE RATING: -54°C to +204°C

APPLICABLE STANDARD: SAE J517 - 100R14



## P.T.F.E HOSE

R14



CODE PART#	DASH SIZE	WALL THICKNESS	HOSE I.D. (NOM.)		HOSE O.D. (NOM.)		WORI PRES		MIN. BURST PRESSURE		MIN. BEND RADIUS	
			(ln)	(mm)	(ln)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(In)
AFL370-6	-6	0.75	3/8	9.5	0.65	16.4	2175	150	8700	600	20	0.8
AFL370-8	-8	0.75	1/2	12.7	0.78	19.8	1960	135	7840	540	25	1.0
AFL370-10	-10	0.90	5/8	16.0	0.89	22.6	1450	100	5800	400	50	2.0
AFL370-12	-12	1.00	3/4	19.0	1.05	26.6	1160	80	4640	320	65	2.6
AFL370-16	-16	1.00	1	25.4	1.33	33.7	800	55	3200	220	90	3.6
AFL370-20	-20	1.00	1.1/4	31.8	1.59	40.3	660	45	2660	180	110	4.4
AFL370-24	-24	1.00	1.1/2	38.1	2.01	51.0	510	35	2040	140	150	6.0
AFL370-32	-30	1.00	2	50.8	2.44	62.0	365	25	1460	100	200	8.0

Burst pressure measured at 21°c

**APPLICATION:** P.T.F.E. hose has excellent temperature characteristics both in high and low temperature, Excellent chemical resistance, non-contamination properties, low coefficient of friction and resists deterioration. 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 moulding machines. Also, for some applications the tube can also be made conductive to dissipate electro-static Charges.

**REINFORCEMENT:** Single braid of 316 series of stainless steel wire.

CORE: Helically convoluted sintered tube of polytetrafluoroethylene (P.T.F.E.).

**TEMPERATURE RATING:** -54°C to + 260°C