Hose & Couplings For Africa cc

STAINLESS STEEL

FLEX

HOSE

STAINLESS STEEL FLEXIBLE HOSE

Metal flexible hose fulfills the needs of the industry by virtue of:

A. Its superior mechanical strength in resistance to crushing, in resistance to penetration by sharp points or edges and similar accidental damage in handling.

B. Its superior thermal characteristics for the transmission of fluids at elevated temperatures.

C. Its superior safety factor for the transmission of harmful or corrosive fluids.

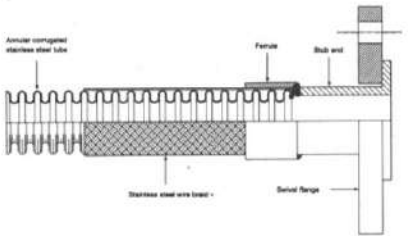
It is highly flexible tubing for conveying steam, oxygen, air, water, oil and gases as well as many corrosive chemicals at high ambient temperatures and high pressure. The hose is also used as a conveying of foodstuffs such as dairy products, edible oil and alcoholic beverages. The hose also has a good vibration and sound absorbing properties. (Double braided hose improves the pressure rating by at least 30%).

Type:

PSI STAINLESS STEEL CONVOLUTED METALLIC HOSE

one wire and two wire braided

Inner Core ……. 304,321, or 316 stainless steel
Pressure support …….304 stainless steel braid
Working temperature …. 200°c up to 700°c



SIZE RANGE: 6.5mm to 300mm nominal bore
TEMPERATURE RANGE: 800 deg C max
MATERIAL: Tube: 321 or 316 Stainless Steel
Braid: Stainless Steel Wire of AISI 304

PSI

STAINLESS STEEL CONVOLUTED METALLIC HOSE

One Wire and Two Wire Braided

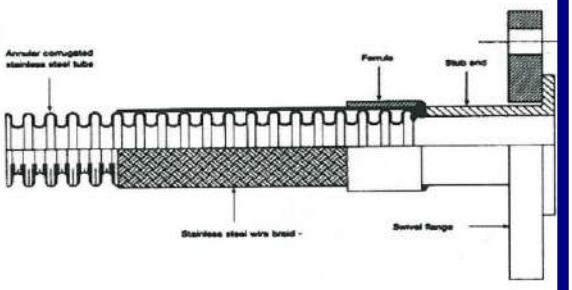
Inner Core: 321 Stainless Steel (304 or 316 also available)

Pressure Support: 304 Stainless steel braid

Working Temperature: -200°C up to +700°C

ADVANTAGES OF FLEXIBLE METALLIC HOSE

- *High physical strength combined with light weight.*
- *Suitable for wide temperature range (-200°C to +700°C).*
- *Good corrosion resistant.*
- *Resistance for fire, moisture, abrasion and penetration.*
- *Absorbs vibration and noise from pumps, compressors, engins, etc.*
- *Compensates for intermittent or constant movement.*
- *Compensates for thermal expansion or contraction of piping.*
- *Corrects problems of misalignment.*
- *A flexible and quick alternative for rigid piping in difficult locations.*



STAINLESS STEEL HOSE WITH SWIVEL FLANGE FITTING

TABLE I
TECHNICAL DATA FOR BRAIDED HOSES & ASSEMBLIES

PART NUMBER	NOMINAL ID		BEND RADIUS		SINGLE BRAID			DOUBLE BRAID		
	inch	mm	STATIC mm	FLEXING mm	Max. Working Pressure bar	Test Pressure bar	Burst Pressure bar	Max. Working Pressure bar	Test Pressure bar	Burst Pressure bar
PSI/006	¼	6	25	100	154	230	616	246	369	984
PSI/010	⅜	10	40	150	105	157	420	168	252	672
PSI/012	½	12	50	200	88	132	352	140	210	560
PSI/016	⅝	16	50	200	73	109	292	116	174	464
PSI/020	¾	20	70	200	64	96	256	102	153	408
PSI/025	1	25	90	200	50	75	200	80	120	320
PSI/032	1 ¼	32	110	250	42	63	168	67	100	268
PSI/040	1 ½	40	130	250	32	48	128	51	76	204
PSI/050	2	50	175	350	31	46	124	49	73	196
PSI/065	2 ½	64	200	410	26	39	104	41	61	164
PSI/080	3	80	205	450	18	27	72	28	42	112
PSI/100	4	100	230	560	16	24	64	26	39	104
PSI/125	5	125	280	660	16	24	64	25	37	100
PSI/150	6	150	320	815	12	18	48	20	30	80
PSI/200	8	200	435	1 015	10	16	40	16	24	64
PSI/250	10	250	560	1 220	6,5	10	26	10,5	16	42

- *The above technical details are subject to change without notice.*
- *The above pressure ratings are for fluid and ambient temperatures of 20°C. For higher temperatures apply correction factors as per Table II.*

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 20°C. 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 alongside.

EXAMPLE

A 50 N.B. hose is required for a temperature of 300°C and working pressure of 18 bar. The specified pressure for a 2" Single Braid Hose as per Table I is 31 bar. The correction factor at 300°C is 0.61.

Hence the working pressure permissible is 31 x 0.61 = 18,91 bar. This is higher than the required pressure i.e. 18 bar, hence Single Braided Hose is recommended.

321 STAINLESS STEEL TUBE WITH SINGLE BRAID 304 STAINLESS STEEL

AUTOMOTIVE EXHAUST CONNECTORS

APPLICATIONS

- *Refineries*
- *Smelters/Furnances*
- *Power Plants*
- *Automotive Industry*
- *Steel Plants*
- *Paper Plants*
- *Chemical Industry*
- *Pharmaceutical Industry*
- *Air Conditioning and Refrigiration*
- *Vibration Absorption*
- *Fuel Dispensing Pumps*
- *Cargo Hoses for Ship Loading/Unloading*
- *Ports and Ship Yards*
- *Railways*
- *Vacuum Systems*
- *Steam, Hot Water, Pneumatic Services*
- *Lubrication Systems*
- *Fertilizer Industry*
- *Boilers*
- *Piping*
- *Areo Space*
- *Defence Industry*
- *Tank Terminals*
- *Nuclear Instalations*

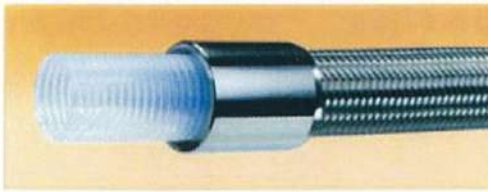
Convoluted PTFE Hoses

Design & Purpose

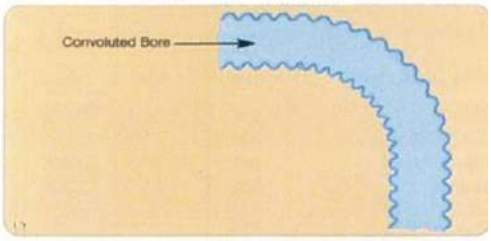
Hyperline FX is unlike any other PTFE hose product currently available.

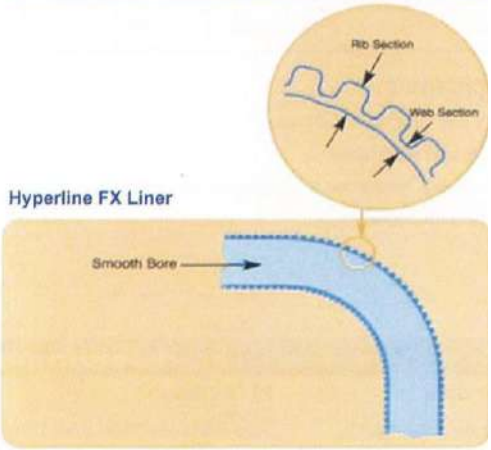
The PTFE liner tube is smooth bore on the inside but convoluted on the outside, to combine the ease of assembly and high flow rates of a smooth bore hose with the flexibility and kink resistance of a convoluted hose in one product.

Hyperline FX is designed to be used in place of Smoothbore Hose when improved flexibility is required, and to replace Convoluted Hose when improved flow characteristics or easier assembly is required.



Conventional Convoluted PTFE Liner





Hyperline FX Liner

Specifications for Hyperline FX, SS or FX, AS, SS Only (for Hyperline FX, AM and FX, AS, AM, apply the factors shown in Red).

PART No. (Cancel -02, add 55-01)	Nominal Hose Size (Same)	Hose ID (Same)*		Tube Only Ouside Diameter (Same)		SS Braid Outside Diameter (Same)		Min. Bend Radius (x 2.0)		Max. Working Pressure (x 0.7)		Burst Pressure Same)	
	inch	inch	mm	inch	mm	inch	mm	inch	mm	psi	Bar	psi	Bar
92-100-04-01-02	¼	0,270	6,8	0,354	9,0	0,378	9,6	¾	19	1 300	88	8 400	580
92-100-06-01-02	⅜	0,394	10,0	0,492	12,5	0,534	13,5	1	25	1 200	80	7 500	520
92-100-08-01-02	½	0.,536	13,6	0,640	16,3	0,690	17,5	1¼	32	900	60	5 500	380
92-100-10-01-02	⅝	0,658	16,7	0,787	20,0	0,843	21,0	2	50	750	50	5 200	360
92-100-12-01-02	¾	0,780	19,8	0,913	23,2	0,948	24,1	2⅜	60	625	42	5 000	350
92-100-16-01-02	1	1,039	26,4	0,193	30,3	1,250	31,3	2⅞	73	580	40	3 800	260

*** For As Grades, use 92-110- in place of 92-100-**

Type: T1 PTFE HOSES (Smooth Bore)

T1	PTFE HOSE (Smooth Bore)
Inner Core:	PTFE (Teflon)
Pressure Support:	One Stainless Steel Wire Braided
Outer Cover:	None
Working Temperature:	-70°C up to +260°C

Hose Part No.		T1-02PVC	T1-02	T1-03	T1-04	T1-05	T1-06	T1-08	T1-10	T1-12	T1-16
Inside Diameter	inch	1/8	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
	mm	2,0	2,0	4,7	6,7	8,5	9,6	13,6	16,0	19,0	25,4
Outside Diameter	mm	4,95	4,95	7,65	9,3	11,15	11,75	16,35	18,35	21,65	28,15
Maximum Working Pressure	psi	6 500	6 500	3 300	3 000	2 600	2,600	2 000	1 600	1 400	1 160
	bar	450	450	230	205	180	180	140	110	95	80
Minimum Burst Pressure	psi	19 500	19 500	12 180	11 745	10 005	8 265	6 525	4 785	3 480	2 393
	bar	1 350	1 350	840	810	690	570	450	330	240	165
Minimum Bend Radius	mm	13	13	45	60	70	80	130	163	180	230
Weight	g/m	45	45	78	110	136	124	210	255	315	430

PROPERTIES

- *UV and Ozone resistance*
- *Diffusion resistance*
- *Excellent resistance to chemicals and solvents*
- *Aging resistance*

APPLICATION

- *Suitable for hot water*
- *Suitable for steam*
- *Unlimited against all chemicals, acids and caustic solutions*

1AWTE	ULTRA HIGH PRESSURE PTFE
Inner Core:	PTFE (Teflon) Smooth Bore
Pressure Support:	Aramid Fibre + High Tensile Steel Wire
Outer Cover:	Polurethane (PUR)
Working Temperature:	-40°C up to +100°C
Colour:	Black

Hose Part No.		1AWTE-08	1AWTE-12	1AWTE-16
		K	K	K
Inside Diameter	inch mm	½ 12,7	¾ 19,0	1 25,4
Outside Diameter	mm	20,3	30,3	37,1
Maximum Working Pressure	psi bar	6 500 450	5 000 345	3 500 242
Minimum Burst Pressure	psi bar	26 000 1 800	20 000 1 345	14 000 966
Minimum Bend Radius	mm	203	305	350
Weight	g/m	400	690	890

Properties

- Safety thermoplastic hose to work at higher operating pressure
- Excellent resistance to paints, solvents and chemicals
- Excellent flexibility and flex fatigue
- Extreme abrasion resistance
- Small bend radius
- Low diffusion rate
- Light weight

Application

- High pressure hydraulic
- High Pressure solvent, paint, chemical