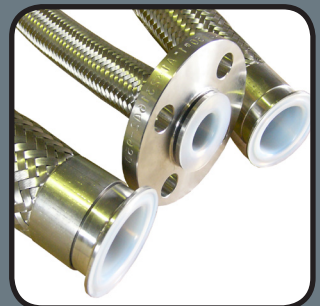




01



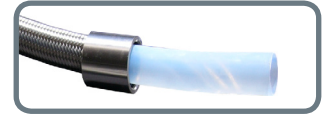
**PTFE HOSE**

**SMOOTH BORE PTFE HOSE**

Size : 1/8" to 1 1/8"

Working Pressure : 5800 to 28300 kPa

Page 9



**HIGH PRESSURE SMOOTH BORE PTFE**

Size : 1/4" to 1 1/2"

Working Pressure : 27600 to 34500 kPa

Page 10



**ULTRA HIGH SMOOTH BORE PRESSURE PTFE**

Size : 1/4" to 1"

Working Pressure : 25000 to 48500 kPa

Page 11

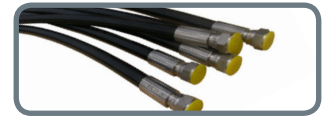


**GAS QUALITY PTFE**

Size : 1/8" to 13/32"

Working Pressure : 31000 to 55200 kPa

Page 12



**TAPE WRAPPED CONVOLUTED PTFE**

Size : 3/8" to 4"

Working Pressure : 1000 to 6900 kPa

Page 13

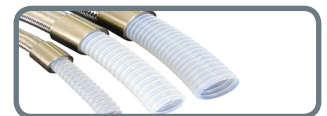


**EASYFLEX CONVOLUTED PTFE**

Size : 3/8" to 2"

Working Pressure : 2300 to 13800 kPa

Page 14



**ENCAPSULATED PTFE**

Size : 1/4" to 6"

Working Pressure : 700 to 1500 kPa

Page 15

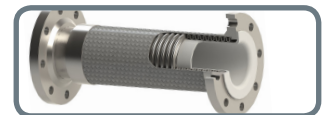


**ENCAPSULATED PTFE SS1 METALIC HOSE**

Size : 1/2" to 6"

Working Pressure : 1200 to 6500 kPa

Page 16

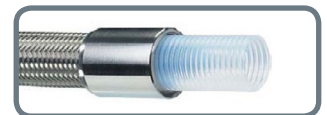


**HOSEFLEX SMOOTHBORE/CONVOLUTED PTFE**

Size : 1/4" to 2"

Working Pressure : 3000 to 8800 kPa

Page 17

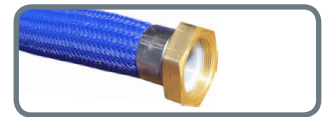


**CONPRO PTFE**

Size : 1/2" to 3"

Working Pressure : 600 to 1000 kPa

Page 18



**CHLORINE TRANSFER PTFE**

Size : 1/2" to 1"

Working Pressure : 2600 to 3400 kPa

Page 19

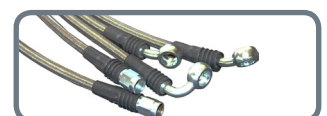


**APPROVED BRAKE LINES**

Size : 1/8"

Working Pressure : 28300 kPa

Page 20

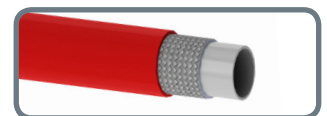


**TEFLEX SILICONE JACKET PTFE**

Size : 1/4" to 1"

Working Pressure : 6200 to 22500 kPa

Page 21

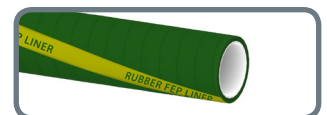


**RUBBER FEP LINER**

Size : 1/2" to 4"

Working Pressure : 1034 to 3447 kPa

Page 22



**PTFE TUBING**

Size : Imperial = Metric = 2mm to 9mm I.D. | 1/16" to 5/8" I.D.

| Working Pressure : 1034 kPa

Page 23





# PTFE HOSE

1.02

## PTFE Hose Design

### Introduction

Polytetrafluoroethylene (PTFE) is an engineered fluoropolymer. Outstanding resistance to chemicals is one of its primary attributes.

A broad temperature range of -54°C to 260°C makes this hose material suitable for the majority of fluids and ambient temperature conditions found in most industries. With all types of hose, increased working temperatures require a reduction in maximum rated working or burst pressure. Whenever excessive flexing, vibration, thermal fluctuations or rapid pressure impulsing is in evidence, further caution should be exercised in reducing the maximum working pressure.

An extremely low coefficient of friction (0.05 to 0.20) provides a non-stick surface. Water absorption of PTFE is negligible, less than 0.01% by ASTM test, and it is FDA-approved for food and pharmaceutical use.

Additionally, PTFE will withstand flexing and vibration without failure from flex fatigue. PTFE is chemically inert. It will not break down or deteriorate in service, and it has an unlimited shelf life because properties do not change with age or exposure to weather. PTFE hose can be used in aerospace, automotive, chemical and industrial applications.

Pacific Hoseflex offers PTFE hose in a variety of configurations. PTFE hose innercore is offered in smooth bore, convoluted, smooth inner with a convoluted outer, conductive (Carbon black added) anti-static and non-conductive virgin. Type 304 or 316 stainless steel wire braid is the standard reinforcement with other specialty materials available.

Pacific Hoseflex can offer alternative hose covers for chafe resistance and silicone-covered hose for heat and fire resistance. Alternate braid materials include Nomex braided convoluted hose and Kevlar braided high-pressure smoothbore hose.

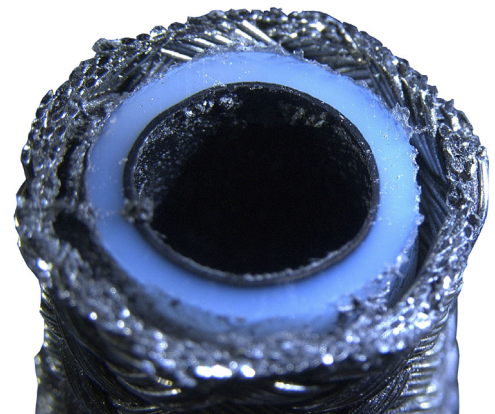
All stated burst pressures are static and are measured on samples at ambient temperature from which averages are recorded to create relevant specifications. Proof or test pressures are usually twice working pressure. All burst pressures are conservatively rated to provide a high margin of safety. At working pressure this falls within the range +2% to -4% (1/8" & 3/16" +0% to -6%). Pacific Hoseflex 100% tests all assemblies.

A damaging electrostatic charge can build up inside the hose when electrically resistive fluids are being transmitted at very high flow rates (particularly if the PTFE hose assemblies are lengthy). To prevent this, special carbon is mixed with the PTFE to reduce its resistivity. The need for earth conductor braids or wires in the bore of the hose is therefore eliminated.

Regarding PTFE tubing, PTFE Hose and Hose Assemblies: Please be advised that we have found no instance of the use of bovine or other animal derived materials used in the manufacture of our PTFE braided products. The subject products are 100% animal origin free. Therefore, there is no concern with regard to the BSE/TSE issue in the PTFE tube and hose as defined in specification EMEA 410.01 Rev.2.

### Temperature Correction Factor Table

WORKING PRESSURE P.S.I.				% CATALOGUE WORKING PRESSURE THAT MAY BE SAFELY USED	
				DEGREES °C	
4000	DO NOT		DO NOT		
3000	USE		USE	-60 TO +100	100
2000	BELOW		ABOVE	+100 TO +150	93
1000	-60°C			+150 TO +200	85
				+200 TO +250	77
			+250 TO +260	70	
DEGREES °C -60 0 +100 +200 +260					



### Conductive Hose Use

There are general principles we have applied to understand if anti-static (AS) is required or not and this very much depends on the medium passing through the hose.

1. For a single phase medium passing through the hose, AS is usually considered necessary where the medium electrical conductivity is less than 10,000 pS/m (pico Siemens per meter). Note electrical conductivity is not always known and electrical conductivity varies with temperature.
2. For a two (or more) phase medium (e.g. a mixture of gas and liquid (such as wet steam), solid particles and liquid or solid particles and gas) AS IS ALWAYS REQUIRED.
3. Pure clean gases should not require AS.
4. If there is any doubt always use AS. (Often customers do not know the electrical conductivity of the medium passing through the hose)

### STATEMENT ON RECOMMENDED FLOW RATES (CONDUCTIVE OR NON-CONDUCTIVE HOSE)

Limiting flow velocities in hoses often relates to electrostatic charging/discharging issues. There are standards for chemical plant equipment (e.g. IEC 60069-32-1) which recommend flow velocities should be less than 7 m/s for low conductivity fluids e.g. fluids which would generate potentially damaging electrostatic charges. Cavitation is likely to be related to this in that a two phase flow would be formed (e.g. gas bubbles in a liquid) and would generate high levels of electrostatic charge. The whole area of electrostatic charging is complex in that a low conductivity fluid can become electrostatically charged as it flows through a pipe or hose.

At the same time the pipe or hose also becomes charged (with the opposite polarity of charge to that in the fluid). As far as hoses go we can supply an AS hose to take care of any charge which tries to build up on the inner surface of the liner (e.g. giving any charge a path to earth) and prevent electrostatic discharges taking place through the hose wall. However normally this does not remove much electrostatic charge from the fluid passing through. Designers of chemical plants are aware of low conductivity fluids becoming charged and are supposed to take this into account when the plant is designed.

As far as hoses are concerned we should recommend an AS hose when we are aware the application needs one e.g. a low conductivity fluid or two phase flow is going to pass through. This will depend on information we obtain from the customer – if they can't supply enough information to make a decision between a natural PTFE liner or AS liner then the default should be to offer an AS liner. Under these circumstances there should be no need to limit the flow velocity in our hoses.



Hose construction determines the 'hoop' strength or the relative ability of the hose to resist collapse. Generally, smaller IDs, thicker walls, external reinforcement such as wire wrap or covers and bonding together the hose layers serve to increase hoop strength. As the temperature of a hose increases, the hoop strength typically decreases because the hose material softens.

As a hose approaches its static bend radius limit, hoop strength can be adversely affected because the hose profile will go from round to oval. If combinations of these factors exist (i.e. large ID, thin wall, high temperature, extreme bending), hoop strength is reduced further.

PTFE hose is a relatively thin walled product and is therefore subject to vacuum collapse if not properly specified and protected. With single braided smooth bore hose, the unbounded metal braid (the pressure handling element of the hose) is of limited value in a vacuum application, especially as temperature increases.

The addition of internal or external springs or bonded covers is the best way to overcome potential vacuum collapse. Certain styles and smaller sizes, smooth bore hoses are rated to 28 Hg at ambient temperature and within specified bend radius.

When vacuum is involved in an application, always determine the expected range of temperature and the potential bending conditions before specifying a particular hose. A common mistake to be avoided involves the use of a transfer hose connected to an 'upstream' valve. Since the hose assembly is open ended, the vacuum that is created when the valve is closed can be overlooked.

However as fluid continues to flow downstream, the vacuum created can often exceed 28 Hg, causing even a 'full vacuum' rated hose to collapse. In this case, additional reinforcement is recommended.





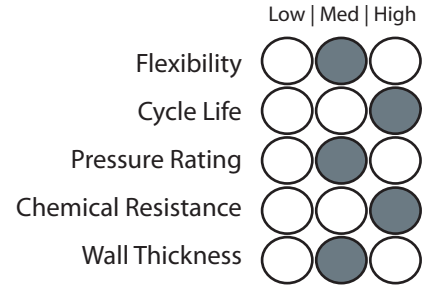
# PTFE HOSE

1.05

PTFE Hose - PTFE

## General Purpose Smoothbore PTFE

**Part No.:** PTFE / PTFE6S  
**Construction:** Smoothbore  
**Profile:** Medium Flexibility / Medium Pressure  
**Tube Available:** PTFE Virgin / Anti-static Inner Tube  
**Braid Available:** 316 / 304 Stainless Steel  
**Size Available:** 1/8" - 1 1/8"  
**Temperature:** -70°C to 260°C



### Construction

**Use:**  
 The inner hose core is manufactured from PTFE. No pigments or additives are incorporated, thus giving the hose liner a translucent appearance free from any contamination.

**Standards:**  
 FDA Approved, Accepted by the U.S. Coast Guard,  
 PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550  
 SAE 100R14



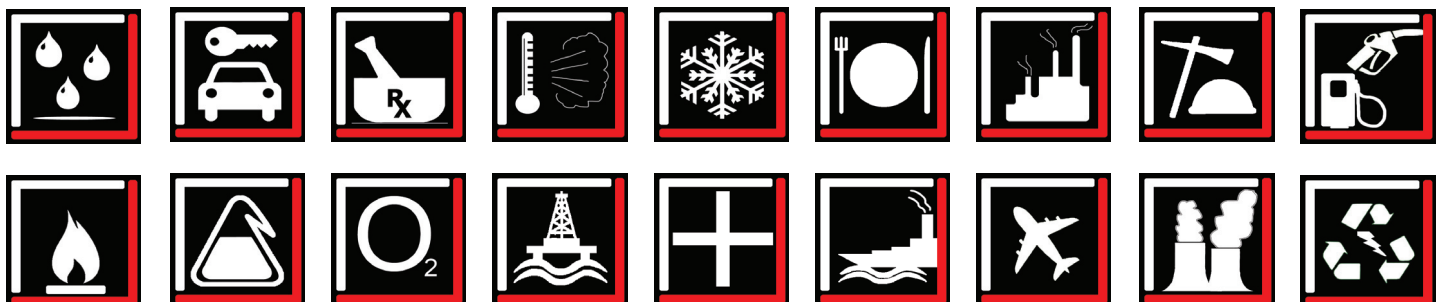
### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter (mm)		Wall Thickness (mm)	Outside Diameter (mm)		Min. Bend Radius (mm)	SAE 100R14 Max. Working Pressure		SAE 100R14 Burst Pressure 4:1		Vacuum (mm hg)	
		Min.	Max.		Min.	Max.		kPa	bar	kPa	bar		
<b>316 Braid</b>	<b>304 Braid</b>	inch	Min.	Max.	mm	Min.	Max.	mm	kPa	bar	kPa	bar	mm hg
PTFE6S-03	PTFE4S-03	1/8"	3.3	3.5	0.76	5.84	6.35	38	20700	207	82800	828	711.20
PTFE6S-04	PTFE4S-04	3/16"	4.64	5.2	0.76	7.32	8.2	51	20700	207	82800	828	711.20
PTFE6S-06	PTFE4S-06	1/4"	6.17	6.73	0.76	8.92	9.47	76	18098	180	72392	723	711.20
PTFE6S-08	PTFE4S-08	5/16"	7.54	8.38	0.76	10.36	11.63	102	17236	172	68944	689	711.20
PTFE6S-10	PTFE4S-10	3/8"	9.27	9.77	0.76	12.2	13.21	127	15513	155	62052	620	711.20
PTFE6S-11	PTFE4S-11	13/32"	10.08	10.85	0.76	13.03	14.19	133	13789	137	55156	551	711.20
PTFE6S-12	PTFE4S-12	1/2"	12.42	13.18	0.76	15.44	16.71	165	10342	103	41368	413	711.20
PTFE6S-15	PTFE4S-15	5/8"	15.36	16.38	0.76	18.74	20.02	197	8618	86	34472	344	711.20
PTFE6S-20	PTFE4S-20	3/4"	18.61	19.38	0.89	21.59	22.86	229	7584	75	30336	303	508.00
PTFE6S-22	PTFE4S-22	7/8"	21.46	23.0	0.89	24.60	26.90	229	6894	68	27576	275	355.59
PTFE6S-25	PTFE4S-25	1"	24.63	26.16	0.89	27.80	29.85	305	6205	62	24820	248	355.59
PTFE6S-28	PTFE4S-28	1 1/8"	27.80	28.34	1.14	31.95	33.50	406	5171	51	20684	206	355.59

\* Please note that Hoseflex PTFE HOSE meets and exceeds the stated working and burst pressure (4:1) values of the SAE 100R14 specifications.  
 \* Please note all pressures stated are static

### Applications



PTFE HOSE



# PTFE HOSE

1.06

PTFE Hose - T1700 / T2000

## High Pressure Smoothbore PTFE

**Part No.:** T1700 / T2000

**Construction:** Smoothbore

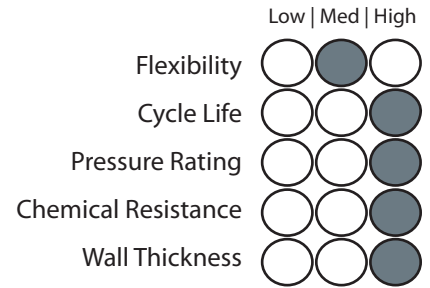
**Profile:** Low Flexibility / High Pressure

**Tube Available:** PTFE Anti-static Inner Tube

**Braid Available:** 304 / 316 Stainless Steel

**Size Available:** 1/4" - 1 1/2"

**Temperature:** -70°C to 260°C



### Construction

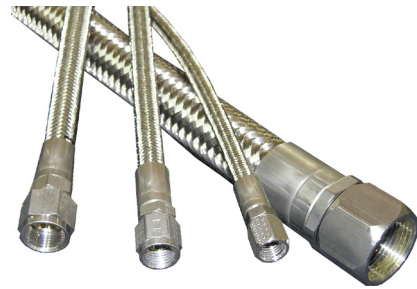
**Use:**

T1700 is one of the highest pressure PTFE hose in the market. It is post sintered for the lowest effusion levels for industrial gas applications.

T2000 is one of the highest pressure PTFE hose in the market. It is non-post sintered and is more suited for general applications where particularly searching gases are not conveyed. Hydraulic and fluid transfer applications are best suited.

**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550



### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter	Outside Diameter	Min. Bend Radius	Max. Working Pressure		Min. Burst Pressure		
					inch	mm	mm	mm	kPa
T1700-06	T2000-06	1/4"	5.63	9.52	38.10	34500	345	110400	1104
T1700-10	T2000-10	3/8"	7.82	12.01	63.50	34500	345	110400	1104
T1700-12	T2000-12	1/2"	10.18	15.24	76.66	34500	345	110400	1104
T1700-15	T2000-15	5/8"	12.57	18.03	83.82	34500	345	110400	1104
T1700-20	T2000-20	3/4"	15.67	24.64	101.60	34500	345	110400	1104
T1700-25	T2000-25	1"	22.02	31.75	127.00	34500	345	110400	1104
-	T2000-32	1 1/4"	28.58	40.64	304.80	27600	276	110400	1104
-	T2000-38	1 1/2"	34.93	48.77	360	27600	276	82700	827

### Applications





# PTFE HOSE

1.07

PTFE Hose - UHP-PTFE

## Ultra High Pressure Smoothbore PTFE

**Part No.:** PTFE-UHP

**Construction:** Smoothbore

**Profile:** High Flexibility / High Pressure

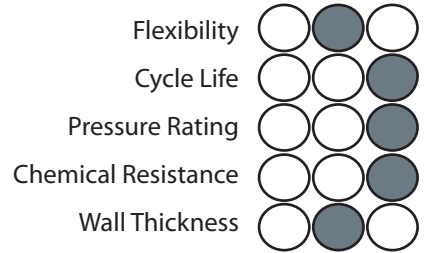
**Tube Available:** PTFE Virgin / Anti-static Inner Tube

**Cover:** 2 Aramid braids and 1 high tensile 304 maypole wound Stainless steel braid

**Size Available:** 1/4" - 1"

**Temperature:** -60°C +260°C

Low | Med | High



### Construction

**Use:**

Ultra high pressure smoothbore PTFE is highest pressure hose and the lightest weight PTFE Hose on the market. Performing well above its weight due to its excellent routability, bend radius and reduced OD. Used for High pressure gas or fluid applications.

**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550 ISO 12086

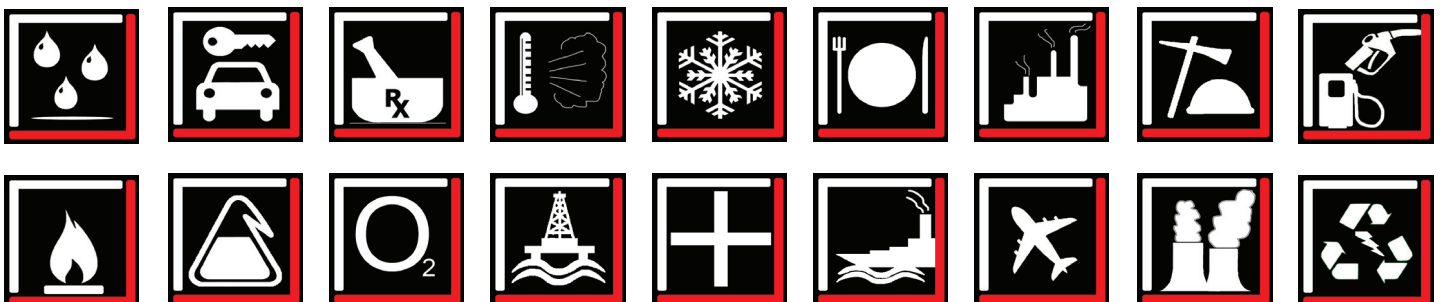


### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter	Outside Diameter	Min. Bend Radius	Working Pressure		Burst Pressure	
	inch	mm	mm	mm	kPa	bar	kPa	bar
PTFE-UHP-06	1/4"	6.20	12.30	38	48500	485	194000	1940
PTFE-UHP-08	5/16"	8.10	14.20	47	45000	450	180000	1800
PTFE-UHP-10	3/8"	9.50	16.00	64	43000	430	175000	1750
PTFE-UHP-12	1/2"	12.20	19.00	74	42500	425	170000	1700
PTFE-UHP-15	5/8"	15.10	22.00	90	36000	360	145000	1450
PTFE-UHP-20	3/4"	20.00	27.50	180	27500	275	110000	1100
PTFE-UHP-25	1"	23.00	31.80	200	25000	250	100000	1000

### Applications



PTFE HOSE





# PTFE HOSE

1.08

PTFE Hose - 6304 / 6307

## Gas Quality PTFE

**Part No.:** 6304 / 6307

**Construction:** Smoothbore

**Profile:** High Flexibility / High Pressure

**Tube Available:** PTFE Virgin / Anti-static Inner Tube

**Cover:** Black Perforated Thermoplastic

**Size Available:** 1/4" - 13/32"

**Temperature:** -70°C +260°C

Low | Med | High

Flexibility

Cycle Life

Pressure Rating

Chemical Resistance

Wall Thickness

### Construction

**Use:**

High performance gas hose specially processed to minimise permeation applications. Aerosol, gas bottle, dehydration and breathing lines.



**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550

### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter (mm)		Wall Thickness (mm)	Outside Diameter (mm)		Min. Bend Radius (mm)	Standard Max. Working Pressure		Min. Burst Pressure	
		Min.	Max.		Min.	Max.		kPa	bar	kPa	bar
6304	1/4"	6.35	6.86	1.02	9.65	10.67	76.2	55200	552	165500	1655
6307	13/32"	10.03	10.54	1.02	13.84	14.86	133	31000	310	124000	1240

### Applications



## Tape Wrapped PTFE

**Part No.:** CTFB / CTFBHV

**Construction:** Tape Wrapped helical convoluted

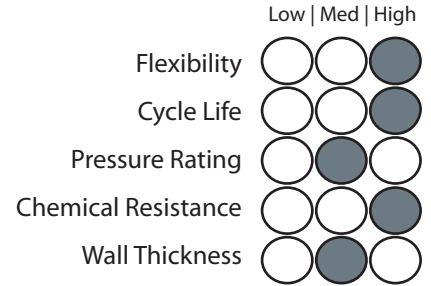
**Profile:** High Flexibility / Medium Pressure

**Tube Available:** PTFE Virgin / Anti-static Inner Tube

**Braid Available:** 304 / 316 Stainless Steel

**Size Available:** 3/8" - 4"

**Temperature:** -54°C to 200°C



### Construction

**Use:**

Chemical transfers, food handling, and various processing applications, from pure water, hazardous waste, thermal cycling in laundries and steam. Not recommended for hot and cold cycling and gas applications.

**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550



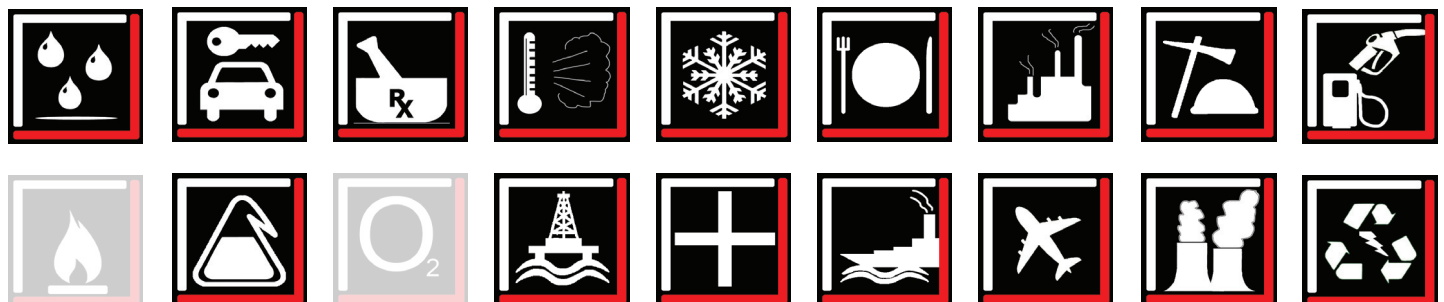
### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter	Outside Diameter	Min. Bend Radius	Max. Working Pressure		Min. Burst Pressure		Vacuum
	inch	mm	mm	mm	kPa	bar	kPa	bar	mm hg
CTFB-10	3/8"	9.53	15.62	25.40	6900	69	27600	276	711.19
CTFB-12	1/2"	12.70	19.93	38	8600	86	34500	345	711.19
CTFB-15	5/8"	16.00	23.03	50	9600	96	38600	386	711.19
CTFB-20	3/4"	19.05	26.67	63	7600	76	30300	303	711.19
CTFB-25	1"	25.40	32.25	76	6000	60	27600	276	634.99
CTFB-32	1 1/4"	31.75	39.88	88.90	6000	60	27600	276	507.99
CTFB-38	1 1/2"	38.10	45.97	114	5200	52	20700	207	304.79
CTFB-50	2"	50.80	58.93	133	3400	34	13500	135	126.99

High Vacuum Tape Wrapped Convoluted Hose ( External Spring )									
CTFBHV-38	1 1/2"	38.10	46.99	190	5200	52	20700	207	711.19
CTFBHV-50	2"	50.80	61.47	254	3400	34	13800	138	711.19
CTFBHV-75	3"	76.20	93.47	381	1700	17	6900	69	711.19
CTFBHV-100	4"	101.60	123.19	610	1000	10	4100	41	711.19

### Applications





# PTFE HOSE

1.10

## PTFE Hose - ECTB

### Easyflex PTFE

**Part No.:** ECTB6S / ECTB4S

**Construction:** Convoluted

**Profile:** High Flexibility / Medium Pressure

**Tube Available:** PTFE Virgin / Anti-static Inner Tube

**Braid Available:** 304 / 316 Stainless Steel

**Size Available:** 3/8" - 2"

**Temperature:** -70°C to 260°C

	Low	Med	High
Flexibility	○	○	●
Cycle Life	○	○	●
Pressure Rating	○	●	○
Chemical Resistance	○	○	●
Wall Thickness	○	○	●

### Construction

**Use:**

General purpose convoluted PTFE hose, convolutions self cleaning spiral construction. Applications include food transfer, chemical dosing, oil, hydraulics and water treatment.



**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550

### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number		Size	Internal Diameter (mm)		Wall Thickness	Outside Diameter (mm)		Min. Bend Radius	Standard Max. Working Pressure		Min. Burst Pressure	
316 Braid	304 Braid	inch	Min.	Max.	mm	Min.	Max.	mm	kPa	bar	kPa	bar
ECTB6S-10	ECTB4S-10	3/8"	9.14	9.91	0.76	14.73	15.75	20.30	13800	138	41400	414
ECTB6S-12	ECTB4S-12	1/2"	12.45	13.21	0.89	18.29	19.30	25.40	10300	103	31000	310
ECTB6S-15	ECTB4S-15	5/8"	15.37	16.38	0.89	21.59	22.61	50.80	8300	83	24800	248
ECTB6S-20	ECTB4S-20	3/4"	18.54	19.56	0.89	24.00	25.27	63.50	6900	69	20700	207
ECTB6S-22	ECTB4S-22	7/8"	21.84	22.86	0.89	27.94	29.46	76.20	5700	57	17200	172
ECTB6S-25	ECTB4S-25	1"	24.89	26.16	1.02	32.13	33.66	88.90	4600	46	13800	138
ECTB6S-32	ECTB4S-32	1 1/4"	31.00	33.00	1.02	39.00	42.00	127.00	3400	34	10300	103
ECTB6S-38	ECTB4S-38	1 1/2"	37.50	40.50	1.02	46.99	49.20	152.40	3000	30	9000	90
ECTB6S-50	ECTB4S-50	2"	48.00	52.00	1.02	58.67	59.70	190.50	2300	23	6900	69

### Applications





# PTFE HOSE

1.11

## PTFE Hose - SCT

### Encapsulated PTFE

**Part No.:** SCTB

**Construction:** Convoluted

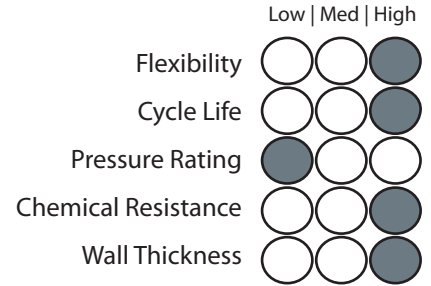
**Profile:** High Flexibility / Low Pressure

**Tube Available:** PTFE Virgin / Anti-static Inner Tube

**Braid Available:** 304 / 316 Stainless Steel

**Size Available:** 1/4" - 6"

**Temperature:** -70°C to 260°C



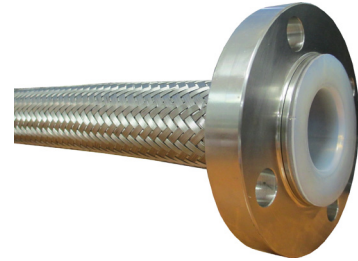
### Construction

**Use:**

The PTFE spiral Liner is extruded within the hose and encapsulated over the flange or fitting, creating a total hygienic seal. The most hygienic PTFE on the market. Approved for food, chemical, cosmetic and pharmaceutical applications.

**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550



### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter (mm)		Wall Thickness	Outside Diameter (mm)		Min. Bend Radius	Max. Working Pressure		Min. Burst Pressure		Vacuum
		Min.	Max.		Min.	Max.		kPa	bar	kPa	bar	
SCTB-06	1/4"	5.5	6.9	0.76	11.4	13.3	25	1500	15	4500	45	744
SCTB-10	3/8"	8.5	10.5	0.76	14.7	16.5	25	1500	15	4500	45	744
SCTB-12	1/2"	11.6	13.6	0.89	17.9	20.0	25	1500	15	4500	45	887
SCTB-15	5/8"	15.1	16.4	0.89	24.7	25.8	35	1500	15	4500	45	887
SCTB-20	3/4"	149.5	20.5	1.00	28.6	31.4	55	1500	15	4500	45	887
SCTB-25	1"	25.4	25.5	1.10	34.2	38.2	85	1500	15	4500	45	887
SCTB-32	1 1/4"	34.5	32.5	1.15	41.9	46.1	100	1500	15	4500	45	887
SCTB-38	1 1/2"	36.5	37.5	1.45	47.2	49.9	120	1500	15	4500	45	887
SCTB-43	1 3/4"	44.5	45.5	1.45	55.8	61.4	135	1500	15	4500	45	887
SCTB-50	2"	49.5	50.5	1.50	60.5	66.7	165	1500	15	4500	45	887
SCTB-65	2 1/2"	62.5	63.5	1.60	80.9	89.1	230	1000	10	3000	30	887
SCTB-80	3"	73.5	74.5	1.60	90.4	99.6	260	1000	10	3000	30	887
SCTB-100	4"	94.5	99.5	1.82	121.1	127.5	400	1000	10	3000	30	887
SCTB-150	6"	148	154	2.5	176	188	520	500	5	1500	15	554

### Applications





# PTFE HOSE

1.12

## PTFE Hose - SS1 Encapsulated

### Encapsulated PTFE SS1 Metallic Hose

**Part No.:** SS1SCT

**Construction:** Smoothbore PTFE / Convuluted Metallic Hose

**Profile:** Low Flexibility / Low Pressure

**Tube Available:** PTFE Virgin / Anti-static Inner Tube

**Braid Available:** 304 / 316 Stainless Steel

**Size Available:** 1/2" - 6"

**Temperature:** -70°C to 260°C

Low | Med | High

Flexibility

Cycle Life

Pressure Rating

Chemical Resistance

Wall Thickness

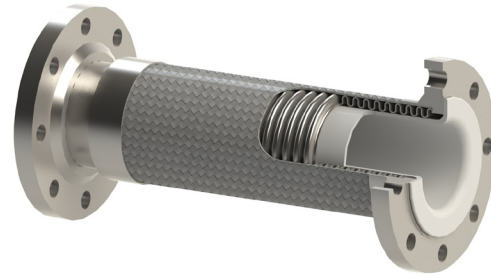
#### Construction

##### Use:

The PTFE Smoothbore Liner is extruded within the metallic hose assembly and encapsulated over the flange or fitting, creating a total hygienic seal. The most hygienic PTFE on the market. Approved for food, chemical, cosmetic and pharmaceutical applications.

##### Standards:

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550

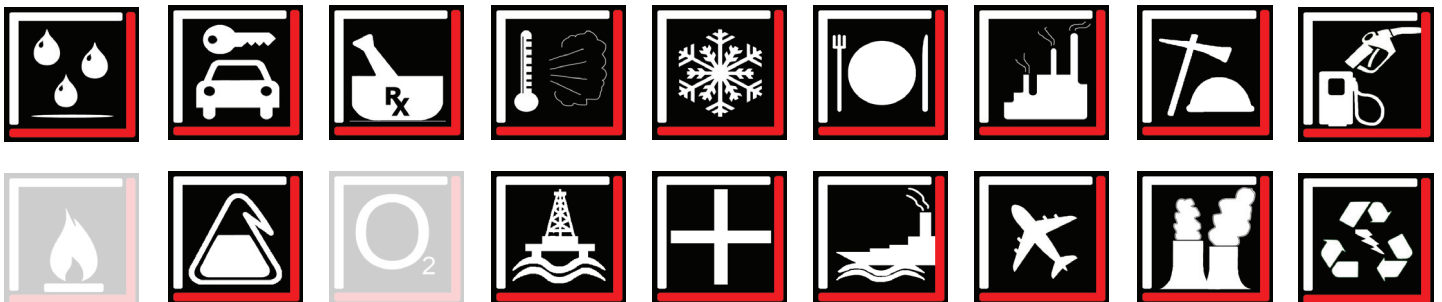


#### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size inch	Outside Diameter mm	Min. Bend Radius	Working Pressure		Burst Pressure	
				kPa	bar	kPa	bar
SS1SCT-12	1/2"	18.00	LIMITED FLEXIBILITY	6500	300	30000	300
SS1SCT-20	3/4"	28.00		5000	200	20000	200
SS1SCT-25	1"	33.70		4400	176	17600	176
SS1SCT-32	1 1/4"	42.60		3500	140	14000	140
SS1SCT-40	1 1/2"	50.90		2800	112	11200	112
SS1SCT-50	2"	61.70		2000	80	8000	80
SS1SCT-65	2 1/2"	85.30		1800	72	7200	72
SS1SCT-80	3"	100.30		1800	72	7200	72
SS1SCT-100	4"	126.30		1600	64	6400	64
SS1SCT-125	5"	155.30		1400	14	5600	56
SS1SCT-150	6"	180.30		1200	12	4800	48

#### Applications





# PTFE HOSE

1.13

## PTFE Hose - Hoseflex Smoothbore /Convoluted

### Hoseflex Smoothbore / Convoluted

**Part No.:** HSC

**Construction:** Smoothbore inner with Convoluted on the outer

**Profile:** High Flexibility / Medium Pressure

**Tube Available:** PTFE Virgin / Anti-static Inner Tube / PFA

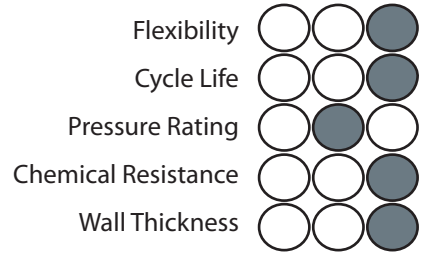
**Braid Available:** 304 / 316 Stainless Steel

**Size Available:** 1/4" - 2"

**Temperature:** -70°C to 260°C

**Vacuum Resistance:** Full Vacuum up to 130°C

Low | Med | High



### Construction

**Use:**

PTFE liner tube is smoothbore 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. Approved for food and chemical transfer applications.

**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550

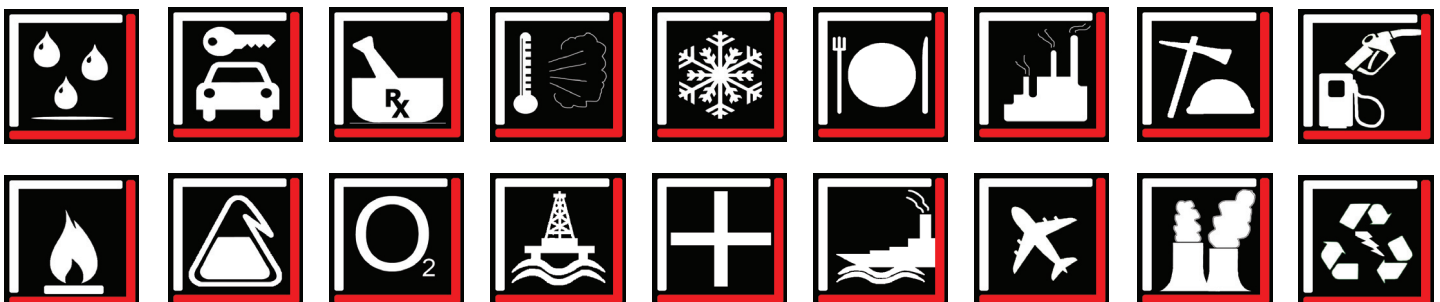


### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter	Wall Thickness	Outside Diameter (mm)		Min. Bend Radius	Standard Max. Working Pressure		Min. Burst Pressure	
				Tube	Braid		kPa	bar	kPa	bar
HSC-06	1/4"	6.8	1.8	8.6	9.6	19	8800	88	35000	350
HSC-10	3/8"	10.0	2.5	12.5	13.5	25	8000	80	32000	320
HSC-12	1/2"	13.6	3.2	16.4	17.5	32	6000	60	24000	240
HSC-15	5/8"	16.7	3.3	20.0	21.4	50	5000	50	20000	200
HSC-20	3/4"	19.8	4.0	23.8	25.1	60	4200	42	17000	170
HSC-25	1"	26.4	3.6	30.0	31.3	73	4000	40	16000	160
HSC-32	1 1/4"	31.75	5.55	37.3	39.5	100	4500	45	18000	180
HSC-38	1 1/2"	38.1	6.9	45.0	47.0	140	4000	40	16000	160
HFSC-50	2"	50.8	8.3	59.1	61.0	200	3000	30	12000	120

### Applications





# PTFE HOSE

1.14

## PTFE Hose - CONPRO

### Conpro PTFE

**Part No.:** CONPRO

**Construction:** Convoluted

**Profile:** High Flexibility / Low Pressure

**Tube Available:** PTFE Virgin / Anti-static Inner Tube

**Braid Available:** Polypropylene

**Size Available:** 1/2" - 3"

**Temperature:** -70°C to 260°C

Low | Med | High

Flexibility

Cycle Life

Pressure Rating

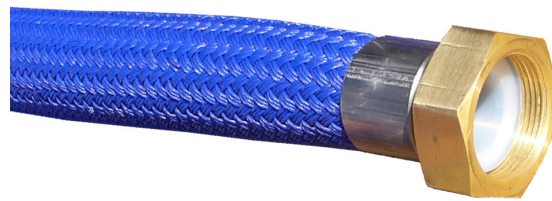
Chemical Resistance

Wall Thickness

### Construction

**Use:**

High corrosive environment. Conpro is more suited to use in more arduous applications throughout the process plant industry. Polypropylene braid produces a low electrically conductive assembly.



**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550

### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter	Wall Thickness	Outside Diameter (mm)		Min. Bend Radius	Standard Max. Working Pressure		Min. Burst Pressure	
				Tube	Braid		kPa	bar	kPa	bar
CONPRO-12	1/2"	11.6	0.89	13.38	21.4	50	1000	10	4000	40
CONPRO-15	5/8"	15.1	0.89	16.88	26.3	65	1000	10	4000	40
CONPRO-20	3/4"	19.5	1	21.5	31.1	55	1000	10	4000	40
CONPRO-25	1"	24.5	1.1	26.7	36.7	85	1000	10	4000	40
CONPRO-32	1 1/4"	31.5	1.15	33.80	44.4	100	1000	10	4000	40
CONPRO-40	1 1/2"	36.5	1.45	39.4	49.7	120	1000	10	4000	40
CONPRO-45	1 3/4"	44.5	1.45	47.40	58.3	135	1000	10	4000	40
CONPRO-50	2"	49.5	1.5	52.5	62.5	165	1000	10	4000	40
CONPRO-65	2 1/2"	62.5	1.6	65.7	83.4	230	700	7	4000	40
CONPRO-80	3"	73.5	1.6	76.7	92.9	260	600	6	4000	40

### Applications





# PTFE HOSE

1.15

## PTFE Hose - PCTH

### Chlorine Transfer PTFE

**Part No.:** PCTH

**Construction:** Convoluted

**Profile:** High Flexibility / Medium Pressure

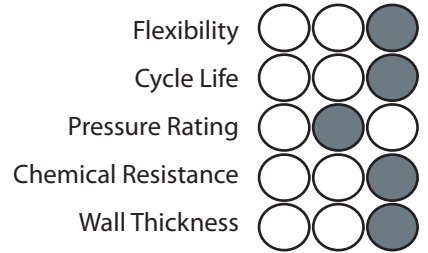
**Tube Available:** PTFE Virgin Inner Tube with an intergal fibreglass cover

**Braid Available:** Two layers of Kynar reinforcement braid

**Size Available:** 1/2" - 1"

**Temperature:** -70°C to 260°C

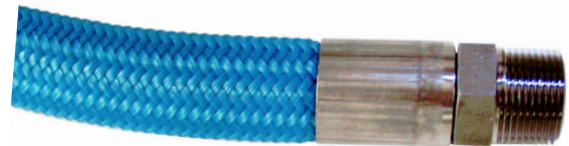
Low | Med | High



### Construction

**Use:**

It's the only hose that can adequately transfer chlorine in a safe manner. Exclusive design resists rugged handling and collapse.



**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550 Chlorine Institute Pamphlet 6. Appendix A

### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter	Outside Diameter (mm)	Min. Bend Radius	Standard Max. Working Pressure		Min. Burst Pressure		
					inch	mm	Braid	mm	kPa
PCTH-12	1/2"	13.72	23.37	38		3400	34	13000	138
PCTH-25	1"	26.54	35.20	152		2600	26	12900	129

**Alternative products:**

Refer to Monel Metallic Hose - Page 42

### Applications



1  
2  
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PTFE HOSE





# PTFE HOSE

1.16

PTFE Hose - PTFE PVC

## Approved Brake Lines PTFE

**Part No.:** PTFE-03

**Construction:** Smoothbore

**Profile:** High Flexibility / High Pressure

**Tube Available:** PTFE Virgin Inner Tube

**Braid Available:** 304 / 316 Stainless Steel

**Cover:** PVC

**Size Available:** 1/8"

**Temperature:** -70°C to 260°C

Low | Med | High

Flexibility

Cycle Life

Pressure Rating

Chemical Resistance

Wall Thickness

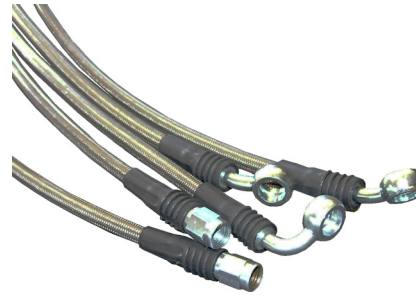
### Construction

**Use:**

The PTFE inner liner and stainless steel braid eliminates hose expansion common to original factory rubber brake lines which gives a better braking performance. High performance auto sport braking systems.

**Standards:**

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550 Approved to DOT (Department of Transportation)



### Specifications

Temperature Correction Factor

-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Colour	Size	Internal Diameter (mm)		Wall Thickness (mm)	Outside Diameter (mm)		Min. Bend Radius (mm)	Standard Max. Working Pressure		Min. Burst Pressure	
			Min.	Max.		Min.	Max.		kPa	bar	kPa	bar
PTFE-03PVCBK	BLACK	1/8"	3.3	3.5	0.76	5.84	6.35	38	28300	283	82800	828
PTFE-03PVCBU	BLUE	1/8"	3.3	3.5	0.76	5.84	6.35	38	28300	283	82800	828
PTFE-03PVCC	PVC	1/8"	3.3	3.5	0.76	5.84	6.35	38	28300	283	82800	828
PTFE-03PVCO	ORANGE	1/8"	3.3	3.5	0.76	5.84	6.35	38	28300	283	82800	828
PTFE-03PVCR	RED	1/8"	3.3	3.5	0.76	5.84	6.35	38	28300	283	82800	828
PTFE-03PVCY	YELLOW	1/8"	3.3	3.5	0.76	5.84	6.35	38	28300	283	82800	828

### Applications





# PTFE HOSE

1.17

## PTFE Hose - TEFLEX

### Teflex Silicone Jacket PTFE

**Part No.:** TEFLEX

**Construction:** Smoothbore

**Profile:** High Flexibility / High Pressure

**Tube Available:** PTFE Virgin Inner Tube impregnated fiberglass braid

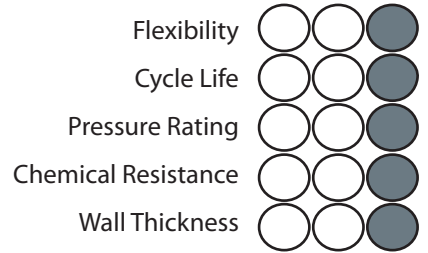
**Braid Available:** 304 / 316 Stainless Steel

**Cover:** Silicone

**Size Available:** 1/4" - 1"

**Temperature:** -70°C +204°C

Low | Med | High



#### Construction

#### Use:

Liquid food and beverage transfer, also suitable for air, water, chemical, oil and automotive applications. Hygienic food grade cover ideal for food & pharmaceutical applications.



#### Standards:

FDA Approved, Accepted by the U.S. Coast Guard, PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550

#### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Size	Internal Diameter	Outside Braid O.D.	Outside Jacket O.D.	Min. Bend Radius (Static)	Standard Max. Working Pressure		Min. Burst Pressure	
	inch	mm	mm	mm	mm	kPa	bar	kPa	bar
TEFLEX-SXX-06	1/4"	6.22	11.81	14.61	44	22500	225	90000	900
TEFLEX-SXX-10	3/8"	9.14	14.86	17.65	70	20000	200	80000	800
TEFLEX-SXX-12	1/2"	12.50	18.21	21.01	108	11000	110	45000	450
TEFLEX-SXX-15	5/8"	15.50	21.94	24.99	140	10000	100	40000	400
TEFLEX-SXX-20	3/4"	18.80	24.74	27.79	178	8800	88	35000	350
TEFLEX-SXX-25*	1"	25.40	33.66	38.74	292	6200	62	25000	250

\* 1" Hose construction is PTFE Liner with double stainless steel Braid

#### Table Key :

**Silicone Jacket Colour (SXX)**

SRD = Red    SBK = Black    SBL = Blue    SWH = White

#### Applications



## Rubber FEP Liner

**Part No.:** RFEP

**Colour:** Green / Yellow Labeling

**Tube Available:** FEP liner Smoothbore

**Cover:** Green EPDM rubber cover, covered and reinforced with multi-layered rubber

**Reinforcement:** Spiral-wound polyester cords and a double helix wire

**Size Available:** 1/2" - 4"

**Temperature:** -40°C +177°C

**Vacuum Resistance:** Full Vacuum

Low | Med | High

Flexibility

Cycle Life

Pressure Rating

Chemical Resistance

Wall Thickness

### Construction

**Use:**

Designed for extended use in hostile environments involving severe chemical, thermal, and mechanical stresses. Does not suffer aging or embrittlement, even with extreme thermal cycling.



**Standards:**

Pharmacopoeia Class VI, USDA, FDA-approved

### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

Part Number	Nominal Dia.		Working Pressure		Min. Bend Radius	Weight Per Mtr
	Inches	O.D (mm)	kPa	bar	mm	kg.
RFEP-12	1/2"	24.63	3447	34.47	36.5	1.19
RFEP-20	3/4"	32.25	3447	34.47	36.5	1.77
RFEP-25	1"	37.59	2757	27.57	76.2	1.87
RFEP-38	1 1/2"	51.81	2413	24.13	114.3	2.95
RFEP-50	2"	64.51	2068	20.68	177.8	3.97
RFEP-65	2 1/2"	77.21	1378	13.78	228.6	5.27
RFEP-75	3"	96.77	1378	13.78	889.0	10.13
RFEP-100	4"	124.20	1034	10.34	1079.5	13.53

Note: Fittings can be Encapsulated

### Applications





# PTFE HOSE

1.19

## PTFE Hose - PTFE Tubing

### PTFE Metric & Imperial Tubing

**Part No.:** PTFEMT / PTFEIT

**Construction:** Smoothbore

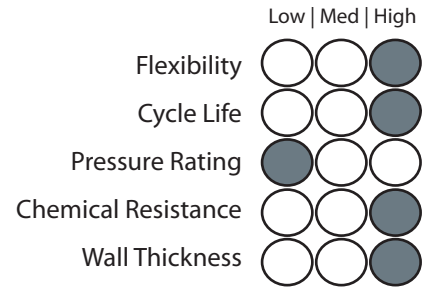
**Profile:** High Flexibility / Low Pressure

**Tube Available:** PTFE Virgin Inner Tube

**Metric Size Available:** 2mm - 28mm I.D. (Larger sizes upon Request)

**Imperial Size Available:** 1/16" - 5/8" I.D. (Larger sizes upon Request)

**Temperature:** -70°C to 260°C



#### Construction

**Use:**

PTFE provides the ultimate in lubricity, high temperature use, chemical resistance, biocompatibility and precision extruded tolerances. Food, Medical and chemical transfer applications.



**Standards:**

FDA Approved

PTFE Perfluorocarbon Resins meets FDA 21 CFR 177.1550

#### Specifications

Temperature Correction Factor													
-60	-40	-20	0	20	50	100	120	150	180	200	220	250	260
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.93	0.93	.85	0.85	0.77	0.77	0.70

METRIC SIZES			
Part Number	O.D. (mm)	I.D. (mm)	Max Pressure (kPa)
PTFEMT-0402	4	2	1034
PTFEMT-0503	5	3	1034
PTFEMT-0604	6	4	1034
PTFEMT-0805	8	5	1034
PTFEMT-0806	8	6	1034
PTFEMT-1008	10	8	1034
PTFEMT-1209	12	9	1034
PTFEMT-1412	14	12	1034
PTFEMT-1614	16	14	1034
PTFEMT-2420	24	20	1034
PTFEMT-3228	32	28	1034

IMPERIAL SIZES				
Part Number	Size O.D. x I.D.	O.D. (mm)	I.D. (mm)	Max Pressure (kPa)
PTFEIT-0201	1/8" x 1/16"	3.175	1.5875	1034
PTFEIT-0302	3/16" x 1/8"	4.7625	3.175	1034
PTFEIT-0403	1/4" x 3/16"	6.35	4.7625	1034
PTFEIT-0504	5/16" x 1/4"	7.9375	6.35	1034
PTFEIT-0604	3/8" x 1/4"	9.525	6.35	1034
PTFEIT-0605	3/8" x 5/16"	9.525	7.9375	1034
PTFEIT-0806	1/2" x 3/8"	12.7	9.525	1034
PTFEIT-1008	5/8" x 1/2"	15.875	12.7	1034
PTFEIT-1210	3/4" x 5/8"	19.05	15.875	1034

#### Applications

