

# STYLE TSV PTFE HOSE STANDARD CONVOLUTED BORE

## *Highly flexible, lightweight, convoluted PTFE hose*

Choose Unisource Style TSV Convoluted PTFE Hose when you require the chemical inert, long-life properties of PTFE, but product flexibility is a prime consideration.

Style TSV combines an inner core of convoluted PTFE, externally reinforced with PTFE-impregnated fiberglass and Series 300 stainless steel wire braid. Style TSV-B hose is formulated using PTFE with carbon black additive near the tube surface. This material provides a continuous conductive path to the metal end fittings, dissipating static electricity build-up. A high pressure rated assembly is complete by attaching special swage type fittings made in a variety of styles.

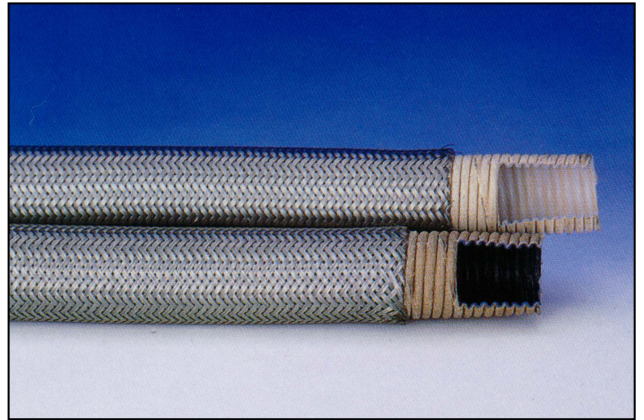
This tape-wrapped, convoluted style hose is used in a variety of applications in chemical plants, food processing and pharmaceutical plants, pulp and paper mills, oil refineries, and particular O.E.M. systems. Select either conductive or non-conductive depending on the application. Some applications require a conductive inner line to dissipate static electrical charges. High resistivity fluids or gases at high velocity cause positive electrical charges to build on the inside of the PTFE liner. If not dissipated to the end of the hose, the charge will build until it arcs through the tube wall to the braid, causing catastrophic hose failure. Specify Style TSV-B with a thin conductive liner on the I.D. for static dissipation when this situation is present. Specify Style TSV-HV for full vacuum applications.

Style TSV hose has a temperature range of -65°F. to 400°F. continuous service. Working pressure ratings range from 500 PSIG (2") to 1000 PSIG (3/8"), depending on size, all with a 4:1 safety factor.

Unisource offers other exterior braid materials such as polyester (TSV-PY), polypropylene (TSV-P), Nomex® (TSV-N), and Kynar® (TSV-K) for special applications. Special exterior jacketing materials available include Hypalon and stainless steel armor.

Style TSV PTFE assemblies can be hydrostatically tested prior to shipment. When specified, Unisource will hydrotest to 1-1/2 times the working pressure of the hose. Unisource also has in-house cleaning facilities for those assemblies requiring sanitary cleaning.

Available fittings are male pipe, JIC female, flanged, Teflon lined flange, and sanitary tri-clamp. Materials are 316 stainless steel and carbon steel.



**Style TSV convoluted tape-wrapped medium pressure PTFE hose.**



8040 NE 33<sup>rd</sup> Drive  
Portland, OR 97211  
1-800-234-2566  
Fax: (503) 287-4818

# STYLE TSV PTFE HOSE STANDARD CONVOLUTED BORE

## PTFE....The Product

**Flexible & Strong.** Combined with metal braid, PTFE hose can perform under high pressure and continuous flexing and vibration conditions. Braided PTFE hose can withstand hundreds of thousands of flex cycles without failure or fatigue.

**Chemically Resistant and Inert.** PTFE hose can handle an almost endless variety of fluids at extremes of pressure and temperature. It is the most universal hose known.

**Wide Ranging Temperature.** Hoses made of PTFE can typically withstand temperatures from -65°F to +400°F (-18°C to +127°C) under most operating conditions. Even 350°F steam/cold water cycling is no match for Teflon.

**Non-Stick, Low Friction.** Almost no substance can adhere to PTFE. This property insures the purity of any fluid when transferred in a PTFE hose. It also allows for repeated reuse or alternate use with different fluids. With a coefficient of friction as low as 0.05, deposits cannot build up and flow rates are high throughout the hose life.

**Resistant To Moisture.** By its nature PTFE lacks affinity to moisture. Absorption is less than 0.01%. In addition, no odor, taste, or color is added to the transfer fluid by PTFE, making it an FDA approved material for food contact.

**Ageless.** Weather, exposure, time...none of these affect the properties of PTFE. PTFE has limitless shelf life, it does not age.

## Technical Specifications

Style TSV - Non-conductive virgin convoluted PTFE with PTFE/fiberglass tape wrap, overbraided with 300 series stainless steel wire.

Style TSV-B - Conductive lined, virgin PTFE with PTFE/fiberglass wrap, overbraided with 300 series stainless steel wire.

### Style TSV and TSV-B

Part No. TSV	Part No. TSV-B	Nom. Hose Size	Avg. O.D. (In.)	Oper Pressure (PSI)	Burst Pressure (PSI)	Bend Radius (In.)	Weight (Lbs./Ft.)	Max Cont. Lghts (Feet)
6TSV	6TSV-B	3/8"	.59	1000	4000	1.00	.12	75
8TSV	8TSV-B	1/2"	.76	1250	5000	1.50	.20	75
10TSV	10TSV-B	5/8"	.91	1400	5600	2.00	.38	50
12TSV	12TSV-B	3/4"	1.07	1100	4400	2.50	.33	50
16TSV	16TSV-B	1"	1.34	1000	4000	3.00	.43	50
20TSV	20TSV-B	1-1/4"	1.57	1000	4000	3.50	.53	50
24TSV	24TSV-B	1-1/2"	1.81	750	3000	4.50	.65	50
32TSV	32TSV-B	2"	2.32	500	2000	5.25	.73	50

Note: Operating pressure ratings above apply to all temperatures up to 400°F.



8040 NE 33<sup>rd</sup> Drive  
Portland, OR 97211  
1-800-234-2566  
Fax: (503) 287-4818