



Versilon™ TS Hose

Stainless Steel Braided Smooth Inner Tube Fluoropolymer Hose

Saint-Gobain Performance Plastics' Versilon TS hose is constructed with a white PTFE smooth inner tube and reinforced with 304 stainless steel braid. TS hose is designed with up to a 33% thicker PTFE inner tube versus competitive hoses. This characteristic enables smooth tube hoses to have superior kink resistance, improved vacuum ratings and higher resistance to damage.

Versilon TS hose is designed with a full size internal diameter to maximize the flow rate, providing greater transfer speed when compared with similar products that only come with a tube size internal diameter. TS hose is engineered to reduce the pressure drop through the fitting area, ensuring a longer service life.

TS hose has low risk of modifying the taste, color and odor of sensitive fluids. It cleans easily with steam, detergent or caustic and it can be autoclaved. It is also non-stick and non-contaminating.

Features and Benefits

- Greater wall thickness of PTFE tube
- Up to 33% thicker than competing products (tube wall .040 minimum)
- Superior kink resistance
- Improved vacuum ratings
- Better damage resistance
- Neutral to taste, color and odor
- Non-sticking, non-contaminating
- Cleans easily via steam, detergent or caustic
- Can be autoclaved
- Full ID sizes
- Greater flow rate per given size
- Less pressure drop through fitting area than hoses with tube size ID

Typical Applications

- Compressed gas transfer
- Compressed gas cylinder filling
- Sanitary fluid transfer
- Steam transfer
- Gas analysis
- Hydraulic lines
- Extrusion presses
- Injectable material and adhesive conveying

Regulatory Compliance

- Compliant with FDA 21CFR 177.1550
- US Pharmacopeia Class VI

TS Hose Specifications

Part Number	Inside Diameter		Outside Diameter		Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius		Vacuum Hg @ 70°F		Weight	
	(in)	(mm)	(in)	(mm)	(psi)	(MPa)	(psi)	(MPa)	(in)	(mm)	(in)	(mm)	(lb/ft)	(kg/m)
1602TS400	1/8	3.2	1/4	6.4	3,000	20.68	14,000	96.53	1.00	25.4	29.9	760	0.05	0.07
1604TS400	1/4	6.4	3/8	9.5	3,000	20.68	12,000	82.74	2.00	50.8	29.9	760	0.08	0.12
1606TS400	3/8	9.5	1/2	12.7	2,500	17.24	10,000	68.95	4.50	114.3	29.9	760	0.12	0.18
1608TS400	1/2	12.7	5/8	15.9	2,000	13.79	8,500	58.61	5.00	127.0	29.9	760	0.15	0.22
1612TS400	3/4	19.1	7/8	22.2	1,200	8.27	4,800	33.09	9.00	228.6	29.9	760	0.27	0.40
1616TS500	1	25.4	1-1/8	28.6	800	5.52	3,500	24.13	12.00	304.8	20.0	508	0.35	0.52
1624TD600	1-1/2	38.1	1-3/4	44.5	900	6.21	3,600	24.82	18.00	457.2	15.0	381	0.79	1.18

! Important:

Burst Pressure ratings at ambient 70°F (21°C). See applicable notes below on vacuum/pressure ratings at temperatures other than ambient.

Working Pressure is given at 70°F; decrease working pressure 1% for every 2°F above 350°F.

Vacuum Rating is given at 70°F; decrease vacuum rating 1% for every 2°F above 350°F. 1-1/2" size (TD) vacuum rating decreases when installed less than 2X minimum bend radius.

Extended Service Life Tip: All 3/4", 1" and 1-1/2" TS/TD assemblies 36" and longer are strongly recommended to use full-length anti-kink casing and/or liner vacuum collapse.

NOTE: Weights and outside diameter dimensions are nominal. Data given is for hose only. End fitting vs. hose pressure limitations must be considered and the lower of the two ratings must be used on assemblies.

Construction

Inner Tube:	White PTFE																
Reinforcement:	304 stainless steel braid																
Temperature Rating:	1-1/2" ID size double-braided for added kink resistance, higher pressure rating; working pressure based on minimum 4:1 safety factor; burst to suggested maximum working pressure																
Minimum Overall Length of Hose Assemblies with Anti-Kink Casing:	-100°F to +450°F (continuous) +500°F (intermittent) -73°C to +232°C (continuous) +260°C (intermittent)																
Average Length:	1/4" size - 18" OAL 3/8" and 1/2" sizes - 24" OAL																
	<table border="1"> <tr> <td>1/8"</td> <td>50'</td> <td>3/4"</td> <td>40'</td> </tr> <tr> <td>1/4"</td> <td>125'</td> <td>1"</td> <td>30'</td> </tr> <tr> <td>3/8"</td> <td>75'</td> <td>1-1/2"</td> <td>30'</td> </tr> <tr> <td>1/2"</td> <td>125'</td> <td></td> <td></td> </tr> </table>	1/8"	50'	3/4"	40'	1/4"	125'	1"	30'	3/8"	75'	1-1/2"	30'	1/2"	125'		
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Fitting Options

Versilon Crimp Style Fittings

- Over 40 styles of stocked crimp-style fittings in a wide range of materials
- Standard: 316L stainless steel (wetted surfaces)

Common Media

- Chemicals
- Steam
- Solvents
- Inks and dyes
- Paint
- Injectable materials
- Plastisols

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