smooth tube







TS

ТВ

industry approvals & compliances

- FDA approved per 21CFR177.1550 (TS only)
- US Pharmacopeia Class VI

common media

 Sanitary transfer Chemicals

304 Stainless Steel High Tensile Strength Braid

- Steam
- Solvents

Smooth Chemfluor® PTFE Fluoropolymer Smooth Inner Tube

- Inks and dyes
- Paint
- Injectable materials
- Plastisols

features & benefits

· Molding/Adhesive conveying

TS/TB Series

applications

· Bottle filling

· Gas analysis

· Hydraulic lines

Extrusion presses

· Steam transfer core

• Greater wall thickness of Chemfluor® PTFE tube

- Up to 33% thicker than most competing products (tube wall .040 minimum)
- Superior kink resistance
- Improved vacuum ratings
- Better damage resistance
- Neutral to taste, color and odor
- Non-stick, non-contaminating
- Cleans easily 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

engineering specifications

average length 1/8" 50' 1/4" 125 3/8" 75' 1/2" 125' 3/4" 40' 30' 1-1/2" 30'

minimum overall length of hose assemblies with anti-kink casing

1/4" size – 18" OAL 3/8" and 1/2" sizes - 24" OAL

temperature rating

- -100°F to +450°F continuous; 500°F intermittent
- -73°C to +232°C continuous; 260°C intermittent

details

TS Series construction

- Inner Tube: White Chemfluor® PTFE
- Reinforcement:
 - 304 stainless steel braid
- 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

TB Series construction

- Inner Tube:
- Black Chemfluor® PTFE
- Electrostatic dissipating conductive version of TS Series
- · Reinforcement:

 - 304 stainless steel braided - 1-1/2" ID size double-braid for added flexibility, higher pressure rating; working pressure based on minimum 4:1 safety factor; burst to suggested maximum working pressure

- - Standard: 316L stainless steel

fittings

- PermaSeal® crimp-style
 - Over 40 styles in a wide range of materials
 - (wetted surfaces)

TS/TB/TD/TDB Series hose specifications

Part Number	Nominal Hose Size	Inside		Outside Diameter		Maximum Working Pressure		Minimum Burst Pressure		Bend Radius		Vacuum Hg @ 70°F		Weight	
	in.	in.	mm	in.	mm	PSI	Mpa	PSI	Мра	in.	mm	in.	mm	lb./ft.	kg/m
2TS	1/8	1/8	3.2	0.25	6.4	3000	20.69	15000	103.45	1.50	38.1	29.9	760	0.05	0.07
4TS/TB	1/4	1/4	6.4	0.38	9.7	3000	20.69	12000	82.76	2.50	63.5	29.9	760	0.08	1/8
6TS/TB	3/8	3/8	9.5	0.52	13.2	2500	17.24	10000	68.97	3.50	88.9	29.9	760	0.12	0.18
8TS/TB	1/2	1/2	12.7	0.66	16.8	2000	13.79	8000	55.17	4.00	101.6	29.9	760	0.15	0.22
12TS/TB	3/4	3/4	19.1	0.88	22.4	1200	8.28	4800	33.10	7.50	190.5	29.9	760	0.22	0.33
16TS/TB	1	1	25.4	1.16	29.5	800	5.52	3200	22.07	12.00	304.8	20	508	0.31	0.46

CRN available for assembly sizes 1/2" to 1"

Important:

Burst pressure ratings at ambient 70°F (21°C). See applicable notes below on vacu-um/pressure ratings at temperatures

other than ambient Working Pressure is given @ 70°F; Decrease working pressure 1% for every 2°F above 350°F.

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

Extended Service Life Tip: All 3/4", 1", and 1-1/2" TS/TB/TD/TDB assemblies 36" and longer are strongly recommended to use full-length anti-kink casing (see Hose Cover Options section, pages 79-80) to help prevent potential kinking and/or liner vacuum collapse.