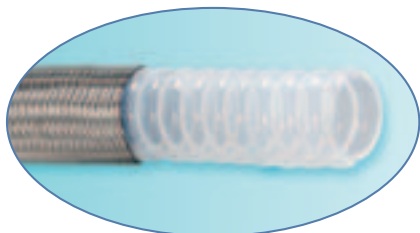


TWOB/TBOB/TWOBHV/TBOBHV Series

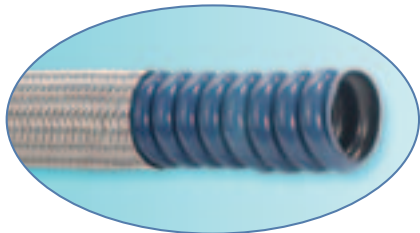
Chemfluor® PTFE Fluoropolymer Helically Convoluted Inner Tube

Stainless Steel Braid • Open Pitch

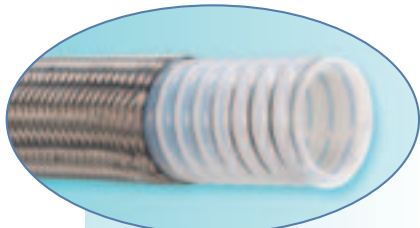
applications	common media	industry approvals & compliances
<ul style="list-style-type: none"> Sanitary transfer Food, flavors and syrups Solvent transfer Drain and sample lines 	<ul style="list-style-type: none"> Base chemicals Corn syrup Hexane (TBOB) Product transfer Caustic solutions 	<ul style="list-style-type: none"> USDA FDA (TWOB only) Pharmacopeia Class VI



TWOB



TBOB



TWOBHV

TWOBHV/TBOBHV Series

- Fully rated vacuum hose
- Recommended for full vacuum applications
- Should always be used for 2-1/2", 3" and 4" I.D. assemblies

features & benefits

- Chemfluor® PTFE inner tube**
- Excellent chemical resistance
 - Compatible with almost all materials
 - Rounded, open-pitch helical convolutions shaped to ensure smooth product flow
 - Non-stick surface, easy to clean (steam, caustics, solvents or other cleaning agents)
 - Assured sterility
 - Easy to flex, yet won't flatten when bent

Chemfluor® black PTFE electrostatic dissipating conductive inner tube

- Co-extrusion design with minute amount of carbon added to inner portion of thick-wall construction
- Processed to prevent chemical leaching or friction contamination
- Chemfluor® PTFE properties are completely maintained

engineering specifications

maximum length	temperature rating
3/8" 100'	<ul style="list-style-type: none"> -100°F to +450°F -73°C to +232°C
1/2" 100'	
3/4" 70'	
1" 65'	
1-1/4" 45'	
1-1/2" 70'	
2" 50'	
3" 30'	
4" 20'	

details

construction

- Inner Tube**
 - TWOB: Chemfluor® white PTFE
 - TBOB: Chemfluor® black PTFE electrostatic dissipating conductive
- Reinforcement:** 316 stainless steel braid
 - Other braid options available:
 - Polypropylene – TWOY/TBOY, see page 19
 - PVDF (Kynar®) – TWOK/TBOK, see page 20

fittings

- PermaSeal® crimp-style
 - Over 40 styles
- Flare-Thru fitting technology available:
 - 150# lap-joint style flanged
 - Female cam and groove
 - Sanitary clamp style
 - 1/2" mini sanitary Flare-Thru available using 3/8" ID open pitch hose
- Fitting details begin on page 31

⚠ Important:

- Hose assemblies may be autoclaved; however, flare faces of Flare-Thru fittings must be clamped down to prevent damage to sealing surface

TWOB/TBOB Series 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.
8TWOB/TBOB	1/2	12.7	3/4	19.1	500	3.45	2,000	13.79	2.00	50.80	29.9	75.95	0.20	0.30
12TWOB/TBOB	3/4	19.1	1-1/8	28.6	425	2.93	1,700	11.72	2.75	69.85	29.9	75.95	0.30	0.45
16TWOB/TBOB	1	25.4	1-1/4	31.8	350	2.41	1,400	9.65	4.00	101.60	29.9	75.95	0.40	0.60
20TWOB/TBOB	1-1/4	31.8	1-5/8	41.3	337	2.32	1,350	9.31	5.50	139.70	29.9	75.95	0.70	1.04
24TWOB/TBOB	1-1/2	38.1	2	50.8	275	1.90	1,100	7.58	7.00	177.80	29.9	75.95	0.75	1.12
32TWOB/TBOB	2	50.8	2-1/2	63.5	250	1.72	1,000	6.90	8.50	215.90	29.9	75.95	1.05	1.56
40TWOB/TBOB	2-1/2	63.5	3-1/8	79.4	212	1.46	850	5.86	13.00	330.20	29.9	75.95	1.35	2.01
48TWOB/TBOB	3	76.2	3-7/8	98.4	175	1.21	700	4.83	14.00	355.60	29.9	75.95	1.75	2.61
64TWOB/TBOB	4	101.6	5	127.0	150	1.03	600	4.14	16.00	406.40	29.9	75.95	2.10	3.13

⚠ Important: *Add HV to indicate HV Series.

⚠ 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 @ 70°F; decrease working pressure 1% for every 2°F above 250°F.

Vacuum Rating is given @ 70°F @ 2X minimum bend radius; decrease vacuum rating 1% for every 2°F above 250°F. Vacuum rating decreases when installed @ less than 2X minimum bend radius. TWOBHV/TBOBHV Series (heavy duty vacuum option) allows full vacuum ratings for 1-1/2", 2" and 2-1/2" sizes up to 350°F; decrease vacuum rating 1% for every 2°F above 350°F. Vacuum rating @ less than 2x minimum bend radius: 1-1/4" = 26" Hg; 1-1/2" = 25" Hg; 2" = 20" Hg; 2-1/2" = 17" Hg; 3" = 20" Hg; 4" = 17" Hg.

Extended Service Life Tip: Flexible Components suggests using full-length anti-kink armor casing or at least 16" to 24" long anti-kink cuffs (see Hose Cover Options, pages 75–76) at each fitting end to help reduce the strain on the crimp collar and fittings in high load installations. Prolonged service at elevated temperatures will reduce total service life.