Flexible Components CTLCT

Anti-Static ChemFluor® PFA Lined EPDM Rubber Hose

Flexible Components anti-static (black) Chemfluor® PFA (fluoropolymer) lined rubber covered (EPDM) hose.

Fluoropolymer liners offer good corrosion resistance and insulating properties. If one transfers materials that have the potential to generate static electricity and the electrons flowing across the surface don't interact (positive and negative electrons flowing back and forth), a charge will build up on the inner surface of the tube. If the charge exceeds the dielectric strength of the material, dielectric breakdown or arcing can occur. This arcing electric charge can pierce the tube, causing a leak or possibly an explosion.

Electrostatic build-up within a hose may be influenced by:
- The material being conveyed
- Velocity of that transferred material
- Filtration (particularly with paper or glass fiber elements) or turbulence generating members in the flow stream
- To some extent, humidity, and to a lesser extent, temperature

CLTCT anti-static chemical transfer hose is now manufactured with an improved surface finish using Chemfluor® PFA fluoropolymer liners. This manufacturing process allows for a much smoother surface finish, ensuring a ripple and bump free I.D. hose assembly. Using Chemfluor® PFA liners also permit continuous 100-ft. lengths of stocked 0.75" to 2" I.D. sizes.

Concerns about electrostatic charge build-up within the interior of your smooth I.D. rubber covered hose, and virtually eliminated along with any concerns about product build-up normally associated with industry standard convoluted I.D. anti-static hoses.

A Critical Process
Markets Product

Features/Benefits

- Improved I.D. surface finish
- Excellent bend radius
- Increased maximum lengths up to 100 ft.
- CTLCT is manufactured to have a maximum resistance of 10^6 Ω when inducing a charge of 500 volts D.C.
- Autoclavable
- Temperature rating: -40˚F to 350˚F
- Imparts no taste or odors

Approvals

- USP Class VI
- Complies with industry standards using ISO 8031 testing methods or MIL-H-27267

Available End Connections

PermaSeal® Crimp Style Fittings

- Over 40 fitting styles available in a wide range of materials
- 316L stainless steel standard material of construction
- See Flexible Components catalog FLS-3187 for detailed PermaSeal® dimensional data

Flare-Thru Fittings

- Available in lap joint 150lb. flanged and locking and non-locking swivel female cam-lock styles

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CTLCT Anti-Static Series Hose Specifications

	Inside Diameter		Outside Diameter		Maximum Working Pressure		Vacuum Hg @ 70˚F		Minimum Burst Pressure		Minimum Bend Radius		Weight	
Part Number	in.	mm.	in.	mm.	PSI	MPa	in.	mm.	PSI	MPa	in.	mm.	lb./ft.	kg./m.
12TLCTCO	0.75	19.05	1.25	31.75	500	3.44	29.9	760	2100	14.47	4.5	114.3	0.62	0.92
16TLCTCO	1	25.4	1.5	38.1	450	3.1	29.9	760	1800	12.41	6	152.4	0.75	1.11
24TLCTCO	1.5	38.1	2.05	52.07	300	2.06	29.9	760	1350	9.3	11	279.4	1.2	1.78
32TLCTCO	2	50.8	2.65	67.31	250	1.72	29.9	760	1200	8.27	13.5	342.9	1.5	2.23

NOTES: Outside diameter and weight information is nominal. See applicable notes below on vacuum/pressure ratings at temperatures other than ambient. Burst pressure ratings at ambient 70˚F (21˚C).

Industry Approvals

- US Pharmacopeia Class VI
- Industry standards using ISO 8031 testing or MIL-H-27267

Construction

- Smooth bore Chemfluor® PFA fluoropolymer tube internally bonded to EPDM rubber hose construction
- Multiple plycords and EPDM rubber layer reinforcements
- Double helix, high tensile strength carbon steel wire support for flexibility and vacuum resistance
- Ozone and abrasion resistant

Temperature Rating

- -40˚F to +350˚F
- -40˚C to +177˚C

Maximum Length

- 100 ft. (all sizes)

Distributed By:

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 212°F.

Vacuum Rating is given @ 70˚F; decrease vacuum rating 1% for every 2˚F above 212˚F. For 1-1/4" and larger sizes, vacuum rating decreases when installed less than 2X min. bend radius.

Flare-Thru fittings are pressure rated only. Not rated for vacuum service.

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 listed in Flexible Components catalog FLS-3187) 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.

Electrostatic Discharge: The following is a list of chemicals that have a tendency to cause concern regarding potential electrostatic build-up. Keep in mind moisture (humidity) and the flow rate are important considerations. By far, steam, kerosene or gasoline-based fuels are the biggest concerns. See engineering section of FLS-3187 for more information on electrostatic discharge.

Cyclohexane	Dipentine	Mineral Oil	Silicone Oil
Decalin	Freon	N-Octane	Skydrol 500
Demethyl Phthalate	Hexane	Naphtha	Skydrol 700
Diacetone	Hezene	Naphthalene	Steam
Dibutyl Ether	Hydraulic Oil	Paint	Toluene
Dibutyl Phthalate	Hydrazine	Petroleum	Turpentine
Dibutyl Sebacate	Lacquer Solvents	Phosphate Ester	Varnish
Dioctyl Phthalate	Lacquers	Pinene	

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Our products are manufactured under a quality management system registered and complying with 3-A Sanitary Standards where noted and with ISO 9001:2000, which has been independently certified by BVQi.

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