

# Versilon® CTLCT Hose

## SMOOTH BORE ANTI-STATIC FLUOROPOLYMER 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 and to some extent, humidity, to a lesser extent, temperature.

Versilon® CTLCT anti-static chemical transfer hose is manufactured with an improved surface finish using PFA fluoropolymer liners. This manufacturing process allows for a much smoother surface finish, ensuring a ripple and bump free I.D. hose assembly. Using 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 are virtually eliminated along with any concerns about product build-up normally associated with industry standard convoluted I.D. anti-static hoses.

### Typical Applications

- Load cells
- Skid transfer
- Pumping stations/portable pumps
- Vessel or tank transfer
- Rail car loading/unloading
- Transfer lines
- Chemical process lines

### Features and Benefits

- Electrostatic dissipating conductive inner tube
- Improved I.D. surface finish
- Excellent bend radius
- Increased maximum lengths up to 100 ft.
- CTLCT is manufactured to have a maximum resistance of 106  $\Omega$  when inducing a charge of 500 volts D.C.
- Autoclavable
- Imparts no taste or odors

### Regulatory Compliance

- US Pharmacopeia Class VI
- Compliant with industry standards using ISO 8031 testing methods or MIL-H-27267



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## Versilon® CTLCT 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)
3812CTLCT	3/4	19.1	1.30	33.0	500	3.45	2,100	14.48	4.50	114.3	29.9	760	0.61	0.91
3816CTLCT	1	25.4	1.56	39.6	450	3.10	1,800	12.41	6.00	152.4	29.9	760	0.78	1.16
3824CTLCT	1-1/2	38.1	2.13	54.1	300	2.07	1,350	9.31	11.00	279.4	29.9	760	1.27	1.89
3832CTLCT	2	50.8	2.68	68.1	250	1.72	1,200	8.27	13.50	342.9	29.9	760	1.78	2.65

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.

3" and 4" hose can be manufactured on request; consult factory.

Minimum runs required: 3" = 240' and 4" = 120'

Maximum length: 3" = 60' and 4" = 30'

**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.

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

### ⚠ 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 212°F.

**Vacuum Rating** is given at 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 minimum bend radius.

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

**Extended Service Life Tip:** Saint-Gobain suggests using full-length anti-kink armor casing or at least 16" to 24" long anti-kink cuffs 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.

## Construction

Inner Tube:	Black electrostatic dissipating conductive PFA
Cover:	EPDM rubber
Reinforcement:	Multiple polyester plycord and EPDM rubber Double helix, high tensile strength carbon steel wire
Color:	Green with a white layline in green lettering
Temperature Rating:	-40°F to +350°F -40°C to +177°C
Maximum Length:*	100 feet (all sizes)

\* Consult factory for maximum length by size for flare-thru fittings.

## 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)

### Versilon® Flare-Thru Fittings

- Available in 150 lb. swivel style flanges, female cam and groove (locking and non-locking swivel style, 316 stainless steel body)
- Up to 2" only

## Common Media

- Solvents

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