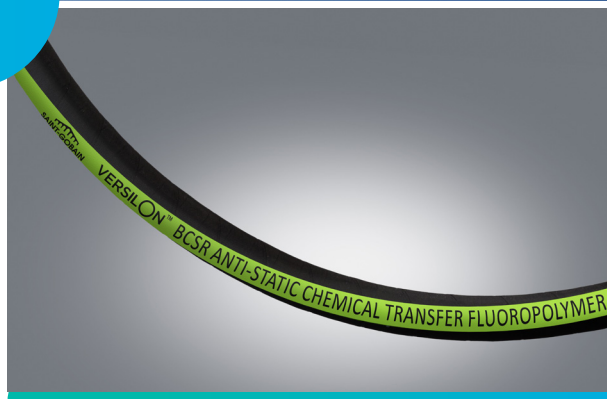
VERSILON®
Engineered Versatility

Versilon® BCSR Hose



ANTI-STATIC CHEMICAL TRANSFER

Ultra Flexible and Anti-Static

Versilon® BCSR hose is constructed with an anti-static chemically resistant PTFE inner core and reinforced with an acid resistant EPDM outer cover. This design provides a much reduced force-to-bend and smaller minimum bend radius compared to smooth bore rubber covered hoses. It also eliminates electrostatic discharge that can build up within the inner core of the hose. BCSR is easy to handle and kink resistant, thus providing a longer service life. BCSR hose meets the most demanding requirements for both vacuum and pressure applications and is ideally suited for many critical chemical processes and fluid transfer applications.

Excellent Chemical and Acid Resistance

Built with a high quality PTFE inner core, BCSR is the ideal hose to transfer corrosive chemicals. Using highly engineered wrapping technology, the vulcanized anti-static EPDM outer cover also brings peace of mind by providing an anti-corrosive protection for the hose when acid or other corrosive chemicals are accidentally exposed to the outer surface of the hose during operations.

Safe and Durable

The high tensile strength type 304 stainless steel mechanical braid reinforcement provides high working pressures and vacuum ratings. The vulcanized EPDM cover is abrasion resistant and protects the stainless steel braid from mechanical damage as well as adding thermal and hand protection for the hose operators.

Typical Applications

- Chemical transfer
- Steam transfer
- Solvent transfer
- Acid lines
- Adhesive transfer
- CIP lines
- SIP lines
- Chemical filling lines

Regulatory Compliance

- US Pharmacopeia Class VI

Features and Benefits

- PTFE black fluoropolymer electrostatic dissipating conductive liner is highly chemical resistant
- Inner core conductivity conforms to AMS-H-27267 10-20 micro amps with 1,000 VDC over a 14” length
- Acid resistant and anti-static black EPDM cover for high abrasion resistance and corrosion resistant protection
- Low profile PTFE convoluted inner core ensures superior flexibility
- High tensile strength type 304 stainless steel braid provides high pressure rating & superior vacuum resistance
- Helically convoluted inner core is designed for easy drainage
- SIP/CIP and autoclavable for easy cleaning

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Versilon® BCSR Hose

Versilon® BCSR 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)
2712BCSR	3/4	19.1	1.20	30.5	1,000	6.89	4,000	27.58	2.80	71.1	29.9	760	0.40	0.60
2716BCSR	1	25.4	1.40	35.6	900	6.21	3,600	24.82	4.50	114.3	29.9	760	0.60	0.89
2724BCSR	1-1/2	38.1	2.20	55.9	550	3.79	2,200	15.17	6.50	165.1	29.9	760	0.90	1.34
2732BCSR	2	50.8	2.60	66.0	500	3.45	2,000	13.79	8.00	203.2	5.0	127	1.10	1.64

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.

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.

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.

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

Fluoropolymer Physical Properties	Durometer Hardness Shore, A, 15s	Color	Maximum Recommended Operating Temp.°F (°C)	Tensile Strength PSI (MPa)	Ultimate Elongation %	Brittle Temperature °F (°C)	Specific Gravity	Water Absorption %	Chemical Solvent Resistance	Folding Endurance (cycles)
ASTM Method	D2240-91			D1457, D1708, D638	D1457, D1708, D638	D746-79	D792	D570-81		
PTFE	58D	Translucent	500 (260)	3000 - 5000 (20.7 - 34.5)	300	-450 (-268)	2.13 - 2.22	<0.01	Excellent	10^6

Construction

Inner Tube:	Black electrostatic dissipating conductive PTFE
Cover:	Smooth anti-static black EPDM rubber
Reinforcement:	High tensile strength 304 stainless steel mechanical braid
Color:	Black with a green layline in black lettering Other colors are available as special orders with minimum quantity requirements Consult factory for more details
Temperature Rating:	-65°F to +350°F -54°C to +177°C
Maximum Length:	3/4" 100' 1" 60' 1-1/2" 60' 2" 60'

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). Also available in zinc plated carbon steel in MNPT & Female JIC
- Standard: 304 stainless steel for crimp collars

Common Media

- Sulfuric acid
- High pressure steam
- Hydrofluoric acid
- Hexane/lacquer
- Silicone/hot glues
- Caustic solutions
- Syrups/flavors

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