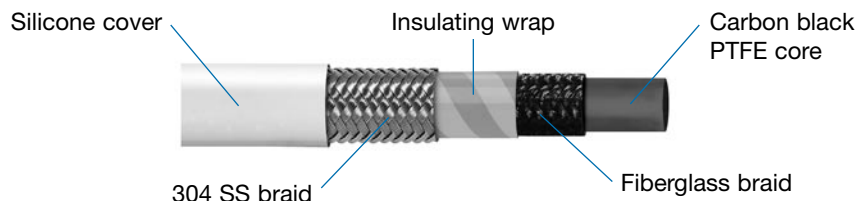


Smooth-Bore, Insulating PTFE Hose

Coreflex™ Series SBI

Features



- -65 to 450°F (-53 to 230°C) temperature rating
- Smooth-bore carbon black PTFE core for applications that require static dissipation:
 - Chemically inert
 - Easy to clean
 - Nonaging, nonstick surface
 - Ultralow extractibles
 - Nonabsorbent; will not impart taste or odor.
- Easy to bend
- Drains easily
- Can be autoclaved and sterilized
- Fiberglass braid:
 - Bonded to the core with a patent-pending process
 - Aids hose hoop strength to reduce kinking.
- Internal insulating wrap:
 - Eliminates need for external insulation in hot/cold media transfer extremes
- Reduces likelihood of frost when transferring cold materials.
- 300 series stainless steel overbraid:
 - Enhances hose pressure rating.
- Silicone cover:
 - Smooth, noncontaminating, easy-to-clean surface
 - Provides insulation from internal system fluid temperature extremes
 - Available in black, blue, red, or white colors.
- 316 stainless steel end connections with 304 stainless steel radially crimped collars
- Sanitary end connections:
 - Heat traceable 316L stainless steel
 - Surface finish not to exceed 15 µin. (0.38 µm) R_a
 - Internally chamfered—smooth transition between hose and end connections.
- Optional PET polyester film hose identification tag encapsulated in platinum-cured silicone:
 - Easy to read; includes hose ordering number plus up to five lines of customer-specified text.
 - Can be autoclaved and sterilized; does not hinder hose flexibility.



Product/Material Approvals

- FDA 21CFR Part 177.1550
- USDA
- USP Class VI
- 3-A

Technical Data

Nominal Hose Size in. (mm)	Hose ID in. (mm)	Hose OD in. (mm)	Static Bend Radius ^① in. (cm)	Temperature Range °F (°C)	Working Pressure at 70°F (20°C) psig (bar)	Burst Pressure at 70°F (20°C) psig (bar)	Weight lb/ft (kg/m)
3/8 (9.6)	0.35 (8.9)	0.75 (19.0)	2.75 (6.98)	-65 to 450 (-53 to 230)	1000 (68.9)	4000 (275)	0.19 (0.29)
1/2 (12.7)	0.50 (12.7)	0.92 (23.4)	4.25 (10.8)		1000 (68.9)	4000 (275)	0.25 (0.37)

Pressure-temperature ratings may be limited by the end connections. Contact your authorized Swagelok sales and service representative for elevated pressure-temperature ratings.

① Measured to center line of bend.

Additional Considerations

PTFE is a permeable material. Gases, vapors, and liquids can migrate through the PTFE core. The rate of permeation is affected by many application-specific variables.

Testing, Cleaning, and Packaging

Every SBI hose assembly is pressure tested with water for 30 to 60 seconds at 1000 psig (69 bar) to a requirement of no visible leakage at ambient temperature.

Each hose is cleaned of any assembly debris and hand wiped clean. Silicone covers are wiped clean with a 50 % isopropyl alcohol / 50 % water mixture.

Each hose is bagged with the following:

- Certification of Compliance (Hose)—FDA, USDA, USP Class VI, and 3-A compliant, including PTFE lot number.
- Material Test Report (End Connection)—Certifies material is type 316L or 316 stainless steel and lists bar stock chemical composition. Heat lot and ordering number are provided for full traceability.
- Proof Pressure Test Certificate—Certifies that each hose passed pressure testing.

Ordering Information

Typical Ordering Number

Build a hose assembly ordering number by combining the designators in the sequence shown below.

1 2 3 4 5 6 7 8 9 8 9 10
SS - WC 6 KC 16 KC 16 - 28 BL or **71 CM - BK - PG**
in. cm

1 Material

End Connections

SS = Stainless steel

2 Hose Series

WC = SBI silicone-covered PTFE hose with insulating wrap and static dissipative core

3 Nominal Hose Size, in.

6 = 3/8
8 = 1/2

⚠ Thermal cycling of hose may affect its ability to maintain a leak-tight seal. Testing should be performed to verify suitability in actual operating conditions.

4 1st End Connection

6 2nd End Connection

Fractional End Connections

AE = Electropolished Kwik-Clamp 45° elbow
AS = Female JIC
FU = Female NPT union
GA = 150 lb lap joint flange (1/2 in. hose only)
KA = Kwik-Clamp 45° elbow
KC = Kwik-Clamp
KE = Electropolished Kwik-Clamp
KR = Kwik-Clamp 90° elbow
MU = Male NPT union
PE = Electropolished male NPT
PF = Female NPT
PM = Male NPT
RE = Electropolished Kwik-Clamp 90° elbow
TA = Tube adapter
TB = Tube butt weld
TN = Tube stub, no hex or groove (annealed)
Metric End Connections
TE = Tube stub, no hex or groove (annealed)
TM = Tube adapter

5 1st End Connection Size

7 2nd End Connection Size

End connection size must match nominal hose size except for **KC** and **KE** (see table at left).

Fractional, in.	Metric, mm
6 = 3/8 (all except GA and Kwik-Clamp)	10 = 10 (3/8 in. hose)
8 = 1/2	12 = 12 (1/2 in. hose)

8 Overall Length

Insert length in inches or centimeters, in whole numbers. Include **CM** as shown for centimeter lengths.

9 Silicone Cover Color

Hose Length, in.	Hose Length, cm
BK = Black	-BK = Black
BL = Blue	-BL = Blue
RD = Red	-RD = Red
WH = White	-WH = White

10 Options

PET Polyester Film Tag,

encapsulated in platinum-cured silicone

PB = Blue	PW = White
PG = Green	PY = Yellow
PR = Red	

Specify text; see **Hose Identification Tag**, below.

Hose Identification Tag

Example Tag Specification

Nominal Hose Size in.	Size Designators Available for KC and KE End Connections			
	8	12	16	24
3/8	✓	✓	✓	✓
1/2	✓	✓	✓	✓

	SS-WC6KC16KC16-28BK-PG
Line 1	ABC Company
Line 2	Process Line
Line 3	Building 2
Line 4	DOM: 1/1/2008
Line 5	Telephone

Safe Product Selection

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

Warranty Information

Swagelok® products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit swagelok.com or contact your authorized Swagelok representative.