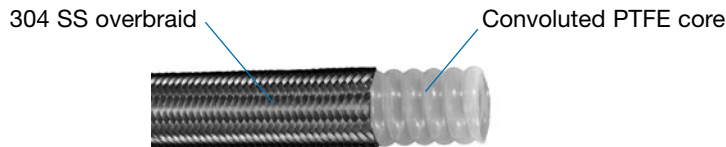


# Convolut-ed-Bore PTFE Hose

## Coreflex™ Series C-CON

### Features



- -65 to 450°F (-53 to 230°C) temperature rating
- Convoluted-bore PTFE core:
  - Chemically inert
  - Helical convolutions promote drainability
  - Low-profile design provides higher flow
  - Nonaging, nonstick surface
  - Nonabsorbent; will not impart taste or odor.
- Drains easily
- Lightweight, easy to bend
- Can be autoclaved and sterilized
- Optional carbon black PTFE core available for applications that require static dissipation
- 300 series stainless steel overbraid:
  - Protects core from abrasion
  - Enhances hose pressure rating.
- Optional silicone cover:
  - Smooth, noncontaminating, easy-to-clean surface
  - Provides insulation from internal system fluid temperature extremes.
- 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:
  - 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 <sup>①</sup> 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)
		Without Silicone Cover	With Silicone Cover					
1/2 (12.7)	0.50 (12.7)	0.76 (19.3)	0.88 (22.4)	2.50 (6.35)	-65 to 450 (-53 to 230)	1500 (103)	6000 (413)	0.19 (0.28)
3/4 (19.0)	0.75 (19.0)	1.00 (25.4)	1.12 (28.4)	3.00 (7.62)		1100 (75.7)	4400 (303)	0.27 (0.40)
1 (25.4)	1.00 (25.4)	1.32 (33.5)	1.47 (37.3)	5.50 (14.0)		750 (51.6)	3000 (206)	0.39 (0.58)
1 1/2 (38.1)	1.50 (38.1)	2.03 (51.6)	—	6.00 (15.2)		700 (48.2)	2800 (192)	0.75 (1.1)
2 (50.8)	2.00 (50.8)	2.46 (62.5)	—	7.50 (19.0)		525 (36.1)	2100 (144)	0.98 (1.5)

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 C-CON hose assembly is pressure tested with water for 30 to 60 seconds at 1000 psig (69 bar) or its maximum working pressure if less than 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 or 8 9  
**SS - CT 8 KC 16 KC 16 - 28 MB** or **71 CM - MB**  
in. cm

#### 1 Material

##### End Connections

SS = Stainless steel

#### 2 Hose Series

CT = C-CON convoluted PTFE hose

CC = C-CON convoluted PTFE hose with static dissipative core

JT = C-CON convoluted PTFE hose with silicone cover (available in 1/2, 3/4, and 1 in. sizes *only*)

#### 3 Nominal Hose Size, in.

8 = 1/2

12 = 3/4

16 = 1

24 = 1 1/2 (CT and CC series *only*)

32 = 2 (CT and CC series *only*)

**⚠ 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

GF = Female cam and groove (not available for 1/2 in. hose)

GM = Male cam and groove (not available for 1/2 in. hose)

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 (1/2 in. hose *only*)

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 (1/2 in. hose *only*)

#### 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.

8 = 1/2

12 = 3/4

16 = 1

24 = 1 1/2

32 = 2

Metric, mm

12 = 12 (1/2 in.

hose *only*)

#### 8 Overall Length

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

#### 9 Options

##### PET Polyester Film Tag for CT and CC Series

Hose Length, in.

MB = Blue

MG = Green

MR = Red

MW = White

MY = Yellow

Hose Length, cm

-MB = Blue

-MG = Green

-MR = Red

-MW = White

-MY = Yellow

##### PET Polyester Film Tag for JT Series, encapsulated in platinum-cured silicone

Hose Length, in.

PB = Blue

PG = Green

PR = Red

PW = White

PY = Yellow

Hose Length, cm

-PB = Blue

-PG = Green

-PR = Red

-PW = White

-PY = Yellow

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

#### Hose Identification Tag

##### Example Tag Specification

	SS-CT8KC16KC16-28MB
Line 1	ABC Company
Line 2	Process Line
Line 3	Building 2
Line 4	DOM: 1/1/2008
Line 5	Telephone

Nominal Hose Size in.	Size Designators Available for KC and KE End Connections				
	8	12	16	24	32
1/2	✓	✓	✓	✓	
3/4		✓	✓	✓	
1			✓	✓	✓
1 1/2				✓	✓
2					✓

#### 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](http://swagelok.com) or contact your authorized Swagelok representative.