Ultrahigh-Purity PFA Tubing

PFA4 and PFA9D

Features

- Available in ultrahigh-purity and advanced (fluorosurfactant resistant) ultrahigh-purity grades
- 100 % virgin material
- PFA has high thermal stability
- Meets SEMI F57-0301 specifications
- Flammability: UL 94 rated V-O (self-extinguishing)

Pressure-Temperature Ratings

Fractional Tubing

Tubing Size, in.	**1/8**	**1/4**	**3/8**	**1/2**	**3/4**	**1**	**1 1/4**
Temperature °F (°C)	**Working Pressure** psig (bar)						
75 (23)	300 (20.6)	275 (18.9)	235 (16.1)	170 (11.7)	110 (7.5)	80 (5.5)	
350 (176)	60 (4.1)	35 (2.4)	30 (2.0)	20 (1.3)	15 (1.0)	10 (0.6)	

Metric Tubing

Tubing Size, mm	**4**	**6**	**8**	**10**
Temperature °C (°F)	**Working Pressure** bar (psig)			
23 (75)	34.4 (500)	16.1 (235)	11.7 (170)	8.9 (130)
176 (350)	4.1 (60)	2.0 (30)	1.3 (20)	1.2 (18)

Marking

Tubing is laser etched with the tubing size, material designator, and lot traceability number.

Cleaning and Packaging

Ultrahigh-purity fluoropolymer tubing is packaged and shipped with the ends capped in accordance with SEMI F57-0301.

Tubing Sizes

Fractional Tubing

Tube OD in.	**Tube ID** in.	**Nominal Wall Thickness** in.
1/8	0.06	0.030
1/4	0.16	0.047
	0.12	0.063
3/8	0.25	
1/2	0.38	
3/4	0.63	
1	0.88	
1 1/4	1.10	0.075

Metric Tubing

Tube OD mm	**Tube ID** mm	**Nominal Wall Thickness** mm
4	2.0	1.0
6	4.0	
8	6.0	
10	8.0	

Ordering Information

Build an ultrahigh-purity fluoropolymer tubing ordering number by combining the designators as shown below.

PFA4 - T 2-030 - 100 - U

Material and Grade

PFA4 = Ultrahigh-purity perfluoroalkoxy (PFA)
PFA9D = PFA 950HP

Type

Standard tubing

Tubing Size

Fractional

2-030 = 1/8 in.
4-047 = 1/4 in. (0.047 in. wall)
4-063 = 1/4 in. (0.063 in. wall)
6-063 = 3/8 in.
8-063 = 1/2 in.
12-063 = 3/4 in.
16-063 = 1 in.
20-075 = 1 1/4 in.

Metric

4M-1M = 4 mm
6M-1M = 6 mm
8M-1M = 8 mm
10M-1M = 10 mm

Package Length

Fractional

50 = 50 ft coil
100 = 100 ft coil
500 = 500 ft spool①
1000 = 1000 ft spool①

Metric

15M = 15 m coil
30M = 30 m coil
150M = 150 m coil
300M = 300 m spool①

① Not available for 1 1/4 in. tubing.

Purity

Ultrahigh-purity with SEMI F57-0301 packaging

Accessories

Tube Cutter

A tube cutter for plastic tubing up to 1 in. outside diameter is available.

Ordering number: **MS-HC-SC-1A**

Replacement blade ordering number: **MS-HC-SC-1A-BLD**

Ultrahigh-Purity Fluoropolymer Products

The Swagelok family of UHP fluoropolymer products includes pneumatically actuated and quarter-turn manual radial diaphragm-sealed shutoff valves, O-ring–free poppet check valves, and fine thread flare fittings.

See these Swagelok catalogs for more information:

- *Ultrahigh-Purity Fluoropolymer Diaphragm Valves—DRP Series* catalog, MS-02-171
- *Ultrahigh-Purity Fluoropolymer O-Ring–Free Poppet Check Valves—CHP Series* catalog, MS-02-320
- *High-Purity PFA Fine Thread Flare Fittings* catalog, MS-02-195

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.

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