

Fluoropolymer Tubing – FEP

FEP (fluorinated ethylene propylene) tubing is a **robust engineering fluoropolymer** which provides excellent fluid visibility and is perfect for flow control monitoring.

Product Advantages

Flow Control | Transparent
Flexible and non-flammable material
Resistant to nearly all chemicals and solvents

Tried-&-Tested Properties | Excellent transmission of UV light
Low friction coefficient
Food-grade material
Low permeability
Easily weldable
Silicone-free

Applications
Instrumentation
Food Process
UV
Gas Sampling
Chemical
Temperature Cycling
Laboratory

Technical Characteristics

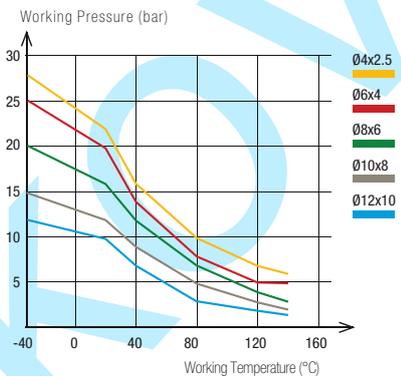
Compatible Fluids	Industrial fluids
Working Pressure	0 to 28 bar
Working Temperature	-40°C to +150°C
Component Materials	Fluorinated ethylene propylene (pure)

Regulations

Food
FDA: 21 CFR 177.1550
RG: 1935/2004
Industrial
UL94 V-0 (Fire resistance)
DI: 2002/95/EC (RoHS), 2011/65/EC
DI: 97/23/EC (PED)
RG: 1907/2006 (REACH)

Reliable performance is dependent upon the type of fluid conveyed and fittings being used.

Performance of FEP Tubing



Tube O.D.	Tube O.D. Tolerance
4 mm	+0.05 / -0.05
6 to 10 mm	+0.07 / -0.07
12 mm	+0.10 / -0.10

Packaging
Tubepack®: 5 m, 25 m, 100 m

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing.

1005T Fluoropolymer (FEP) Tubing

Tubepack® 5 m

O.D. (mm)	I.D. (mm)	 R	 Clear	kg
4	2.5	40	1005T04 00 25	0.155
6	4	50	1005T06 00	0.250
8	6	70	1005T08 00	0.385
10	8	120	1005T10 00	0.524
12	10	180	1005T12 00	0.547

1025T Fluoropolymer (FEP) Tubing

Tubepack® 25 m

O.D. (mm)	I.D. (mm)	 R	 Clear	kg
4	2.5	40	1025T04 00 25	0.506
6	4	50	1025T06 00	1.025
8	6	70	1025T08 00	1.431
10	8	120	1025T10 00	1.693
12	10	180	1025T12 00	1.913

Related Products

Parker Legris stainless steel fittings are perfectly suited for use with fluoropolymer tubing (PFA, FEP).

Push-In Fittings

[LF 3800](#) P. 1-77



[LF 3900](#) P. 1-77



Compression Fittings

[Stainless Steel](#) P. 5-31



Fluoropolymer Tubing - PFA

Parker Legris **PFA** (perfluoroalkoxy) tubing offers **10 times greater durability** than other fluoropolymer tubings (PTFE, FEP and PVDF) under severe chemical and mechanical conditions. This tubing range is available in **three material grades**, offering perfect compatibility with all applications, even in extreme environments.

Product Advantages

Great Versatility

- Exceptional chemical inertia
- A flexible alternative to stainless steel tubing
- Broad range of working temperatures, from cryogenic to extreme heat
- Non-stick properties allowing conveyance of many fluids & gases
- Outstanding resistance to ageing
- Fluoropolymer with the lowest permeability
- Non-flammable
- UV-transparent
- Tube marking on request
- Silicone-free

Three Material Grades

- Clear High Purity PFA: to cover all applications, including those requiring maximum mechanical resistance
- Coloured PFA: for circuit identification
- Black Antistatic PFA: eliminates all risk of electrostatic discharge



- Applications**
- Food-Process
 - Fuel Cells
 - Electrical/Electronics
 - Aircraft
 - Oil/Gas Industry
 - Pharmaceutical
 - Medical
 - Chemical
 - Clean Rooms

Technical Characteristics

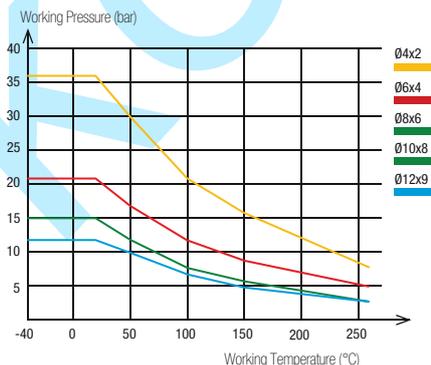
Compatible Fluids	Medical, bio-compatible, food process, gas, compressed air
Working Pressure	Vacuum to 36 bar
Working Temperature	-196°C to +260°C
Component Materials	Perfluoroalkoxy <ul style="list-style-type: none"> • High Purity PFA • Translucent coloured PFA • Antistatic PFA

Reliable performance is dependent upon the type of fluid conveyed and fittings being used. Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

Regulations

- Medical**
 USP: Class VI (A)
 External communication devices
- Industrial**
 UL94 V-0 (Fire resistance)
 DI: 2002/95/EC (RoHS), 2011/65/EC
 DI: 97/23/EC (PED)
 RG: 1907/2006 (REACH)
 DI: 94/09/EC (ATEX, black tubing)
- Food Industry**
 FDA: 21 CFR 177.1550
 (clear, translucent coloured)
 RG: 1935/2004
 NSF 51 (material)

Performance of PFA Tubing



Tube O.D.	Tube O.D. Tolerance
4 to 8 mm	+0.10 / -0.10
10 to 12 mm	+0.15 / -0.15

Packaging
 Tubepack®: 10 m, 50 m, 100 m

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing based on NF E49-100.

To calculate burst pressure, the values in this graph should be multiplied by 3.

1010T..P Fluoropolymer (PFA) Tubing

Tubepack® 10 m

O.D. (mm)	I.D. (mm)		 Clear	 crystal	 crystal	 crystal	kg
4	2	12	1010T04P00	1010T04P12	1010T04P13	1010T04P14	0.087
6	4	34	1010T06P00	1010T06P12	1010T06P13	1010T06P14	0.237
8	6	60	1010T08P00	1010T08P12	1010T08P13	1010T08P14	0.410
10	8	95	1010T10P00	1010T10P12	1010T10P13	1010T10P14	0.723
12	9	120	1010T12P00	1010T12P12	1010T12P13	1010T12P14	1.148

1050T..P Fluoropolymer (PFA) Tubing

Tubepack® 50 m

O.D. (mm)	I.D. (mm)		 Clear	 crystal	 crystal	 crystal	kg
4	2	12	1050T04P00	1050T04P12	1050T04P13	1050T04P14	0.435
6	4	34	1050T06P00	1050T06P12	1050T06P13	1050T06P14	1.185
8	6	60	1050T08P00	1050T08P12	1050T08P13	1050T08P14	2.050
10	8	95	1050T10P00	1050T10P12	1050T10P13	1050T10P14	3.615
12	9	120	1050T12P00	1050T12P12	1050T12P13	1050T12P14	5.740

1100T..P Fluoropolymer (PFA) Tubing

Tubepack® 100 m

O.D. (mm)	I.D. (mm)		 Clear	 crystal	 crystal	 crystal	kg
4	2	12	1100T04P00	1100T04P12	1100T04P13	1100T04P14	0.870
6	4	34	1100T06P00	1100T06P12	1100T06P13	1100T06P14	2.370
8	6	60	1100T08P00	1100T08P12	1100T08P13	1100T08P14	4.100
10	8	95	1100T10P00	1100T10P12	1100T10P13	1100T10P14	7.230
12	9	120	1100T12P00	1100T12P12	1100T12P13	1100T12P14	11.480

1010T..A Fluoropolymer (PFA) Antistatic Tubing

Tubepack® 10 m

O.D. (mm)	I.D. (mm)			kg
4	2	12	1010T04A01	0.087
6	4	34	1010T06A01	0.237
8	6	60	1010T08A01	0.410
10	8	95	1010T10A01	0.723
12	9	120	1010T12A01	1.148

1050T..A Fluoropolymer (PFA) Antistatic Tubing

Tubepack® 50 m

O.D. (mm)	I.D. (mm)			kg
4	2	12	1050T04A01	0.435
6	4	34	1050T06A01	1.185
8	6	60	1050T08A01	2.050
10	8	95	1050T10A01	0.362
12	9	120	1050T12A01	5.740