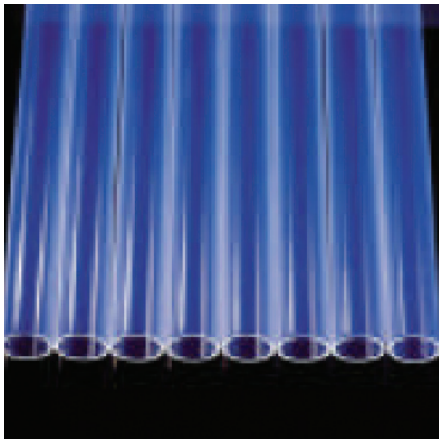
FEP Tubing - Technical Data

Material



FEP is similar to PTFE with regard to excellent dielectric properties; chemical inertness; toughness at low temperatures; low coefficient of friction; non-stick properties & weatherability. FEP has a higher degree of transparency and a greater modulus of elasticity at low temperatures than PTFE. As with all fluoropolymers, FEP tubing can be steam cleaned or chemically sterilized according to all industrial standards & is produced from FDA approved raw material.

Properties

General	Upper service temperature	200 °C
	Chemical resistance	excellent
	Specific gravity	2.15
	Melting point	270 °C
Electrical	Dielectric constant	2.1
	Dielectric dissipation factor	0.0001
	Dielectric strength	> 2000 Volt / mil
Mechanical	Tensile strength	3000 psi
	Elongation	300 %
	Compression strength	2200 psi
	Flexural modulus	95 000 psi
	Hardness	D-55
Environmental	Water absorption	< 0.01 %
	Water resistance	excellent
	Oxygen index	>95 %
	Flammability UL94	V-0

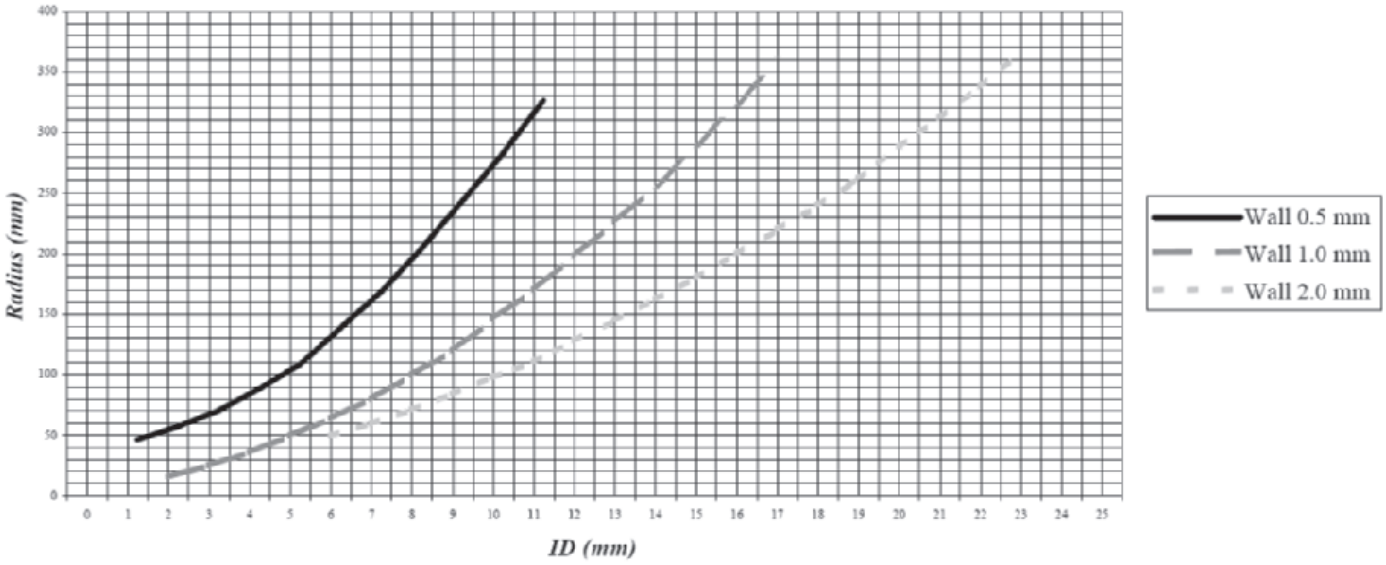
Tolerances

ID (mm)	Tolerance (mm)
2.00 – 3.99	+/- 0.08
4.00 – 7.99	+/- 0.10
8.00 – 9.99	+/- 0.12
10.00 – 11.99	+/- 0.15
12.00 – 15.99	+/- 0.20

Wall (mm)	Tolerance (mm)
0 – 0.30	+/- 0.05
0.31– 0.70	+/- 0.08
0.71 – 1.00	+/- 0.10
1.01 – 1.30	+/- 0.12
1.31 – 1.60	+/- 0.15
1.61 – 2.00	+/- 0.20

Bending radius

Bending radius for FEP at 21˚C



Theoretical burst pressure values at 21˚C

ID	OD	Wall	Bar	ID	OD	Wall	Bar
1	3	1	224.00	11	13	1	20.36
2	4	1	112.00	12	14	1	18.67
3	5	1	74.67	13	15	1	17.23
4	6	1	56.00	14	16	1	16.00
5	7	1	44.80	15	17	1	14.93
6	8	1	37.33	16	18	1	14.00
7	9	1	32.00	17	19	1	13.18
8	10	1	28.00	18	20	1	12.44
9	11	1	24.89	19	21	1	11.79
10	12	1	22.40	20	22	1	11.20