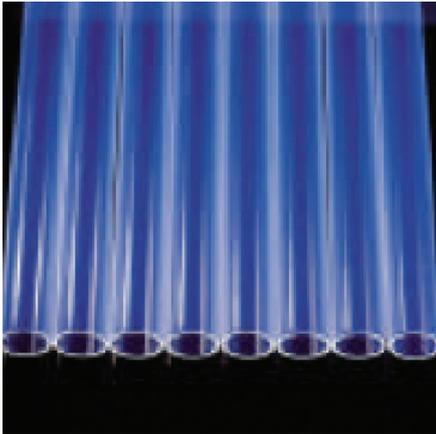


FEP Tubing - Technical Data

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 |

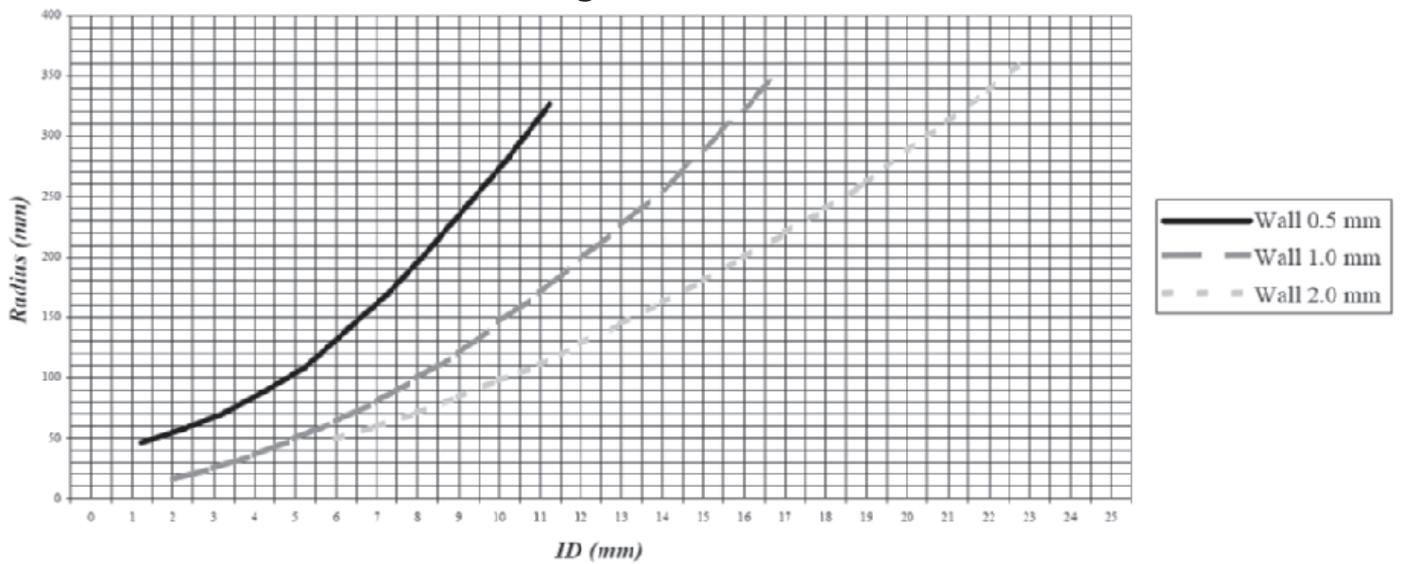
Tolerances

| 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 |