

Fluoropolymer Smooth Bore Tubing Capabilities

United Flexible's tube production comprises many fluoropolymers. The following technical data shows specifications for our standard dimensions. In addition to our standard range, we also produce according to customer demands.

PTFE tubing has in natural stage a milky white to transparent appearance. PTFE is the fluoropolymer with the highest temperature range and best chemical resistance. We can as well produce it in different colors, with fillers to enhance properties and customized to your application demands. Antistatic PTFE is available even with FDA compliant filler. PTFE tubing can be laser marked for tracability and is even available as convoluted tubing. See some examples right.

Sizes Available:

ID 0,20 mm (.0078 in) to ID 40,00 mm (1.5748 in)
Wall 0,15 mm (.0059 in) to 5,00 mm (.1968 in)

Applications:

Food processing, chemical processing, water handling, ink and painting systems, delivery of natural gas and mineral oils, adhesive delivery lines and cryogenic applications. PTFE tubing is used in a variety of applications in the automotive, aviation, electrical and appliance markets.

Pressure Range:

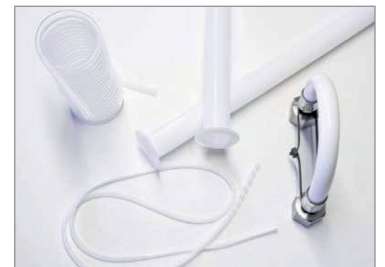
Low to mid pressure applications

Temperature Range:

-60°C to +260°C (-76°F to +500°F)

Compliance:

PTFE Grades in use are compliant to FDA 21 CFR 177.1550, REACH and RoHS, Some grades are compliant to EU 10/2011, USP class VI and WRAS (As FEP and PFA Tubing).



PTFE TUBING TOLERANCES (ID & OD)							
ID (mm)	ID (in)	Tol. (mm)	Tol. (in)	OD (mm)	OD (in)	Tol. (mm)	Tol. (in)
0,20-1,00	.008 - .039	±0,05	±.002	0,30-1,00	.008 - .039	±0,05	±.002
1,01-4,00	.039 - .157	±0,10	±.004	1,01-4,00	.039 - .157	±0,10	±.004
4,01-8,00	.158 - .315	±0,15	±.006	4,01-8,00	.158 - .315	±0,15	±.006
8,01-12,50	.315 - .492	±0,20	±.008	8,01-12,50	.315 - .492	±0,20	±.008
12,51-20,00	.492 - .787	±0,25	±.010	12,51-20,00	.492 - .787	±0,25	±.010
20,01-30,00	.788 - 1.181	±0,30	±.012	20,01-30,00	.788 - 1.181	±0,30	±.012
30,01-40,00	1.181 - 1.575	±0,35	±.014	30,01-40,00	1.181 - 1.575	±0,35	±.014

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FEP tubing has in natural stage a totally transparent appearance. In some applications even coloured FEP tubing is desired. Here we can help with different colourings. FEP tubing is favoured in food and beverage application due to the excellent clarity. FEP is virtually unaffected by UV light and ozone

Applications:

Food processing, chemical processing, water handling, insulation,

Pressure Range:

Low to mid pressure applications

Temperature Range:

-60 C to +205C (-76F to +401F)

Compliance:

FEP grades in use are compliant to FDA 21 CFR 177.1550, REACH and RoHS.
Some grades are compliant to EU 10/2011, USP Class VI, WRAS.

FEP as material is classified UL 94 = VO.

PFA tubing has in natural stage a totally transparent appearance. In some applications even colored PFA tubing is desired. Here we can help with different colorings. PFA tubing is favoured in application where purity is an issue.

Applications:

Semi conductive Industry, food and pharma processing, analytics, heat exchangers, gas distribution,

Pressure Range:

Low to mid pressure applications

Temperature Range:

-60 C to +260C (-76F to +500F)

Compliance:

PFA Grades in use are compliant to FDA 21 (FR 177.1550, REACH and RoHS).
Some grades are compliant to EU 10/2011, USP Class VI, WRAS.

PFA is classified UL94 = VO.

FEP & PFA Sizes available:

ID 0,50 mm (.0197 in) to 25,00 mm (.9842 in)

Wall 0.50 mm (.197 in) to 4,00 mm (.1574 in)

FEP & PFA (ID & OD)

ID (mm)	ID (in)	Tol. (mm)	Tol. (in)	OD (mm)	OD (in)	Tol. (mm)	Tol. (in)
0,50-1,00	.020 - .039	±0,05	± .002	0,50-1,00	.020 - .039	±0,05	± .002
1,01-4,00	.039 - .079	±0,07	± .003	1,01-2,00	.039 - .079	±0,07	± .003
2,01-4,00	.079 - .157	±0,10	± .004	2,01-4,00	.079 - .157	±0,10	± .004
4,01-8,00	.158 - .315	±0,15	± .006	4,01-8,00	.158 - .315	±0,15	± .006
8,01-12,50	.315 - .492	±0,20	± .008	8,01-12,50	.315 - .492	±0,20	± .008
12,51-20,00	.492 - .787	±0,30	± .012	12,51-20,00	.492 - .787	±0,30	± .012
20,01-30,00	.788 - 1.181	±0,35	± .014	20,01-30,00	.787 - 1.181	±0,35	± .014