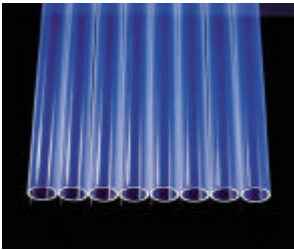


Plastica AB

Datasheet PTFE Tubing

1. Material

PolyTetraFluoroEthylene (PTFE)



PTFE is the most chemically resistant plastic known. Its mechanical properties are low compared to other engineered plastics, but it can be improved by adding fillers such as glass fiber, carbon, graphite and similar materials. PTFE has almost ideal dielectric properties. Its dielectric constant (2.1) and power-loss factor (0.0002) are low and remain so over a wide range of temperatures and frequencies. In certain applications, such as fuel hoses, some electrical conductivity is required to dissipate static charges. When exposed to flame, PTFE decomposes leaving just a little residue. PTFE is extremely inert and stable up to a temperature of 260 °C. PTFE is also virtually unaffected by oxygen, ozone and UV light.

2. Properties

general	Upper service temperature	260 °C
	Chemical resistance	excellent
	Specific gravity	2.15
	Melting point	327 °C
electrical	Dielectric constant	2.1
	Dielectric dissipation factor	0.0002
	Dielectric strength	> 1400 Volt / mil
Mechanical	Tensile strength	3500 psi
	Elongation	300 %
	Compressive strength	3500 psi
	Flexural Modulus	90 000 psi
	Hardness	D-60
Enviromental	Water absorption	< 0.01 %
	Water resistance	excellent
	Oxygen index	>95 %
	Flammability UL 94	V-0

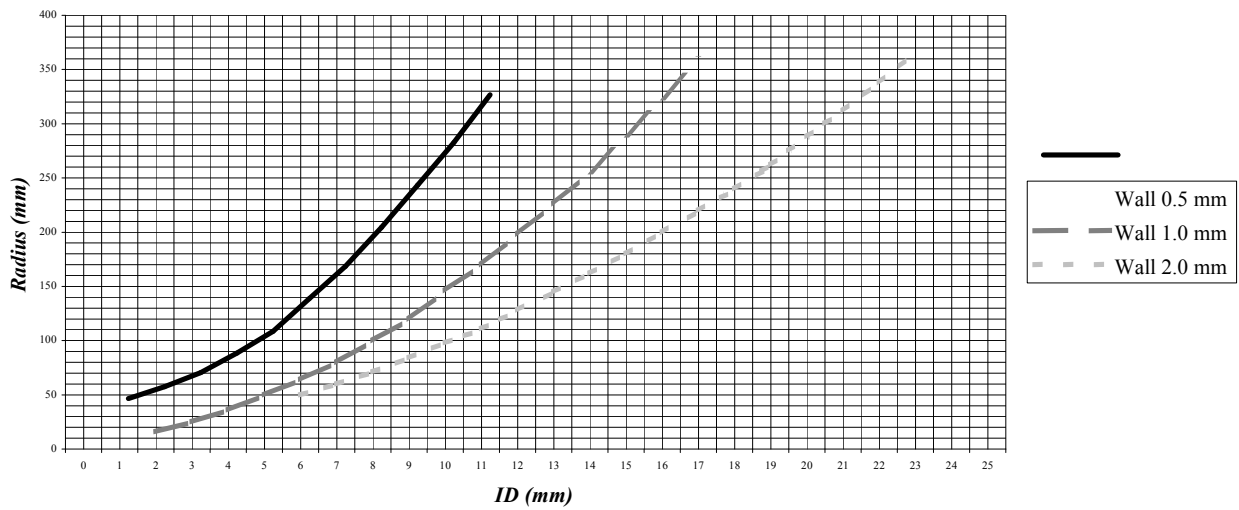
4. Tolerances

(GKV-Norm)

ID mm	Tolerance	Wall mm	Tolerance
3.00 - 5.00 mm	+/- 0.20 mm	0.10 - 0.30 mm	+/- 0.05 mm
5.01 - 7.00 mm	+/- 0.25 mm	0.31 - 0.60 mm	+/- 0.10 mm
7.01 - 10.00 mm	+/- 0.30 mm	0.61 - 1.00 mm	+/- 0.15 mm
10.01 - 15.00 mm	+/- 0.35 mm	1.01 - 2.00 mm	+/- 0.20 mm
15.01 - 20.00 mm	+/- 0.40 mm	2.01 - 4.00 mm	+/- 0.40 mm
		4.01 - 6.00 mm	+/- 0.50 mm

5. Bending radius

Bending radius for PTFE at 25° C



6. Theoretical burstpressure values at room temperature

These values are examples on theoretical basis. Scantube can, what so ever, not take any responsibility for the values shown. The Workingpressure depends on what safetyfactor you choose for your application.

ID	OD	Wall	BAR=KG/cm2
1	3	1	280.00
2	4	1	140.00
3	5	1	93.33
4	6	1	70.00
5	7	1	56.00
6	8	1	46.67
7	9	1	40.00
8	10	1	35.00
9	11	1	31.11
10	12	1	28.00
11	13	1	25.45
12	14	1	23.33
13	15	1	21.54
14	16	1	20.00
15	17	1	18.67
16	18	1	17.50
17	19	1	16.47
18	20	1	15.56
19	21	1	14.74
20	22	1	14.00