

## Rometec s.r.l.

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P. IVA 04120621000 - CCIAA RM 736916

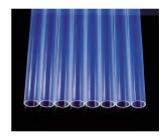
Reg. Soc. Tribunale RM 9229/91 - Cap. soc. 46'482,00 €



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

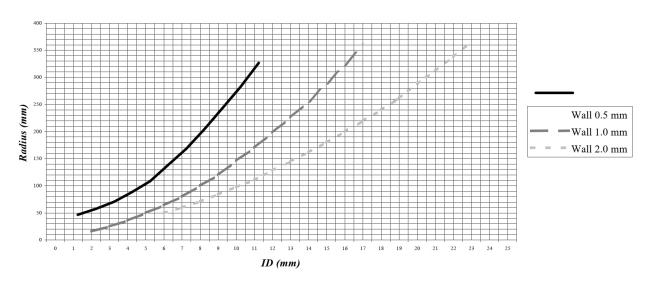
#### 3. Sizes

Scantube produces metric and industrial sizes as well as AWG sizes. Special dimensions can be made upon request.

<u>4. Tolerances</u>	<u>ID mm</u>	<u>Tolerance</u>	<u>Wall mm</u>	<u>Tolerance</u>
	3.00 - 5.00 mm	+/- 0.20 mm	0.10 - 0.30 mm	+/- 0.05 mm
(GKV-Norm)	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.

<u>ID</u>	<u>OD</u>	<u>Wall</u>	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