

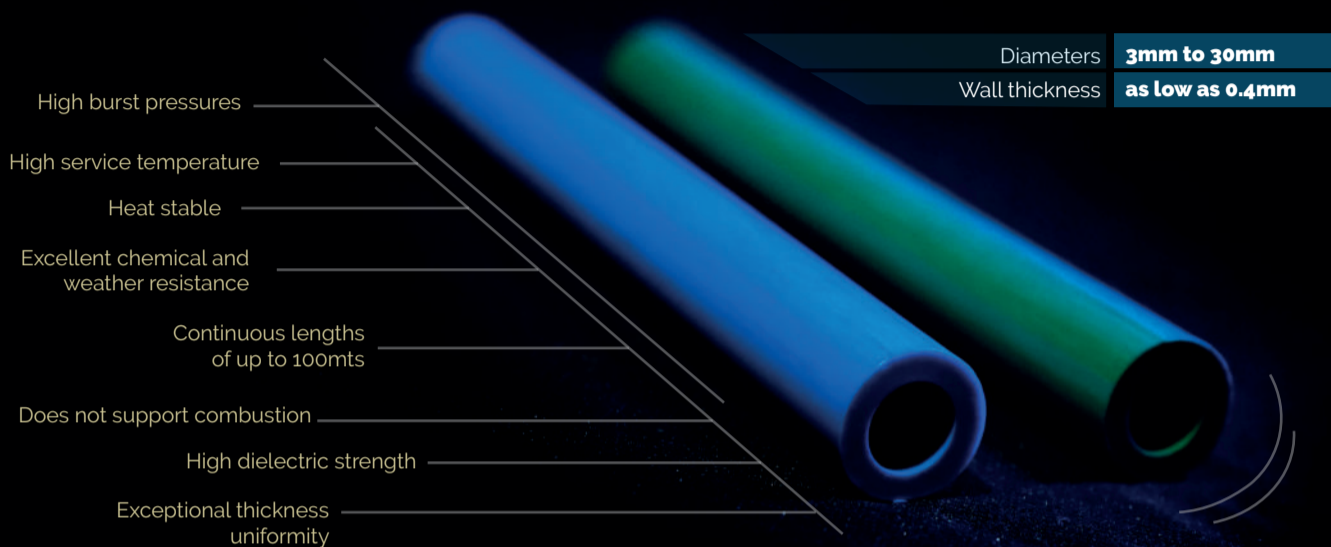


FluoroTube PTFE tubing is a high-strength, flexible polymer tubing that can withstand high temperatures while being resistant to nearly all chemicals.

Using a state-of-the-art PTFE paste extrusion press along with blending and molding techniques in line with global standards, Poly Fluoro remains India's premier manufacturer of high-quality PTFE tubing.

PTFE tubing can broadly be categorized in three ways:

1. Spaghetti tubing –less than 1.5mm in wall thickness and outer diameters under 15 mm
2. PTFE hoses –higher wall thickness tubes with diameters under 35mm
3. PTFE sleeves –wall thicknesses are usually between 2-6mm, but diameters go as high as 300mm



## Why Poly Fluoro?

- Poly Fluoro has a custom build extruder, capable of extruding any ID-OD combination as per **client needs**.

- Profiles are also possible, making us **uniquely suited** for taking on requirements that other manufacturers might not be able to make.

- We use only the best resins in our process and hold ourselves to the **highest quality assessment** standards, testing our final products extensively in relation to their end applications.

FLUOROTUBE PTFE TUBING Technical specifications	ASTM Test	Value
<b>Physical properties</b>		
Specific gravity	D792	2.15
Water absorption (%)	D570 / 24 hrs 1/3" t	< 0.00
Mold shrinkage (cm / cm)		0.02 – 0.05
Contact angle (degree)		110
<b>Thermal properties</b>		
Thermal conductivity (cal/sec/cm <sup>2</sup> , °/cm)	C177	6 x 10 <sup>-4</sup>
Coefficient of liner thermal expansion (1/°C)	D696 / 23 - 60°C	10 x 10 <sup>-5</sup>
Melting point (°C)		327
Melt viscosity (poise)		10 <sup>11</sup> -10 <sup>13</sup> (340 -380°C)
Maximum temperature for continuous use (°C / °F)		260 / 500
<b>Mechanical properties</b>		
Tensile strength (kgf/cm <sup>2</sup> )	D638 / 23°C	140 - 350
Elongation (%)	D638 / 23°C	200 - 400
Compression strength (kgf / cm <sup>2</sup> )	D695 / 1% deformation, 25°C	50 - 60
Tensile modulus (kgf / cm <sup>2</sup> )	D638 / 23°C	4,000
Flexural modulus (kgf / cm <sup>2</sup> )	D790 / 23°C	5,000 - 6,000
Impact strength (ft - lb / in)	D256 / 23°C, Izod	3
Hardness (Shore)	Durometer	D50 - D65
Deformation under load (%)	D621/100°C, 70 kgf/cm <sup>2</sup> , 24 hrs	5
	D621 / 25°C, 140 kgf/cm <sup>2</sup> , 24 hrs	7
Static friction coefficient	Coated - steel surface	0.02
<b>Electrical properties</b>		
Dielectric constant	D150 / 103Hz	2.1
	D150 / 106 Hz	2.1
Dielectric dissipation factor	D150 / 103 Hz	< 1 x 10 <sup>-4</sup>
Dielectric break down strength (KV/mm)	D149 / Short time, 1/ 8 in	105
Volume resistivity (ohm - cm)	D257	> 10 <sup>15</sup>
Chemical resistance		Excellent
Weather ability		Excellent
Combustibility (%)	D2863 / Oxygen concentration index	> 95

