

# PTFE, conductive (antistatic)



*In applications creating static charge (for example, when using a medium with a high flow rate), we advise anti-static PTFE tubing.*

*When static charge is created it can ignite the medium (due to electric sparks) or can cause holes in the wall of the tubing. The filler in the tubing does not prevent static charge but provides a good and safe guidance.*

*Anti-static PTFE tubing is available in smooth and convoluted design, in both metric and inch sizes. Delivery on coils, spools and cut lengths. Due to the filler, the colour of anti-static PTFE tubing is often black.*

## Key properties of PTFE tubing

- Excellent chemical resistance
  - Working temperature -190°C to +260°C
  - Greatest resistance to fatigue (Wöhler curve)
  - FDA approved
  - Flame resistant - UL94V0
  - No stick
  - Low coefficient of friction
  - UV-resistant (does not age)
  - Not hygroscopic (water absorption < 0,01%)
  - Very good dielectric insulation properties
- Properties of PTFE can be improved by adding additives as carbon, graphite, glass etc.

$\Omega m$	Range of conductivity
$10^{16}$ $10^{13}$ $10^{12}$ $10^{11}$	<u>Isolating range</u> (virgin PTFE, Ceramic isolators)
$10^{10}$ $10^9$ $10^8$ $10^7$	<u>Anti-static range</u>
$10^6$ $10^5$ $10^4$ $10^3$ $10^2$ $10^1$ 1	<u>Conductive range</u> (PTFE with anti-static filler)
$10^{-1}$ $10^{-2}$ $10^{-3}$	Carbon
$10^{-4}$ $10^{-5}$	<u>Metals</u>

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ID mm	OD mm	BR bij 20°C mm	BP bij 20° Bar	Gewicht (kg/m)	Tol. ID/OD (mm)	RoI ID mm
2,50	4,00	14	71	0,165	+/- 0,10	300
4,00	6,00	25	61	0,034	+/- 0,10	300
5,00	8,00	36	72	0,656	+/- 0,15	300
6,00	8,00	49	40	0,047	+/- 0,10	300
8,00	10,00	81	30	0,061	+/- 0,10	300
8,00	12,00	50	61	0,135	+/- 0,20	300
9,00	12,00	74	40	0,106	+/- 0,20	300
10,00	12,00	121	24	0,074	+/- 0,20	400
12,00	14,00	169	20	0,088	+/- 0,25	500

The above mentioned dimensions and tolerances are our standard.  
Other dimensions and/or tolerances available on request.

# Polyfluor