

PFA Tubing—High Temperature Sleaving



For applications requiring more clarity, flexibility and a higher continuous working temperature, PFA is a good choice.

Key Properties

- Less creep (less than PTFE)
- Transparent
- Melt processable
- Higher continuous working temperature than FEP
- Longer continuous lengths than PTFE (due to melt processability)
- Better performance in high pressure/temperature application than PTFE
- Working temperature from -200°C to +260°C



Broad chemical resistance and impressive mechanical performance at high temperatures allow PFA tubing to be used in some of the harshest applications, from downhole oil well instrumentation through to highly corrosive chemical manufacture.

PFA tubing can be delivered in smooth or convoluted design (spiral or parallel), in metric, inch and AWG sizes.

Delivery possible on straight lengths, cut lengths, coils or spools or striped/marked.

And unlike FEP, PFA chemistry lends itself to very low off-gassing, resulting in high purity that's suitable for pharmaceutical, laboratory, and sampling applications; ultra-high purity grades are suitable for semiconductor applications. In very aggressive industrial environments, such as hydrofluoric and nitric acids at 250 F, PFA tubing is preferred and has proven to provide a long service life.

	Property	Specification	Unit	Value
General	Continuous working temp.	Maximum	°C	260
	Chemical resistance		-	Excellent
	Specific gravity	D 792	g/cm ³	2.15
Electrical	Dielectric constant	D 150 at 10 ³ Hz	-	2.04
		D 150 at 10 ⁶ Hz	-	2.04
	Dielectric dissipation factor	D 150 at 10 ³ Hz	-	0.0002
		D 150 at 10 ⁶ Hz	-	0.0003
	Dielectric strength	D 149	kV/mm	55
	Volume resistivity	D 257	Ohm-cm	>10 ¹⁸
Mechanical	Tensile strength	D 1708, D 638	Mpa	30
	Elongation	D 1708, D 638	%	300
	Compressive strength	D 695	Mpa	15
	Impact strength	D 256 bij +23°C	J/m	No break
	Flexural Modulus	D 790 bij +23°C	Mpa	690
	Tensile Modulus	D 638	Mpa	270
	Hardness	D 2240	-	60-65
Thermal	Melting (gel)point		°C	305
	Thermal conductivity	+23°C	W/Kg.m	0.25
	HDT	DIN 75	°C	
	method A			74
	method B			48

** Actual properties may change due to processing method, compound type, extruded dimensions and other variables. It is the user's responsibility to evaluate and fully test the suitability of the product for their specific application.*

PFA Tubing—High Temperature Sleevings

ID (mm)	ID tol. +/- mm	Wall (mm)	Wall tol. +/- mm	OD (mm)
2.00	0.10	1.00	0.15	4.00
4.00	0.20	1.00	0.15	6.00
6.00	0.20	1.00	0.15	8.00
8.00	0.20	1.00	0.15	10.00
9.00	0.30	1.50	0.20	12.00

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

