PFA Tubing—High Temperature Sleeving

Features & Benefits

- No Stick
- FDA Approved
- Chemically inert
- Transparent/Clear
- Less creep (less than PTFE)
- UV resistant (does not age)
- Very low coefficient of friction
- Lower melting temp than PTFE
- Not hygroscopic (water absorption <0.01%)
- Working Temperature from –200°C to +260°C

Applications

- For applications requiring more clarity, flexibility and a higher continuous working temperature, PFA is a good choice.
- PFA is clear transparent with a light blue glow. The material combines many of the properties of PTFE and FEP.
- In the Semi-conductor and Pharmaceutical industries PFA HP (High Purity) hoses are used for fluid handling applications requiring extremely low absorption level.

Product Information

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.

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.

Possibilities

- PFA Tubing
- Cleanroom PFA tubing
- PFA high pressure hoses
- PFA heat shrink tubing
- PFA connectors
- PFA rod
- PFA rings
- PFA bellows
- PFA welding liners
- PFA film/foil
- Coating with PFA

PFA Tubing—High Temperature Sleeving

PFA Tubing—High Temperature Sleeving

PFA Tubing—High Temperature Sleeving

General Properties PFA

	Property	Specification	Unit	Value
General	Continuous working temp.	Maximum	°C	260
	Chemical resistance		-	Excellent
	Specific gravity	D 792	g/cm³	2.15
	Flammability	UL94		V-0
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 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.

Size Guide

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