



PFA TUBING

Key properties / advantages of PFA tubing

- Similar properties to PTFE tubing.
- Melt processable – gives longer continuous length than PTFE.
- Higher continuous working temperature compared to FEP.
- PFA is virtually unaffected by oxygen, ozone and UV light.
Sterilisation by ETO or Steam

Dimensions: Optinova produces metric, imperial and AWG sizes. Special dimensions can be made upon request. Random production length is standard but fix length and cut pieces can be supplied upon request. Please contact info.de@Optinova.com

STANDARD TOLERANCE	
OD mm	Tol mm
> 1.99	+/- 0.07
2.00 – 3.99	+/- 0.08
4.00 – 7.99	+/- 0.10
8.00 – 9.99	+/- 0.12
10.00 – 11.99	+/- 0.15
12.00 – 15.99	+/- 0.20
16.00 – 17.99	+/- 0.25
18.00 – 19.99	+/- 0.30
20.00 – 23.99	+/- 0.35
24.00 – 29.99	+/- 0.40
	etc.

STANDARD TOLERANCE	
Wall mm	Tol mm
> 0.30	+/- 0.05
0.31 – 0.70	+/- 0.08
0.71 – 1.00	+/- 0.10
1.01 – 1.30	+/- 0.12
1.31 – 1.60	+/- 0.15
1.61 – 2.00	+/- 0.20
2.01 – 2.50	+/- 0.25
2.51 – 3.00	+/- 0.30
3.01 – 3.50	+/- 0.35
3.51 – 4.00	+/- 0.40
	etc.

	PROPERTY	SPECIFICATION	UNIT	
GENERAL	Continuous service temperature	Maximum	°C	260
			°F	500
	Chemical resistance		–	Excellent
	Specific gravity	D 792	–	2.15
ELECTRICAL	Dielectric constant	D 150 at 10 ³ Hz	–	2.1
		D 150 at 10 ⁶ Hz	–	2.1
	Dielectric dissipation factor	D 150 at 10 ³ Hz	–	0.0002
		D 150 at 10 ⁶ Hz	–	0.0003
	Dielectric strength (short term) 10 mils film	D 149	Volt/mil	2 000
Volume resistivity	D 257	Ohm • cm	> 10 ¹⁸	
ENVIROMENTAL	Water absorption	D 570	%	< 0.03
	Weather resistance	–	–	Excellent
	Oxygene index	D 2863	%	> 95
	Flammability	UL 94	–	V-0
MECHANICAL	Tensile strength	D 1708, D 638	psi	4 000
	Elongation	D 1708, D 638	%	300
	Compressive strength	D 695	psi	2 200
	Impact strength	D 256 at +23°C	FT-Lb/in	No Break
	Flexural Modulus	D 790 at +23°C	psi	100 000
	Tensile Modulus	D 638	psi	40 000
	Hardness	D 2240	–	D-60
THERMAL	Melting point		°C	305
			°F	581
	Thermal conductivity	C177	BTU/hr/ft ² /°F.in	1.3
	Deflection temperature 66 psi 264 psi	D 648	°C	74
				48
Deflection temperature 66 psi 264 psi	D 648	°F	166	
			118	

Bending radius for PFA at 25° C

