



FEP TUBING

Key properties / advantages of FEP tubing

- More transparent / optically clear than PTFE and therefore used in monitoring equipment.
- More flexible than PTFE.
- FEP is virtually unaffected by oxygen, ozone and UV light.
- The working temperature of FEP is extremely broad, ranging from 200°C (392°F) to -200°C (-328°F).

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.

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	200	
			°F	392	
	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	–	0.0001	
		D 150 at 10 ⁶ Hz	–	0.0008	
	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	%	< 0.01	
	Weather resistance	–	–	Excellent	
	Oxygene index	D 2863	%	>95	
	Flammability	UL 94	–	V-0	
MECHANICAL	Tensile strength	D 1708, D 638	MPa	24.1	
	Elongation	D 1708, D 638	%	300	
	Compressive strength	D 695	MPa	15.2	
	Impact strength	D 256 at +23°C	Ft-Lb/in	No Break	
	Flexural Modulus	D 790 at +23°C	MPa	654.6	
	Tensile Modulus	D 638	MPa	344.5	
	Hardness	D 2240	–	D-55	
THERMAL	Melting point		° C	270	
			° F	518	
	Thermal conductivity	C-177	BTU/hr/ft ² /°F.in	1.4	
	Deflection temperature 66 psi 264 psi	D 648		° C	59
					57
	Deflection temperature 66 psi 264 psi	D 648		° F	138
					134

Bending radius for FEP at 25°C

