MT3000
PVDF HEAT SHRINK TUBING

APPLICATIONS

- Abrasion protection for surgical and in-vivo instruments
- Strain relief applications

PROFILE

- Shrink ratio ≤ 3:1
- Full recovery at 150°C (302°F) minimum
- Supports sterilization environments: gamma, ethylene oxide (ETO), steam, dry heat and autoclave
- Manufactured to ISO 10993 standards
- Registered with the FDA: MAF-472
- Custom sizing, colors, finishing and value-add options available
- Radiopacity can be customized

ABOUT

- MT3000 is a crosslinked polyvinylidene fluoride (PVDF) heat shrink tubing. PVDF offers excellent chemical and abrasion resistance, high dielectric strength and superior tensile strength. Its homogeneous structure (properties evenly distributed) contributes to its consistency and high performance, making our MT3000 essentially free from flaws, defects, pinholes, seams, cracks or inclusions
- MT3000 is semi-lubricious and more flexible than our other PVDF heat shrink tubing. MT3000 offers abrasion protection for surgical and in-vivo instruments

HEAT SHRINK TUBING — MT3000

TABLE 1: DIMENSIONS

Standard Sizes	As Supplied		Recovered							
	Inside Diameter (D) Minimum		Inside Diameter (d) Maximum		Wall Thickness (in., mm.) (W)					
					Minimum		Maximum		Nominal	
Size	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/64	.046	1.17	.023	0.58	.008	0.20	0.12	0.31	.010	0.25
1/16	.063	1.60	.031	0.79	.008	0.20	0.12	0.31	.010	0.25
3/32	.093	2.36	.046	1.17	.008	0.20	0.12	0.31	.010	0.25
1/8	.125	3.18	.062	1.58	.008	0.20	0.12	0.31	.010	0.25
3/16	.187	4.75	.093	2.36	.008	0.20	0.12	0.31	.010	0.25
1/4	.250	6.35	.125	3.18	.009	0.28	0.15	0.38	.012	0.33
3/8	.375	9.53	.187	4.75	.009	0.28	0.15	0.38	.012	0.33
1/2	.500	12.70	.250	6.35	.009	0.28	0.15	0.38	.012	0.33

TABLE 2: PROPERTIES

Property	Unit	Requirement	Test Method
Physical			
Dimensions*	inches (mm)	In accordance with Table 1	
Longitudinal change*	percent	+0, -10 maximum	ASTM D 2671
Concentricity as supplied*	percent	70 minimum	ASTM D 2671
Tensile strength*	psi (MPa)	5000 minimum (34.5)	ASTM D 2671, 20"/minute
Ultimate elongation*	percent	100 minimum	
Secant modulus* (expanded)	psi (MPa)	50,000 minimum	ASTM D 2671
Heat resistance 168 hours at 250 ± 5°C (482°F) Followed by test for: Ultimate elongation	percent	50 minimum	ASTM D 2671, 20"/minute
Electrical			
Dielectric strength	kV/mm	500 minimum (19.680)	ASTM D 2671
Dielectric			
withstand 3000V, 60Hz	sec	60 minimum	ASTM D 2671
Chemical			
Fluid resistance 24 hours at 23 ± 3°C (77 ± 5°F) Isopropyl alcohol 5% saline solution Disinfectant			ASTM D 2671
Followed by tests for: Dielectric strength	kV/mm	400 minimum (15.760)	ASTM D 2671
Tensile strength	psi (MPa)	3500 minimum (24.1)	ASTM D 2671
Heavy metals analysis Cadmium, Mercury, Lead, Bismuth, Antimony	ppm	1 maximum (total of all metals)	USP XXII Physiochemical tests-plastic (Note 1)

*Denotes lot acceptance test

Note 1: Sample preparation and extraction is per USP XXII. Metals analysis may be colorimetric as described in USP XXII or by equivalent quantitative analytical method.

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01/24 med-mt-3000-hst-ss-en