



# MT-PBX SINGLE WALL PEBA HEAT SHRINK TUBING

## APPLICATIONS

- Mechanical protection for guidewires and instruments
- Interventional shaft encapsulation
- Strain relief applications

## PROFILE

- Shrink ratio  $\leq$  4:1
- Full recovery at 190°C (374°F) minimum
- Supports sterilization environments: gamma, ethylene oxide (ETO), steam, dry heat and autoclave
- Manufactured to ISO 10993 standards
- Radiopaque options; radiopacity can be customized
- Flexible and semi-rigid options available; 55D, 63D & 72D

## ABOUT

- MT-PBX is a crosslinked single wall polyether block amide (PEBA) tubing. PEBA is tough and lightweight with excellent mechanical protection and high maneuverability
- MT-PBX can be suitable for strain relief, insulation and as ultra-thin jacket providing mechanical protection for guidewires and other medical instruments. Our dual wall option provides an inner reflowable layer and is a great option for interventional shaft encapsulation

# HEAT SHRINK TUBING — MT-PBX PEBA

**TABLE 1: DIMENSIONS**

Description	As Supplied		Recovered							
	Inside Diameter (D) Minimum		Inside Diameter (d) Maximum		Wall Thickness (W)					
					Minimum		Maximum		Nominal	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
MT-PBX72-040-020-004-*	0.040	1.00	0.020	0.50	0.003	0.08	0.005	0.13	0.004	0.10
MT-PBX72-060-030-004-*	0.060	1.52	0.030	0.89	0.003	0.08	0.005	0.13	0.004	0.10
MT-PBX72-100-050-004-*	0.100	2.54	0.050	1.27	0.003	0.08	0.005	0.13	0.004	0.10
MT-PBX72-120-060-004-*	0.120	3.04	0.060	1.52	0.003	0.08	0.005	0.13	0.004	0.10
MT-PBX72-188-094-004-*	0.188	4.77	0.094	2.38	0.003	0.08	0.005	0.13	0.004	0.10
MT-PBX72-250-125-004-*	0.250	6.35	0.125	3.17	0.003	0.08	0.005	0.13	0.004	0.10
MT-PBX72-100-050-006-*	0.100	2.54	0.050	1.27	0.005	0.13	0.007	0.18	0.006	0.15
MT-PBX72-120-060-008-*	0.120	3.04	0.060	1.52	0.0065	0.17	0.0095	0.24	0.008	0.20
MT-PBX72-188-094-010-*	0.188	4.77	0.094	2.38	0.008	0.20	0.012	0.30	0.010	0.25
MT-PBX72-250-125-012-*	0.250	6.35	0.125	3.17	0.010	0.25	0.014	0.36	0.012	0.30

**TABLE 2: PROPERTIES**

Property	Unit	Requirement	Test Method
<b>Physical</b>			
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
<b>Electrical</b>			
Dielectric strength: Sizes 3/64 through 1/2	volts/mil	800 minimum (31.500)	ASTM D 2671
Dielectric strength: Sizes 3/4 through 2	kV/mm	600 minimum (23.600)	
<b>Dielectric</b>			
withstand 3000V, 60Hz	sec	60 minimum	ASTM D 2671
<b>Chemical</b>			
Fluid resistance 24 hours at 23 ± 3°C (73 ± 5°F) Isopropyl alcohol 5% saline solution Disinfectant			ASTM D 2671
Followed by tests for: Dielectric strength Sizes 3/64 through 1/2 Sizes 3/4 through 2	kV/mm	700 minimum (27.600) 500 minimum (19.700)	ASTM D 2671
Tensile strength	psi (MPa)	5000 minimum (34.5)	ASTM D 2671, 2"/minute
Heavy metals analysis Cadmium, Mercury, Lead, Bismuth, Antimony	ppm	1 maximum (total of all metals)	USP XXII Physiochemical tests-plastic (Note 1)

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