

# MT-5000 LDPE Heat Shrink Tubing

## Applications

- Strain relief applications



### PROFILE

- Shrink ratio <\_ 4:1
- Full recovery at 110°C (230°F) minimum
- Supports sterilization environments: gamma and ethylene oxide (ETO)
- Manufactured to ISO 10993 standards
- Registered with the FDA: MAF-469
- Custom sizing, colors, finishing and value-add options available
- Radiopacity can be customized
- Adhesive-layer option available

### ABOUT

- MT-5000 is a crosslinked low-density polyethylene (LDPE) heat shrink tubing and offers excellent flexibility making it a great option for strain relief applications.
- MT-5000 homogenous structure (properties evenly distributed) contributes to its consistency and high performance, thereby reducing the likelihood that flaws, defects, pinholes, seams, cracks or inclusions will occur after the product is fully recovered at the temperature stated above.
- MT-5000 is sometimes shipped in the air-spooled condition which helps maintain tubing shape and form. Use of only part of the air-spooled MT-5000 reel may result in loss of air pressure and shape to the remaining product on the reel, which could cause the remaining product to kink or twist. Due to the pliable nature of the product, full recovery of the MT-5000 at the temperature set forth above will remove twists and kinks so the product can be used.
- MT-5000 is flexible with a high shrink ratio making it a great option for strain relief applications.

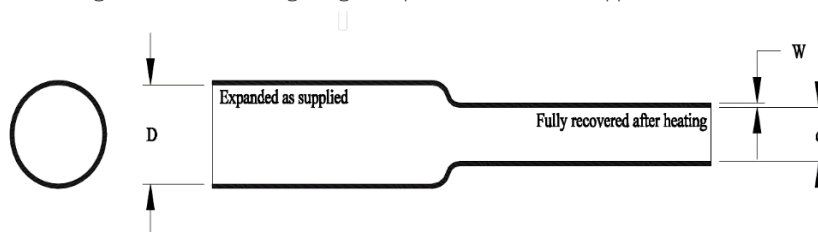


TABLE 1: DIMENSIONS

Standard Sizes	As Supplied		Recovered							
	Inside Diameter Minimum (D)		Inside Diameter Maximum (d)		Wall Thickness (in., mm.) (W)					
Size	in.	mm.	in.	mm.	Minimum	Maximum	Nominal			
3/64	.046	1.17	.023	0.58	.013	0.33	.019	0.48	.016	0.40
1/16	.063	1.60	.031	0.79	.014	0.35	.020	0.50	.017	0.43
3/32	.093	2.36	.046	1.17	.017	0.43	.023	0.58	.020	0.50
1/8	.125	3.18	.062	1.58	.017	0.43	.023	0.58	.020	0.50
3/16	.187	4.75	.093	2.36	.017	0.43	.023	0.58	.020	0.50
1/4	.250	6.35	.125	3.18	.022	0.56	.028	0.71	.025	0.64
3/8	.375	9.53	.187	4.75	.022	0.56	.028	0.71	.025	0.64
1/2	.500	12.70	.250	6.35	.022	0.56	.028	0.71	.025	0.64
3/4	.750	19.05	.375	9.53	.027	0.69	.033	0.84	.030	0.76

# Heat Shrink Tubing — MT-5000

TABLE 2: PROPERTIES

Property	Unit	Requirement	Test Method
<b>Physical</b>			
Dimensions*	inches ( <i>mm</i> )	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 ( <i>MPa</i> )	1800 minimum ( <i>12.4</i> )	ASTM D 2671,
Ultimate elongation*	percent	200 minimum	20" minute
Secant modulus* (expanded)	psi ( <i>MPa</i> )	2.5 x 10 <sup>4</sup> maximum ( <i>172</i> )	ASTM D 2671
Heat resistance 168 hours at 125°C (257°F) Followed by test for: Ultimate elongation			ASTM D 2671, 20"/minute
	percent	100 minimum	
<b>Electrical</b>			
Dielectric strength	volts/mil ( <i>volts/mm</i> )	500 minimum ( <i>19.680</i> )	ASTM D 2671
Dielectric withstand 3000V, 60Hz	sec	60 minimum	ASTM D 2671
<b>Chemical</b>			
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	volts/mil ( <i>volts/mm</i> )	500 minimum ( <i>19.680</i> )	
Tensile strength	psi ( <i>MPa</i> )	1800 minimum ( <i>12.4</i> )	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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