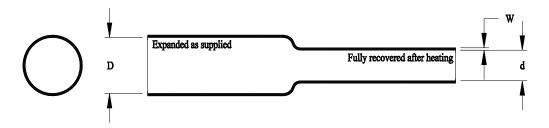
Altera[™] MT6000 Flexible, High Expansion Ratio, Modified Polyolefin, Heat - Shrinkable Tubing



This specification covers the requirements for one type of single wall, electrical insulating, extruded tubing whose diameter will reduce to a predetermined size upon application of heat in excess of 110°C (230°F).

The tubing is fabricated from modified polyolefin crosslinked by irradiation. It shall be homogenous and essentially free from flaws, defects, pinholes, seams, cracks or inclusions.

The tubing is fabricated from materials which meet the requirements of U.S. Pharmacopeia Class VI Plastics. Color shall be black or clear unless otherwise specified.

Table 1: <u>Dimensions</u>

4:1 Shrink Ratio

	As Supplied Inside Diameter (D) Minimum		Recovered							
Size			Inside Diameter (d) Maximium		Wall Thickness (W)					
					Minimum		Maximum		Nominal	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/16	.187	4.75	.046	1.17	.017	0.43	.023	0.58	.020	0.51
1/4	.250	6.35	.062	1.57	.017	0.43	.023	0.58	.020	0.51
3/8	.375	9.53	.093	2.36	.017	0.43	.023	0.58	.020	0.51
1/2	.500	12.70	.125	3.18	.022	0.56	.028	0.71	.025	0.64

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Specification Control Drawing

Tyco Electronics		yco Electronics Corporation 00 Constitutional Drive Ienlo Park, CA 94025 USA	Raychem Tubing	Title: Altera [™] MT6000 Flexible, High Expansion Ratio, Modified Polyolefin, Heat - Shrinkable Tubing		
		nend this drawing at any time. The product for their application	Document No :	MT6000		
Cage Code: 06090	Scale: None	Size: A	Rev. Date: 18-Jan-11	Rev.:	Sheet: 1 of 2	

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)	1,800 minimum <i>(12.4)</i>	ASTM D 2671,	
* Ultimate Elongation	Percent	200 minimum	20"/ minute	
Secant Modulus (as supplied)	psi (MPa)	3.5 x 10 ⁴ maximum <i>(241)</i>	ASTM D 2671	
Heat Resistance				
168 hours at 125°C (257°F)				
Followed by test for:			ASTM D 2671, 20"/minute	
Ultimate Elongation	Percent	100 minimum		
Electrical				
Dielectric Strength	Volts/mil	500 minimum <i>(19.7)</i>	ASTM D 2671	
	(Volts/mm)			
Dielectric Withstand				
3,000V, 60 Hz	sec	60 minimum	ASTM D 2671	
Chemical				
Fluid Resistance			ASTM D 2671	
24 hours at 23 ± 3°C (77 ± 5°F)				
Isopropyl Alcohol				
5% Saline Solution				
Cidex**				
Followed by tests for:	Volts/mil	500 minimum (10.7)	A CTM D 2674	
Dielectric Strength		500 minimum (19.7)	ASTM D 2671	
Tanaila Ctranath	(Volts/mm)	4 000 minimum (40 4)	A CTM D OCZ4	
Tensile Strength	psi (MPa)	1,800 minimum <i>(12.4)</i>	ASTM D 2671	
Heavy Metals Analysis	ppm	1 maximum	USP XXII	
Cadmium		(total of all metals)	Physicochemical Tests-Plastics	
Mercury Lead			(Note 1)	
Bismuth			(Note 1)	
Antimony				
Anumony				

^{*} 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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