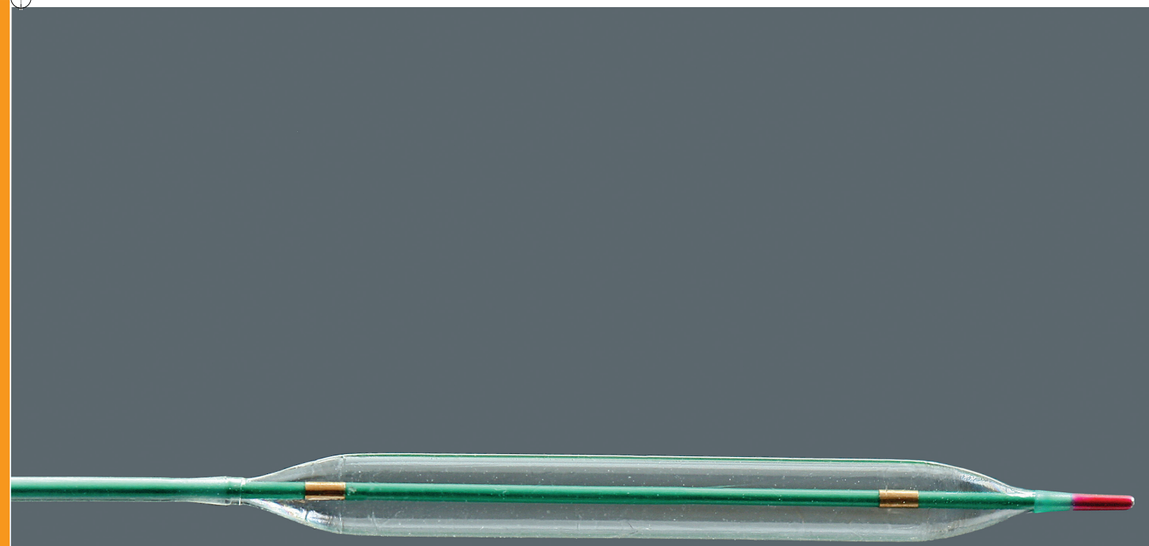


Introducing

Medical Tubing Solutions

MT-LWA (Laser-Welding Application)
Altera Polyolefin Tubing
Laser-Welding Process Aid

Altera Polyolefin Tubing
Laser-Welding Process Aid

Tyco Electronics
Our commitment. Your advantage.

Key Features

2:1 or 3:1 shrink ratios, custom sizes available

Flexible; forms to irregular shapes

Good clarity for laser-welding

Excellent electrical insulation properties

Removes easily after application, good axial tear propagation

DESCRIPTION

Useful for laser-welding operations of stents and balloons, hot jaw bonding or other secondary value-added processes. Heat-shrinkable tubing helps hold joints in place during operation and removes easily without residue or damage to the end product.

INSTALLATION TEMPERATURE

Minimum shrink temperature:	95°C [203°F]
Minimum Full Recovery Temperature:	121°C [250ºF]

SPECIFICATIONS & APPROVALS

U.S. Pharmacopeia Class VI Plastics

ASTM D 2617

ELECTRICAL

Dielectric strength: 500 V/mil (19.7 kV/mm) minimum

Dielectric Withstand 3000V, 60 Hz: 60 sec. minimum

MECHANICAL

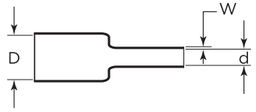
Longitudinal change: +0, -10% maximum

Tensile strength: 1500 psi minimum (10.3 MPa)

Ultimate elongation: 200% minimum

2% Secant Modulus: 2.5 x 10^4 psi maximum (172MPa)

Product Dimensions



Size	As Supplied		Recovered			
	Inside Diameter (D) Minimum		Inside Diameter (d) Maximum		Wall Thickness (W) Nominal	
	in.	*mm.*	in.	*mm.*	in.	*mm.*
1/32	0.040 +/- 0.005	*1.02 +/- 0.13*	0.013 +/- 0.002	*0.33 +/- 0.05*	0.010 +/- 0.002	*0.25 +/- 0.05*
3/64	0.055 +/- 0.005	*1.40 +/- 0.13*	0.020 +/- 0.003	*0.51 +/- 0.08*	0.012 +/- 0.002	*0.31 +/- 0.05*
1/16	0.072 +/- 0.005	*1.83 +/- 0.13*	0.027 +/- 0.004	*0.69 +/- 0.10*	0.017 +/- 0.003	*0.43 +/- 0.08*
3/32	0.107 +/- 0.008	*2.72 +/- 0.20*	0.042 +/- 0.004	*1.07 +/- 0.10*	0.020 +/- 0.003	*0.51 +/- 0.08*
1/8	0.140 +/- 0.010	*3.56 +/- 0.25*	0.057 +/- 0.005	*1.45 +/- 0.13*	0.020 +/- 0.003	*0.51 +/- 0.08*
3/16	0.205 +/- 0.010	*5.21 +/- 0.25*	0.086 +/- 0.007	*2.18 +/- 0.18*	0.020 +/- 0.003	*0.51 +/- 0.08*
1/4	0.275 +/- 0.015	*6.99 +/- 0.38*	0.117 +/- 0.008	*2.97 +/- 0.20*	0.025 +/- 0.003	*0.64 +/- 0.08*
3/8	0.415 +/- 0.020	*10.54 +/- 0.51*	0.171 +/- 0.016	*4.34 +/- 0.41*	0.025 +/- 0.003	*0.64 +/- 0.08*

ORDERING INFORMATION

Color	Clear (-X) Only
Size selection	Always order the largest size that will recover snugly over the substrate. Special order sizes are available upon request.
Standard packaging	On plastic spools (SP), double-bagged
Ordering description	Specify product name and size (for example, MT-LWA-3/32-X-SP) For non-standard sizes specify expanded ID and recovered ID (for example, MT-LWA-.045-.024-X-SP)

ALTERA TUBING LINE

	MT 1000	MT 2000	MT 3000	MT 5000	MT 5500	MT 6000	MT-PBX (D*)	MT-PBX (D*/D*)	MT-FEP	MT-LWA
Shrink Ratio	2:1	2.5:1	2:1	2:1	2:1	4:1	2:1	2:1	1.6:1	2:1 or 3:1
Material	Fluoropolymer	Polyolefin	Fluoropolymer	Polyolefin	Polyolefin	Polyolefin	PEBA	PEBA	Fluoropolymer	Polyolefin
Flexibility	Semi-Rigid	Semi-Rigid	Flexible	Flexible	Very Flexible	Flexible	Flex-Rigid*	Flex-Rigid*	Semi-Rigid	Flexible
Temperature (Full Rec)	175°C	110°C	150°C	105°C	100°C	125°C	190°C*	190°C*	210°C	121°C
Adhesive Layer	Optional	Optional	Optional	Optional	Optional	Optional	Optional	No	No	No

* = Shore D Durometer dependent

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