

MT1000
PVDF HEAT SHRINK TUBING

APPLICATIONS

- Abrasion protection for laparoscopic and in-vivo instruments
- High performance insulation for electrosurgical devices
- Strain relief applications

PROFILE

- Shrink ratio ≤ 2:1
- Full recovery at 175°C (347°F) minimum
- Supports sterilization environments: gamma, ethylene oxide (ETO), steam, dry heat and autoclave
- Manufactured to ISO 10993 standards
- Registered with the FDA: MAF-444
- Custom sizing, colors, finishing and value-add options available
- Radiopacity can be customized

ABOUT

- MT1000 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 MT1000 tubing essentially free from flaws, defects, pinholes, seams, cracks or inclusions
- MT1000 is rigid and highly-lubricious, and works very well at providing abrasion protection for rigid laparoscopic and in-vivo instruments

HEAT SHRINK TUBING — MT1000

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		Normal	
3/64	0.046	1.17	0.023	0.58	.008	0.20	0.012	0.31	.010	0.25
1/16	0.063	1.60	0.031	0.79	.008	0.20	0.012	0.31	.010	0.25
3/32	0.093	2.36	0.046	1.17	.009	0.20	0.012	0.31	.010	0.25
1/8	0.125	3.18	0.062	1.58	.009	0.20	0.012	0.31	.010	0.25
3/16	0.187	4.75	0.093	2.36	.009	0.20	0.012	0.31	.010	0.25
1/4	0.250	6.35	0.125	3.18	.011	0.28	0.015	0.38	.013	0.33
3/8	0.375	9.53	0.187	4.75	.011	0.28	0.015	0.38	.013	0.33
1/2	0.500	12.70	0.250	6.35	.011	0.28	0.015	0.38	.013	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	150 minimum	
Secant modulus* (expanded)	psi (MPa)	1 x 105 minimum (690)	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: 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)	
Dielectric withstand 3000V, 60Hz	sec	60 minimum	ASTM D 2671
Chemical			
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)	
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)

*Denotes lot acceptance testNote

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.

TE.com/medical

TE Connectivity, TE connectivity (logo), Raychem and TE are trademarks owned or licensed by the TE Connectivity Ltd. family of companies.
All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

© 2024 TE Connectivity. All Rights Reserved.

04/24 med-mt-1000-hst-ss-en

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

TE Connectivity:

SMV1W220KJT 1393454-9 1897725-2 2380312-2 HT-CT-50M-1-OUT-0 TE50BR39J 3631B101LL SBCHE154R7K SBCHE64R7K 175977-2 T4133012081-000 170376-2 1903112-2 2-520263-2 2098557-4 2310537-1 917688-1 MPT100C18RF U5254-000005-030PA 292206-2 3-1447221-5 1-962915-1 2005330-1 282680-1 354022KFT RH73H2A40MKTN ROX05SJ18R 2-521104-2 CPF0402B37K4E1 HSHC4508K2J