



Introducing TTMS-MP Heat-Shrinkable Tubing

TTMS-MP tubing is a semi-flattened, heat-shrinkable tubing intended for wire and cable identification. Available in continuous spools only, TTMS-MP tubing is designed for computer-based printing using a T2000CT-PRINTER. However, the real advantage of TTMS-MP is the ease with which it slips over wires due to its oval shape. The product format makes TTMS-MP identification tubing ideal for applications where in-sequence kitting is not of over-riding importance, for example where several hundred identical markers are required. TTMS-MP comes in spools of 50 and 100 meters, which minimize the number of spool changes necessary during a printing run. The installed markers are low profile and lightweight, and in addition to identification, may also be used to provide insulation and strain relief.



TTMS-MP Heat-Shrinkable Tubing

KEY FEATURES

- Easier to use than standard TTMS due to its oval shape
- 3 : 1 shrink ratio (except sizes 38.1mm and 50.8mm which are 2 : 1)
- Thin walled and flame retardant
- Thermal Transfer printable only
- Meets military specifications for material and print performance
- -55°C to 135°C operating temperature
- CSA certified, UL recognized UL224
- RoHS compliant

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For Printer Support

1-800-430-7226, option 4 or 5

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APPLICATIONS

Used for wire and cable harness identification in the following industries :

- Aerospace
- Commercial
- Defense
- Industrial
- Lighting
- Marine
- Rail & Mass Transit

ELECTRICAL

- **DIELECTRIC STRENGTH** : 20MV/m minimum (IEC 243)

MECHANICAL

- **TENSILE STRENGTH** : 10MPa minimum (SAE -AMS-DTL-23053/5)
- **ULTIMATE ELONGATION** : 200% minimum (SAE-AMS-DTL-23053/5)
- **LONGITUDINAL CHANGE** : -20% maximum (SAE-AMS-DTL-23053/5)
- **HEAT AGING** : 100% UE retained and print legible after 168 hours at 175°C (347°F)
- **HEAT SHOCK** : No cracking, dripping or flowing and print legible after 4 hours at 250°C (482°F)
- **LOW TEMPERATURE FLEXIBILITY** : No cracking after 4 hours at -55°C (-67°F), 1mm (7/16 inch) mandrel bend.

STANDARDS AND SPECS

- **Tyco Electronics** : RW 2517
- **UL** : recognized Standard 224, (File E35586)
- **CSA** : certified CSA C22.2 No. 198.1-98, (File 31929)
- **Military** : AMS-DTL-23053/5, AS-81531, MIL-STD-202F Method 215

MATERIALS

- Thin wall, flame retardant radiation cross-linked polyolefin heat-shrinkable tubing

PRODUCT DIMENSIONS in inches and (millimeters)

| Part Number | Exp. (Min) | Recovered (max) | Rec. use range | Rec. wall thickness | Weight lb/ft (g/m) |
|--------------|---------------|-----------------|-------------------------------|-----------------------------|--------------------|
| TTMS-MP-2.4 | 0.093 (2.36) | 0.031 (0.79) | 0.032 - 0.075 (0.91 - 1.90) | 0.021 ± 0.003 (0.53 ± 0.08) | 0.0017 (2.76) |
| TTMS-MP-3.2 | 0.125 (3.18) | 0.042 (1.07) | 0.044 - 0.105 (1.11 - 2.66) | 0.023 ± 0.003 (0.58 ± 0.08) | 0.0025 (3.73) |
| TTMS-MP-4.8 | 0.187 (4.75) | 0.062 (1.57) | 0.069 - 0.160 (1.75 - 4.06) | 0.023 ± 0.003 (0.58 ± 0.08) | 0.0033 (4.93) |
| TTMS-MP-6.4 | 0.250 (6.35) | 0.083 (2.11) | 0.091 - 0.215 (2.31 - 5.46) | 0.023 ± 0.003 (0.58 ± 0.08) | 0.0043 (6.46) |
| TTMS-MP-9.5 | 0.375 (9.53) | 0.125 (3.18) | 0.137 - 0.320 (3.47 - 8.12) | 0.023 ± 0.003 (0.61 ± 0.08) | 0.0062 (9.27) |
| TTMS-MP-12.7 | 0.500 (12.70) | 0.166 (4.22) | 0.183 - 0.425 (4.64 - 10.79) | 0.024 ± 0.003 (0.61 ± 0.08) | 0.0084 (12.53) |
| TTMS-MP-19.0 | 0.750 (19.05) | 0.250 (6.35) | 0.275 - 0.640 (6.99 - 16.25) | 0.024 ± 0.003 (0.61 ± 0.08) | 0.0149 (22.13) |
| TTMS-MP-25.4 | 1.000 (25.40) | 0.333 (8.46) | 0.366 - 0.850 (9.29 - 21.59) | 0.025 ± 0.003 (0.64 ± 0.08) | 0.0190 (28.24) |
| TTMS-MP-38.1 | 1.500 (38.10) | 0.750 (19.05) | 0.825 - 1.300 (20.95 - 33.02) | 0.020 ± 0.003 (0.51 ± 0.08) | 0.0340 (50.61) |
| TTMS-MP-50.8 | 2.000 (50.80) | 1.000 (25.40) | 1.100 - 1.750 (27.94 - 44.95) | 0.025 ± 0.003 (0.64 ± 0.08) | 0.0584 (86.96) |



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