



Introducing TMS-90-SCE Military Grade Heat-Shrinkable Wire Identification Sleeves

The TMS-90-SCE is a flame retardant military grade heat-shrinkable polyolefin tubing used for wire identification. It is lightweight and ideal for aerospace applications. It is manufactured from the same compound as the Raychem TMS-90 product, but offered in TE Connectivity (TE) System 6 "Ladder" format for ease of thermal transfer printing. **Available in various sizes ranging from 3/32" to 1 1/2" and have a 2:1 shrink ratio.**

KEY FEATURES

- Product successor to the TMS-90 product
- 2 : 1 shrink ratio
- Flame retardant
- Thermal Transfer printable
- Meets the performance requirements of SAE-AMS-DTL-23053/5 class 1
- Meets the mark permanence requirements of SAE-AS81531 and MIL 202 Method 215J Resistance to Solvents
- -55°C to +135°C operating temperature range
- UL Recognized Standard 224 (File E35586)
- CSA certified (File LR31929)
- RoHS complaint

APPLICATIONS

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

ELECTRICAL

- **Dielectric strength** : 19.7MV/m minimum (ASTM D2671) materials
- **Flame retardant** radiation cross-linked homopolymer-based polyolefin heat-shrinkable tubing

MECHANICAL

- **Tensile strength** : 10.3MPa minimum (ASTM D638, 20 inches/min)
- **Ultimate elongation** : 200% minimum (ASTM D638, 20 inches/min)
- **Longitudinal change** : -10% min and +10% max (ASTM D2671)
- **Heat aging** : 336 hours at 175°C (347°F)
- **Heat shock** : No dripping, flowing or cracking and print legible after 4 hours at 250°C (482°F)
- **Low temperature flexibility** : No cracking after 4 hours at -55°C (-67°F), 11mm (7/16 inch) mandrel bend.

STANDARDS AND SPECS

- **TE Connectivity (TE)** : RW 2530
- **UL** : Recognized Standard 224 (File E35586)
- **CSA** : Certified (File LR31929)
- **Military** : AMS-DTL-23053/5 class 1, AS-81531, and MIL STD-202 Method 215J

PRODUCT DIMENSIONS in millimeters and (inches)

Part Number	Nominal weight per piece (g)	Minimum Expanded Inside Dia.	Maximum Recovered Inside Dia.	Recovered Wall Thickness	Sleeve Progression
TMS-90-SCE-3/32	0.1726	2.36 (0.093)	0.79 (0.031)	0.508 +/- 0.076 (0.020 +/- 0.003)	12.70 +/- 0.64 (0.500 +/- 0.025)
TMS-90-SCE-1/8	0.2440	3.18 (0.125)	1.07 (0.042)	0.508 +/- 0.076 (0.020 +/- 0.003)	12.70 +/- 0.64 (0.500 +/- 0.025)
TMS-90-SCE-3/16	0.3500	4.75 (0.187)	1.57 (0.062)	0.508 +/- 0.076 (0.020 +/- 0.003)	12.70 +/- 0.64 (0.500 +/- 0.025)
TMS-90-SCE-1/4	0.4727	6.35 (0.250)	2.11 (0.083)	0.635 +/- 0.076 (0.025 +/- 0.003)	16.94 +/- 0.89 (0.667 +/- 0.035)
TMS-90-SCE-3/8	0.6017	9.53 (0.375)	3.18 (0.125)	0.635 +/- 0.076 (0.025 +/- 0.003)	25.40 +/- 0.89 (1.000 +/- 0.035)
TMS-90-SCE-1/2	0.9120	12.70 (0.500)	4.22 (0.166)	0.635 +/- 0.076 (0.025 +/- 0.003)	29.64 +/- 1.02 (1.167 +/- 0.040)
TMS-90-SCE-3/4	1.704	19.05 (0.750)	6.35 (0.250)	0.762 +/- 0.076 (0.030 +/- 0.003)	42.34 +/- 1.02 (1.667 +/- 0.040)
TMS-90-SCE-1-1/2	3.5344	38.10 (1.500)	19.05 (0.750)	1.016 +/- 0.152 (0.035 +/- 0.003)	71.96 +/- 1.02 (2.833 +/- 0.040)

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