

Thermo-Shrink® Heavy-Wall Heat Shrinkable Tubing

- TS-46 irradiated cross-linked polyolefin with 3:1 standard shrink ratio
- Adhesive liner provides complete insulation and protection to electrical splices in above-grade, underground or underwater applications
- Maximum flame retardancy
- Meets UL 486D, CSA C22.2 No. 198.2, ANSI C119.1, Western Underground Guides Nos. 2.4, 2.5, MIL-DTL-23053/15, IEEE 383 Vertical Flame Test, ANSI C37.20.2, ICEA S-19-8 and NEMA insulation thickness requirements
- Continuous operating temperature from -55°C to 110°C
- Rated for 600V, 90°C continuous use
- Shrink temperature of 120°C



| Model | Expanded I.D. (Min.) (In.) | Recovered I.D. (Max.) (In.) | Nominal Recovered Wall Thickness (In.) | Cable Range* | Length (In.) | Cat. No. |
|------------|----------------------------|-----------------------------|--|-------------------|--------------|---------------|
| TS-46-400 | .400 | .150 | .060 | 12-6 AWG | 6 | 46-343 |
| | | | | | 9 | 46-344 |
| | | | | | 48 | 46-346 |
| TS-46-750 | .750 | .240 | .090 | 8-1/0 AWG | 6 | 46-347 |
| | | | | | 9 | 46-348 |
| | | | | | 48 | 46-350 |
| TS-46-1100 | 1.100 | .350 | .120 | 2-4/0 AWG | 6 | 46-351 |
| | | | | | 9 | 46-352 |
| | | | | | 48 | 46-354 |
| TS-46-1500 | 1.500 | .470 | .160 | 3/0 AWG-400 KCMIL | 9 | 46-356 |
| | | | | | 12 | 46-357 |
| | | | | | 48 | 46-358 |
| TS-46-2000 | 2.000 | .630 | .160 | 250-750 KCMIL | 9 | 46-369 |
| | | | | | 18 | 46-371 |
| | | | | | 48 | 46-372 |

*Reference only. Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

| Properties | Heavy Wall |
|--|------------------------------------|
| Shrink Temperatures | 120°C to 250°C (200°C recommended) |
| Continuous Operating Temperature | -55°C to 110°C |
| Tensile Strength (PSI) | 2,100 PSI min. |
| Ultimate Elongation | 600% min. |
| Secant Modulus @ 2% Strain | 25,000 PSI max. |
| Specific Gravity | 1.20 max. |
| Heat Aging, 168 hrs. @ 175°C Tensile Strength Elongation | 500% |
| Heat Shock, 4 hrs. @ 225°C | No cracks, flowing or dripping |
| Flammability | Self-extinguishing |
| Low Temperature Brittle Point | -55°C |
| Volume Resistivity | 10 ¹³ ohm-cm min. |
| Dielectric Strength | 500V/mil (20kV/min.) |
| Corrosive Effect | Non-corrosive |
| Solvent Resistance 24 hrs. Immersion per MIL-DTL-23053 | Good to excellent |
| Water Absorption | 0.5% |
| Fungus Resistance | No growth |
| Longitudinal Change, 3 min. | +1%/-10% |

All values are typical performance data and are not to be used as design data.



Thermo-Shrink® Medium-Wall Heat Shrinkable End Caps

- Creates a watertight seal to protect the ends of power and control cords
- Effectively offers protection against oxidation, ozone, UV radiation, etc.
- Coated with hot melt adhesive to ensure environment seal
- Fits easily over end of cable
- Protect power cables up to 1000V and telecommunication cable
- Recommended for both open air and underground power distribution cables with PVC, lead or XLPE sheaths
- Thermally stabilized cross-linked polyolefin, coated with specially designed hot melt adhesive



| Technical Data | | |
|---------------------------------|-----------------|-----------------------|
| Property | Test Method | Typical Data |
| Operating Temperature | IEC 216 | -55°C to +110°C |
| Tensile Strength | ASTM D 638 | >14 MPa |
| Elongation at break | ASTM D 638 | >400% |
| Density | ASTM D 792 | 1.05g/cm ³ |
| Elongation of break after aging | 150°C, 168 hrs. | >300% |
| Dielectric Strength | IEC 243 | >15KV/mm |
| Volume Resistance | IEC 93 | 10 ¹⁴ Ω.cm |

| Expanded I.D. (Min.) | Recovered I.D. (Max.) | Recovered Wall Thickness +/-10% | Cable Dia. Range* | Length (In.) | Cat. No. |
|----------------------|-----------------------|---------------------------------|--------------------------|--------------|---------------|
| 0.55"/14mm | 0.18"/4.5mm | 0.079"/2.0mm | 0.20"/5mm - 0.47"/12mm | 1.77/45mm | 46-381 |
| 0.98"/25mm | 0.31"/8mm | 0.091"/2.3mm | 0.39"/10mm - 0.71"/18mm | 2.76/70mm | 46-382 |
| 1.38"/35mm | 0.59"/15mm | 0.118"/3.0mm | 0.67"/17mm - 1.18"/30mm | 3.35/85mm | 46-383 |
| 2.95"/75mm | 1.38"/35mm | 0.138"/3.5mm | 1.77"/45mm - 2.76"/70mm | 5.12/130mm | 46-384 |
| 4.72"/120mm | 2.36"/60mm | 0.157"/4.0mm | 2.95"/75mm - 4.33"/110mm | 6.10/155mm | 46-387 |

*Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

1-800-435-0705 for Customer Service