

Polyolefin heat-shrink tubing

## FITCOTUBE® FT800

Flexible, radiation - cross-linked heat-shrink tubing coated with adhesives. Suitable for moisture- and waterproof encapsulation of wires, cables, pinching- and plug connections as well as other electrical and mechanical components.

**Operating temperature:** - 55°C to + 125°C, short term up to + 250°C

Shrink temperature: + 110° C

Shrink ratio: 3:1
Standard colors: Black

Approvals: UL File E191539, CSA





| Description   | Inner diameter (mm) |                        | Wall thickness (mm)    |
|---------------|---------------------|------------------------|------------------------|
|               | as supplied (min.)  | after shrinkage (max.) | after shrinkage (nom.) |
| 3:1           |                     |                        |                        |
| FT800-3/1     | 3.00                | 0.60                   | 0.95                   |
| FT800-4.5/1.5 | 4.80                | 1.50                   | 1.10                   |
| FT800-6/2     | 6.40                | 2.00                   | 1.20                   |
| FT800-9/3     | 9.50                | 3.00                   | 1.30                   |
| FT800-12/4    | 12.70               | 4.00                   | 1.40                   |
| FT800-19/6    | 19.00               | 6.00                   | 1.80                   |
| FT800-24/8    | 24.00               | 8.00                   | 2.50                   |
| FT800-40/13   | 40.00               | 13.00                  | 2.50                   |

Packaging: 1.2 meter lengths. Special sizes on request. Cut lengths on request.

**Processing note:** Care for clean and straight cutting edges.

Start shrinkage on the end. Pre-heat metal body.



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| Attributes | Testing | Value |
|------------|---------|-------|
|------------|---------|-------|

#### Mechanical

| Tensile strength    | ASTM D 638        | min. 10.4 MPa   | ≥ 15 MPa |
|---------------------|-------------------|-----------------|----------|
| Ultimate elongation | ASTM D 638        | min. 200 %      | ≥ 350 %  |
| Longitudinal change | SAE-AMS-DTL-23053 | + 1 % to - 15 % | ≥ - 7 %  |
| Elastic modulus     | ASTM D 882        | max. 173 MPa    | ≥ 80 MPa |

#### **Thermal**

| Low temperature flexibility (- 55°C x 4 h) | SAE-AMS-DTL-23053 | no cracking                      | pass |
|--|-------------------|----------------------------------|------|
| Short-term aging (250° C x 4 h)            | SAE-AMS-DTL-23053 | no cracking, flowing or dripping | pass |
| Flammability                               | ASTM D 2671 (B)   | max. 60 sec.                     | pass |
| Copper corrosion<br>(158°C x 16 h)         | SAE-AMS-DTL-23053 | no corrosion                     | pass |
| Color stability<br>(175 °C x 24h)          | SAE-AMS-DTL-23053 | no changes                       | pass |

#### **Electrical**

| Dielectric strength               | ASTM D 876 | min. 11.8 kV/mm            | ≥ 20 kV/mm              |
|-----------------------------------|------------|----------------------------|-------------------------|
| Volume resistivity                | ASTM D 876 | min. 10 <sup>12</sup> Ω/cm | ≥ 10 <sup>14</sup> Ω/cm |
| Breakdown test<br>(2.5 kV x 60 s) | UL 224     | no breakdown               | pass                    |

### Chemical

| Water absorption                  | ASTM D 570        | max. 1 %   | ≥ 0.5 % |
|-----------------------------------|-------------------|--|---------|
| Liquid resistance<br>(23°C x 24h) | SAE-AMS-DTL-23053 | min. 6.2 MPa (tensile strength)<br>min. 7.9 kV/mm<br>(dielectric strength) | pass    |