



Cold Shrink™

Corrosion Protection Kit

CPT Series



Data Sheet

1. Product Description

3M™ CPT Series Cold Shrink™ Corrosion Protection Kits are designed to provide a quick and easy method for protecting bulkhead termination connectors from the corrosive influences of wet and salt-fog installation environments.

A CPT series assembly is an open-ended tubular rubber sleeve which is factory expanded and assembled onto a removable core. The core is removed after the assembly has been positioned for installation over a bulkhead terminator connector. Mastic strips are provided for sealing between NPT fitting threads and the enclosure in use (Junction Box, Cabinet, Panel Board and etc.). CPT insulating sleeves are made of an EPDM rubber that contains no chlorides or sulfurs. Ten kits accommodate 1/2" through 4" bulkhead connectors.

To extend the useful life of this product in applications where continuous exposure to high levels of ultra-violet radiation are expected, overwrap with Scotch™ Super 33+ or Scotch™ 70 Silicone Tape. 3M CPT series assemblies will seal on the recommended cable size within five (5) minutes at 30°F (-1°C) and within sixty (60) minutes at 0°F (-18°C). Seal time can be accelerated by warming the assembly prior to installation (under the clothing or in a heated vehicle).

2. Features

- Simple installation, requires no tools
- Accommodates a wide range of connectors
- No torches or heat required
- Good thermal stability
- Seals tight; retains its resiliency and pressure after prolonged years of aging and exposure
- Excellent wet electrical properties
- Salt spray resistant. Meets requirements of ASTM B287, in a 5% salt solution with a 3.0 – 3.1 pH
- Water-resistant. Meets the water seal requirements of ANSI C119.1
- Resists fungus
- Resists acids and alkalis
- Resists ozone

3. Typical Physical and Electrical Properties

CPT Insulator

Physical Properties

Test Method	Typical Value*
• Color	Black
• 300% Modulus (ASTM D412-75)	480 psi (3,3 Mpa)
• Ultimate Tensile (Original) (ASTM D412-75)	1400 psi (9,6 Mpa)
• Ultimate Elongation (Original) (ASTM D412-75)	750%
• Die C Tear (Original) (ASTM D624C-73)	150 pli (26,3 KN/m)
• Fungus Resistance (28 Day Exposure) (ASTM G-21)	No Growth
• Moisture Absorption (7 Days @ 90°C (194°F) H ₂ O) Weight Gain	1.8%

Electrical Properties

Test Method	Typical Value*
• Dielectric Strength (Original) (7 Days @ 90°C (194°F) H ₂ O) (ASTM D149-75)	365 v/mil (14,4 kV/mm) 282 v/mil (11,1 kV/mm)

* All values are averages and are not intended for specification purposes

4. Sizing Guide


Product Number	Cable O.D. (Minimum)	Connector	
		Maximum O.D.	Maximum Installed Length
CPT-1/2	0.50" (13 mm)	1.60" (41 mm)	4.50" (114 mm)
CPT-3/4	0.66" (17 mm)	1.90" (48 mm)	4.80" (122 mm)
CPT-1	0.66" (17 mm)	2.20" (56 mm)	4.80" (122 mm)
CPT-1 1/4	1.22" (31 mm)	2.65" (67 mm)	4.80" (122 mm)
CPT-1 1/2	1.40" (36 mm)	3.00" (76 mm)	5.50" (140 mm)
CPT-2	1.68" (43 mm)	3.60" (91 mm)	6.50" (165 mm)
CPT-2 1/2	1.97" (50 mm)	4.30" (109 mm)	8.50" (215 mm)
CPT-3	2.60" (66 mm)	5.40" (137 mm)	8.50" (215 mm)
CPT-3 1/2	2.90" (74 mm)	6.00" (152 mm)	10.0" (254 mm)
CPT-4	2.90" (74 mm)	6.00" (152 mm)	10.5" (267 mm)

Table 1

5. Maintenance

3M Cold Shrink™, CPT series, insulator assemblies are stable under normal storage conditions. They are not impaired by freezing or overheating due to the ambient

temperatures found in storage or shipping. Normal storage and stock rotation are recommended.

NOTE: Plastic core is recyclable 

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Electrical Products Division

6801 River Place Blvd.
Austin, TX 78726-9000



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80-6109-4090-2