3M

CCT Tubing

Adhesive-Lined, 3:1, Flexible, Polyolefin for CATV Applications

Data Sheet

Product Description

3MTM CCT is a heat shrinkable, crosslinked polyolefin tubing with a lining of adhesive sealant, that is designed specifically for the CATV industry. The mechanically tough and chemically resistant outer wall is made of cross-linked polyolefin which provides excellent UVresistance. When heated above 121°C (250°F), with either a heat gun or torch, the tubing shrinks down to 1/3 its expanded diameter. As the adhesive lining softens it is pushed into all the voids and crevices around the connector and cable by the shrinking action of the outer wall. When cooled the adhesive then solidifies forming a flexible moisture-proof seal, providing complete corrosion protection. When reheated, the adhesive sealant will soften again, allowing easy stripping for reentry to the connector or splice. 3M CCT has white heat indicating stripes which darken when the tubing is heated to the proper recovery temperature, providing a visual confirmation of correct installation.

Typical Applications

3M CCT is designed for use on both above ground and below ground connections in CATV wiring including splices, taps, amplifiers and splitters. The 3 to 1 shrink ratio of CCT tubing provides easy installation and a tight fit, even where there are large differences between cable and connector diameters. Provided in standard lengths of 48", CCT can be easily cut to the proper length for a particular job.

Standard Colors

Black with white heat indicating stripes.

Standard Packaging

Four foot lengths. Cut pieces are available subject to factory quotation

Ordering Information

Order CCTTubing by product name, size equivalent to the expanded inside diameter required and package type. Always order the largest size that will fit snugly over the component to be covered.

Example: CCT, 1.3", 4 foot.

Standard Sizes and Dimensions

Expanded I.D. (Minimum)	Recovered (Maximum)	Recovered Outer Wall Thickness (Nominal)
in. (mm)	in. (mm)	in. (mm)
0.40 (10,2) 0.75 (19,1) 1.10 (27,9) 1.30 (33,0) 1.50 (38,1) 1.70 (43,2) 2.00 (50,8)	0.15 (3,8) 0.25 (6,4) 0.40 (10,2) 0.43 (10,9) 0.45 (11,4) 0.48 (12,2) 0.75 (19,1)	.080 (2,0) .080 (2,0) .080 (2,0) .080 (2,0) .080 (2,0) .080 (2,0) .100 (2,5)
	(Minimum) in. (mm) 0.40 (10,2) 0.75 (19,1) 1.10 (27,9) 1.30 (33,0) 1.50 (38,1) 1.70 (43,2)	(Minimum) (Maximum) in. (mm) 0.40 (10,2) 0.15 (3,8) 0.75 (19,1) 0.25 (6,4) 1.10 (27,9) 0.40 (10,2) 1.30 (33,0) 0.43 (10,9) 1.50 (38,1) 0.45 (11,4) 1.70 (43,2) 0.48 (12,2) 2.00 (50,8) 0.75 (19,1)

Typical Properties

Applicable Specification

Physical			
Tensile Strength	2000 PSI		
Ultimate Elongation	400%		
Longitudinal Change	+1, -10%		
Specific Gravity	1.3		
Operating Temperature -55°C to			
Range	+110°C		
Shrink Temperature	121°C		
(Min.)	(250°F)		
Low Temperature Flexibility			
(4 hrs. @ -70°C) N	lo cracking		
Flammability Self-extinguish			

Electrical

Dielectric Strength
Volume Resistivity
Water Absorption
Fungus Resistance

500 V/mil
10¹⁴ ohm-cm
0.2% max
non-nutrient

Adhesive

Softening Point 90°C (194°F)
Peel Strength (pli)
Polyethylene 30
PVC 10
Aluminum 40
Corrosive Effect Non-corrosive

Technical information provided consists of typical product data and should not be used for specification purposes. Unless otherwise noted, all tests are performed at room temperature.

Limited Warranty – 3M expressly warrants that for a period of ninety days from the date of purchase, 3M static control products will be free of defects in materials (parts) and workmanship (labor). Defects occurring during the warranty period will be repaired or products will be replaced at 3M's option and expense, if 3M receives notice during the warranty period. Defective products must be returned to 3M with proof of purchase date. Warranty Exclusions - THE FOREGOING EXPRESS WARRANTYIS MADE IN LIEU OF ALLOTHER PRODUCT WARRANTIES, EXPRESS AND IMPLIED, INCLUDING FITNESS AND MERCHANTIBILITY. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean, or repair products. Limit of Liability – In no event will 3M or Seller be responsible or liable for special, incidental, or consequential losses or damages, whether based in tort or contract. Fulfillment of 3M's warranty obligations will be Customer's exclusive remedy and 3M's and Seller's limit of liability for any breach of warranty or otherwise. For your nearest distributor or to order, call 1-800-328-1368

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3M Electrical Specialties Division

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