



HDT Tubing

Heavy-Duty, Polyolefin

Data Sheet

Product Description

3M™ HDT tubing is designed to provide reliable performance as well as excellent mechanical and environmental protection. This flame-retardant product combines the important advantage of easy handling and installation with maximum operating reliability and system protection. HDT Tubing comes with a factory-applied sealant. This sealant is a heat-activated thermoplastic material that remains soft and flexible over long periods under adverse environmental conditions. During heating the sealant softens, bonds to underlying surfaces and fills small voids that might be present.

When cool, the sealant forms a barrier against water, moisture, dirt and other environmental contaminants. Heavy-duty tubing is fabricated from specially formulated cross-linked polyolefin, assuring long-term environmental protection. The tubing is also highly chemical, abrasion and split resistant. Meets MIL-DTL-23053/15, Class 1.

Uncoated product (without sealant) is available on special order.

Standard Colors

All sizes available in black. HDT-0400, -0800 and -1100 are also available in red.

Standard Packaging

Four-foot lengths. Other lengths are available subject to special quotation.

Ordering Information

Order HDT Tubing by product name, size equivalent to the expanded inside diameter, package type and color. Always order the largest size that will shrink snugly over the component to be covered.

Example: HDT-1100-48A, 4 ft., black.

Standard Sizes and Dimensions (without adhesive)

Part Number	Cable Range	Expanded I.D.		Recovered I.D.		Recovered Outer Wall Thickness		Length in.	Std. Pkg. Pieces/ Carton	Color
		in.	(mm)	in.	(mm)	in.	(mm)			
HDT-0300-48A	#14-#8 AWG	.30	(7,62)	.10	(2,5)	.08	(2,0)	48	20	Red and Black
HDT-0400-48A	#12 - #6 AWG	.40	(10,2)	.15	(3,8)	.09	(2,3)	48	20	Red and Black
HDT-0800-48A	#8 - 1/0 AWG	.80	(20,3)	.20	(5,1)	.11	(2,8)	48	20	Red and Black
HDT-1100-48A	#2 - 4/0 AWG	1.10	(27,9)	.37	(9,4)	.12	(3,0)	48	20	Red and Black
HDT-1500-48A	3/0 - 400 MCM	1.50	(38,1)	.50	(12,7)	.17	(4,3)	48	20	Black Only
HDT-2000-48A	250 - 750 MCM	2.00	(50,8)	.65	(16,5)	.17	(4,3)	48	10	Black Only
HDT-3000-48A	600 - 1250 MCM	3.00	(76,2)	1.00	(25,4)	.17	(4,3)	48	10	Black Only
HDT-4500-48A	1500 - 2500 MCM	4.50	(114,3)	1.50	(38,1)	.17	(4,3)	48	5	Black Only
HDT-6000-48A	2.1" - 4.8" O. D.	6.00	(152,4)	1.80	(45,7)	.17	(4,3)	48	5	Black Only
HDT-7000-48A	2.5" - 5.6" O. D.	7.00	(177,8)	2.00	(50,8)	.17	(4,3)	48	5	Black Only

Typical Properties

Applicable Specification – MIL-DTL-23053/15, Class 1; ULFile E-102356; ABS				
Physical		*Low Temperature Flexibility	No cracking	
Tensile Strength	2400 PSI	(4 hrs. @ -55°C)		
Ultimate Elongation	475%	Flammability	Self-extinguish	
Longitudinal Change	+1, -10%	Electrical		
Secant Modulus	14,000 PSI	Dielectric Strength	500 V/mil (60 mils)	
Specific Gravity	1.28	Volume Resistivity	10 ¹⁴ ohm-cm	
*Heat Aging	7 days @ 175°C			
	Elongation 225%			
*Heat Shock	No dripping,	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.		
(4 hrs. @ 225°C)	cracking, flowing			
			Chemical	
			Corrosion Effect	Non-corrosive
			Solvent Resistance	
			Tensile Strength	1500 PSI
			Dielectric Strength	200 V/mil
			Water Absorption	0.02%
			Fungus Resistance	Non-nutrient

* Outer wall only.

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 WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESS AND IMPLIED, INCLUDING FITNESS AND MERCHANTABILITY. 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

3M Electrical Specialties Division

6801 River Place Blvd.
Austin, TX 78726-9000

© 3M March 1997