

HEAT SHRINKABLE POLYOLEFIN

FLEXIBLE • THIN-WALL • 2:1 • ADHESIVE-LINED

HAT

HAT is a thin wall, adhesive-lined shrinkable polyolefin tubing. It is designed to insulate, seal and protect components and electrical splices from moisture and corrosion. Product is coated on the inside with special thermoplastic adhesive which adheres to a wide variety of plastic, rubber, and metal substrates. When heated, it will shrink to 50% of its supplied diameter to conform to the object it covers. Upon cooling, adhesive returns to its original state, forming a moisture-resistant bond between tubing and substrate.

Applicable Specifications: SAE-AMS-DTL-23053/4, Class 2
 UL File Number: E52612 (excludes clear)
 Operating Temperature Range: -67°F (-55°C) to 230°F (110°C)
 Shrink Ratio: 2 to 1
 Shrink Temperature: 250°F (121°C)
 Standard Colors: Black
 Standard Shipping Length: 4 Foot Lengths

Catalog Number Size	Minimum Expanded I.D.		Maximum Recovered I.D.		Recovered Wall Thickness		Std. 4-ft Lengths ft / pkg
	inches	mm	inches	mm	inches	mm	
HAT-1/8	0.125	3.18	0.063	1.60	0.021	0.53	100, 200
HAT-3/16	0.188	4.76	0.093	2.36	0.022	0.56	100, 200
HAT-1/4	0.250	6.35	0.125	3.18	0.030	0.76	100, 200
HAT-3/8	0.375	9.53	0.188	4.76	0.031	0.79	100, 200
HAT-1/2	0.500	12.70	0.520	6.35	0.032	0.81	100, 200
HAT-3/4	0.750	19.05	0.375	9.53	0.037	0.94	20, 100
HAT-1"	1.000	25.40	0.500	12.70	0.038	0.97	20, 100
HAT-1-1/2	1.500	38.10	0.750	19.05	0.039	0.99	20, 100

HEAT SHRINKABLE POLYOLEFIN

SEMI-RIGID • MEDIUM-WALL • 3:1, 4:1 • ADHESIVE-LINED

**HML
HML4X**

HML & HML4X are radiation crosslinked heat-shrinkable tubings, adhesive-lined to provide environmental sealing in a wide variety of electrical applications. Their internal adhesive coating, when heated, melts and flows to form a positive seal. The coating adheres to the outer tubing and surface below, creating an excellent barrier to moisture. Because the tubing and adhesive are flexible, the moisture seal withstands bending of the substrate. Flexibility makes **HML & HML4X** tubings ideal for cable repair. The adhesive bonds to a wide variety of plastics, rubbers, and metals, including polyethylene, rubber, and aluminum.

Applicable Specifications: SAE-AMS-DTL-23053/4, Class 3
 Operating Temperature Range: -67°F (-55°C) to 230°F (110°C)
 Shrink Ratio: HML - 3 to 1
 HML4X - 4 to 1
 Shrink Temperature: 230°F (110°C)
 Standard Colors: Black
 Standard Shipping Length: 4 Foot Lengths

HML & HML4X are available with expansion ratios of 3:1 and 4:1 making it possible to repair cable without removing connectors.

Catalog Number Size	Minimum Expanded I.D.		Maximum Recovered I.D.		Recovered Wall Thickness		Std. 4-ft Lengths ft / pkg
	inches	mm	inches	mm	inches	mm	
HML-1/8	0.118	3.00	0.039	1.00	0.039	0.99	100, 200
HML-1/4	0.236	6.00	0.079	2.00	0.039	0.99	100, 200
HML-3/8	0.354	9.00	0.118	3.00	0.055	1.40	100, 200
HML-1/2	0.472	12.00	0.157	4.00	0.070	1.78	100, 200
HML-3/4	0.748	19.00	0.236	6.00	0.088	2.24	100, 200
HML-1"	0.945	24.00	0.315	8.00	0.100	2.54	20, 100
HML-1-1/2	1.575	40.00	0.512	13.00	0.100	2.54	20, 48
HML4X-4/1	0.157	4.00	0.039	1.00	0.039	0.99	40
HML4X-8/2	0.315	8.00	0.079	2.00	0.039	0.99	40
HML4X-12/3	0.472	12.00	0.118	3.00	0.055	1.40	40
HML4X-16/4	0.630	16.00	0.157	4.00	0.070	1.78	40
HML4X-24/6	0.945	24.00	0.236	6.00	0.088	2.24	40
HML4X-32/8	1.260	32.00	0.315	8.00	0.100	2.54	40
HML4X-52/13	2.047	52.00	0.512	13.00	0.100	2.54	40