

Rugged, heavy wall, adhesive-lined, polyolefin heat-shrinkable tubing

Rugged, heavy wall RHW tubing is specifically designed for insulating, protecting and sealing electrical connections and joints in low-voltage cables. RHW is the ideal choice whenever maximum mechanical protection is required in an electrical insulation system. It provides splice insulation thickness equal to or greater than standard wire insulation manufactured to common industry standards.

RHW withstands mechanical abuse for increased product reliability. It is highly resistant to impact and abrasion and

provides a high level of strain relief when installed on splices and joints. It is also resistant to chemicals, moisture and oils.

Adhesive-lined RHW provides a complete moisture-proof seal, preventing corrosion of underlying components. the thermoplastic adhesive in RHW will adhere to most common insulation materials including crosslinked poly, PVC, neoprene, hypalon and EPR, as well as to most metals including lead, aluminum and steel.


Installation requires no special skills. When heated, RHW tubing shrinks quickly to insulate and encapsulate electrical connections and cable joints. While the tubing is shrinking, the internal adhesive lining melts and flows to environmentally seal the connection.

RHW is the ideal choice for applications where maximum reliability and product performance, and simplified installation are required. Because RHW is heat-shrinkable, a minimum number of sizes are needed to cover a wide range of cable and splice diameters.

Temperature rating

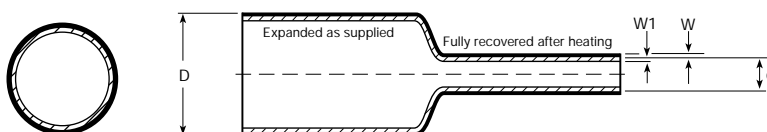
Full recovery temperature:	125°C
Continuous operating temperature:	-55°C to 110°C

Specifications*

Type	Raychem	 UL**
RHW	RHW SCD	File E115664

*When ordering, always specify latest issue. **Sizes 9/3 through 70/21 only.

Dimensions (millimeters/inches)



Size	Inside diameter		Recovered wall thickness**						Size	Inside diameter		Recovered wall thickness**					
	D (min.)	d (max.)	W	W1	Expanded as supplied	Recovered after heating	Jacket wall	Adhesive wall		D (min.)	d (max.)	W	W1	Expanded as supplied	Recovered after heating	Jacket wall	Adhesive wall
9/3	9	0.354	3	0.118	2.0	0.079	0.25	0.010	70/21	70	2.756	21	0.827	4.4	0.173	0.40	0.016
13/4	13	0.512	4	0.158	2.4	0.094	0.30	0.012	85/25	85	3.346	25	0.984	4.3	0.169	0.40	0.016
20/6	20	0.787	6	0.236	2.5	0.098	0.35	0.014	105/30	105	4.134	30	1.181	4.3	0.169	0.45	0.018
33/8	33	1.299	8	0.315	3.2	0.126	0.35	0.014	130/36	130	5.118	36	1.417	4.3	0.169	0.45	0.018
43/12	43	1.693	12	0.472	4.3	0.169	0.40	0.016	160/50	160	6.299	50	1.968	4.3	0.169	0.45	0.018
51/16	51	2.008	16	0.630	4.5	0.177	0.40	0.016	180/50	180	7.087	50	1.968	4.3	0.169	0.50	0.020

**Wall thickness will be less if tubing recovery is restricted during shrinkage.

Ordering information

Color	Black (all sizes); red (sizes 9/3, 13/4, 20/6 and 33/8 only)
Size selection	Always order the largest size that will shrink snugly over the component being covered.
Standard packaging	1200MM lengths
Marking	Tubing will be marked with the product name, size and batch number. Sizes 9/3 through 70/21 will also be marked with the UL logo.
Ordering description	Specify product name, size, cut length, coating option and color; for example, RHW-20/6-1200/ADH-0 (ADH = Adhesive-lined, 0=Black).

Specification values

	Property	Unit	Requirement	Method of test
Material	Dimensions	mm (<i>inches</i>)	See reverse	ASTM D 412
	Longitudinal change	percent	+5, -15	ASTM D 792
	Tensile strength	psi (<i>MPa</i>)	1750 (<i>12</i>) minimum	ASTM D 412
	Ultimate elongation	percent	350 minimum	ASTM D 792
	Specific gravity		1.2 maximum	ASTM D 792
	Hardness	Shore D	40 to 60	ASTM D 2240
	Low temperature flexibility (4 hours at -55°C/-67°F)		No cracking	ASTM D 2671
	Heat resistance (168 hours at 150°C/302°F) Followed by test for:			
	Ultimate elongation	percent	350 minimum	ASTM D 2671
Electrical	Dielectric strength	volts/mil (<i>kV/mm</i>)	430 (<i>170</i>) minimum	ASTM D 149
	Dielectric withstand, 2200 V	seconds	60 minimum	UL 486D
	Volume resistivity	ohm-cm	1 x 10 ¹² minimum	ASTM D 257
Chemical	Corrosive effect (16 hours at 150°C/302°F)		Noncorrosive	ASTM D 2671 Procedure A
	Fungus resistance		Rating of 1 or less	ASTM G 21
	Water absorption (24 hours at 23°C/73°F)	percent	0.1 maximum	ASTM D 570
	Fluid resistance (168 hours at 23°C/73°F) in: VDE 0370 oil Followed by tests for:			ASTM D 2671
	Tensile strength	psi	80% minimum of original	ASTM D 2671
	Ultimate elongation	percent	80% minimum of original	ASTM D 2671

Typical performance values

	Property	Unit	Performance	Method of Test
Adhesive Properties	Softening point	°C	90 ± 10	ASTM E 28
	Peel Strength			ASTM D 1000
	Copper		10 lbs./in. width	
	Polyethylene		10 lbs./in. width	
	Adhesive Shear	psi	150 minimum	ASTM D 1002
	Aluminum to aluminum			
	Water absorption	percent	0.5 maximum	ASTM D 570
	Corrosive effect (16 hours at 121°C/250°F)		Noncorrosive	ASTM D 2671 Procedure A

Raychem is a trademark of Tyco Electronics Corporation.

Users should independently evaluate the suitability of the product for their application.

Tyco Electronics Corporation

300 Constitution Drive
Menlo Park, CA 94025-1164
USA
Tel: (800) 926-2425 (US & Canada)
Tel: +1 (650) 361-3860 (All other countries)

Faraday Road
Dorcan, Swindon, SN3 5HH
United Kingdom
Tel: +44 1793 528171

3816 Noborito, Tama-ku
Kawasaki, Kanagawa 214-8533
Japan
Tel: +81 44 900 5102

Asia Pacific Headquarters
26 Ang Mo Kio, Industrial Park 2
Singapore 569507
Tel: +65 4866 151

All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Tyco Electronics Corporation makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. Tyco Electronics Corporation's only obligations are those in the Standard Terms and Conditions of Sale for these products and in no case will Tyco Electronics Corporation be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Tyco Electronics Corporation's Specifications are subject to change without notice. In addition, Tyco Electronics Corporation reserves the right to make changes in materials or processing without notification to the Buyer which do not affect compliance with any applicable specification.

For more information about this product visit www.tycoelectronics.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity:

[RHW-13/4-1200/ADH-0](#) [RHW-20/6-1200/ADH-0](#) [RHW-33/8-1200/ADH-0](#) [RHW-105/30-1200/ADH-0](#) [RHW-130/36-1200/ADH-0](#) [RHW-160/50-1200/ADH-0](#) [RHW-180/50-1200/ADH-0](#) [RHW-20/6-300/ADH-0](#) [RHW-43/12-1200/ADH-0](#) [RHW-51/16-1200/ADH-0](#) [RHW-70/21-1200/ADH-0](#) [RHW-85/25-1200/ADH-0](#) [RHW-9/3-1200/ADH-0](#) [RHW-33/8-400/ADH/NM-0](#)