

Medium wall, polyolefin heat-shrinkable tubing

Medium wall, general purpose RMW tubing is specifically designed for use in a broad range of low-voltage applications. RMW is tough and flexible, making it particularly suitable for the insulation and protection of cable joints in low voltage electrical systems as well as for cable repair. Uncoated RMW provides insulation and strain relief. Adhesive-lined RMW also provides an environmental seal.

RMW withstands mechanical abuse for increased product reliability. It is made from tough, abrasion-resistant,

crosslinked polyolefin which is resistant to impact and abrasion.

Adhesive-lined RMW provides a complete moisture-proof seal, preventing corrosion of underlying components. It is resistant to chemicals and moisture. The thermoplastic adhesive in RMW will adhere to most common polymeric- and elastomeric-insulated cables as well as to metals such as lead and aluminum.

Installation is fast and easy and requires no special skills. When heated,

RMW tubing shrinks quickly and conforms tightly to the substrate. While adhesive-lined RMW tubing is shrinking, the internal adhesive coating melts and flows to environmentally seal the splice, cable jacket or termination on which it is being installed.

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

Temperature rating

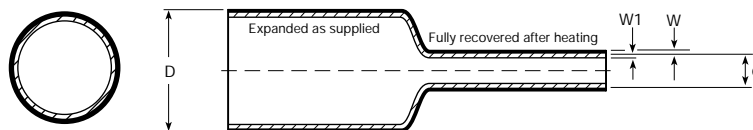
| | |
|-----------------------------------|----------------|
| Full recovery temperature: | 125°C |
| Continuous operating temperature: | -55°C to 110°C |

Specifications*

| | |
|------|---------|
| Type | Raychem |
| RMW | RMW SCD |

*When ordering, always specify latest issue.

Dimensions (millimeters/inches)



| Size | Inside diameter | | Recovered wall thickness** | | | | Size | Inside diameter | | Recovered wall thickness** | | | | | | | |
|-------|-------------------------------|----------------------------------|----------------------------|-------------------------|----------------------|-------------------------|------|-------------------------------|----------------------------------|----------------------------|-------------------------|----|-------|-----|-------|------|-------|
| | D (min.) Expanded as supplied | d (max.) Recovered after heating | W (nom.) Jacket wall | W1 (nom.) Adhesive wall | W (nom.) Jacket wall | W1 (nom.) Adhesive wall | | D (min.) Expanded as supplied | d (max.) Recovered after heating | W (nom.) Jacket wall | W1 (nom.) Adhesive wall | | | | | | |
| 10/3 | 10 | 0.394 | 3 | 0.118 | 1.0 | 0.039 | 0.25 | 0.010 | 85/25 | 85 | 3.346 | 25 | 0.984 | 2.8 | 0.110 | 0.40 | 0.016 |
| 16/5 | 16 | 0.630 | 5 | 0.197 | 1.4 | 0.055 | 0.30 | 0.012 | 95/29 | 95 | 3.740 | 29 | 1.142 | 3.1 | 0.122 | 0.45 | 0.018 |
| 25/8 | 25 | 0.984 | 8 | 0.315 | 2.0 | 0.079 | 0.35 | 0.014 | 115/34 | 115 | 4.527 | 34 | 1.339 | 3.1 | 0.122 | 0.45 | 0.018 |
| 35/12 | 35 | 1.693 | 12 | 0.472 | 2.0 | 0.079 | 0.35 | 0.014 | 140/42 | 140 | 5.512 | 42 | 1.654 | 3.1 | 0.122 | 0.45 | 0.018 |
| 50/16 | 50 | 1.968 | 16 | 0.630 | 2.0 | 0.079 | 0.35 | 0.014 | 160/50 | 160 | 6.299 | 50 | 1.968 | 3.2 | 0.126 | 0.50 | 0.020 |
| 63/19 | 63 | 2.480 | 19 | 0.748 | 2.4 | 0.095 | 0.40 | 0.016 | 180/60 | 180 | 7.087 | 60 | 2.362 | 3.2 | 0.126 | 0.50 | 0.020 |
| 75/22 | 75 | 2.953 | 22 | 0.866 | 2.7 | 0.106 | 0.40 | 0.016 | | | | | | | | | |

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

Ordering information

| | |
|----------------------|---|
| Color | Black |
| 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. |
| Ordering description | Specify product name, size, cut length, coating option and color; for example, RMW-25/8-1200/ADH-0 or RMW-75/22-1200/U-0 (ADH = Adhesive-lined, U=Uncoated, 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>) | 2000 (<i>14</i>) minimum | ASTM D 412 |
| | Ultimate elongation | percent | 350 minimum | ASTM D 792 |
| | Specific gravity | | 1.2 maximum | ASTM D 792 |
| | Hardness | Shore D | 50 to 70 | ASTM D 2240 |
| | Low temperature flexibility (4 hours at -55°C/-67°F) | | No cracking | ASTM D 2671 |
| Electrical | Heat resistance (168 hours at 150°C/302°F) Followed by test for: | | | |
| | Ultimate elongation | percent | 350 minimum | ASTM D 2671 |
| | Dielectric strength | volts/mil (<i>kV/mm</i>) | 500 (<i>200</i>) minimum | ASTM D 149 |
| Chemical | Volume resistivity | ohm-cm | 1 x 10 ¹² minimum | ASTM D 257 |
| | 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 | 85% minimum of original | ASTM D 2671 |
| Ultimate elongation | percent | 85% 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.

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