

### **MWTM**

# 600V Class Medium Wall Tubing for 1/C Low Voltage Power Cable

#### General Instructions

#### Suggested Installation Equipment (not supplied with kit)

- · Cable preparation tools
- Raychem P63 cable preparation kit or cable manufacturer approved solvent
- Clean, lint-free cloths
- Non-conducting abrasive cloth, 120 grit or finer
- Connector(s) and installation tools
- · Raychem recommended torch

Recommended Raychem Torches Install heat-shrinkable cable accessories with a "clean burning" torch, i.e., a propane torch that does not deposit conductive contaminants on the product.

Clean burning torches include the Raychem FH-2629 (uses refillable propane cylinders) and FH-2618A1 (uses disposable cylinder).

#### **Safety Instructions Warning:**

When installing electrical power system accessories, failure to follow applicable personal safety requirements and written installation instructions could result in fire or explosion and serious or fatal injuries.

To avoid risk of accidental fire or explosion when using gas torches, always check all connections for leaks before igniting the torch and follow the torch manufacturer's safety instructions. To minimize any effect of fumes produced during installation, always provide good ventilation of confined work spaces.

#### **Adjusting the Torch**

Adjust regulator and torch as required to provide an overall 12- inch bushy flame. The FH-2629 will be all blue, the

other torches will have a 3- to 4-inch yellow tip. Use the yellow tip for shrinking.

#### Regulator Pressure

FH-2618A1 FH-2629

Full pressure 15 psig

#### **General Shrinking Instructions**

- Apply outer 3- to 4-inch tip of the flame to heat-shrinkable material with a rapid brushing motion.
- Keep flame moving to avoid scorching.
- Unless otherwise instructed, start shrinking tube at center, working flame around all sides of tube to apply uniform heat.

To determine if a tube has completely recovered, look for the following, especially on the back and underside of the tube:

- 1. Uniform wall thickness.
- 2. Conformance to substrate.
- 3. No flat spots or chill marks.
- 4. Visible sealant flow if tube is coated.

**Note:** When installing multiple tubes, make sure that the surface of the last tube is still warm before positioning and shrinking the next tube. If installed tube has cooled, re-heat the entire surface.

#### **Installation Instructions**

#### 1. Product selection.

Check kit selection with dimensions given in Table 1.

Use coated tubing for sealed, electrical splicing. Uncoated tubing should be used for non-sealed applications only.

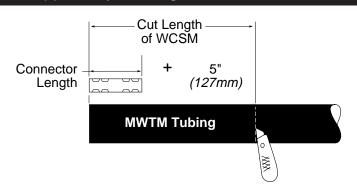
\*Cut piece standard length 48" (1219mm).

Table 1	Std. Continous	Use Range
Kit: Coated*/(Uncoated)	Uncoated Length	Min-Max
MWTM-10/3-1200-S/(10/3-A/U)	25' (7.62m)	0.13-0.35" <i>(3-9mm)</i>
MWTM-16/5-1200-S/(16/5-A/U)	25' (7.62m)	0.25-0.55" <i>(6-14mm</i>
MWTM-25/8-1200-S/(25/8-A/U)	25' (7.62m)	0.35-0.85" (9-22mm)
MWTM-35/12-1200-S/(35/12-A/U)	25' (7.62m)	0.50-1.25" (13-32mm)
MWTM-50/16-1200-S/(50/16-A/U)	15' ( <i>4.57m</i> )	0.65-1.70" (17-43mm)
MWTM-85/25-1200-S/(85/25-A/U)	5' (1.5m)	1.00-2.90" <i>(25-74mm)</i>
MWTM-115/34-1200-S/(115/34-A/U)	5' (1.5m)	1.40-3.90" <i>(36-99mm)</i>
MWTM-140/42-1200-S/(140/42-A/U)	5' ( <i>1.5m</i> )	1.80-4.70" <i>(46-</i>

#### Warning: De-energize circuit(s) before proceeding with installation.

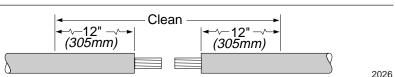
#### 2. Cut coated MWTM to required length.

Cut the MWTM using a sharp knife or heavy scissors. Cut must be smooth, without nicks or notches.



3. Cutback insulation; clean cables.

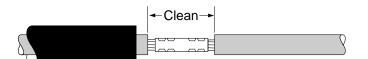
Using an oil-free solvent, clean the cables as shown.



## 4. Place tube over clean cable; install connector.

Protect tube from end of conductor as it is placed over the cable end.

Install connector per manufacturer's instructions. After installation, clean and deburr connector.

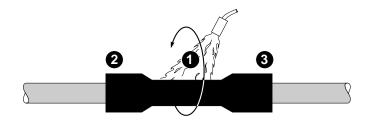


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## 5. Center tube over splice; shrink in place.

Center MWTM over splice. Working the torch with a smooth brushing motion around the tube, begin shrinking at the center of tube (1), After center portion shrinks, work torch as before towards one end (2), then to the opposite end (3) until completely shrunk.



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#### 6. Inspect completed splice.

Properly installed tube will be smooth and conform to the connection. Adhesive will be visible at both ends of coated tubing.

**Note:** Allow to cool before moving or placing in service.



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