

PRODUCT OVERVIEW



- A** Twin 16 AWG Copper Bus Wires
- B** Semiconductive Polymer Core Matrix
- C** Flame-Retardant Jacket
- D** Metallic Grounding Braid
- E** Fluoropolymer Outer Jacket

Chromalox® HWM hot water maintenance cable employs self-regulating heat trace technology to provide commercial buildings with immediate hot water availability up to 140°F (60°C) without expensive recirculation systems. It is a simple, yet energy efficient solution that provides heat at the point where heat loss occurs because the self-regulating cable adjusts its output to independently respond to temperatures along its length. Energy savings may be derived from multiple sources, such as lower supply line heat loss, eliminated return line heat loss, no pump operating costs, and no supply water overheating costs. HWM heating cable is flexible and, due to the parallel construction of the self-regulating cable, it can be cut to any length (up to maximum circuit length), spliced, tee-branched and terminated on site. It can be single-overlapped without fear of burnout. It is for use on 120 and 208 to 277 V. Chromalox hot water maintenance cable is third-party tested and approved for use in ordinary areas.

DESCRIPTION

The heating cable consists of two (2) 16 AWG nickel-plated copper bus wires embedded in a self-regulating semiconductive polymeric core matrix that controls power output so that the cable can be used directly on plastic or metallic pipes. A flame- and water-resistant polyolefin jacket electrically insulates the matrix and bus wires. A tinned copper braid covering serves added mechanical protection and positive ground path. A fluoropolymer outer jacket protects the braid from chemical attack and mechanical abuse.

WARNING — A ground fault protection device is required by Chromalox, agency certifications, and NEC to minimize the danger of fire if the heating cable is dam-aged or improperly installed. A minimum trip level of 30 mA is recommended to minimize nuisance tripping.

APPLICATION

Trace Surface Type Metal and plastic
Chemical Resistance Acids or bases

SUPPLY VOLTAGE

120 Vac
 208 to 277 Vac

APPROVALS

-  Ordinary Areas
- Type 4X, IP66 (with U Series Connection Kits)
- Type 4X (with DL Series Connection kits)

TEMPERATURE RATING

Maximum Maintenance Temperature 140°F (60°C)
Maximum Exposure Temperature, Power Off 275°F (135°C)
Minimum Installation Temperature -40°F (-40°C)

DESIGN AND INSTALLATION

For proper design and installation, use ChromaTrace Heat Trace Project Design Software. Additional resources include the, Pipe Heat Tracing Design Worksheet (PJ305), and Chromalox Commercial

Heating Cable Products Installation Instructions (PJ970). These resources are available on the Chromalox website, www.chromalox.com.

HWM HOT WATER MAINTENANCE HEATING CABLE

INSULATION REQUIREMENT

| Pipe Size | Required Fiberglass Insulation Thickness |
|------------------|--|
| 0.5 in. (13 mm) | 1 in. (25 mm) |
| 0.75 in. (19 mm) | 1 in. (25 mm) |
| 1 in. (25 mm) | 1 in. (25 mm) |
| 1.25 in. (32 mm) | 1 in. (25 mm) |
| 1.5 in. (38 mm) | 1.5 in. (38 mm) |
| 2 in. (50 mm) | 2 in. (50 mm) |

CABLE SELECTION

| Maintenance Temperature | 120 V, 208V, 240 V, 277 V |
|---------------------------|---------------------------|
| 105°F (41°C) | HWH 5 |
| 115°F (46°C) - 140F (60C) | HWH 10 |

MAXIMUM CIRCUIT LENGTHS

| Model | Maximum Circuit Length in Feet (Meters) per Circuit Breaker | | |
|----------|--|-----------|-----------|
| | 10 A | 15 A | 20 A |
| HWM 5-1 | 200 (61) | 270 (82) | 400 (122) |
| HWM 5-2 | 400 (122) | 540 (165) | 800 (244) |
| HWM 10-1 | 130 (40) | 155 (47) | 220 (67) |
| HWM 10-2 | 260 (9) | 310 (95) | 440 (134) |

PRODUCT CHARACTERISTICS

| | |
|--|-----------------------------|
| Minimum Bend Radius, in. (mm) | 1.125 (28.5) |
| Bus Wire Size | 16 AWG |
| Heating Cable Dimensions WxH, in. (mm) | 0.48 x 0.21 (12.1 x 5.3) |
| Weight, lb per 1,000 ft (kg per 300 m) | 80 (36) |

CONNECTION KITS

Chromalox has a complete line of accessories specifically designed for use with SRP cable. Use only Chromalox accessories to ensure the performance of the heat trace system, compliance with warranty, codes, and approval requirements.

| | Accessories | U Series | DL Series |
|-------------------------|---|----------|-----------|
| Power Connection | Heat trace to electrical service connection | UPC | RTPC |
| Splice & Tee | | UMC | RTST |
| End Seal | For terminating cable | UES | RTES |
| Lighted End Seal | | UESL | RTST-SL |
| Thermostat | Ambient air sensing thermostat | TXL | RTAS |
| | Line sensing mechanical thermostat | TXR | RTBC |

ORDERING INFORMATION

| Model | Volts | Output (W/ft.) | PCN |
|------------|---------|----------------|--------|
| HWM 5-1CT | 120 | 5 @ 50F | 387305 |
| HWM 5-2CT | 208-277 | 5 @ 50F | 387348 |
| HWM 10-1CT | 120 | 10 @ 50F | 387250 |
| HWM 10-2CT | 208-277 | 10 @ 50F | 387313 |



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TECHNICAL SUPPORT
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*press 1 to be directed to heat trace support