## **Heating Cable**

### CWM **Constant Wattage** Medium Temperature



- Accurate, Easy to Control and Monitor
- Low Energy Cost
- No Inrush at Any Ambient
- Industrial/Process and **Commercial/Construction** Applications
- Flexible to Most Any Configuration
- Fluoropolymer Jacket
- Maximum Exposure Temperature, Power Off, 392°F (200°C)
- Steam Cleanable on Process Equipment Up to 190 PSIG (Power Off)
- 4, 8 and 12 W/Ft.
- 120, 208 277 and 480 Volt From Stock



in Field

Chromalox CWM constant wattage heating

industrial process temperature maintenance

thermal output over its entire length. Using a

single power point, you can easily configure

and install a heat tracing system as short as

field. System design only requires that you match the CWM cable thermal output to the

CWM is flexible at most ambient tempera-

complex fittings. It is rugged, easy to

fluoropolymer electrical insulation over-

jacketing, CWM has outstanding electrical

most chemically hostile environments. An

· Durable, non-aging fluoropolymer jacket

most hostile environments.

ensures long service life and can be used in

• Flexible, easy to install on most equipment

Accurate temperature, reliable electric heat

that can be consistently controlled and

• Parallel circuitry allows cut-to-length.

High performance, rated to withstand up

to 392°F saturated steam (190 psig)

• Low profile, uses standard size thermal insulation on piping and process

temperature (power off).

and delivers long-term reliable perfor-

and thermal properties, and is well suited for

extensive range of wattages and voltages are

available immediately from Chromalox stock.

tures and can be wrapped around piping and

monitor and maintain temperature, and has

zero inrush at start-up. With 392°F (200°C)

heat loss of your piping system.

several feet or as long as 780 feet right in the

cable is a proven, reliable solution for

and freeze protection. CWM features a parallel heating core that produces uniform

G

**Description** 

**Features** 

mance.

No Inrush current.

easily monitored.

Safe and rugged.

equipment.



Medium Temperature

E



C R

Construction

D

- Twin 12 AWG Copper Buss Wires Provide reliable, consistent electrical current.
- **B** FEP Insulation Jacket Electrically insulates buss wires.
- **O** Pairing Jacket Secures two buss wires together and provides wrapping surface for Nichrome wire.
- Nickel Chromium Wire Heating component of the cable.
- **FEP Insulation** Rugged outer sheath protects heating cable, assures longer service life, and provides protection against environmental application hazards.
- F Tinned Copper Braid Plated copper braid increases robust construction, provides ground path and provides additional protection in any location. Suffix "C" in model number.
- FEP Overjacket (optional) Fluoropolymer overjacket, over the braid, provides protection from most aqueous and chemically corrosive solutions. Suffix "T" in model number.

#### Approvals<sup>1</sup>

UL Listed for ordinary areas.

- CSA Certified for ordinary and:
- Class I, Div. 2, Groups A, B, C, D
- Class II, Div. 2, Groups F, G. Rated T3 Temperature Class<sup>2</sup>.

#### Notes —

- 1. Depends on specific model.
- 2. Exception: Cable surface temperature shall not exceed 190°C in Class II, Div. 2, Group F; 165°C in Class II, Div. 2, Group G.
  - Chromalox<sup>®</sup>



### **Heating Cable**

# CWM

Constant Wattage Medium Temperature *(cont'd.)* 



#### **Specifications**

| Model                                | Output<br>(W/Ft.) | Nominal<br>Voltage<br>(Vac) | Circuit Load<br>(Amps/Ft.) | Max.<br>Circuit Length<br>(Ft.) |
|--------------------------------------|-------------------|-----------------------------|----------------------------|---------------------------------|
| CWM 4-1CT<br>CWM 8-1CT               | 4                 | 120<br>120                  | 0.033<br>0.067             | 350<br>240                      |
| CWM 12-1CT                           | 12                | 120                         | 0.100                      | 200                             |
| CWM 4-2CT<br>CWM 8-2CT<br>CWM 12-2CT | 4<br>8<br>12      | 240<br>240<br>240           | 0.017<br>0.033<br>0.050    | 700<br>480<br>400               |
| CWM 12-4CT                           | 12                | 480                         | 0.025                      | 780                             |

#### **Output Wattage at Various Operating Voltages (Ft.)**

| Model    | 120V | 208V | 220V | 240V | 277V | 480V |
|----------|------|------|------|------|------|------|
| CWM 12-1 | 12   | —    |      | —    | —    |      |
| CWM 8-1  | 8    |      | —    | —    | —    | _    |
| CWM 4-1  | 4    |      |      | _    |      | —    |
| CWM 12-2 | 3    | 9    | 10.1 | 12   | _    | _    |
| CWM 8-2  | 2    | 6    | 6.7  | 8    |      | _    |
| CWM 4-2  | —    | 3    | 3.4  | 4    | —    | —    |
| CWM 12-4 | —    | 2.3  | 2.5  | 3    | 4    | 12   |

#### Maximum Maintenance Temperatures

| Output        | Temperatures (°F) |     |     |     |     |     |      |      |     |
|---------------|-------------------|-----|-----|-----|-----|-----|------|------|-----|
| (W/Ft.)       | 3                 | 4   | 6   | 6.7 | 8   | 9   | 10.1 | 10.6 | 12  |
| w/o AT-1 Tape | 340               | 325 | 293 | 282 | 262 | 246 | 229  | 222  | 200 |
| w/ AT-1 Tape  | 350               | 344 | 332 | 328 | 320 | 314 | 307  | 304  | 296 |

## CWM

## Constant Wattage Medium

Temperature (cont'd.)

#### **Ordering** Information

| 0 0               |                             |                         |        |                  |                     |
|-------------------|-----------------------------|-------------------------|--------|------------------|---------------------|
| Output<br>(W/Ft.) | Nominal<br>Voltage<br>(Vac) | Model                   | Stock  | PCN              | Wt./1000'<br>(Lbs.) |
| 4                 | 120                         | CWM 4-1C<br>CWM 4-1CT   | S<br>S | 392040<br>392057 | 96<br>110           |
|                   | 240                         | CWM 4-2C<br>CWM 4-2CT   | S<br>S | 392059<br>392083 | 96<br>110           |
| 8                 | 120                         | CWM 8-1C<br>CWM 8-1CT   | S<br>S | 392139<br>392163 | 96<br>110           |
|                   | 240                         | CWM 8-2C<br>CWM 8-2CT   | S<br>S | 392147<br>392171 | 96<br>110           |
| 12                | 120                         | CWM 12-1C<br>CWM 12-1CT | S<br>S | 392227<br>392251 | 96<br>110           |
|                   | 240                         | CWM 12-2C<br>CWM 12-2CT | S<br>S | 392235<br>392260 | 96<br>110           |
|                   | 480                         | CWM 12-4C<br>CWM 12-4CT | S<br>S | 392243<br>392278 | 96<br>110           |

#### Accessories

|  | DL  | EL   |             |  |  |
|--|---|------|-------------|--|--|
| Power Connection   | Heat trace to electrical service connection | RTPC | RT-JBC-2    |  |  |
| Splice & Tee   |   | RTST | RT-TST      |  |  |
| End Seal   | For terminating cable                       | RTES | RT-TES      |  |  |
| Thermostat   | Ambient air sensing thermostat              | RTAS | B-100/B-121 |  |  |
|  | Line sensing mechanical thermostat          | RTBC | E-100/E-121 |  |  |
|  | Line sensing electronic thermostat RTSS N/A |      |             |  |  |
| To Order — General Application & Installation Accessories such as tape, pipe straps, warning labels, etc., refer to the DL & EL General Application Accessories page at the end of this section. |   |      |             |  |  |

### Ordering

Information

**To Order** — Complete the Model Number using the Matrix provided.

| Model | Consta       | nt Wattaı                                     | ge Mediun         | n Temperature   |  |  |  |
|-------|--------------|---|-------------------|---|--|--|--|
| CWM   | Constar      | ant Wattage, Medium Temperature Heating Cable |                   |   |  |  |  |
|       | Code         | Outpu   | Output (W/Ft.)    |   |  |  |  |
|       | 4<br>8<br>12 | Four<br>Eight<br>Twelve                       | 'e                |   |  |  |  |
|       |              | Code  | Nominal           | Voltage (Vac)   |  |  |  |
|       |              | 1<br>2<br>4                                   | 120<br>240<br>480 |   |  |  |  |
|       |              |   | Code              | Braid and Overcoat Options  |  |  |  |
|       |              |   | C                 | Standard tinned-copper metallic<br>braid for additional protection and<br>ground path             |  |  |  |
|       |              |   | СТ<br>            | Fluoropolymer corrosion resistant<br>overjacket over braid for hostile/<br>corrosive environments |  |  |  |
| CWM   | 5            | 1   | C                 | Typical Model Number  |  |  |  |

More Information is Available Online on Heat Trace.

Bookmark Your Browser to <u>www.chromalox.com</u> and Select Manuals.