

# Heating Cable

## CWM

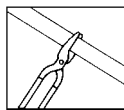
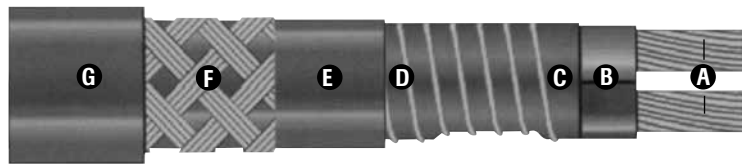
### Constant Wattage Medium Temperature

- Uniform Thermal Output, Low Energy Cost
- No Inrush at Any Ambient
- Industrial/Process and Commercial/Construction Applications
- 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
- Approximate Size 1/4"W x 1/8"H
- Minimum Bend Radius 1-1/4"
- For Use on Metallic Pipes
- Consult Factory for Use on Plastic Pipes

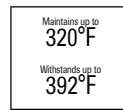
#### Description

Chromalox CWM constant wattage heating cable is a proven, reliable solution for industrial process temperature maintenance and freeze protection. CWM features a parallel heating core that produces uniform thermal output over its entire length. Using a single power point, you can easily configure and install a heat tracing system as short as several feet or as long as 780 feet right in the field. With 392°F (200°C) fluoropolymer electrical insulation over-jacketing, CWM has outstanding electrical and thermal properties, and is well suited for most chemically hostile environments.

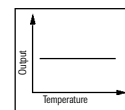
**WARNING** — A ground fault protection device is required by NEC to minimize the danger of fire if the heating cable is damaged or improperly installed. A minimum trip level of 30mA is recommended to minimize nuisance tripping.



Cut to Length  
in Field



Medium Tem-  
perature



Constant Watt-  
age Output

**Note** — Consult maximum maintenance temperature chart on page G-23 for allowable watt densities.

#### Features

- Durable, non-aging fluoropolymer jacket ensures long service life and can be used in some hostile environments.
- Flexible, easy to install on most equipment and delivers long-term reliable performance.
- Eliminates the need for oversized wiring or switchgear.
- Accurate temperature, reliable electric heat that can be consistently controlled and easily monitored.
- Safe and rugged.
- Parallel circuitry allows cut-to-length.
- High performance, rated to withstand up to 392°F saturated steam (190 psig) temperature (power off).
- Low profile, uses standard size thermal insulation on piping and process equipment.

#### Construction

- A** **Twin 12 AWG Copper Buss Wires** — Provide reliable, consistent electrical current.
- B** **FEP Insulation Jacket** — Electrically insulates buss wires.
- C** **Pairing Jacket** — Secures two buss wires together and provides wrapping surface for Nichrome wire.

- D** **Nickel Chromium Wire** — Heating component of the cable.
- E** **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.
- G** **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:

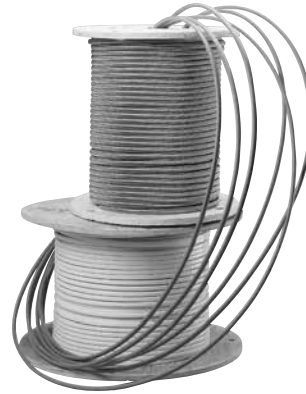
- Class I, Div. 2, Groups A, B, C, D
- Class II, Div. 2, Groups F, G. Rated T3 Temperature Class<sup>2</sup>.

#### 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.

## CWM

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



### Specifications

Model	Output (W/Ft.)	Nominal Voltage (Vac)	Circuit Load (Amps/Ft.)	Max. Circuit Length (Ft.)
CWM 4-1CT	4	120	0.033	350
CWM 8-1CT	8	120	0.067	240
CWM 12-1CT	12	120	0.100	200
CWM 4-2CT	4	240	0.017	700
CWM 8-2CT	8	240	0.033	480
CWM 12-2CT	12	240	0.050	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 Allowable Pipe Maintenance Temperature with Power On

Output (W/Ft.)	Temperatures (°F)								
	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

CONSTANT  
WATTAGE