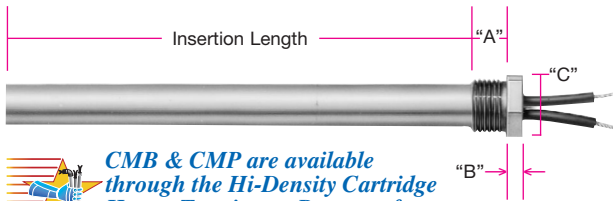



### Cartridge Heater Termination — Single Ended National Pipe Thread (NPT) Fitting

TYPE CM Fig. 1 – Fitting Flush with Lead End of Sheath



 **CMB & CMP are available through the Hi-Density Cartridge Heater Terminator Program for 2nd or 3rd Day Shipping**

**NOTE:** Stainless steel fittings are available through the Terminator program for heaters 1/2" diameter and larger.



**Note:** Fitting can be offset from end of sheath. See Figure 2, Single Threaded Mounting Options CMV and CMW below.

**Standard NPT Bushing Dimensions (Fig. 1 & Fig. 2)**

| Heater Diameter (in) | NPT Size     | "A"  | "B"  | "C"   |
|----------------------|--------------|------|------|-------|
| 1/4                  | 1/8-27       | 3/8  | 3/16 | 7/16  |
| 3/8                  | 1/4-18       | 1/2  | 3/16 | 9/16  |
| 1/2                  | 3/8-18       | 9/16 | 1/4  | 11/16 |
| 5/8                  | 1/2-14       | 5/8  | 1/4  | 7/8   |
| 3/4                  | 3/4-14       | 3/4  | 1/4  | 1-1/8 |
| 7/8                  | 1-11 1/2     | 3/4  | 1/4  | 1-3/8 |
| 1                    | 1-11 1/2     | 3/4  | 1/4  | 1-3/8 |
| 1-1/4                | 1 1/4-11 1/2 | 7/8  | 5/16 | 1-3/4 |

#### Type CM Single Threaded Fitting Mounting Termination Fitting Flush with Lead End of Sheath

Available on HDC, HDM, and LDC cartridge heaters

A single threaded pipe fitting is attached to the end of a cartridge heater to allow for installation into a threaded hole. Brass fittings are silver brazed and stainless steel fittings are heli-arc welded. Available with the potting seals listed in the table.

Potted end seals help to protect the heater from moisture or contamination from plastic material, cleaning solvents, or oils. The bushing cavity can be sealed with various materials such as:

**CMA/CMN Low temperature epoxy potting** — 266°F (130°C), UL rated to 194°F (90°C)  
Teflon® leads internally connected, rated 392°F (200°C).

**CMB/CMP Hi-temp cement potting with silicone varnish** — 1000°F (538°C)  
Fiberglass leads internally connected, rated 482°F (250°C).

**CMC/CMQ Silicone rubber potting** — 392°F (200°C)  
Silicone rubber leads internally connected, rated 392°F (200°C).

**CMD/CMR High temperature epoxy potting** — 450°F (232°C)  
Teflon® leads internally connected, rated 392°F (200°C).

➤ A minimum of 1/4" unheated section below the bushing is required.

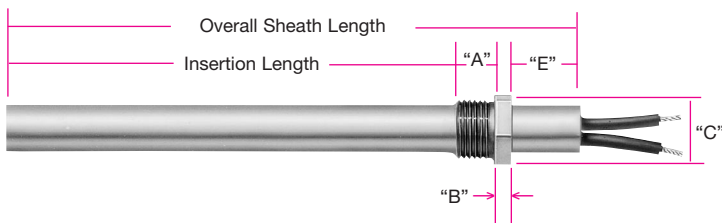
➤ **Standard 10" (254 mm) leads. Specify longer leads.**

#### Type Codes for Single Threaded Fittings

| Potting Seal Type | Fitting Material |                 |
|-------------------|------------------|-----------------|
|                   | Brass            | Stainless Steel |
| Low Temp Epoxy    | <b>CMA</b>       | <b>CMN</b>      |
| Hi-Temp Cement    | <b>CMB</b>       | <b>CMP</b>      |
| Silicone Rubber   | <b>CMC</b>       | <b>CMQ</b>      |
| Hi-Temp Epoxy     | <b>CMD</b>       | <b>CMR</b>      |

### Single Ended National Pipe Thread (NPT) Fitting Option

TYPE CM Fig. 2 – Fitting Offset from Lead End of Sheath



#### Type CM Single Threaded Fitting Mounting Option Fitting Offset from Lead End of Sheath

Available on HDC, HDM, and LDC cartridge heaters

This mounting option available with many terminations attaches a fitting offset from the lead end of the sheath. This option is useful when the lead wires need to be kept away from the heated area. Brass fittings are silver brazed and stainless steel fittings are offset heli-arc welded.

**CMV** Brass Fitting

**CMW** Stainless Steel Fitting

➤ Specify offset dimension "E" when ordering.

➤ A termination must be specified separately.

### Hi-Density Cartridge Immersion Heater Specifically Designed for Heating Water & Other Liquids



See Page 2-23.