Mightyband™ (Square Cable)



Mightyband™ Coil Heaters with Square/Rectangular MI Cable

TEMPCO offers a square sheathed, mineral insulated, coiled nozzle heater with a built-in-thermocouple. The unique feature of the 1/8" square sheath is a larger sheath contact area as compared to its round sheathed counter-

part, allowing for faster start-up cycles. The ANSI Type J standard or optional Type K thermocouple normally has a grounded junction. However, an optional ungrounded junction is available. Heaters can be formed into a compact coiled nozzle heater supplying a full 360° of heat to the distributed wattage coil. The low mass of the heater allows quick response to both heating and cooling.



SpecificationsResistance tolerance: $\pm 10\%$ Wattage tolerance: $\pm 10\%$ Maximum Wattage:720 watts (for 240 volt heaters)300 watts (for 120 volt heaters)Maximum operating temperature: $1500^{\circ}F$ (816°C)Maximum Watt density:134 watts/in² applied to nozzlePhysical Dimensions:1/8" square(except non-heated tail section, which is 1/8" round)Length of non-heated section:1" to 6" (specify when ordering)Potting Adapter:5/16" O.D. \times 1-1/2" longStandard Lead Length as specified in table below (if other than standard, specify)

Standard Features

- * Standard lead wire construction is a fiberglass braided insulation with stainless steel overbraid suitable for 482°F (250°C). Optional constructions using Teflon* insulation or armor cable are available on request.
- * The standard wire to M.I. cable transition area (potting adapter) is temperature rated to 450°F (232°C). High temperature 842°F (450°C) is optional.
- * The ANSI Type J standard or optional Type K thermocouple junction can be grounded at the tip (the end farthest from transition area) or ungrounded anywhere along the length of the heater.
- * Heaters can be supplied with optional stainless steel clamping straps, which provide additional circumferential clamping forces and protection of the heater coils from accidental damage.
- * All Mightyband coil heaters are available with one (1) of six (6) different lead orientations (LO) as shown on Page 5-4. Other custom lead orientations can be manufactured to suit. Specify lead orientation when ordering.
 - * Can be supplied with optional grounding wire upon special request.

Standard (Non-Stock) 1/8" Square Tempco-Pak Cable Heaters (Non-heated tail section is 1/8" round) Standard Cable Heaters have 304 Stainless Steel Sheath

Closed Coil Stretched Standard I ead I ead Coil I.D. Width Width **Built-In** Lead Length **Protection** Orientation Part mm T/C Voltage Wattage mm in mm in Number in mm 63.5 .500 12.7 2.00 50.8 2.5 240 450 1016 L01 MHC00116 Cyes .500 12.7 2.50 4.6 240 300 48 1219 L05 MHC00117 63.5 116.8 yes A† 1.25 31.8 yes 230 48 914 L04 .750 19.1 125 M† MHC00118 1.25 230 250 914 750 19.1 31.8 48 M L04 MHC00119 yes .750 19.1 1.25 31.8 1.5 38.1 240 300 48 1219 S2 L05 MHC00120 yes 1829 0.95 240 250 72 .750 19.1 24.1 yes M1 L01 MHC00121 24.6 0.95 24.1 yes 240 250 72 1829 L01 MHC00122 .968 M21.58 40.1 240 300 L01 .968 24.6 1829 M2MHC00123 ves

Ordering Information

† Cement Potted Teflon® insulated SPC wire

Standard Heaters

Order by Part number for standard heaters listed above for runnerless plastic injection molding, hot sprue bushings and nozzles.

If not otherwise specified, all Mightyband heaters are supplied with close wound coiling pattern, Type L01 lead orientation (see page 5-4), 24" of leads and 20" of stainless steel overbraid with Type J thermocouple. If longer leads are required, please specify.

Custom Engineered/Manufactured Heaters

An electric heater can be very application specific; for sizes, ratings and terminations not listed, **TEMPCO** will design and manufacture a Mightyband heater to meet your requirements. **Standard lead time is 3 weeks.**

Please Specify the following:

- ☐ Inside Diameter
- ☐ Width (Length)
- Specify width as closed or stretched
- Wattage
- Voltage

- ☐ Length of non-heated tail section
- ☐ Lead length
- ☐ Lead Orientation (see page 5-4)
- ☐ Lead Transition (see page 5-5)
- ☐ Lead protection (see page 5-5)
- ☐ Thermocouple Type—if required

▲ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.