



Dpstar manufactured 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 counterpart, allowing for faster start -up cycles. The ANSI Type K standard thermocouple normally has a grounded junction. However, an optional undergrounded 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.

## Application

Mineral Insulated heaters are designed to maximize manufacturing productivity by reducing cycle time. Maintain the molten material at a uniform temperature while the injection mold cavity is simultaneously being cooled.

- Tool Heating for e.g. plastic, rubber
- Plastic injection industry
- Equipment for medical technical and laboratory industry
- Extrusion Machinery
- Hot Runner
- Melting process
- Mold and Dies
- Packing machinery

## Specifications

- Resistance tolerance : ±5%
- Wattage tolerance : ±5%
- Maximum Operating temp : 1500°F (816°C)
- Maximum watt density : 134 watts/in<sup>2</sup> applied to nozzle
- Physical dimensions : 1/8" square
- Length of non-heated section : 1" to 6" (as specified)
- Potting adapter : 5/16" O.D. x 1-1/2" long

	Code	Size	Voltage	Power	Length	C/W Thermocouple	TYPE
1	MIHTR-110V-200W-360L	3.3mm x 3.3mm	110V	200W	360mmL	Yes	K
2	MIHTR-230V-600W-860L	3.3mm x 3.3mm	230V	600W	860mmL	Yes	K
3	MIHTR-240V-250W-350L	3.3mm x 3.3mm	240V	250W	350mmL	Yes	K
4	MIHTR-240V-300W-450L	3.3mm x 3.3mm	240V	300W	450mmL	Yes	K
5	MIHTR-240V-300W-750L	3.3mm x 3.3mm	240V	300W	750mmL	Yes	K
6	MIHTR-240V-400W-580L	3.3mm x 3.3mm	240V	400W	580mmL	Yes	K
7	MIHTR-240V-400W-860L	3.3mm x 3.3mm	240V	400W	860mmL	Yes	K
8	MIHTR-240V-450W-660L	3.3mm x 3.3mm	240V	450W	660mmL	Yes	K
9	MIHTR-240V-450W-860L	3.3mm x 3.3mm	240V	450W	860mmL	Yes	K
10	MIHTR-240V-600W-860L	3.3mm x 3.3mm	240V	600W	860mmL	Yes	K
11	MIHTR-240V-700W-1000L	3.3mm x 3.3mm	240V	700W	1000mmL	Yes	K
12	MIHTR-240V-800W-1150L	3.3mm x 3.3mm	240V	800W	1150mmL	Yes	K
13	MIHTR-240V-900W-1350L	3.3mm x 3.3mm	240V	900W	1350mmL	Yes	K



MI Heating Cable is Mineral Insulated semi-rigid electric resistance wire heating cable. The resistance wire heating element is electrically insulated using Magnesium Oxide (Mineral) to ensure safe electrical insulation with maximum thermal transfer. The mineral insulation is then encapsulated in a metal sheath for extreme durability and environmental protection. MI cable is a durable and long lasting heating cable that is capable of heating to very high temperatures. MI cable can be used in both ordinary and hazardous locations/areas and is versatile enough that it can be used for a wide range of surface heating and radiant heating applications.



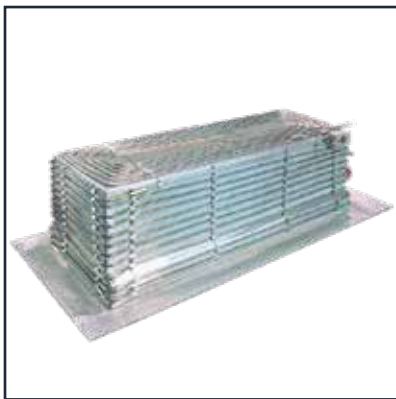
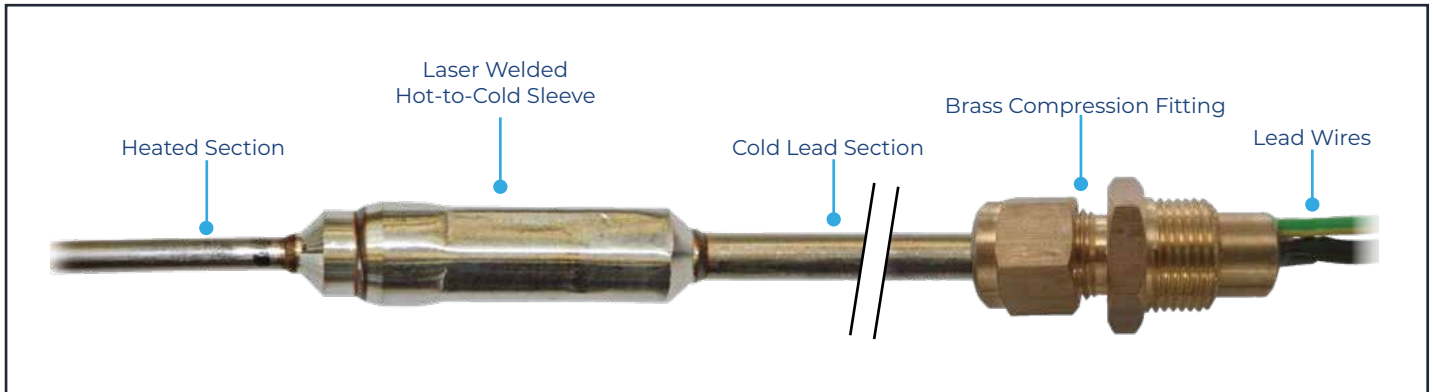
## Product Highlights

- High temperature capability
- High-watt density
- High corrosion resistance
- Laser welded sleeves provide superior reliability
- Durable design for use in harsh environments

## Ideal For

- Tanks and Vessels
- Power generation hoppers
- Pipe tracing
- Containers and drums
- Valves, flanges, metal tubes
- Radiant heaters
- Furnaces
- Floodgate heating
- Reactors
- Plate heating
- Pump heating
- Continuous heating ovens





## Specifications

- Maximum exposure temperature: 1832°F (1000°C)
- Maximum watt density: 76.2 watts/ft (250 watts/m)
- Outer sheath material options:
  - Stainless steel, Alloy 800 & 825, or Inconel 600
- Heat Conductor: Nichrome, Copper, or Copper alloy
- Series resistance cable
- Dielectric Mineral Insulation: MgO = Magnesium Oxide
- Cable diameter: 1/8" (3.2mm) up to 1/4" (6.5mm)
- Custom made units for your exact requirements
- Ingress protection rating: IP67 (waterproof)
- Standard cold lead length: 1.64ft (0.5m)
- Standard voltage: 230VAC
- Standard brass compression fitting connections: M20x1.5 †
- † Other sizes, voltages and fittings available

Chemical & Corrosion Resistance Chart										
Outer Material	Sulfuric Acid	Hydrochloric Acid	Hydrochloric Acid	Phosphoric Acid	Nitric Acid	Organic Acid	Alkali	Salts	Seawater	Chloride
Stainless steel 321	N	N	N	N	D	E	A	A	N	N
Inconel 600	D	D	A	D	D	E	E	E	A	E
Alloy 825	E	E	E	E	E	E	E	E	E	E

E - Excellent  
 A - Acceptable  
 X - Application dependent  
 N - Not recommended

*Other outer material options available upon request*

## Ordering Information

Please contact Dpstar Group for personalized application assistance.

NOTE: Dpstar Group provides a complete system with all materials necessary for installation including heating cable, clamp bands, installation mesh, aluminum foil, stainless steel foil, and more.