

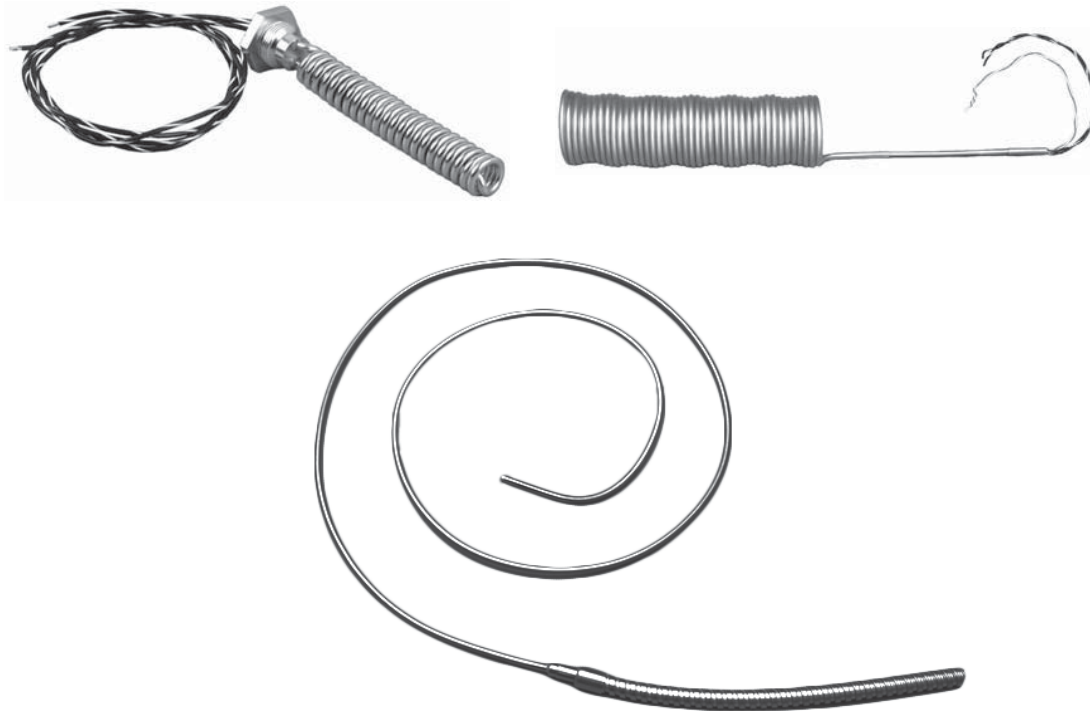


closing the loop on thermal solutions

Cable Heaters

MINERAL INSULATED CABLE HEATERS

Mineral insulated cable heaters can be formed to a wide variety of shapes and sizes that can deliver high temperatures to areas where standard heaters are impractical due to size or space restrictions. Cable heaters can be formed to cover cylindrical areas that require uniform heat patterns. Custom-formed cable heaters are transitioned with a moisture resistant transition to a flexible leadwire, which can have additional protective jackets such as stainless steel braid or stainless steel armor.



Cable Heaters

Design Features:

- Wattage and voltage customized to application
- Elements can be formed to specification or formed on location
- Optional internal thermocouple can be located at various points for precise temperature control
- Sealed leadwire transition eliminates contamination
- Sheath materials available in 304 stainless steel, 316 stainless steel, Inconel® 600, or custom material available upon request

Typical Applications:

- Heat Trace / Freeze Protection
- Semiconductor Manufacturing
- Plastic Molding Hot Runners Systems
- Air or Liquid Immersion
- Cutting and Sealing Bars
- Tube and Pipe Heating
- Large Surface Areas
- Vacuum Chambers



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Engineering Specifications

Performance Ratings

Watt density: 150 watts per square inch of sheath surface area maximum with ideal application, consult factory

Maximum temperature: 1500°F (815°C)

Dimensional Ratings

Heater cable diameters: 0.040", 0.062", 0.093", 0.125", 0.132", 0.150", 0.170", 0.188", 0.200", 0.250", Consult the factory for additional sizes

Cable diameter tolerance: ± 0.005

Heater length tolerance: 0 to 6" (± 1/8"), 6 to 18" (± 1/4"), 18 to 24" (± 3/8"), 24 to 120" (± 3/4"), 120 to 300" (± 1")

Electrical Ratings

Resistance tolerance: ± 10%

Standard voltage: 120 or 240 volts
For higher or lower voltages, contact Durex Industries

Thermocouples: ANSI Type J or K

Transition and Termination

Transition (potting) adapters: 0.25" to 0.38" diameter (See chart)

Transition temperature ratings: Standard transition is rated to 482°F (250°C)
Optional high temperature transition is rated to 842°F (450°C)
Standard heater lead wire insulation is TGGT (Teflon®, double fiberglass, Teflon® impregnation) rated to 482°F (250°C)

Thermocouple: Standard leads use a fiberglass insulation rated to 900°F (482°C)
Teflon® insulation is available upon request

Optional lead protection: Fiberglass sleeving, stainless steel overbraid, or stainless steel armor cable available

Standard Specifications

Sheath Cross Section	Maximum Voltage	Adapter		Minimum Bend Radius
		Diameter	Length	
0.062 Dia.	120	0.25	1.16	0.18
0.093 Dia.	120	0.28	0.88	0.28
0.125 Dia.	240	0.28	0.88	0.38
0.080 x 0.140	240	0.28	0.88	0.38
0.100 x 0.120	240	0.28	0.88	0.38
0.150 Dia.	240	0.28	0.88	0.45
0.105 x 0.150	240	0.28	0.88	0.45
0.130 x 0.130	240	0.28	0.88	0.45
0.188 Dia.	240	0.38	1.20	0.56
0.200 Dia.	240	0.38	1.20	0.60
0.250 Dia.	240	0.38	1.20	0.75

Radius may be reduced to two times the sheath diameter under ideal conditions. Consult the factory.
Resistance / Wattage Tolerance ± 10%