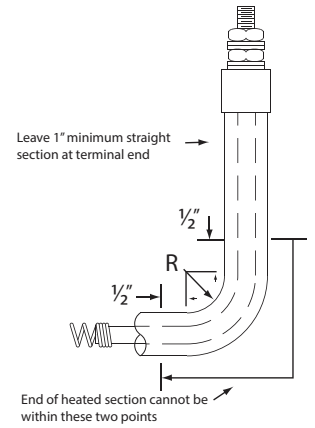


Forming



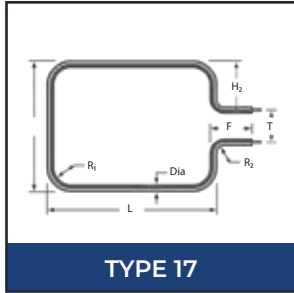
Tubular heaters can be formed into virtually any shape required. Minimum radius dimension for forming is equal to the diameter of the tubular being formed. Bends are repressed as required. When ordering, specify the appropriate dimensions for the corresponding shown below. If configuration is not shown, provide a sketch or sample SL reference is "Sheath Length".



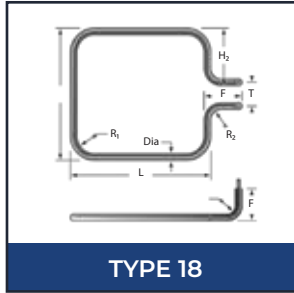
Typical Formations

<p>TYPE 1</p>	<p>TYPE 2</p>	<p>TYPE 3</p>	<p>TYPE 4</p>
<p>TYPE 5</p>	<p>TYPE 6</p>	<p>TYPE 7</p>	<p>TYPE 8</p>
<p>TYPE 9</p>	<p>TYPE 10</p>	<p>TYPE 11</p>	<p>TYPE 12</p>
<p>TYPE 13</p>	<p>TYPE 14</p>	<p>TYPE 15</p>	<p>TYPE 16</p>

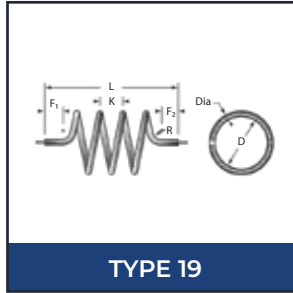
Typical Formations



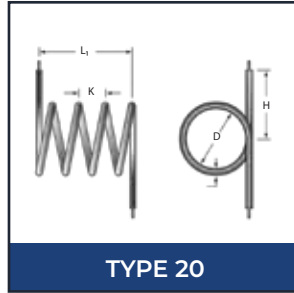
TYPE 17



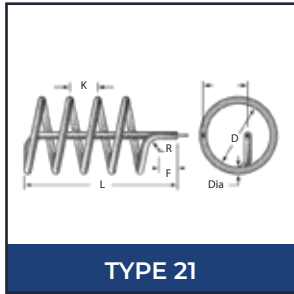
TYPE 18



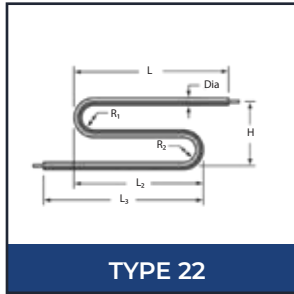
TYPE 19



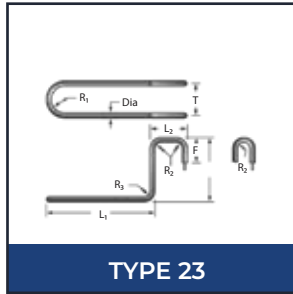
TYPE 20



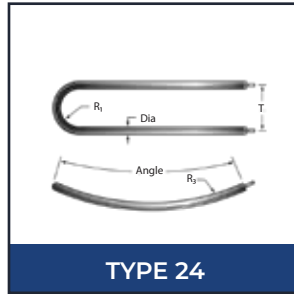
TYPE 21



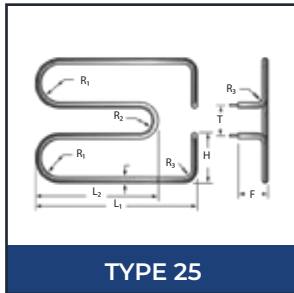
TYPE 22



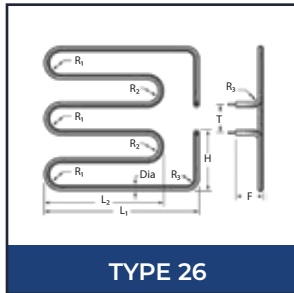
TYPE 23



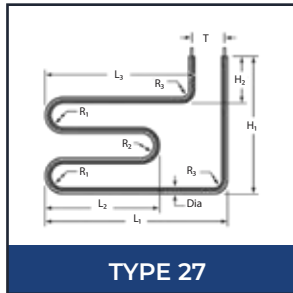
TYPE 24



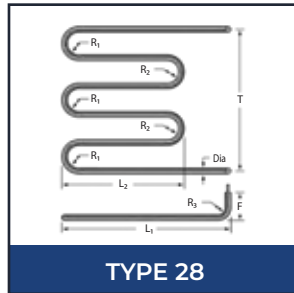
TYPE 25



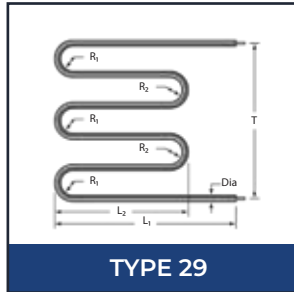
TYPE 26



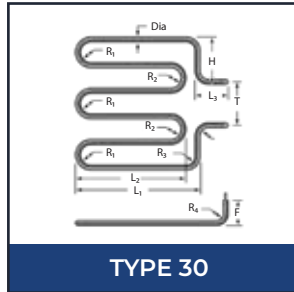
TYPE 27



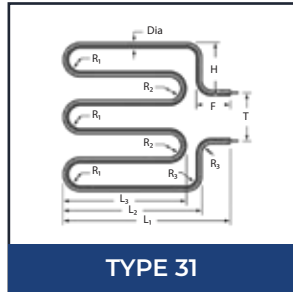
TYPE 28



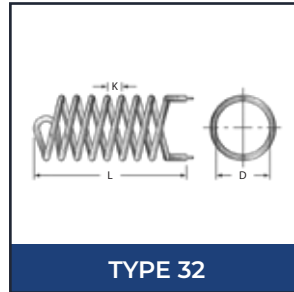
TYPE 29



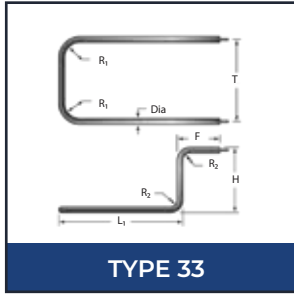
TYPE 30



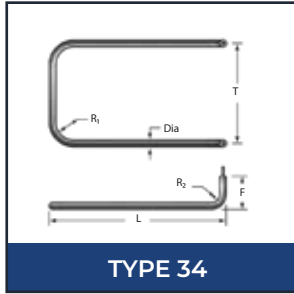
TYPE 31



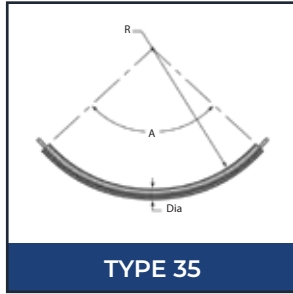
TYPE 32



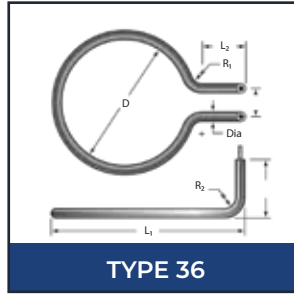
TYPE 33



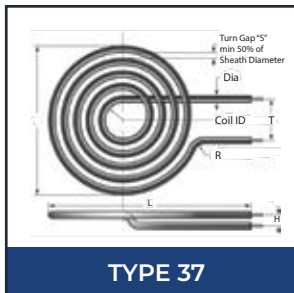
TYPE 34



TYPE 35



TYPE 36



TYPE 37



Tubular heater is highly adaptable to most applications where electrical heating is required. They can be used in their straight form or bent into various shapes. Tubular heaters use 80% Nickel 20% Chromium alloy resistance wire that is fusion welded to the nickel-coated steel terminal cold pin. This coil assembly is precisely stretched and centered in the element metal sheath, and embedded inside a 96% pure, high-grade Magnesium Oxide powder (MgO). The filled tube is then compacted by a roll reduction mill into a solid mass, permanently stabilizing the coil in the center of the tube while providing excellent heat transfer and dielectric strength between the coil and the sheath.

It is compacted with a high temperature MgO powder that provides good insulation property and heat-transfer characteristics between the nichrome wire element to the heater sheathed body. The tubular heater provides a highly efficient, reliable and low-cost means of rapidly supplying heat directly to air, metals and various types of liquids, depending on the application. Tubular heaters can be used in free air, clamped to a surface, placed inside a groove or cast into metal. These versatile heating elements are available in Steel, Stainless Steel or Incoloy outside sheath and can be utilized in application temperatures of up to 1400°F.

Application

For heating almost any liquid or viscous materials including acids, water, synthetic oils, lube oils as well as air, gases, steam or low melting point solids.

- Metal mold, die and platen heating
- Liquid immersion & circulation heaters
- Furnace & oven heating
- Comfort heating and freeze protection
- Tank wall and pipe heating
- Cut and seal heads on packaging equipment
- Process air and gas heating
- Cast into metal parts and platens
- Thermoforming, curing, drying
- Medical and analytical device heating

Material Sheath Selection

Copper

Heating Of Fresh Water Free From Chloride Or Other Aggressive Chemicals. Copper Element May Nickel Plated To Provide Protection In Certain Applications. Maximum Sheath Temperature In Water 180°C.

Incoloy 800/840

A Nickel Chrome Alloy Used For Heating Liquids Where Resistance To Stress Corrosion Is Required. Maximum Sheath Temperature 850°C.

Stainless Steel 304

Heating Gases, Where Oxidation Of Corrosion Is Likely. Selection Will Depend On The Media To Be Heated And The Operating Conditions. Maximum Sheath Temperature 750°C.

Stainless Steel 316 L

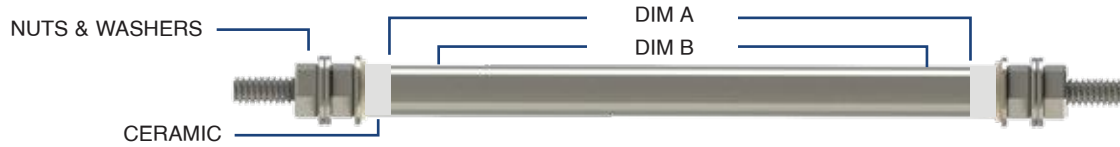
Heating Liquids Where Corrosion Is Likely. Selection Will Depend On The Media To Be Heated And The Operating Conditions. Maximum Sheath Temperature 750°C.

Titanium

Heating Aggressive Liquids Where Other Metal Sheathed Materials Do Not Have The Required Corrosion Resistance. Selection Will Depend On The Chemical Composition Of The Media To Be Heated. Maximum Sheath Temperature 500°C.

MALTEC Straight Length Elements can be formed to suit the pattern required. Special wattages, voltages, lengths, diameters and bushes can be supplied on customer's request.

- 304 Stainless Steel Heating Element



Oil Heaters

(3.1 w/cm²)

dia.8.2 mm

(3.1 w/cm²)

dia. 11.2 mm

Cat. No.	Watts	Volts	Dim 'A'	Dim 'B'	Cat. No.	Watts	Volts	Dim 'A'	Dim 'B'
MT 41-SB	500	240	745	625	MT 41-SC	650	240	745	625
MT 42-SB	750	240	1060	940	MT 42-SC	1000	240	1060	940
MT 43-SB	1000	240	1370	1250	MT 43-SC	1350	240	1370	1250
MT 44-SB	1250	240	1685	1565	MT 44-SC	1700	240	1685	1565
MT 45-SB	1500	240	2040	1880	MT 45-SC	2000	240	2040	1880
MT 46-SB	1800	240	2415	2255	MT 46-SC	2500	240	2415	2255
MT 47-SB	2000	240	2700	2500	MT 47-SC	2700	240	2700	2500
MT 48-SB	2500	240	3330	3130	MT 48-SC	3400	240	3330	3130

Air Heaters

(4.65 w/cm²)

dia.8.2 mm

(4.65 w/cm²)

dia. 11.2 mm

Cat. No.	Watts	Volts	Dim 'A'	Dim 'B'	Cat. No.	Watts	Volts	Dim 'A'	Dim 'B'
MT 01-SB	500	240	495	415	MT 01-SC	650	240	495	415
MT 02-SB	750	240	705	625	MT 02-SC	1000	240	705	625
MT 03-SB	1000	240	915	835	MT 03-SC	1350	240	915	835
MT 04-SB	1250	240	1165	1045	MT 04-SC	1700	240	1165	1045
MT 05-SB	1500	240	1370	1250	MT 05-SC	2000	240	1370	1250
MT 06-SB	1800	240	1620	1500	MT 06-SC	2500	240	1620	1500
MT 07-SB	2000	240	1790	1670	MT 07-SC	2700	240	1790	1670
MT 08-SB	2500	240	2245	2085	MT 08-SC	3400	240	2245	2085
MT 09-SB	3000	240	2705	2505	MT 09-SC	4000	240	2705	2505

Water Heaters

(12 w/cm²)

dia.8.2 mm

(12 w/cm²)

dia. 11.2 mm

Cat. No.	Watts	Volts	Dim 'A'	Dim 'B'	Cat. No.	Watts	Volts	Dim 'A'	Dim 'B'
MT 31-SB	600	240	255	195	MT 31-SC	800	240	255	195
MT 32-SB	900	240	350	290	MT 32-SC	1200	240	350	290
MT 33-SB	1200	240	470	390	MT 33-SC	1600	240	470	390
MT 34-SB	1500	240	565	485	MT 34-SC	2000	240	565	485
MT 35-SB	1800	240	660	580	MT 35-SC	2400	240	660	580
MT 36-SB	2000	240	725	645	MT 36-SC	2700	240	725	645
MT 37-SB	2400	240	855	775	MT 37-SC	3250	240	855	775
MT 38-SB	3000	240	1050	970	MT 38-SC	4000	240	1050	970
MT 39-SB	3600	240	1285	1165	MT 39-SC	4900	240	1285	1165
MT 40-SB	4800	240	1670	1550	MT 40-SC	6500	240	1670	1550

Ø : 8.2mm & 11.2mm Option : 14, 16, 19

Max length available : 6 meters



Electric Heating Elements

Customized design for general, industry and OEM

MALTEC-H

**With Over 100,000,000 Custom Heater Element Designs
There Is A Good Chance That We've Made Something
Similar To The Heating Solution You Seek.**

Dpstar offers the very best in the design and engineering of custom heating elements. Our capabilities are ideally suited to meet your requirements and we are committed to keeping up with the constant changes occurring in manufacturing and product design.

Tubular heater is highly adaptable to most applications where electrical heating is required. They can be used in their straight form or bent into various shapes. Tubular heaters are typically made using stainless steel, Incoloy, Inconel or titanium alloys. These heating elements have a strong outer sheath to help protect the process heater from physical stress and uses high quality alloys to allow efficient heat transfer from resistance coil to your heating medium.