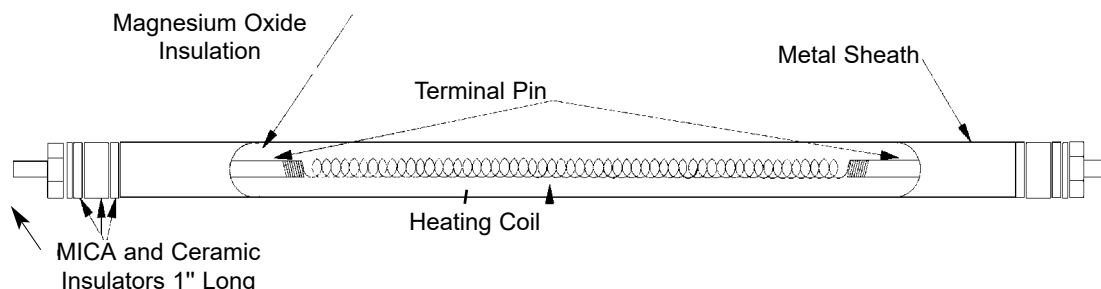


GLO-QUARTZ® TUBULAR CALROD ELEMENTS

Tubular heating elements, the most versatile of all types, are used for practically the entire range of electric resistance heating applications.

A cut-a-way view showing the components of the elements is shown below:



The metal sheath material and the proper size resistance wire for the heating element are carefully chosen and verified by computer calculations to insure the longest service life possible. The nickel/chromium resistor wire is then fusion welded to a terminal pin to assure a positive connection. It is centered in the metal sheath and insulated with high quality magnesium oxide (MgO). The MgO is tightly compacted around the coil and acts as an electrical insulator. The material rapidly conducts the heat from the coiled resistor to the metal sheath and puts the heat where it is required.

Choice of Sheath Material

A selection of sheath material is available to meet an unlimited variety of applications. Standard sheath materials are: Incoloy®, Types 304 and 316 stainless steel, copper, nickel and titanium.



The MgO must meet rigid specifications.

Easy Bending To put heat where it is needed, tubular elements can be formed to fit most requirements.

We can form tubular elements to your exact specifications.

Terminal Construction

Tubular elements generally have a threaded terminal for electrical connection at each end. Other types of terminal connections are available.

Variety of Mounting Methods

Elements can be supplied with threaded fittings for mounting through walls of tanks, ovens, etc. Compression threaded fittings are also available for easy field installation. Rings, clips, brackets, and washers can also be attached to elements for mounting purposes.

Long Life

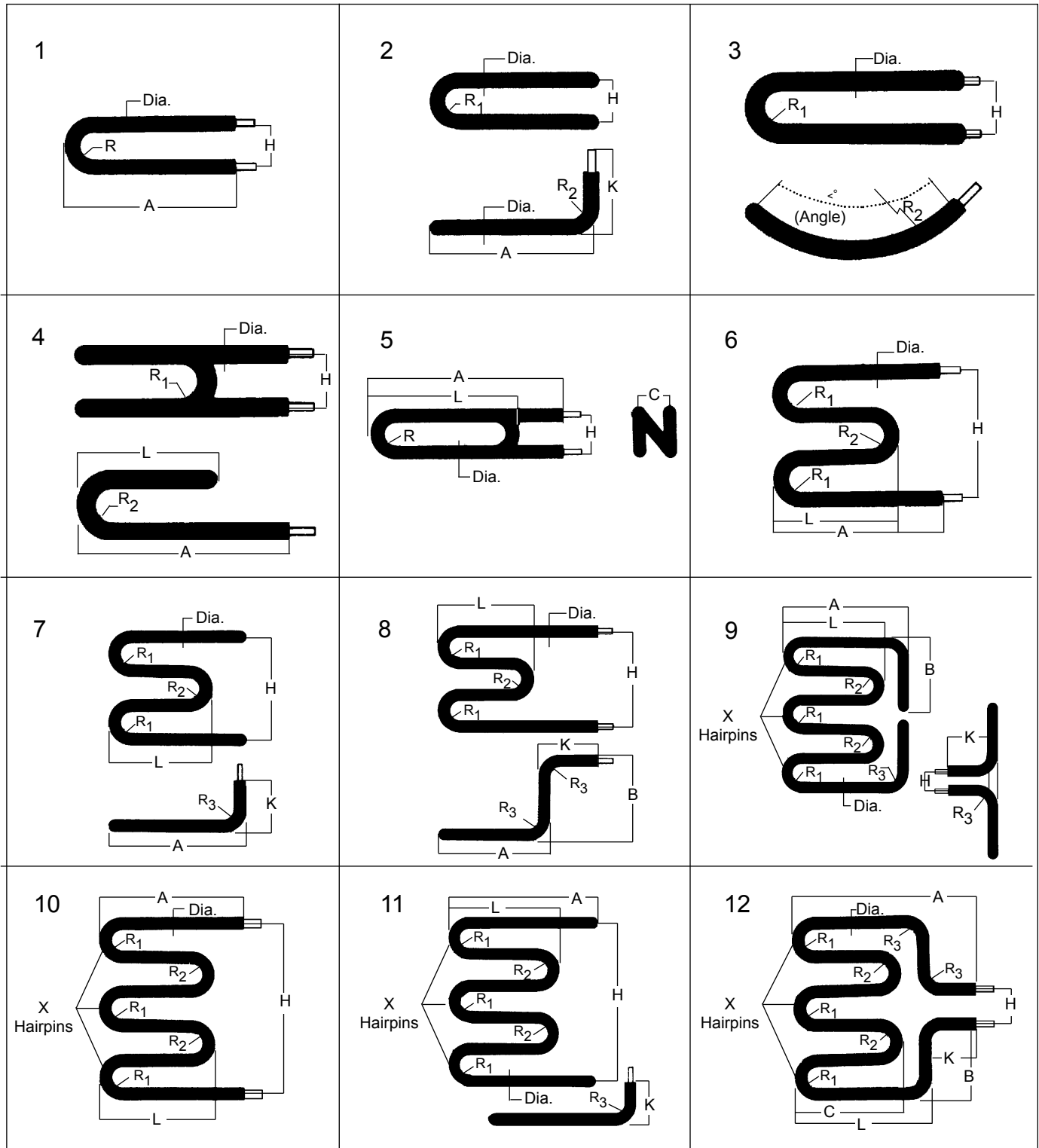
Tubular heaters are designed for long life and will outlast other tubular elements in a given application. Proper application assures long life. Consult with one of our applications engineers for assistance.

Cold Zone

Virtually any cold zone can be manufactured, provided cold zone parameters are not violated.

GLO-QUARTZ® TUBULAR CALROD ELEMENTS

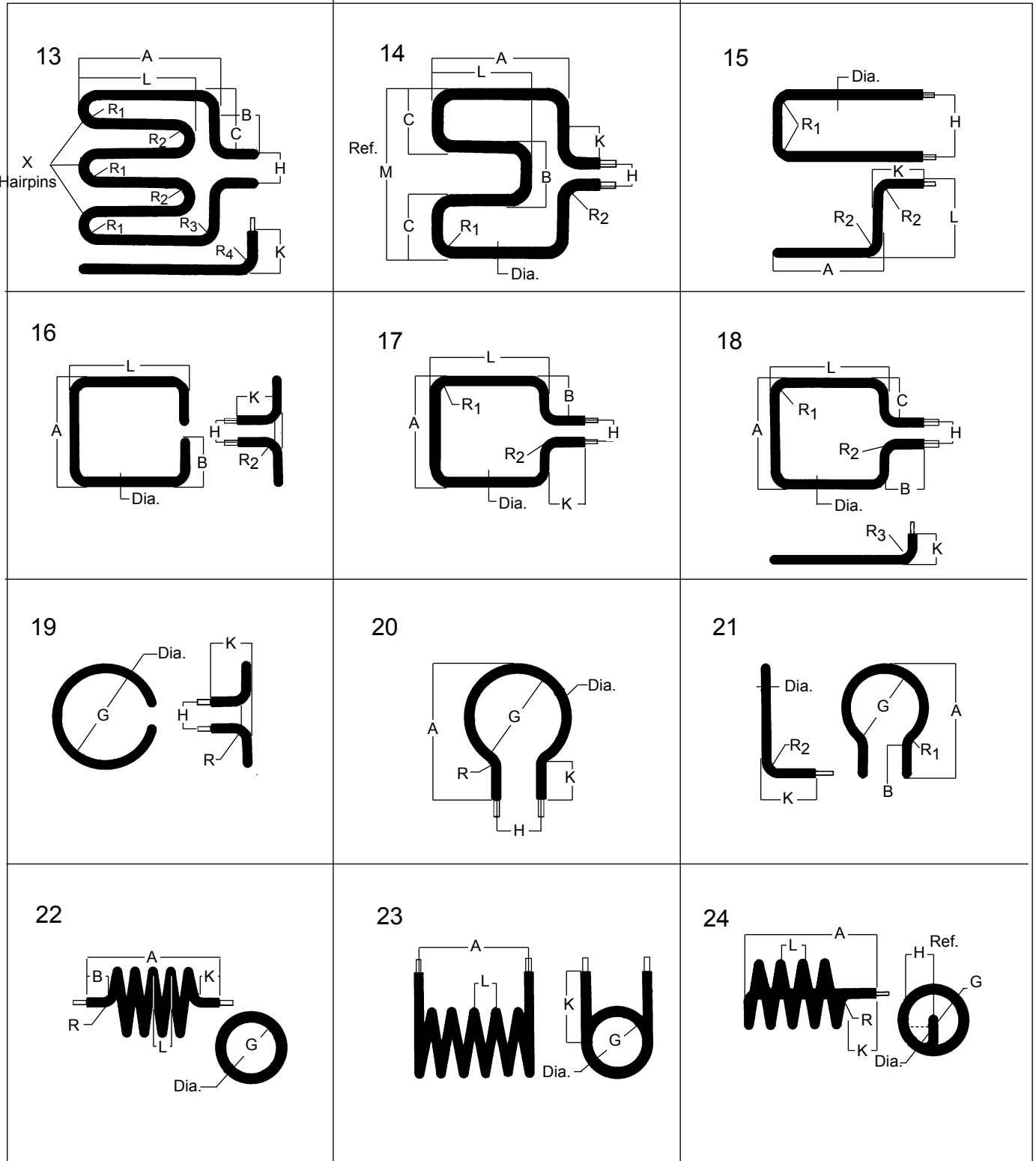
Basic Tubular Bending Forms *Custom Shapes Available*



GLO-QUARTZ® TUBULAR CALROD ELEMENTS

Basic Tubular Bending Forms *continued*

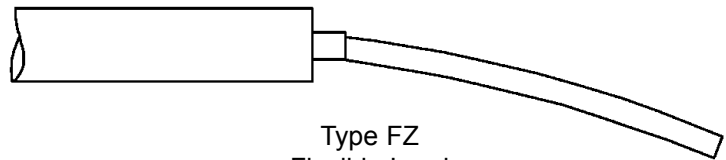
Custom shapes available



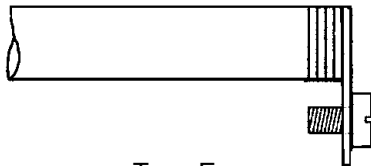
GLO-QUARTZ® TUBULAR CALROD ELEMENTS



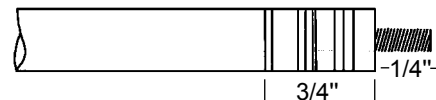
Type P
Plain Terminal Pin
Specify Length



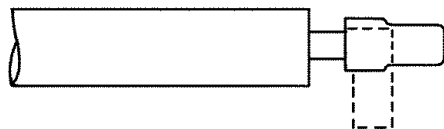
Type FZ
Flexible Lead
Specify Length
6" Standard



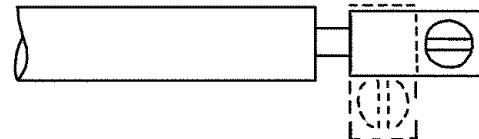
Type E
Right Angle
Lug Terminal



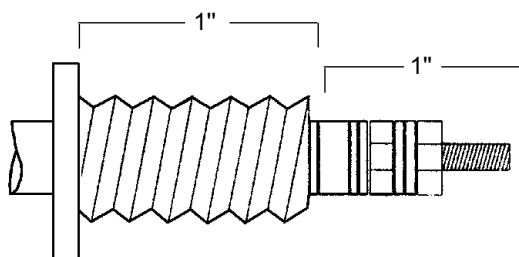
Type T
Stud Terminal
8-32 X 1" or 10-32 X 1"



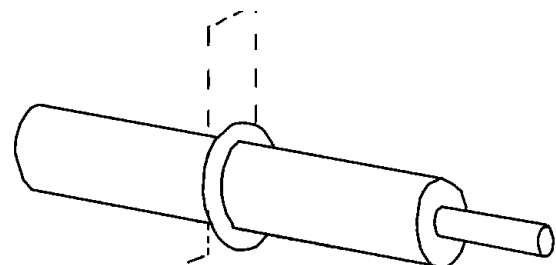
Type S
Quick-Disconnect Spade



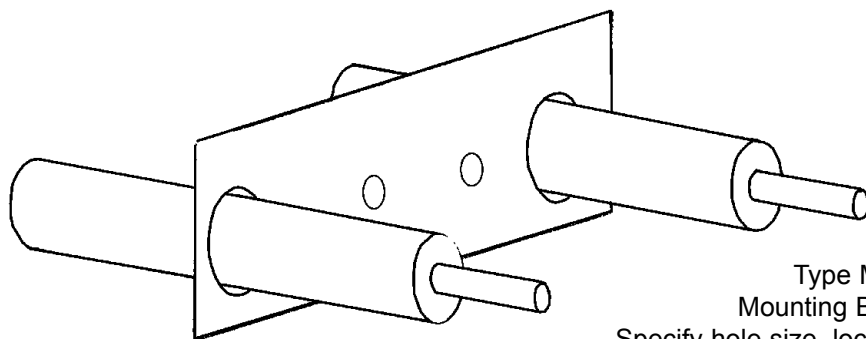
Type L
Terminal Lug
Specify Direction



Type BH
Water Tight Bulkhead Fitting,
Specify: 5/8-18, 3/4-16, Brass, Steel
or Stainless Steel



Type LR
Locator Ring, Specify Dimension
from end of Sheath, metal
elements only

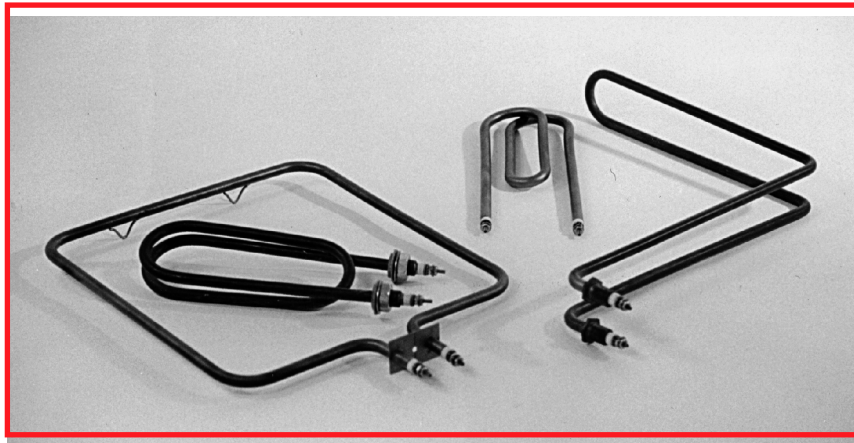


Type MF
Mounting Bracket.
Specify hole size, location and number

GLO-QUARTZ® TUBULAR CALROD ELEMENTS

HOW TO ORDER: All part numbers will begin with the letter **E**.

Use the information provided in following list below to determine the code numbers for your element.



Complete the code number to the right with the information below.*

E = Element

Forming Option

Insert drawing # from page 63-64

Standard Sheath Material

- SA** - 304 Stainless Steel
- SB** - 316 Stainless Steel
- N** - Incoloy®
- C** - Copper
- T** - Titanium

Custom Sheath Material

- I** - Inconel®
- M** - Monel®

Wattage

(i.e. 1500 watts = 15; 3000 watts = 3)

Voltage

Use voltage/phase chart on pg 1 to specify voltage. Elements are single phase only.

Sheath Length Not Including Terminals

Terminal Ends

- P** - Plain Terminal Pin
- FZ** - Flexible Leads
- E** - Right Angle Lug Terminal
- T** - Stud Terminal
- S** - Quick Disconnect Spade
- L** - Terminal Lug

Special Options

- BH** - Bulk Head Fitting (Specify Material)
- LR** - Locator Ring
- MF** - Mounting Bracket

* Provide sheath length and heated length when ordering element.

E _ _ _ _ _

Example:

Part # **E** **1** **N** - **15** **DD** **24** - **T**

Form #1 → 240 Volt/1PH

Incoloy® Sheath → 24" Long Sheath Length

1500 Watts → Stud Terminal