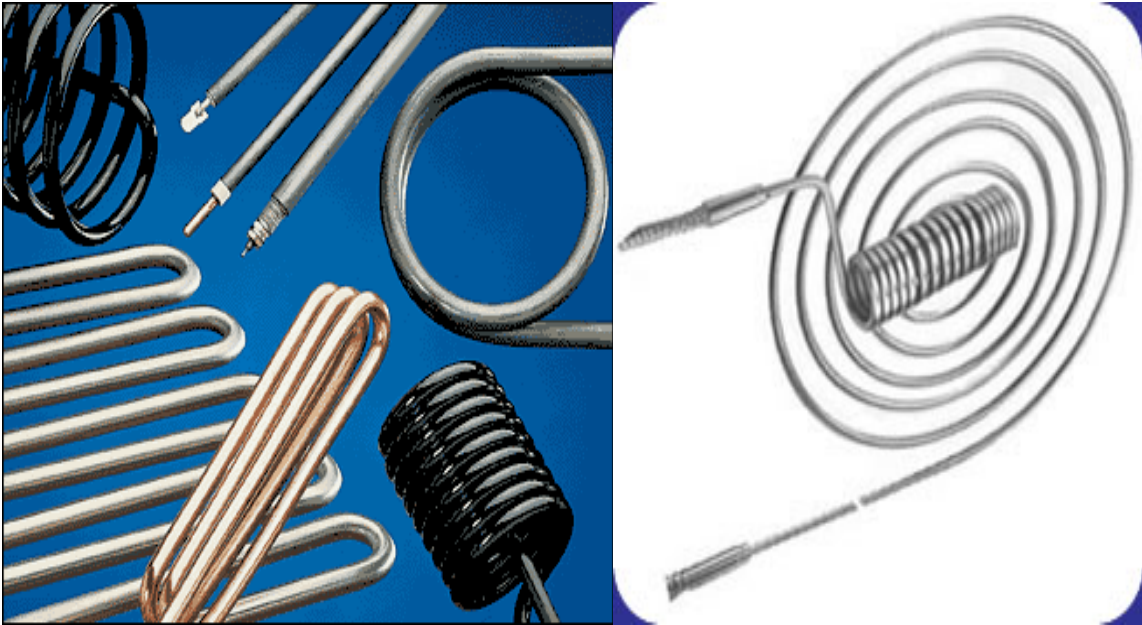


# ***Tubular Heaters***



## ***Tubular Heating Elements from Heaters Controls & Sensors***

Formed Tubular Heating Elements provide an economical, robust, and versatile heat source.

Tubular Heating Elements are commonly used to fit into milled grooves for hot runner molding systems. The precision fit optimizes heat transfer to the working surface.

Heaters Controls & Sensors can provide Formed Tubular Heating Elements "ready to go" into your existing channel or new tool design.

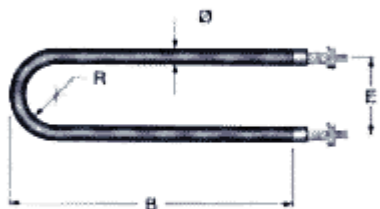
Tubular Heating Elements are made of incolloy and can be bent into all shapes and sizes.

These elements could be designed to fit various applications from radiant to contact heating with watt densities for liquids, solids or gases. Tubular heaters are also used in heating oils, food metal Plastics or various other processes.

Available in various diameter from .125" to .625" and voltages from 12 volts to 600 volts.

The following diagrams provide various formations that are possible, kindly chose the formation you require by Type Number and send it to us to enable us to quote.

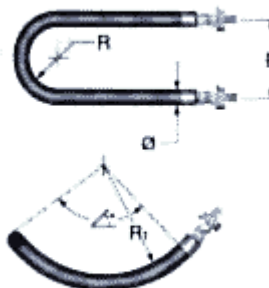
**Type 1**



$$SL = 2B + 1.14R - 43Ø$$

$$E = 2R + Ø$$

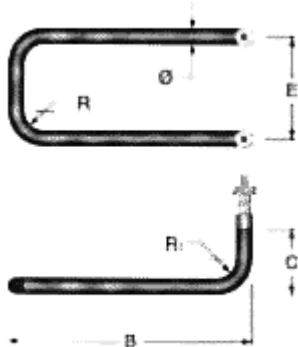
**Type 2**



$$SL = 0.175 \angle (2R + Ø) + 1.14R - 43Ø$$

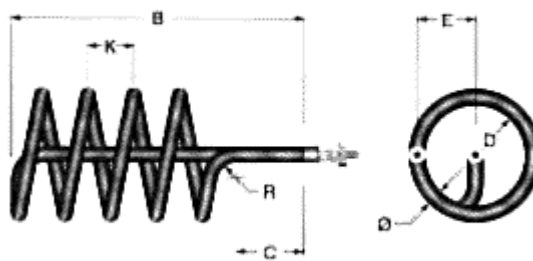
$$E = 2R + Ø$$

**Type 3**



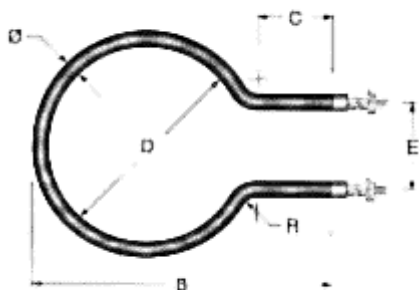
$$SL = 2C - .86R - 3.86Ø + 2B - .86R + E$$

**Type 4**



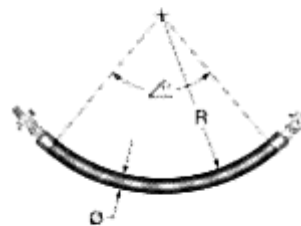
$$SL = [(D + Ø)(3.14)(\text{NUMBER OF } 360^\circ \text{ TURNS})] + (D/2) + B + C$$

**Type 5**



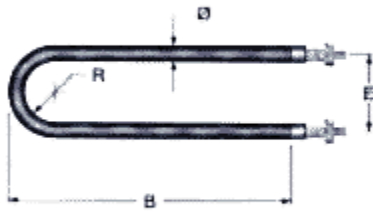
$$SL = 3.14D + 1.14R + 2C - 3.71Ø - E$$

**Type 6**



$$SL = 0.175 \angle (R + 5Ø)$$

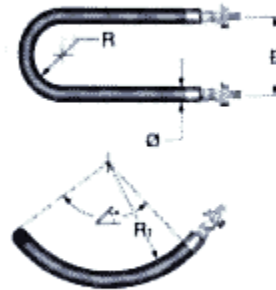
**Type 1**



$$SL = 2B + 1.14R - 43Ø$$

$$E = 2R + Ø$$

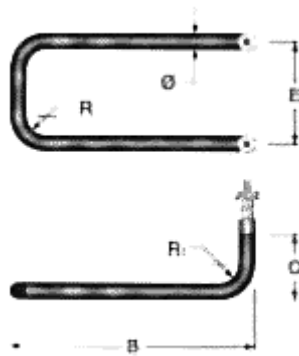
**Type 2**



$$SL = 0.175 \angle (2R + Ø) + 1.14R - 43Ø$$

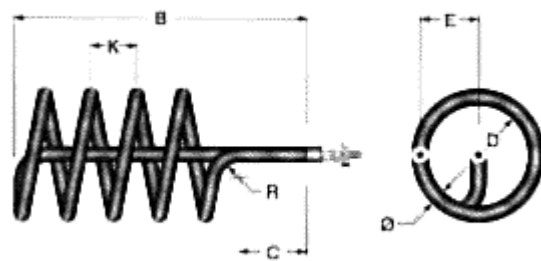
$$E = 2R + Ø$$

**Type 3**



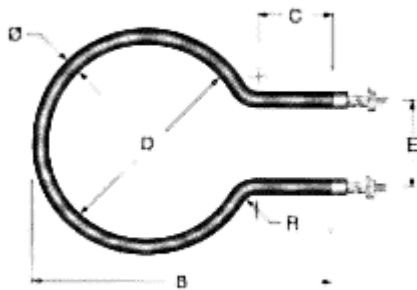
$$SL = 2C - .86R - 3.86Ø + 2B - .86R + E$$

**Type 4**



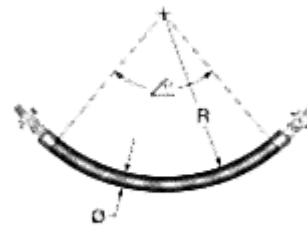
$$SL = (D + Ø)(3.14)(\text{NUMBER OF } 360^\circ \text{ TURNS}) + (D/2) + B + C$$

**Type 5**



$$SL = 3.14D + 1.14R + 2C - 3.71Ø - E$$

**Type 6**



$$SL = 0.175 \angle (R + 5Ø)$$