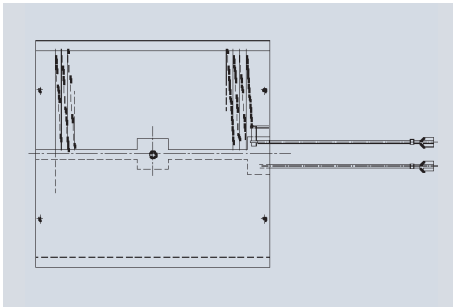
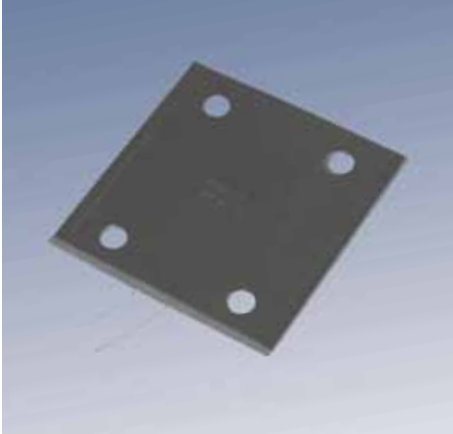


**Flat Heaters (Rectangular)**



**MICA Heaters**

**Description**

Flat, rectangular surface heaters that are mounted to the outside of the body to be heated.

Two Mica plates sandwich a wire heating element formed around a Mica former. The heater may have an optional protective steel sheath.

**Features**

- Controllable heat by resistance wire technology
- Resistor wound on Mica plate, outside insulated with two mica plates
- Heat transfer mode - conduction
- Uniform heat distribution over entire contact surface

**Design Characteristics**

- Operating temperature up to 350°C
- Power Density up to 4 W/cm<sup>2</sup>
- Protection: IP20 without metal sheath  
IP40 with metal sheath
- Sheath: stainless steel 1.4301 0.3mm  
stainless steel 1.4301 0.5mm  
galvanized steel sheet 0.5mm  
aluminium sheet 0.6mm
- Electrical connection: lead wires,  
length as desired  
blade terminal

**Flat Heaters (Circular)**



**Description**

Flat, circular heaters. If required the heater may have a protective steel sheath.

**Features**

identical with those of flat (rectangular) heaters

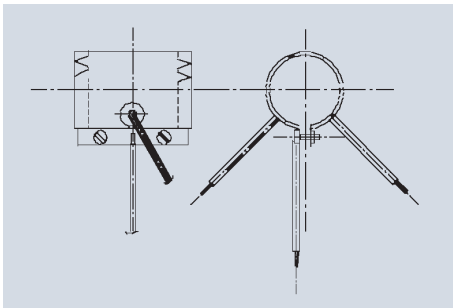
**Design Characteristics**

- Available diameters  
50, 80, 85, 90, 100, 110, 120, 130 140, 160mm
- Center bore 10-15mm diameter
- Other design characteristics identical with those of the flat heating elements

**Applications**

- Tools and dies
- Machines and equipment
- Laboratory and medical apparatus
- Liquid containers

**Cylinder Heaters**



**MICA Heaters**

**Description**

Tubular bent flat heaters for heating of cylindrical bodies. The steel sheet covering provides stability and can be used for clamping the unit to the body to be heated.

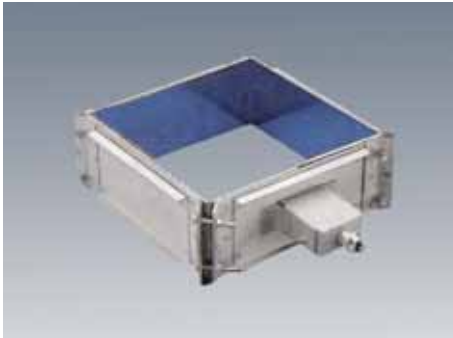
**Features**

- Controllable heat by resistance wire technology
- Heat transfer mode - conduction
- Uniform heat distribution over entire contact surface

**Design Characteristics**

- Minimum diameter 30mm
- Height 30 to 500mm
- Steel sheet clamp with lead wires connection leads on one or two sides, lead length as desired
- Steel sheath with additional clamp and cylinder screws
- Leads one side or two sides, or with terminal box and cable gland
- These elements are manufactured 2 to 3mm smaller than the nominal diameter in order to ensure a tight fit
- Dimensioning and configuration according to customer requirements

**Square Heaters**



**Description**

Square arrangement of flat heaters with tension clamp for heating square blocks.

**Features** identical with those of flat heaters

**Design Characteristics**

- Heating element with additional clamp
- Additional cutouts possible
- Operating voltage up to 500V
- Electrical connections: leads, length as desired terminal box with cable gland

**Application**

- Tools and dies
- Machines and equipment
- Laboratory and medical apparatus
- Liquid containers

**Inquiries and orders should indicate**

- Shape, dimensions, sheath material, type of termination
- Voltage and performance, lead length
- Desired quantity

**DBK will gladly assist you with the design and calculation of your heater requirements or will provide the complete heater solution.**