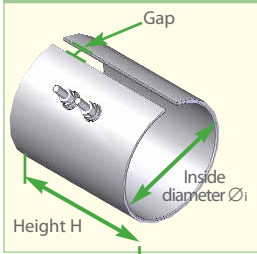


# CONNECTIONS FOR BAND HEATERS

- Description of the different connections, with and without cap:
  - Wires : flexible wires, nickel core, fiberglass insulated, designed for a maximum operating temperature of 340°C.
  - Connection with embossement and leads in the thickness : each conductor is protected by a galvanized steel braid.
  - Terminals : M4, M5 or M6 threaded terminals, depending on the watt density, mounted with 2 washers and 1 nut per terminal.
  - Plugs : 2 pins,  $\varnothing$  6 mm, axe 19 mm, in nickered stainless steel. Connection boxes, other models of pins in option. See p12.
  - Braid (specific for termination with cap) : 2 conductors wire termination, protected by a galvanized steel braid.
- All of our band heaters are provided with an earth wiring, by default. Delivery without ground wire, only on request.

## CONNECTIONS WITHOUT CAP

### Legend



### Orientation of the connections

Both terminations on the same side, parallel to the gap



Both terminations on the same side, perpendicular to the gap



One termination on each side of the gap



Standard band heaters are in aluminised sheath or stainless steel as option ( no stainless for steel band heaters with wires in the thickness and connection with embossement). The dimensional ranges are the same for those two types mentioned above, except special specifications.

Connection without cap, single phased, are centered on the band heater's height . (except for connections leads in the thickness and leads under embossement). Dim. between the two axes: 19 mm.

### Connections , on the same side, parallel to the gap

#### Pins

Intensity < 9 A



#### Mica

$\varnothing$  : 50 to 150 mm  
H : 55 to 215 mm

#### Mica with clamping sheath

$\varnothing$  : 70 to 380 mm  
H : 60 to 215 mm

#### Terminals

Intensity < 13.5 A



#### Mica

$\varnothing$  : 50 to 150 mm  
H : 55 to 215 mm

#### Mica with clamping sheath

$\varnothing$  : 70 to 380 mm  
H : 60 to 215 mm

**Ceramic** : on request

#### Wires

Intensity < 20 A



#### Mica

$\varnothing$  : 50 to 150 mm (alu)  
 $\varnothing$  : 50 to 150 mm (st. steel)  
H : 55 to 215 mm

#### Mica with clamping sheath

$\varnothing$  : 70 to 380 mm  
H : 60 to 215 mm

**Ceramic** : on request

### Connections , on the same side, perpendicular to the gap

#### Terminals

Intensity < 13.5 A



#### Mica with clamping sheath

$\varnothing$  : 70 to 380 mm  
H : 45 to 215 mm

**Ceramic** : on request

#### Wires

Intensity < 20 A



#### Mica

$\varnothing$  : 70 to 380 mm  
H : 45 to 215 mm

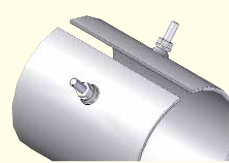
#### Ceramic

$\varnothing$ min: 70 to 380 mm  
H : 30 to 450 mm

### Connections located on each side of gap

#### Terminals

Intensity < 13.5 A



#### Mica

$\varnothing$  : 50 to 150 mm  
H : 30 to 111 mm

#### Mica with clamping sheath

$\varnothing$  : 70 to 380 mm  
H : 65 to 111 mm

**Ceramic** : on request

#### Wires

Intensity < 20 A



#### Mica

$\varnothing$  : 25 to 150 mm (alu)  
 $\varnothing$  : 40 to 150 mm (st. steel)  
H : 20 to 111 mm

#### Ceramic

$\varnothing$  : 70 to 380 mm  
H : 60 to 215 mm

#### Wires under bossage

Rated current < 4.5 A



#### Mica

$\varnothing$  : 30 to 150 mm  
H : 32 to 111 mm

(This heater is only available in brass)

#### Wires in the thickness

Intensity < 4.5 A



#### Mica

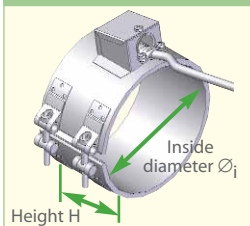
$\varnothing$  : 30 to 150 mm  
H : 30 to 111 mm

Possibility to add plugs, in option. See chapter "Options" p 12 and "Accessories" documentation.

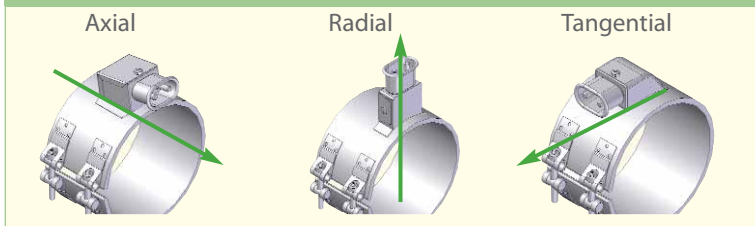
Refer to p18 "How to define special band heaters" to help you to define your quotation. Choose the connection type and fill in the enclosed form.

## CONNECTIONS WITH CAP

### Legend

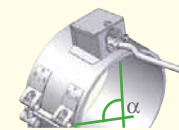


### Orientation of the caps



### Std positioning of the cap

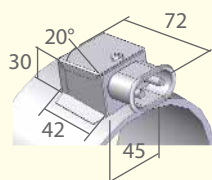
$\text{Ø}_{\text{band h.}} < 100 \text{ mm}$   $\alpha : 180^\circ$   
 $\text{Ø}_{\text{band h.}} \geq 101 \text{ mm}$   $\alpha : 90^\circ$   
 Other angles on request



- Connection description : Other models, in option: p.12.
- Mica and ceramic b. h. : standard aluminised sheath, option stainless steel.  
Caps : standard aluminised plate, option stainless steel.
- Sealed nozzle heaters & caps : all pieces made of brass or stainless steel
- Positioning of caps on the height : please consult us.
- The sketches of the connection shown below, correspond to  $\text{Øi}$  and H ranges mentioned in the table. Other ranges, see note(1).
- Models of caps, below, for single phase connection. Possibility of three phase (stud terminals and braid), commutable or not. Please, consult us.

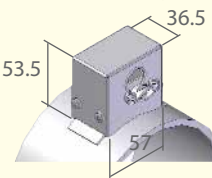
### Axial orientation

Pins- Intensity < 16 A (single phase)



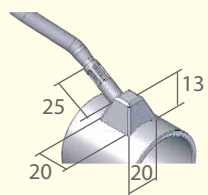
**Mica**  
 $\text{Øi} : 70 \text{ to } 380 \text{ mm} / \text{H} : 44 \text{ to } 424 \text{ mm}$   
*Other range (1) :*  
 $\text{Øi} : 60 \text{ to } 250 \text{ mm} / \text{H} : 35 \text{ to } 43 \text{ mm}$   
**Ceramic**  
 $\text{Ø}_{\text{min}} : 60 \text{ mm} / \text{H} : 45 \text{ to } 450 \text{ mm}$

Terminals - Intensity < 13.5 A (single phase)



**Mica**  
 $\text{Øi} : 95 \text{ to } 380 \text{ mm} / \text{H} : 70 \text{ to } 424 \text{ mm}$   
*Other range(1) :*  
 $\text{Øi} : 95 \text{ to } 250 \text{ mm} / \text{H} : 40 \text{ to } 69 \text{ mm}$

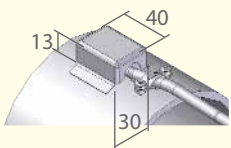
Braid + CMBPE type cap, angle 30° - Intensity < 7.5 A (single phase)



**Sealed mica (brass)**  
 $\text{Øi} : 30 \text{ to } 250 \text{ mm} / \text{H} : 91 \text{ to } 215 \text{ mm}$   
**Sealed mica (stainless steel)**  
 $\text{Øi} : 30 \text{ to } 250 \text{ mm} / \text{H} : 61 \text{ to } 215 \text{ mm}$   
**Mica**  
 $\text{Øi} : 45 \text{ to } 250 \text{ mm} / \text{H} : 41 \text{ to } 130 \text{ mm}$

Other orientations : radial or tangential, with different slopes . (see p12)

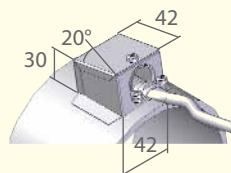
Braid + small bulk cap - Intensity < 20 A (single phase)



**Mica**  
 $\text{Øi} : 90 \text{ to } 250 \text{ mm} / \text{H} : 30 \text{ to } 49 \text{ mm}$   
 &  $\text{Øi} : 60 \text{ to } 380 \text{ mm} / \text{H} : 50 \text{ to } 111 \text{ mm}$   
 $I_{\text{max}} : \text{H} \leq 111 \text{ mm} : 13.5 \text{ A}, \text{ beyond } 20 \text{ A}.$   
*Other range (1) :*  
 $\text{Øi} : 60 \text{ to } 380 \text{ mm} / \text{H} : 112 \text{ to } 424 \text{ mm} (I_{\text{max}} 20 \text{ A})$

Also available with radial or tangential ends.

Braid - Intensity < 20 A (single phase)



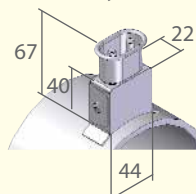
**Mica**  
 $\text{Øi} : 60 \text{ to } 380 \text{ mm} / \text{H} : 44 \text{ to } 69 \text{ mm}$   
 &  $\text{Øi} : 70 \text{ to } 380 \text{ mm} / \text{H} : 70 \text{ to } 424 \text{ mm}$   
**Ceramic**  
 $\text{Ø}_{\text{min}} : 60 \text{ mm} / \text{H} : 45 \text{ to } 450 \text{ mm}$

In case of particular bulks, please consult us.

Note (1) : for these ranges, please consult us for cap dimensions.

### Radial orientation

Pins - Intensity < 16 A (single phase)

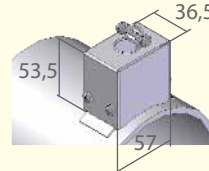


Also perpendicular available on the edge of the band heater

**Mica**  
 $\text{Øi} : 50 \text{ to } 250 \text{ mm} / \text{H} : 22 \text{ to } 43 \text{ mm}$   
 et  $\text{Øi} : 50 \text{ to } 380 \text{ mm} / \text{H} : 44 \text{ to } 424 \text{ mm}$   
 $I_{\text{max}} : \text{H} \leq 29 \text{ mm} : 4.5 \text{ A}, \text{ beyond } 16 \text{ A}.$   
*Other range (1) :*  
 $\text{Øi} : 35 \text{ to } 49 \text{ mm} / \text{H} : 22 \text{ to } 285 \text{ mm}$

**Ceramic**  
 $\text{Ø}_{\text{min}} : 60 \text{ mm} - \text{H} : 30 \text{ to } 450 \text{ mm}$

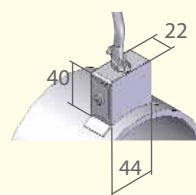
Terminals - Intensity < 13.5 A (single phase)



**Mica**  
 $\text{Øi} : 75 \text{ to } 250 \text{ mm} / \text{H} : 35 \text{ to } 43 \text{ mm}$   
 and  $\text{Øi} : 75 \text{ to } 380 \text{ mm} / \text{H} : 44 \text{ to } 424 \text{ mm}$

**Ceramic**  
 $\text{Ø}_{\text{min}} : 60 \text{ mm} / \text{H} : 30 \text{ to } 450 \text{ mm}$

Braid - Intensity < 20 A (single phase)



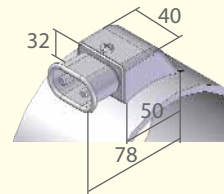
**Mica**  
 $\text{Øi} : 50 \text{ to } 250 \text{ mm} / \text{H} : 22 \text{ to } 43 \text{ mm}$   
 and  $\text{Øi} : 50 \text{ to } 380 \text{ mm} / \text{H} : 44 \text{ to } 424 \text{ mm}$   
 $I_{\text{max}} : \text{H} \leq 29 \text{ mm} : 4.5 \text{ A}, \text{ beyond } 20 \text{ A}.$

*Other range (1) :*  
 $\text{Øi} : 35 \text{ to } 49 \text{ mm} / \text{H} : 22 \text{ to } 285 \text{ mm}$

**Ceramic**  
 $\text{Ø}_{\text{mini}} : 60 \text{ mm} / \text{H} : 30 \text{ to } 450 \text{ mm}$

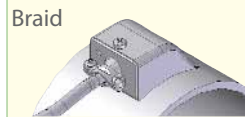
### Tangential orientation

Pins Intensity < 16 A (single phase) Or braid - Intensity < 20 A (single phase)



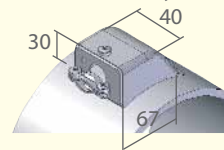
**Mica**  
 $\text{Øi} : 70 \text{ to } 380 \text{ mm} / \text{H} : 51 \text{ to } 424 \text{ mm}$   
*Other range (1) : pins*  
 $\text{Øi} : 110 \text{ to } 250 \text{ mm} / \text{H} : 32 \text{ to } 50 \text{ mm}$

*Other range (1) : braid*  
 $\text{Øi} : 90 \text{ to } 250 \text{ mm} / \text{H} : 35 \text{ to } 50 \text{ mm} (I_{\text{max}} 20 \text{ A})$   
 et  $\text{Øi} : 60 \text{ to } 380 \text{ mm} / \text{H} : 112 \text{ to } 424 \text{ mm}$   
 $\text{Øi} : 60 \text{ to } 250 \text{ mm} / \text{H} : 50 \text{ to } 111 \text{ mm} (I_{\text{max}} 13.5 \text{ A})$



**Ceramic**  
 $\text{Ø}_{\text{min}} : 60 \text{ mm} / \text{H} : 45 \text{ to } 450 \text{ mm}$

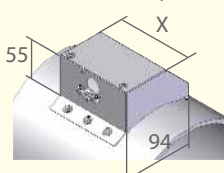
Terminals - Intensity < 13.5 A (single phase)



**Mica**  
 $\text{Øi} : 70 \text{ to } 380 \text{ mm} / \text{H} : 51 \text{ to } 424 \text{ mm}$

*Other range(1) :*  
 $\text{Øi} : 95 \text{ to } 250 \text{ mm} / \text{H} : 40 \text{ to } 50 \text{ mm}$   
 and  $\text{Øi} : 110 \text{ to } 250 \text{ mm} / \text{H} : 35 \text{ to } 39 \text{ mm}$

Terminals - Intensity < 20 A (single phase)



**Ceramic**  
 $\text{Ø}_{\text{min}} : 60 \text{ mm} / \text{H} : 45 \text{ to } 450 \text{ mm}$

X: lthe cap height equals the band height