

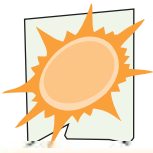
Z.R.E.

... Infinite solutions ...

Nozzle band heaters

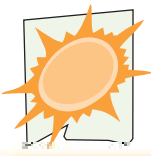


MODEL Z.11 (BRASS)
MODEL Z.15 (STEEL)
MODEL Z.17 (STEEL/PLUS)
MODEL Z.19 (STEEL)
MODEL Z.20 (CERAMIC)
MODEL Z.122 (MAXI)



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Nozzle band heaters

At your disposal a wide range of nozzle band heaters equipped to satisfy any requirements of dimension and working temperatures.

Three different models are available in stock (with different dimension and wattage).

Our longstanding experience in manufacturing heaters enable us to offer nozzle heater bands based on a proved technology.

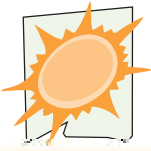
During the heater manufacturing process, an accurate control on the bending pressure distribution allows us to guarantee an excellent coupling between the internal heating element and the casing in order to reach the highest thermal exchange with the nozzle.

The connection between the heater and the feeding cable is protected by a special brass tube 1mm thick, without weldings, which ensure a high mechanical resistance in the most delicate areas of the heater.

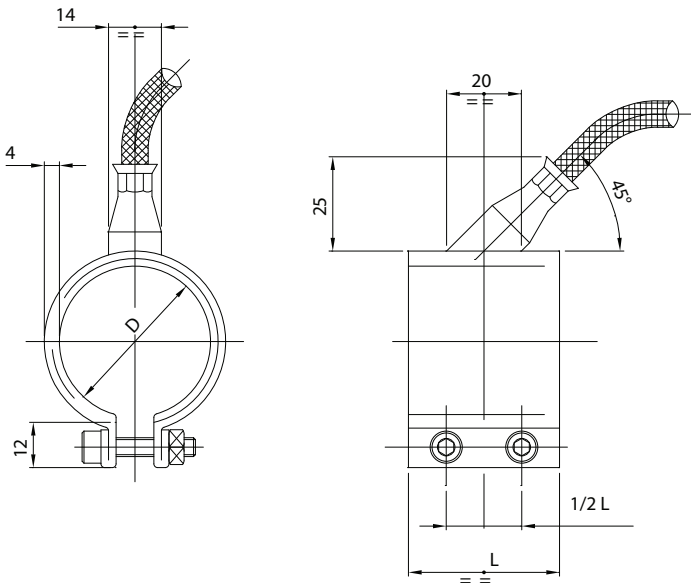
An accurate series of testing on ohmic value, dielectric strength, earth leakage and insulation resistance during and at the end of the manufacturing process, guarantee a top quality product.

Profit from our long-time experience to fit your needs





Model Z.11 brass



Standard with axial exit 45° (30° axial optional)
Flexible bipolar cable + earth length 1000mm

Technical features

Z11 nozzle band heaters are usually employed when there are no space limit and dangers coming from the plastic corrosive action. They are also hermetically sealed from liquid plastic.

- Specific wattage up to 6W/cm²
- Working temperature 300/320°C
- Available, upon request with built in thermocouple FeCu Ni (type J)
- Max diameter ØD 110 mm, max width L 60 mm
- Feeding lead length over 1000 [mm], upon request
- Standard model with axial exit 45°
- Available upon request radial exit or tangential exit 5°/15°/30°/45° or axial exit 5°/15°/30° (see page 12)
- Standard feeding voltage 230V
- Different voltage and wattage upon request
- Available upon request, execution with hole and threaded connector / cap nut for thermocouple (see pag. 12)

Material

- Brass tube
 - Ni-Cr 80/20 wire
 - Continuous mica insulations
 - Flexible bipolar feeding lead + earth wire
 - Ni bore insulated in PTFE with protective metal sleeve max. working temperature 320° peak 350°C
- Options:
- pure Nichel or copper nichel conductors with silicon sleeve max working temperature 180°C

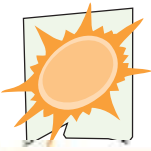
For further information please contact our technical dep.

We reserve the right to change technical details.

Please, follow installation and storage instruction (see page 19).

How to order

- Model Z.11
 Application:
 + article number (if known):
 + Ø:
 + Width:
 + Wattage:
 + Voltage:
 + Lead length:
 + Exit:
 + Quantity:



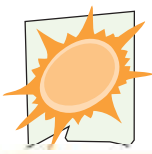
Dimension available in stock

| Code | Diameter [mm] | Width [mm] | Wattage [Watt] |
|-----------|---------------|------------|----------------|
| Z11025030 | 25 | 30 | 100 |
| Z11030025 | 30 | 25 | 105 |
| Z11030030 | 30 | 30 | 125 |
| Z11030035 | 30 | 35 | 145 |
| Z11030040 | 30 | 40 | 165 |
| Z11035025 | 35 | 25 | 120 |
| Z11035030 | 35 | 30 | 145 |
| Z11035035 | 35 | 35 | 170 |
| Z11035040 | 35 | 40 | 195 |
| Z11035045 | 35 | 45 | 220 |
| Z11040025 | 40 | 25 | 140 |
| Z11040030 | 40 | 30 | 165 |
| Z11040035 | 40 | 35 | 195 |
| Z11040040 | 40 | 40 | 225 |
| Z11040045 | 40 | 45 | 250 |
| Z11042025 | 42 | 25 | 145 |
| Z11042030 | 42 | 30 | 175 |
| Z11042035 | 42 | 35 | 205 |
| Z11042040 | 42 | 40 | 235 |
| Z11045025 | 45 | 25 | 155 |
| Z11045030 | 45 | 30 | 190 |
| Z11045035 | 45 | 35 | 220 |
| Z11045040 | 45 | 40 | 250 |
| Z11045045 | 45 | 45 | 285 |
| Z11045050 | 45 | 50 | 315 |
| Z11045055 | 45 | 55 | 345 |
| Z11050020 | 50 | 20 | 140 |
| Z11050025 | 50 | 25 | 195 |
| Z11050030 | 50 | 30 | 210 |
| Z11050035 | 50 | 35 | 245 |
| Z11050040 | 50 | 40 | 280 |
| Z11050050 | 50 | 50 | 350 |
| Z11050060 | 50 | 60 | 420 |
| Z11055020 | 55 | 20 | 155 |
| Z11055025 | 55 | 25 | 190 |
| Z11055030 | 55 | 30 | 230 |
| Z11055035 | 55 | 35 | 270 |
| Z11055040 | 55 | 40 | 310 |
| Z11055050 | 55 | 50 | 385 |
| Z11060020 | 60 | 20 | 165 |
| Z11060025 | 60 | 25 | 210 |
| Z11060030 | 60 | 30 | 250 |
| Z11060035 | 60 | 35 | 295 |
| Z11060040 | 60 | 40 | 335 |
| Z11060050 | 60 | 50 | 420 |
| Z11060060 | 60 | 60 | 505 |
| Z11065020 | 65 | 20 | 180 |
| Z11065025 | 65 | 25 | 225 |
| Z11065030 | 65 | 30 | 275 |
| Z11065035 | 65 | 35 | 320 |
| Z11065040 | 65 | 40 | 365 |
| Z11065050 | 65 | 50 | 455 |
| Z11065060 | 65 | 60 | 550 |

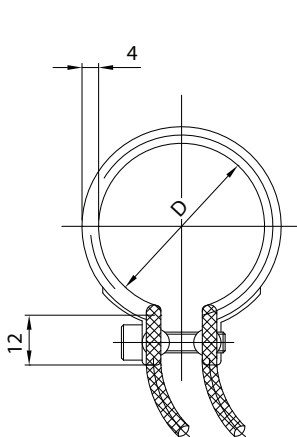
| Code | Diameter [mm] | Width [mm] | Wattage [Watt] |
|-----------|---------------|------------|----------------|
| Z11070020 | 70 | 20 | 195 |
| Z11070025 | 70 | 25 | 245 |
| Z11070030 | 70 | 30 | 295 |
| Z11070035 | 70 | 35 | 345 |
| Z11070040 | 70 | 40 | 395 |
| Z11070050 | 70 | 50 | 490 |
| Z11070060 | 70 | 60 | 590 |
| Z11075020 | 75 | 20 | 210 |
| Z11075025 | 75 | 25 | 260 |
| Z11075030 | 75 | 30 | 315 |
| Z11075035 | 75 | 35 | 370 |
| Z11075040 | 75 | 40 | 420 |
| Z11075050 | 75 | 50 | 525 |
| Z11075060 | 75 | 60 | 635 |
| Z11080020 | 80 | 20 | 225 |
| Z11080025 | 80 | 25 | 280 |
| Z11080030 | 80 | 30 | 335 |
| Z11080035 | 80 | 35 | 395 |
| Z11080040 | 80 | 40 | 450 |
| Z11080050 | 80 | 50 | 565 |
| Z11080060 | 80 | 60 | 675 |
| Z11085020 | 85 | 20 | 240 |
| Z11085025 | 85 | 25 | 300 |
| Z11085030 | 85 | 30 | 360 |
| Z11085035 | 85 | 35 | 420 |
| Z11085040 | 85 | 40 | 480 |
| Z11085050 | 85 | 50 | 600 |
| Z11085060 | 85 | 60 | 720 |
| Z11090020 | 90 | 20 | 250 |
| Z11090025 | 90 | 25 | 315 |
| Z11090030 | 90 | 30 | 380 |
| Z11090035 | 90 | 35 | 445 |
| Z11090040 | 90 | 40 | 505 |
| Z11090050 | 90 | 50 | 635 |
| Z11090060 | 90 | 60 | 760 |
| Z11095020 | 95 | 20 | 265 |
| Z11095025 | 95 | 25 | 335 |
| Z11095030 | 95 | 30 | 400 |
| Z11095035 | 95 | 35 | 465 |
| Z11095040 | 95 | 40 | 535 |
| Z11095050 | 95 | 50 | 670 |
| Z11095060 | 95 | 60 | 800 |
| Z11100020 | 100 | 20 | 280 |
| Z11100025 | 100 | 25 | 350 |
| Z11100030 | 100 | 30 | 420 |
| Z11100035 | 100 | 35 | 490 |
| Z11100040 | 100 | 40 | 560 |
| Z11100050 | 100 | 50 | 700 |
| Z11100060 | 100 | 60 | 840 |

All items available in stock without feeding cable

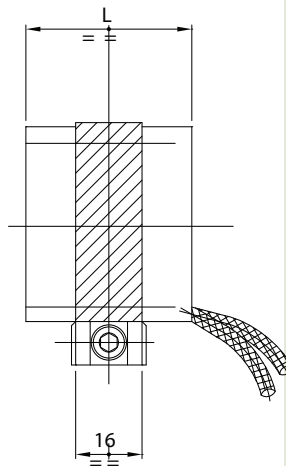
Please specify cable length and type of output in the order



Model Z.15 steel



Nr. 1 clamping band up to L. 35mm
Nr. 2 clamping bands from L. 35mm
to L. 60mm



Flexible unipolar cable
length 1000mm

Technical features

Z15 nozzle band heaters are usually employed when the space around the nozzle is limited (hotrunners) and also in case of plastic corrosive action (i.e. PVC and other materials like PEEK, ABS and PTFE with flame retardant).

The electric connection between the heater and the feeding cables is interated into the internal heating element. A special manufacturing technique of the casing allows an excellent connection with the leads.

- Specific wattage up to 7 W/cm²
- Working temperature 350/370° C
- Available, upon request with built in thermo-couple FeCU Ni (type J)
- Max diameter ØD 110 mm, max width L 200 mm
- Feeding lead length over 1000 [mm], upon request
- Standard feeding voltage 230 V
- Different voltage and wattage upon request

Material

- High thermal conductivity steel casing
- Ni-Cr 80/20 wire
- Continuous mica insulations
- Flexible bipolar feeding lead
- Teflon fibreglass insulated nickel conductors with metal braiding protection

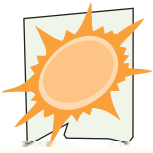
For any further information please contact our technical dep.

We reserve the right to change technical details.

Please follow the installation and storage instruction (see page 19).

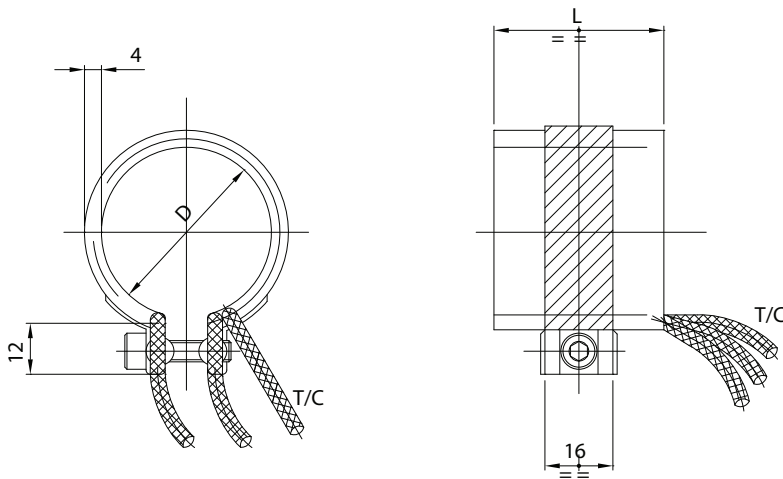
How to order

- Model Z.15
 Application:
 + article number (if known):
 + Ø:
 + Width:
 + Wattage:
 + Voltage:
 + Lead length:
 + Exit:
 + Quantity:



Model Z15 with built in thermocouple

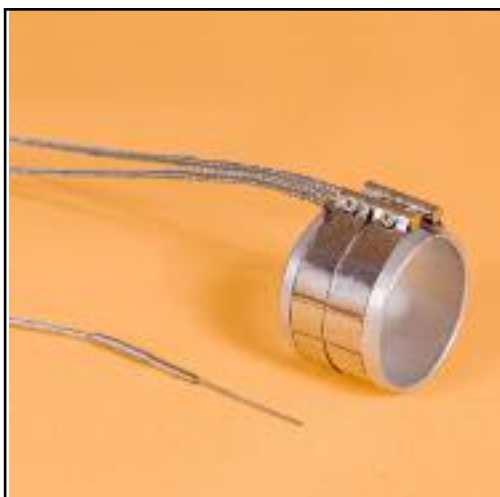
Upon request is possible to supply the model Z15 with built in grounded thermocouple and earth wire



Example:
Z15 with thermocouple and earth

Model Z15 with external thermocouple

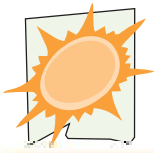
We are able to supply also Z15 (even standard item) with an external not grounded thermocouple with mineral insulation $\text{ØD } 1,5 \text{ mm}$ width 50/100 mm



Example
Z15 with thermocouple to slot in



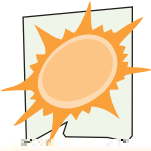
Example:
Z15 with thermocouple slotted in



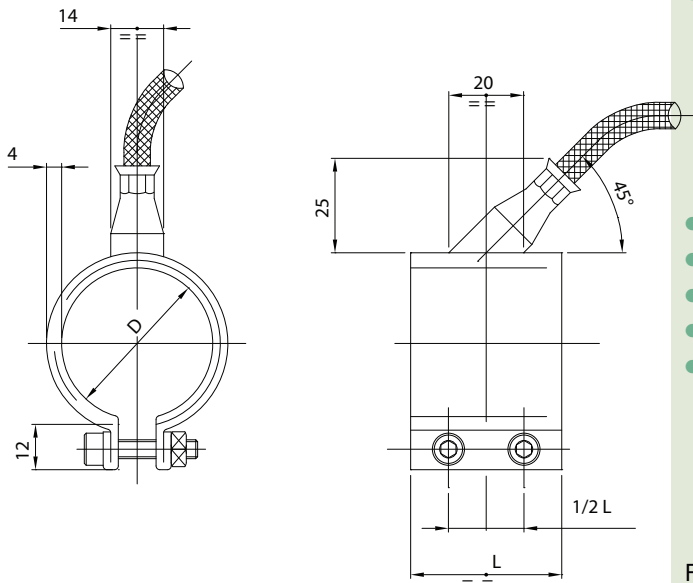
Dimension available in stock (cable 1000 mm)

| Code | Diameter [mm] | Width [mm] | Wattage [Watt] |
|-----------|---------------|------------|----------------|
| Z15025030 | 25 | 30 | 115 |
| Z15030025 | 30 | 25 | 125 |
| Z15030030 | 30 | 30 | 155 |
| Z15030035 | 30 | 35 | 180 |
| Z15030040 | 30 | 40 | 205 |
| Z15035025 | 35 | 25 | 150 |
| Z15035030 | 35 | 30 | 180 |
| Z15035035 | 35 | 35 | 210 |
| Z15035040 | 35 | 40 | 240 |
| Z15035045 | 35 | 45 | 270 |
| Z15040025 | 40 | 25 | 170 |
| Z15040030 | 40 | 30 | 205 |
| Z15040035 | 40 | 35 | 240 |
| Z15040040 | 40 | 40 | 275 |
| Z15040045 | 40 | 45 | 310 |
| Z15042025 | 42 | 25 | 180 |
| Z15042030 | 42 | 30 | 215 |
| Z15042035 | 42 | 35 | 250 |
| Z15042040 | 42 | 40 | 290 |
| Z15045025 | 45 | 25 | 190 |
| Z15045030 | 45 | 30 | 230 |
| Z15045035 | 45 | 35 | 270 |
| Z15045040 | 45 | 40 | 310 |
| Z15045045 | 45 | 45 | 345 |
| Z15045050 | 45 | 50 | 385 |
| Z15050020 | 50 | 20 | 170 |
| Z15050025 | 50 | 25 | 215 |
| Z15050030 | 50 | 30 | 255 |
| Z15050035 | 50 | 35 | 300 |
| Z15050040 | 50 | 40 | 345 |
| Z15050050 | 50 | 50 | 430 |
| Z15055020 | 55 | 20 | 185 |
| Z15055025 | 55 | 25 | 235 |
| Z15055030 | 55 | 30 | 280 |
| Z15055035 | 55 | 35 | 330 |
| Z15055040 | 55 | 40 | 375 |
| Z15055050 | 55 | 50 | 470 |
| Z15055060 | 55 | 60 | 565 |
| Z15060020 | 60 | 20 | 205 |
| Z15060025 | 60 | 25 | 255 |
| Z15060030 | 60 | 30 | 310 |
| Z15060035 | 60 | 35 | 360 |
| Z15060040 | 60 | 40 | 410 |
| Z15060050 | 60 | 50 | 515 |
| Z15060060 | 60 | 60 | 620 |
| Z15065020 | 65 | 20 | 220 |
| Z15065025 | 65 | 25 | 280 |
| Z15065030 | 65 | 30 | 335 |
| Z15065035 | 65 | 35 | 390 |
| Z15065040 | 65 | 40 | 445 |
| Z15065050 | 65 | 50 | 560 |
| Z15065060 | 65 | 60 | 670 |

| Code | Diameter [mm] | Width [mm] | Wattage [Watt] |
|------------|---------------|------------|----------------|
| Z15070020 | 70 | 20 | 240 |
| Z15070025 | 70 | 25 | 300 |
| Z15070030 | 70 | 30 | 360 |
| Z15070035 | 70 | 35 | 420 |
| Z15070040 | 70 | 40 | 480 |
| Z15070050 | 70 | 50 | 600 |
| Z15070060 | 70 | 60 | 725 |
| Z15075020 | 75 | 20 | 255 |
| Z15075025 | 75 | 25 | 320 |
| Z15075030 | 75 | 30 | 385 |
| Z15075035 | 75 | 35 | 450 |
| Z15075040 | 75 | 40 | 515 |
| Z15075050 | 75 | 50 | 645 |
| Z15075060 | 75 | 60 | 775 |
| Z15080020 | 80 | 20 | 275 |
| Z15080025 | 80 | 25 | 345 |
| Z15080030 | 80 | 30 | 410 |
| Z15080035 | 80 | 35 | 480 |
| Z15080040< | 80 | 40 | 550 |
| Z15080050 | 80 | 50 | 690 |
| Z15080060 | 80 | 60 | 825 |
| Z15085020 | 85 | 20 | 290 |
| Z15085025 | 85 | 25 | 365 |
| Z15085030 | 85 | 30 | 440 |
| Z15085035 | 85 | 35 | 510 |
| Z15085040 | 85 | 40 | 585 |
| Z15085050 | 85 | 50 | 730 |
| Z15085060 | 85 | 60 | 880 |
| Z15090020 | 90 | 20 | 310 |
| Z15090025 | 90 | 25 | 385 |
| Z15090030 | 90 | 30 | 465 |
| Z15090035 | 90 | 35 | 540 |
| Z15090040 | 90 | 40 | 620 |
| Z15090050 | 90 | 50 | 775 |
| Z15090060 | 90 | 60 | 930 |
| Z15095020 | 95 | 20 | 325 |
| Z15095025 | 95 | 25 | 410 |
| Z15095030 | 95 | 30 | 490 |
| Z15095035 | 95 | 35 | 570 |
| Z15095040 | 95 | 40 | 655 |
| Z15095050 | 95 | 50 | 820 |
| Z15095060 | 95 | 60 | 980 |
| Z15100020 | 100 | 20 | 345 |
| Z15100025 | 100 | 25 | 430 |
| Z15100030 | 100 | 30 | 515 |
| Z15100035 | 100 | 35 | 600 |
| Z15100040 | 100 | 40 | 690 |
| Z15100050 | 100 | 50 | 860 |
| Z15100060 | 100 | 60 | 1030 |



Model Z.17 steel/plus



Standard with axial exit 45° (30° axial optional)
Flexible bipolar cable + earth length 1000mm

Technical features

Z17 nozzle band heaters are the answer to the new market needs. They are born to meet the growing request for higher and higher wattages and working temperatures. They are totally protected from the plastic corrosive action and hermetically sealed to avoid any plastic seepage.

- Specific wattage up to 8 W/cm²
- Working temperature 380/400° C
- Available, upon request with built in thermocouple Fe/Co
- Max diameter ØD 110 mm, max width L 60 mm
- Feeding lead length over 1000 [mm], upon request
- Standard model with axial exit 45°
- Available upon request radial exit or tangential exit 5°/15°/30°/45° or axial exit 5°/15°/30° (see page 12)
- Standard feeding voltage 230V
- Different voltage and wattage upon request
- Available upon request, execution with hole and threaded connector / cap nut for thermocouple (see pag. 12)

Material

- Stainless steel tube
- Ni-Cr 80/20 wire
- Continuous mica insulations
- Flexible bipolar feeding lead + earth wire
- Teflon fiberglass insulated nickel conductors with metal braiding protection

Options:

- Pure Nichel or copper nichel conductors with silicon sleeve max working temperature 180°C

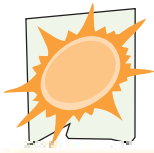
For further information please contact our technical dep..

We reserve the right to change technical details.

Please follow the installation and storage instruction (see page 19).

How to order

- Model Z.17
- Application:
- + article number (if known):
- + Ø:
- + Width:
- + Wattage:
- + Voltage:
- + Lead length:
- + Exit:
- + Quantity:



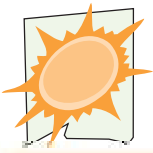
Dimension available in stock

| Code | Diameter [mm] | Width [mm] | Wattage [Watt] |
|-----------|---------------|------------|----------------|
| Z17025030 | 25 | 30 | 130 |
| Z17030025 | 30 | 25 | 130 |
| Z17030030 | 30 | 30 | 170 |
| Z17030035 | 30 | 35 | 200 |
| Z17030040 | 30 | 40 | 230 |
| Z17035025 | 35 | 25 | 160 |
| Z17035030 | 35 | 30 | 200 |
| Z17035035 | 35 | 35 | 240 |
| Z17035040 | 35 | 40 | 270 |
| Z17035045 | 35 | 45 | 310 |
| Z17040025 | 40 | 25 | 190 |
| Z17040030 | 40 | 30 | 230 |
| Z17040035 | 40 | 35 | 270 |
| Z17040040 | 40 | 40 | 310 |
| Z17040045 | 40 | 45 | 350 |
| Z17042025 | 42 | 25 | 200 |
| Z17042030 | 42 | 30 | 240 |
| Z17042035 | 42 | 35 | 290 |
| Z17042040 | 42 | 40 | 330 |
| Z17045025 | 45 | 25 | 210 |
| Z17045030 | 45 | 30 | 260 |
| Z17045035 | 45 | 35 | 310 |
| Z17045040 | 45 | 40 | 350 |
| Z17045045 | 45 | 45 | 400 |
| Z17045050 | 45 | 50 | 450 |
| Z17045055 | 45 | 55 | 490 |
| Z17050020 | 50 | 20 | 190 |
| Z17050025 | 50 | 25 | 240 |
| Z17050030 | 50 | 30 | 290 |
| Z17050035 | 50 | 35 | 340 |
| Z17050040 | 50 | 40 | 390 |
| Z17050050 | 50 | 50 | 500 |
| Z17050060 | 50 | 60 | 600 |
| Z17055020 | 55 | 20 | 210 |
| Z17055025 | 55 | 25 | 270 |
| Z17055030 | 55 | 30 | 320 |
| Z17055035 | 55 | 35 | 380 |
| Z17055040 | 55 | 40 | 430 |
| Z17055050 | 55 | 50 | 540 |
| Z17060020 | 60 | 20 | 230 |
| Z17060025 | 60 | 25 | 290 |
| Z17060030 | 60 | 30 | 350 |
| Z17060035 | 60 | 35 | 410 |
| Z17060040 | 60 | 40 | 470 |
| Z17060050 | 60 | 50 | 600 |
| Z17060060 | 60 | 60 | 720 |
| Z17065020 | 65 | 20 | 250 |
| Z17065025 | 65 | 25 | 320 |
| Z17065030 | 65 | 30 | 380 |
| Z17065035 | 65 | 35 | 450 |
| Z17065040 | 65 | 40 | 520 |
| Z17065050 | 65 | 50 | 650 |

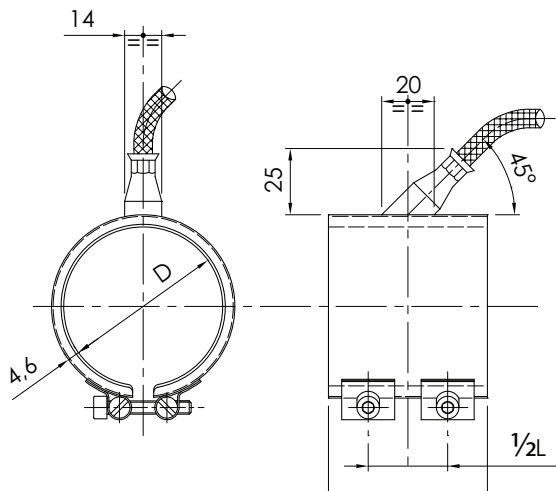
| Code | Diameter [mm] | Width [mm] | Wattage [Watt] |
|-----------|---------------|------------|----------------|
| Z17070020 | 70 | 20 | 270 |
| Z17070025 | 70 | 25 | 340 |
| Z17070030 | 70 | 30 | 410 |
| Z17070035 | 70 | 35 | 490 |
| Z17070040 | 70 | 40 | 560 |
| Z17070050 | 70 | 50 | 700 |
| Z17070060 | 70 | 60 | 840 |
| Z17075020 | 75 | 20 | 290 |
| Z17075025 | 75 | 25 | 370 |
| Z17075030 | 75 | 30 | 440 |
| Z17075035 | 75 | 35 | 520 |
| Z17075040 | 75 | 40 | 560 |
| Z17075050 | 75 | 50 | 750 |
| Z17075060 | 75 | 60 | 900 |
| Z17080020 | 80 | 20 | 310 |
| Z17080025 | 80 | 25 | 390 |
| Z17080030 | 80 | 30 | 470 |
| Z17080035 | 80 | 35 | 560 |
| Z17080040 | 80 | 40 | 640 |
| Z17080050 | 80 | 50 | 800 |
| Z17080060 | 80 | 60 | 960 |
| Z17085020 | 85 | 20 | 330 |
| Z17085025 | 85 | 25 | 420 |
| Z17085030 | 85 | 30 | 500 |
| Z17085035 | 85 | 35 | 590 |
| Z17085040 | 85 | 40 | 680 |
| Z17085050 | 85 | 50 | 850 |
| Z17085060 | 85 | 60 | 1020 |
| Z17090020 | 90 | 20 | 350 |
| Z17090025 | 90 | 25 | 440 |
| Z17090030 | 90 | 30 | 540 |
| Z17090035 | 90 | 35 | 630 |
| Z17090040 | 90 | 40 | 720 |
| Z17090050 | 90 | 50 | 900 |
| Z17090060 | 90 | 60 | 1080 |
| Z17095020 | 95 | 20 | 370 |
| Z17095025 | 95 | 25 | 470 |
| Z17095030 | 95 | 30 | 570 |
| Z17095035 | 95 | 35 | 660 |
| Z17095040 | 95 | 40 | 760 |
| Z17095050 | 95 | 50 | 950 |
| Z17095060 | 95 | 60 | 1150 |
| Z17100020 | 100 | 20 | 380 |
| Z17100025 | 100 | 25 | 500 |
| Z17100030 | 100 | 30 | 600 |
| Z17100035 | 100 | 35 | 700 |
| Z17100040 | 100 | 40 | 800 |
| Z17100050 | 100 | 50 | 1000 |
| Z17100060 | 100 | 60 | 1200 |

All items available in stock without feeding cable.

Please specify cable length and type of output in the order



Model Z.19 steel



Standard with axial exit 45° (30° axial optional)

Technical features

Z19 heaters are the solution for nozzle heaters which dimension are over 60mm length the external part of the heater is a clamping band made of stainless steel separated from the internal heating element (resistive part).

- Specific wattage up a 6 W/cm² (potenza max. 1600W)
- Working temperature 380/400° C
- Available, upon request with built in thermo-couple Fe/Co and Fe/CuNi
- Max diameter ØD 110 mm, max width L 200 mm
- Available upon request radial exit or tangential exit 5°/15°/30°/45° or axial exit 5°/15°/30° (see page 12)
- Standard feeding voltage 230
- Available upon request, execution with hole and threaded connector / cap nut for thermocouple (see pag. 12)

Material

- Clamping band made of stainless steel AISI430
- Ni-Cr 80/20 wire
- Continuous mica insulations
- Flexible bipolar feeding lead + earth wire
- Teflon fibreglass insulated nickel conductors with metal braiding protection

Options:

- Pure Nichel or copper nichel conductors with silicon sleeve max working temperature 180°C

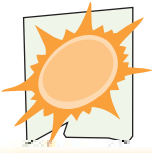
For further information please contact our technical dep.

We reserve the right to change technical details.

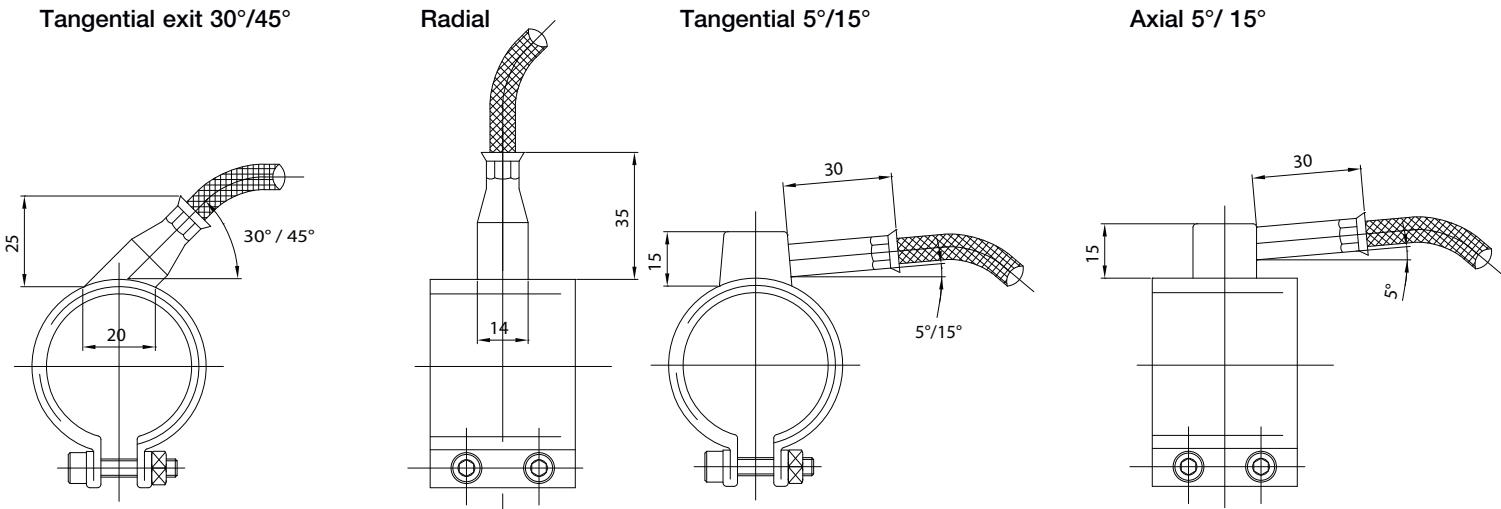
Please follow the installation and storage instruction (see page 19).

How to order

- Model Z.19
 Application:
 + article number (if known):
 + Ø:
 + Width:
 + Wattage:
 + Voltage:
 + Lead length:
 + Exit:
 + Quantity:



Alternative exits for nozzle band heater Z.11 Z.17 and Z.19



Special exit model

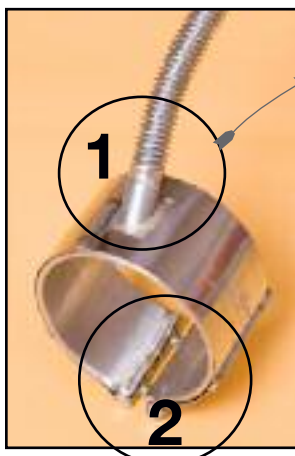


Low exit 7mm



Special execution

Standard threaded
connector

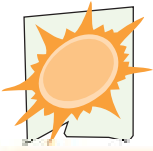


Band heater with IP55
with stainless steel tube
welded (1) and brazing
on the edges for width
up to 60mm (2)

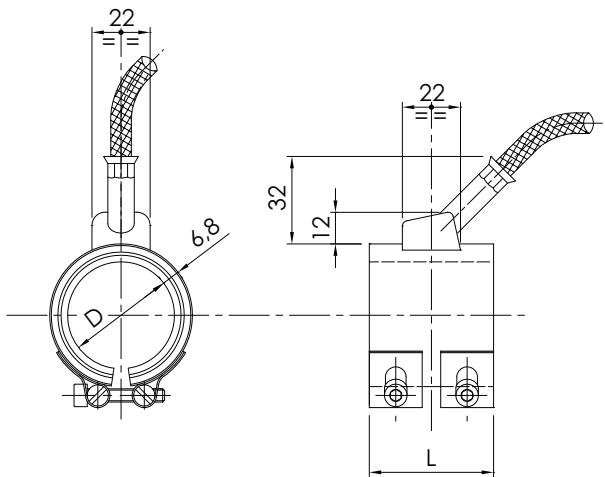


| | | | | | |
|--------------------|---------------------|----------------------|-----------------------|-------------------|---------------------|
| M8 x 1,25 (8MA) | M10 x 1,5 (10MA) | M12 x 1,75 (10MA) | M12 x 1,25 (128MB) | M14 x 2 (14MA) | M14 x 1,5 (14MB) |
|--------------------|---------------------|----------------------|-----------------------|-------------------|---------------------|

| | | |
|----------|----------|----------|
| 1/8" GAS | 1/4" GAS | 3/8" GAS |
|----------|----------|----------|



Model Z.20 ceramic



Standard with axial exit 45° (30° axial optional)

Technical features

Ceramic insulated nozzle band heaters are a further step ahead which enable us to satisfy the growing request for higher and higher wattages and working temperatures.

Due to ceramic insulation this type of heater is able to tolerate high specific load on the surface; they are also suitable for application with working temperature up to 450° continuous.

They are totally protected from the plastic corrosive action.

- Specific wattage up to 10 W/cm²
- Working temperature 450°C continuous
- Available, upon request with built-in thermocouple Fe/Cu-mi (tipo J), NiGr-Ni (tipo K)
- Max diameter ØD 110 mm, max width L 100 mm
- Feeding lead length over 1000 [mm], upon request
- Alternative exits see pag. 14
- Standard feeding voltage 230V
- Different voltage and wattage upon request

Material

- Stainless steel casing made of AISI 430
- Ni-Cr 80/20 wire
- High purity ceramic insulation
- Flexible bipolar feeding lead + earth wire
- Teflon fibreglass insulated nickel conductors with metal braiding protection

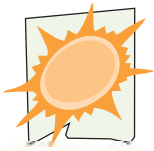
For further information please contact our technical department.

We reserve the right to change technical details.

Please follow the installation and storage instructions (see page 19).

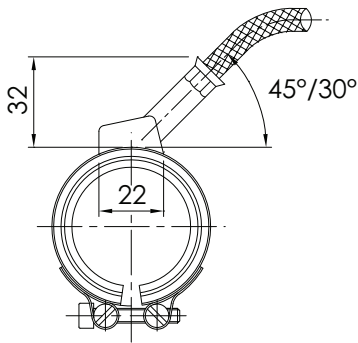
How to order

- Model Z.20
- Application:
- + article number (if known):
- + Ø:
- + Width:
- + Wattage:
- + Voltage:
- + Lead length:
- + Exit:
- + Quantity:

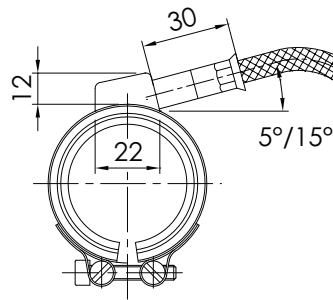


Alternative exits for nozzle band heater Z.20

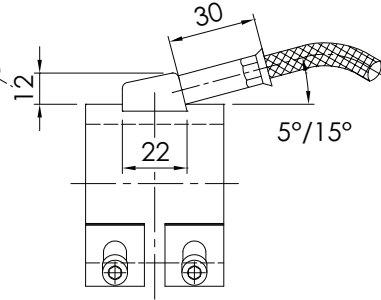
Tangential exit 30°/45°



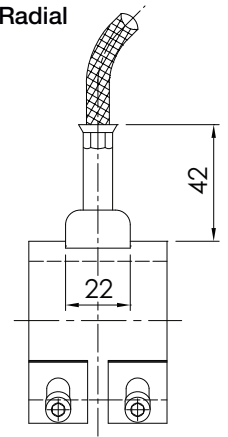
Tangential 5°/15°



Axial 5°/15°



Radial



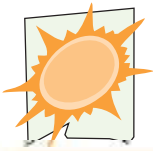
List dimension / power

Width [mm]

| Diametre [mm] | List dimension / power | | | | | | | | | | | | |
|---------------|------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|--------|
| | 19 | 23 | 27 | 31 | 35 | 39 | 43 | 47 | 51 | 55 | 59 | 63 | > +4mm |
| 25 | 110 | 130 | | | | | | | | | | | |
| 30 | 130 | 160 | 190 | 215 | 245 | | | | | | | | |
| 32 | 140 | 170 | 200 | 230 | 260 | 290 | 320 | 350 | | | | | |
| 35 | 155 | 190 | 220 | 255 | 285 | 320 | 350 | 385 | 420 | 450 | 485 | | |
| 40 | 180 | 215 | 255 | 290 | 330 | 370 | 405 | 440 | 480 | 520 | 555 | 595 | |
| 42 | 190 | 230 | 265 | 305 | 345 | 385 | 425 | 465 | 505 | 545 | 585 | 625 | |
| 43 | 195 | 235 | 275 | 315 | 355 | 395 | 435 | 475 | 515 | 555 | 600 | 640 | |
| 45 | 200 | 245 | 285 | 330 | 370 | 415 | 455 | 500 | 540 | 585 | 625 | 670 | |
| 48 | 215 | 260 | 305 | 350 | 395 | 440 | 485 | 530 | 580 | 625 | 670 | 715 | |
| 50 | 225 | 270 | 320 | 365 | 415 | 460 | 510 | 555 | 600 | 650 | 695 | 740 | |
| 55 | 250 | 300 | 350 | 405 | 455 | 505 | 560 | 610 | 660 | 715 | 765 | 815 | |
| 56 | 255 | 305 | 355 | 410 | 465 | 515 | 570 | 620 | 675 | 725 | 780 | 830 | |
| 58 | 260 | 315 | 370 | 425 | 480 | 535 | 590 | 645 | 700 | 755 | 810 | 860 | |
| 60 | 270 | 325 | 385 | 440 | 495 | 555 | 610 | 665 | 720 | 780 | 835 | 890 | |
| 63 | 285 | 345 | 400 | 460 | 520 | 580 | 640 | 700 | 760 | 820 | 880 | 935 | |
| 65 | 290 | 355 | 415 | 475 | 535 | 600 | 660 | 720 | 780 | 845 | 905 | 965 | |
| 68 | 305 | 370 | 435 | 500 | 560 | 625 | 690 | 755 | 820 | 885 | 945 | 1010 | |
| 70 | 315 | 380 | 445 | 515 | 580 | 645 | 710 | 775 | 840 | 910 | 975 | 1040 | |
| 72 | 325 | 390 | 460 | 530 | 595 | 665 | 730 | 800 | 865 | 935 | 1005 | 1070 | |
| 75 | 340 | 410 | 480 | 550 | 620 | 690 | 760 | 830 | 910 | 980 | 1045 | 1115 | |
| 80 | 360 | 435 | 510 | 585 | 660 | 735 | 810 | 890 | 960 | 1040 | 1115 | 1190 | |
| 85 | 385 | 460 | 540 | 620 | 700 | 780 | 860 | 940 | 1020 | 1100 | 1185 | 1265 | |
| 90 | 405 | 490 | 575 | 660 | 745 | 830 | 915 | 1000 | 1085 | 1170 | 1250 | 1335 | |
| 95 | 425 | 515 | 605 | 695 | 785 | 875 | 965 | 1055 | 1145 | 1230 | 1320 | 1410 | |
| 100 | 450 | 545 | 640 | 730 | 825 | 920 | 1045 | 1110 | 1205 | 1300 | 1390 | 1485 | |

Other diametre upon request

Width as showed in the list. From 63mm on doable in multiple of 4



Model Z.122 maxi



Technical features

Z. 122 nozzle band heaters are the confirmation in this field of our step forward to the future.

In fact, the technical features of these new heaters are better than the ones commonly used. Built with a rectangular tube (mm 8.6 x 4.6), they give an excellent guarantee of mechanical resistance against impacts and knocks as well as safety when using tools during maintenance operations.

Z. 122 nozzle band heaters are totally protected from the plastic corrosive action and are hermetically sealed from liquid plastic.

Their rectangular shape with a 8.6 mm long side, acting as heat dissipator, allows us to reach the highest thermal exchange with the nozzle.

- Stainless steel tube mm 8.6 x 4.6
- Cold end 65 mm
- Specific wattage up to max. 15 W/cm²
- Working temperature max 750° C
- Available, upon request, with built-in thermo couple Fe/Co (tipo J) oppure NiCrNi (K)
- Min. diameter ØD 20 mm, max. diameter ØD 100 mm, max. straight lenght L 3000 mm
- Min. bending radius 10 mm
- Feeding lead lenght over 1000 mm, upon request
- Standard model with axial exit 45°
- Available, upon request, radial exit, or tangential exit 45° or 5°, or axial exit 5° or 30°
(vedere pag. 17)
- Standard feeding voltage 230 V
- Available, upon request, different voltages up to max 440 V

Material

- CrNi-steel tube
- Ni-Cr 80/20 wire
- Highly compressed MgO insulation
- Flexible bipolar feeding lead + earth wire
- Teflon insulated nickel conductors, with metal braiding protection
- Stainless steel clamping band

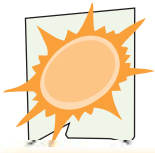
For further information please contact our technical dep.

We reserve the right to change technical details.

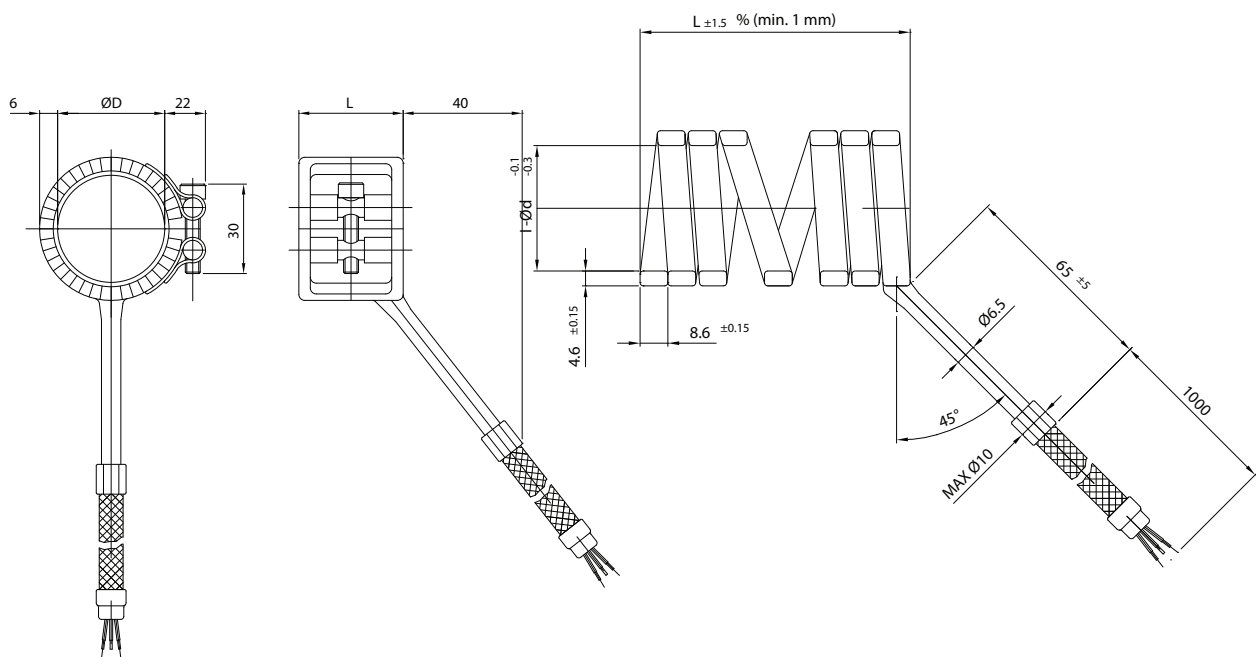
Please follow the installation and storage instruction (see page 19)

How to order

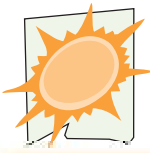
Model Z.122
 Application:
 + article number (if known):
 + Ø:
 + Width:
 + Wattage:
 + Voltage:
 + Lead length:
 + Exit:
 + Quantity:



Standard exit



Standard with axial exit 45° with clamping band



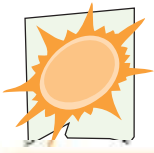
Microtubular heaters' dimension (not coiled) available in stock (with or without thermocouple)

4,6 x 8,6 mm
(diritto)

| Totale lenght [mm] | Heated lenght [mm] | Unheated zone | [W] |
|--------------------|--------------------|---------------|------|
| 315 | 250 | 65 | 300 |
| 415 | 350 | 65 | 450 |
| 515 | 450 | 65 | 550 |
| 715 | 650 | 65 | 800 |
| 915 | 850 | 65 | 1000 |

Approximate dimension/wattage list using standard microtubular heaters

| Code | Ø D [mm] | L [mm] | Watt [W] | Code | Ø D [mm] | L [mm] | Watt [W] | Code | Ø D [mm] | L [mm] | Watt [W] | Codice | Ø D [mm] | L [mm] | Watt [W] |
|------------|----------|--------|----------|------------|----------|--------|----------|------------|----------|--------|----------|------------|----------|--------|----------|
| Z122020040 | 20 | 40 | 300 | Z122030040 | 30 | 40 | 450 | Z122040040 | 40 | 40 | 550 | Z122070020 | 70 | 20 | 300 |
| Z122020060 | 20 | 60 | 450 | Z122030060 | 30 | 60 | 550 | Z122040060 | 40 | 60 | 800 | Z122070040 | 70 | 40 | 800 |
| Z122020080 | 20 | 80 | 550 | Z122030080 | 30 | 80 | 800 | Z122040080 | 40 | 80 | 1000 | Z122072020 | 72 | 20 | 300 |
| Z122020100 | 20 | 100 | 800 | Z122030100 | 30 | 100 | 1000 | Z122040100 | 40 | 100 | 1000 | Z122072040 | 72 | 40 | 800 |
| Z122020120 | 20 | 120 | 800 | Z122030120 | 30 | 120 | 1000 | Z122042040 | 42 | 40 | 550 | Z122074020 | 74 | 20 | 300 |
| Z122020140 | 20 | 140 | 800 | Z122030140 | 30 | 140 | 1000 | Z122042060 | 42 | 60 | 800 | Z122074040 | 74 | 40 | 800 |
| Z122020160 | 20 | 160 | 800 | Z122030160 | 30 | 160 | 1000 | Z122042080 | 42 | 80 | 1000 | Z122076020 | 76 | 20 | 300 |
| Z122022040 | 22 | 40 | 300 | Z122032040 | 32 | 40 | 450 | Z122044040 | 44 | 40 | 550 | Z122076040 | 76 | 40 | 1000 |
| Z122022060 | 22 | 60 | 450 | Z122032060 | 32 | 60 | 550 | Z122044060 | 44 | 60 | 800 | Z122078020 | 78 | 20 | 300 |
| Z122022080 | 22 | 80 | 550 | Z122032080 | 32 | 80 | 800 | Z122044080 | 44 | 80 | 1000 | Z122078040 | 78 | 40 | 1000 |
| Z122022100 | 22 | 100 | 800 | Z122032100 | 32 | 100 | 1000 | Z122046040 | 46 | 40 | 550 | Z122080020 | 80 | 20 | 300 |
| Z122022120 | 22 | 120 | 800 | Z122032120 | 32 | 120 | 1000 | Z122046060 | 46 | 60 | 800 | Z122080040 | 80 | 40 | 1000 |
| Z122022140 | 22 | 140 | 800 | Z122032140 | 32 | 140 | 1000 | Z122046080 | 46 | 80 | 1000 | Z122082020 | 82 | 20 | 450 |
| Z122022160 | 22 | 160 | 1000 | Z122034040 | 34 | 50 | 550 | Z122048040 | 48 | 40 | 550 | Z122082040 | 82 | 40 | 1000 |
| Z122024040 | 24 | 50 | 450 | Z122034060 | 34 | 60 | 550 | Z122048060 | 48 | 60 | 1000 | Z122084020 | 84 | 20 | 300 |
| Z122024060 | 24 | 60 | 550 | Z122034080 | 34 | 80 | 800 | Z122048080 | 48 | 80 | 1000 | Z122084040 | 84 | 40 | 1000 |
| Z122024080 | 24 | 80 | 550 | Z122034100 | 34 | 100 | 1000 | Z122050040 | 50 | 40 | 550 | Z122086020 | 86 | 20 | 300 |
| Z122024100 | 24 | 100 | 800 | Z122034120 | 34 | 120 | 1000 | Z122050060 | 50 | 60 | 1000 | Z122086040 | 86 | 40 | 1000 |
| Z122024120 | 24 | 120 | 800 | Z122036040 | 36 | 50 | 450 | Z122050080 | 50 | 80 | 1000 | Z122088020 | 88 | 20 | 450 |
| Z122024140 | 24 | 140 | 1000 | Z122036060 | 36 | 60 | 800 | Z122052040 | 52 | 40 | 550 | Z122088040 | 88 | 40 | 1000 |
| Z122024160 | 24 | 160 | 1000 | Z122036080 | 36 | 80 | 800 | Z122052060 | 52 | 60 | 1000 | Z122090020 | 90 | 20 | 450 |
| Z122026040 | 26 | 50 | 450 | Z122036100 | 36 | 100 | 1000 | Z122052080 | 52 | 80 | 1000 | Z122090040 | 90 | 40 | 1000 |
| Z122026060 | 26 | 60 | 550 | Z122038040 | 38 | 50 | 550 | Z122054040 | 54 | 40 | 550 | Z122092020 | 92 | 20 | 450 |
| Z122026080 | 26 | 80 | 800 | Z122038060 | 38 | 60 | 800 | Z122056040 | 56 | 40 | 800 | Z122092040 | 92 | 40 | 1000 |
| Z122026100 | 26 | 100 | 800 | Z122038080 | 38 | 80 | 1000 | Z122058040 | 58 | 40 | 800 | Z122094020 | 94 | 20 | 450 |
| Z122026120 | 26 | 120 | 1000 | Z122038100 | 38 | 100 | 1000 | Z122060040 | 60 | 40 | 800 | Z122094040 | 94 | 40 | 1000 |
| Z122026140 | 26 | 140 | 1000 | | | | | Z122062020 | 62 | 20 | 300 | Z122096020 | 96 | 20 | 450 |
| Z122026160 | 26 | 160 | 1000 | | | | | Z122062040 | 62 | 40 | 800 | Z122096040 | 96 | 40 | 1000 |
| Z122028040 | 28 | 50 | 450 | | | | | Z122062060 | 62 | 60 | 1000 | Z122098020 | 98 | 20 | 450 |
| Z122028060 | 28 | 60 | 550 | | | | | Z122064020 | 64 | 20 | 300 | Z122098040 | 98 | 40 | 1000 |
| Z122028080 | 28 | 80 | 800 | | | | | Z122064040 | 64 | 40 | 800 | Z122100020 | 100 | 20 | 450 |
| Z122028100 | 28 | 100 | 1000 | | | | | Z122064060 | 64 | 60 | 1000 | Z122100040 | 100 | 40 | 1000 |
| Z122028120 | 28 | 120 | 1000 | | | | | Z122066020 | 66 | 20 | 300 | | | | |
| Z122028140 | 28 | 140 | 1000 | | | | | Z122066040 | 66 | 40 | 800 | | | | |
| Z122028160 | 28 | 160 | 1000 | | | | | Z122068020 | 68 | 20 | 300 | | | | |
| | | | | | | | | Z122068040 | 68 | 40 | 800 | | | | |



Installation and storage instruction

Installation

- When installing the nozzle heater band, please make sure to hold it tightly screwing up the apposite bolts (with exagonal head). When reached the working temperature or after 5/10 min. heating screw it up still further. Do the same after few hours in order to compensate the thermal linear expansion of the heater.

Not doing the operation described above may cause the over heating of the parts of the heater that are not perfectly in contact with the nozzle and consequently the resistive filament may burn.

Storage

- Store at room temperature in a dry place.

Operation

- Security procedures for the handling of electrical items and applications must be followed
- Do not touch nozzle heater bands while in use because the can get very hot
- Please make sure that the heating elements can not touch flammable material while in use

It is very important to follow these advices in order to have a longer lifetime of the heater

General information

- If our nozzle heater bands are delivered with feeding cables without insulation (naked connection) or with removable insulation (covered with gls-sleeving) the customer himself has to take care about the protection

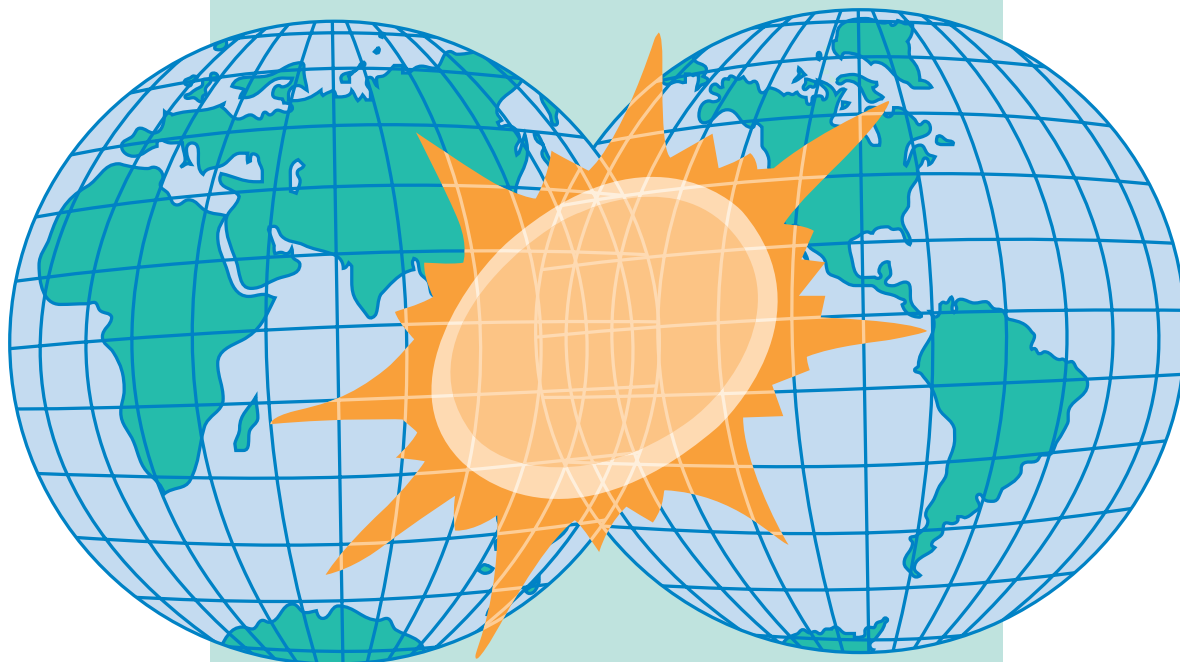


Connections

- Protect connections against the ingress of liquids and gases to avoid short circuits
- Install the connections away from sharp edges or parts since this may also cause short circuits
- Protect connection leads against the effects of temperature and lay them in a proper way
- Pay attention to the connection voltage
- Pay attention to the thermocouple leads' correct polarization and protect them against accidental contact with the heaters

Temperature controllers

- Temperature controllers have to match the power consumption and the used temperature sensor.
- Only install temperature controllers with automatic soft start function so that any moisture which may have entered the heating element will escape slowly



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