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HS- 050.31E

hotspring® COIL HEATERS HOTSET

hotspring® Ø 3.3 (WRP 3.3) y hotspring® Ø 3.8 (WRP 3.8)

hotspring®
Ø 3.3

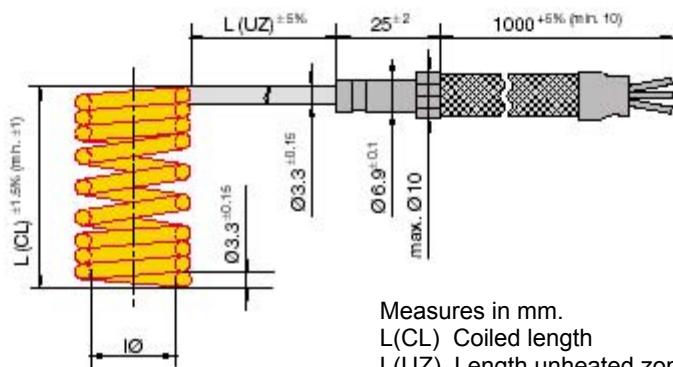


TECHNICAL DATA

- humidity-resistant hotspring® coil heater with round cross-section Ø 3.3 mm
- Sheath material: Stainless Steel or Nickel
- Insulation sheath: high-compressed MgO
- Heating conductor compound: NiCr 8020
- Sheath temperature of heating element: max. 750 °C
- Voltage: max. 250 V, Standard: 230 V
- Power tolerance (cold): ± 10% (< on request)
- High voltage strength (cold): min. 800 V-AC
- Insulation resistance (cold): ≥ 5 MΩ at 500 V-DC
- Leakage current (cold): ≤ 0.5 mA bei 253 V-AC
- Exit axial, radial or tangential, see page 6
- max. total length straight: 3000 mm
- min. length of unheated zone Luz: 25 mm plus connection head 25 mm
- Length tolerance: heated zone: ± 2.5%
unheated zone: ± 5%
- Inner diameter tolerances without reflection tube:
up to Ø 12 mm -0.05/-0.20
up to Ø 30 mm -0.10/-0.30
up to Ø 50 mm -0.20/-0.40
> Ø 50 mm on request
- Sheath surface load according to operating temperature and heat dissipation,
- minimum bending radius (internal): heated zone: 4 mm
unheated zone: 4 mm
- Connection versions see page 3
- for connection-temperatures max. 260 °C
- deliverable with or without integrated thermocouple Fe-CuNi (type J, Standard) or NiCr-Ni (type K) (IEC 60584) (ungrounded (standard) or grounded)
- deliverable with clamping band or clamping element
- optional IP 68 water-immersion-protected with water proof connection zone, for connection-temperatures max. 300 °C, connection leads PTFE insulated Ni-leads on request
- Deliverable with reflector tube
- Deliverable with clamping band
- Other dimensions and product varieties on request.
- We reserve the right to change technical details.

Approximate formula for calculation the stretched heated length of coiled heaters [mm]

$(\text{Ø} + 3.3) \cdot \pi \cdot \text{number of windings} = \text{heated length}_{\text{straight}}$



STANDARD MODELS

W a 230V	Length mm	Heated length mm	Thermocouple TCJ
180	390	300	
180	390	300	X
270	540	450	
270	540	450	X
390	740	650	
390	740	650	X
500	940	850	
500	940	850	X
630	1140	1050	
630	1140	1050	X
950	1400	1310	
950	1400	1310	X

hotspring®
Ø 3.8

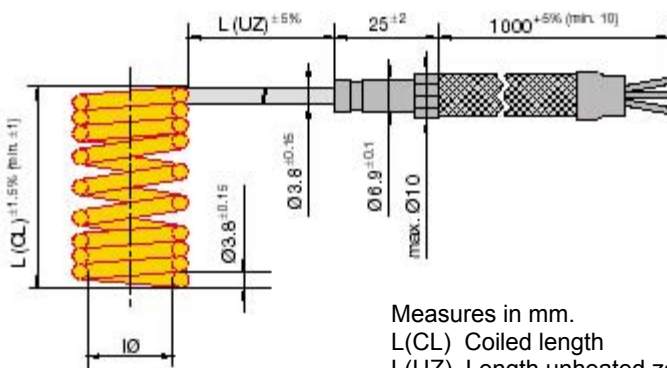


TECHNICAL DATA

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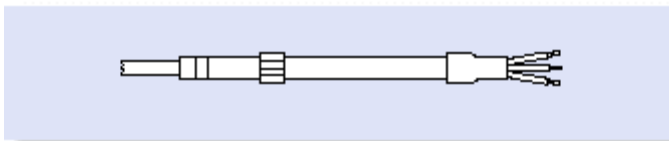
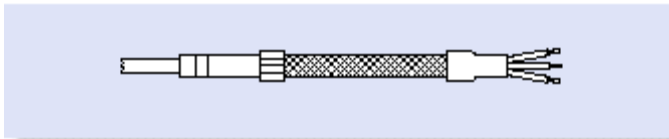
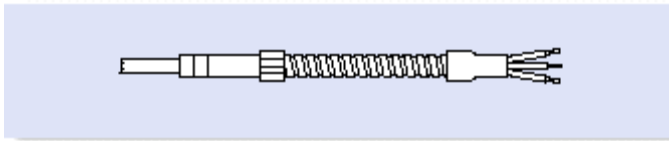
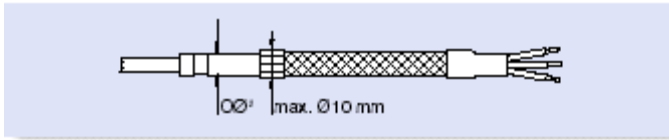
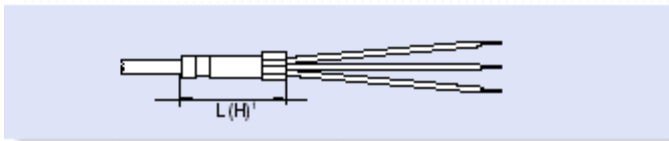


The hotspring ® or 3.8 only made to order

Other dimensions and product varieties on request.

We reserve the right to change technical details.

CONNECTION VERSIONS hotspring[®] Ø 3.3 y hotspring[®] Ø 3.8



Type N

- PTFE insulated Cu-nickel plated leads, multistranded (Standard)
- with ground wire

Type NG

- PTFE insulated Cu-nickel plated leads, multistranded (Standard) with glass silk insulated protective sleeving
- with ground wire

Type NM

- PTFE insulated Cu-nickel plated leads, multistranded (Standard) with flexible metal sleeving
- with ground wire

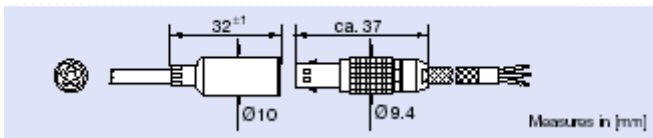
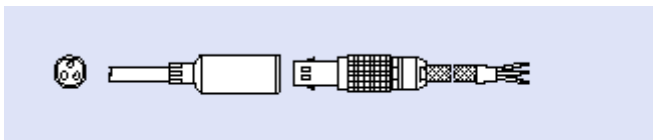
Type ND

- PTFE insulated Cu-nickel plated leads, multistranded (Standard) with braided metal sleeving
- with ground wire

Type NT

- PTFE insulated Cu-nickel plated leads, multistranded (Standard) with PTFE-sleeving
- with ground wire

(1) length of head L = 25 mm (Standard) or 20 mm
 (2) other types on request



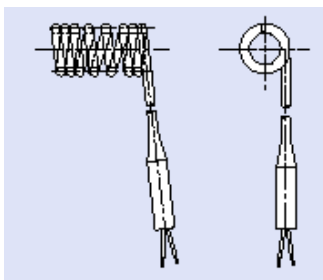
Plug connection, with 3 pins

maximum current at 20 °C max. 8,0 A

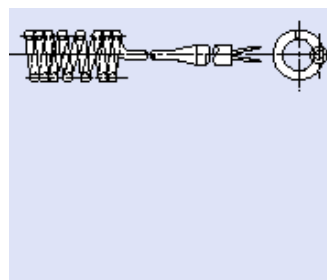
Plug connection, with 5 pins

* maximum current at 20 °C max. 6,5 A

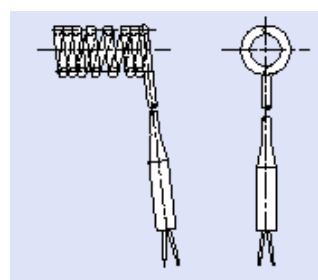
EXITS



Tangential



Axial



Radial