

# Ex-Resistance Temperature Detector WR15 model 3GoH

for gas explosion hazardous areas and areas with combustible dust

In general   

The temperature sensors manufactured by Reckmann GmbH (R58®) are solely intended for the measurement of process temperatures in solid, liquid and gaseous media. This design allows a direct screwing into the process connection of a container or a pipeline. The Namur-Tapering reduces the response time.

## Application area:

Autoclave, machine and plant engineering, chemicals industry, power plant technology, industry of building materials, recycling.

Depended on electrical and thermal parameters for operating with the following types of protection:

II 1/2G Ex ia IIC T1...T6 Ga/Gb or

II 1/2D Ex ia IIIC T135 °C Da/Db.

Ambient temperature at the connection point max. -40 °C up to +100 °C

**For installation please see our operating instructions.**

**Stock-number-code: WR15-G.**

## Technical datas

- **Connection head** (fig. 1/1) according to DIN EN 50446.  
Standard connection heads: Form B-G12, B-KL, B-VA, BA-KL, BA-KLH, B-KUKL, B-KUHKL. Dimension see page 2.
- **Protection shell** (fig. 1/3 up to 4) according or similar to DIN 43772.  
Standard material 1.4571.  
Standard- D/d: 12 tapered according to Namur to 9 mm
- **Process connection** (fig.1/3) by in the head screwed double nipple, with all common threads. Standard thread G1/2".
- **Measuring insert** (fig.1/2) replaceable according or similar to DIN 43735.  
Sensor depending on use:  
thin film or ceramic according to IEC / EN 60751,  
standard in 1 x 3-, 1 x 4-, 2 x 3- oder 2 x 4 wire circuit,  
Recommended operating temperature on the measuring tip depended on accuracy class according to IEC / EN 60751  
- 40°C up to + 500°C by thin film sensors,  
- 40°C up to + 600°C by ceramic sensors.  
**Notice:** using only by uncritical processtemperature (< 400 °C), depended on the temperature decoupling only by double nipple.  
Double sensor with exi-transmitter only on request.
- **Sheath material** according to IEC / EN 61515.  
Standard material 1.4404,  
Standard diameter 3 or 6 mm.  
**Notice:** Sensors with Ø 3 mm and more than 4 inner conductors, Ø < 3 mm, Ø > 3 mm and more than 6 inner conductors are considered to be non-insulated or grounded in accordance with IEC / EN 60079-11 (dielectric strength) and must be connected to equipotential bonding of the system throughout the intrinsically safe circuit for safety reasons, taking into account the special conditions according to IEC / EN 60079-14.
- **Protection shell** (fig. 1/3 up to 4) the following dimension are acceptable:  
outer diameter(D) ≥ 6,0 mm, wall thickness(S) ≥ 1,0 mm, ground height ≥ 1,3 x S [mm].  
fitting length (EBL) max. 8000 mm.
- **Optional materials for gas and dust explosion protection:**  
please see ex operation instructions chapter 4 X-Conditions .

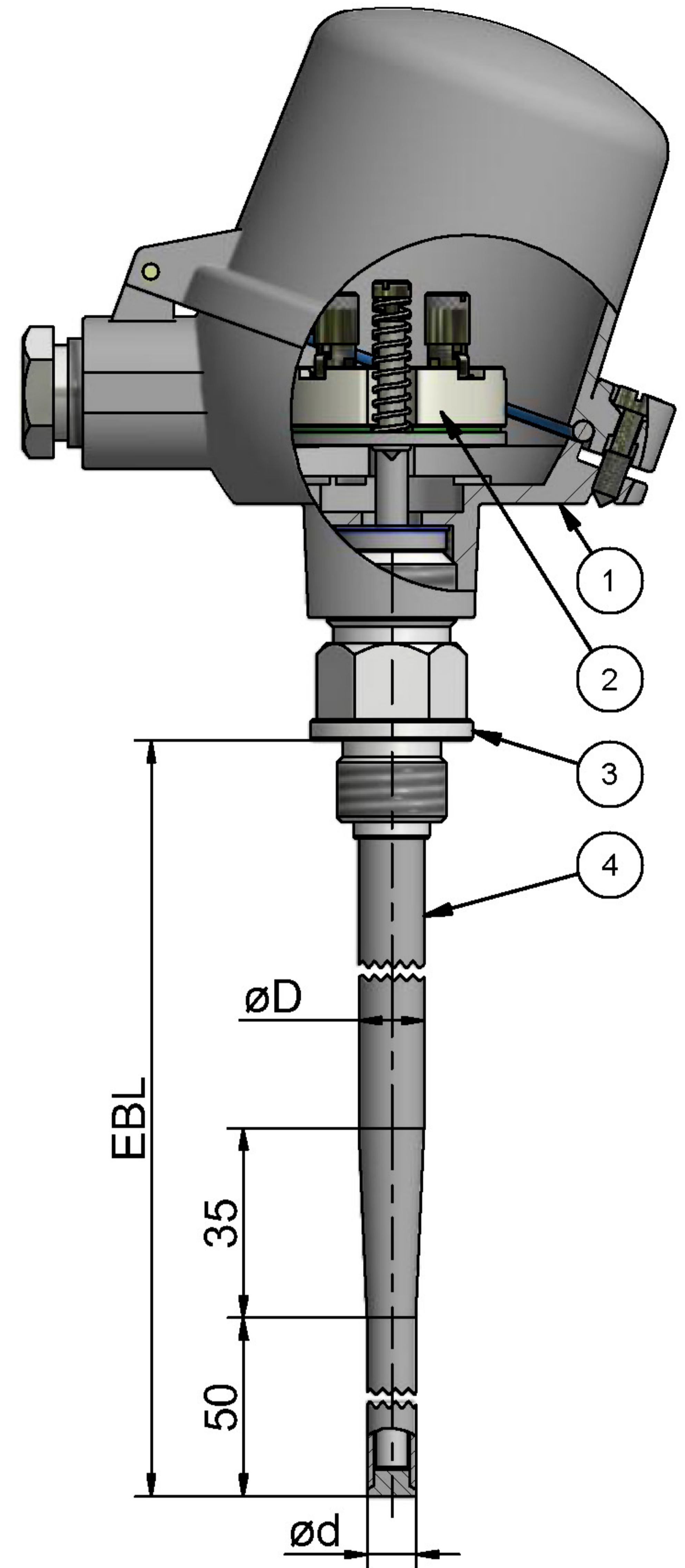
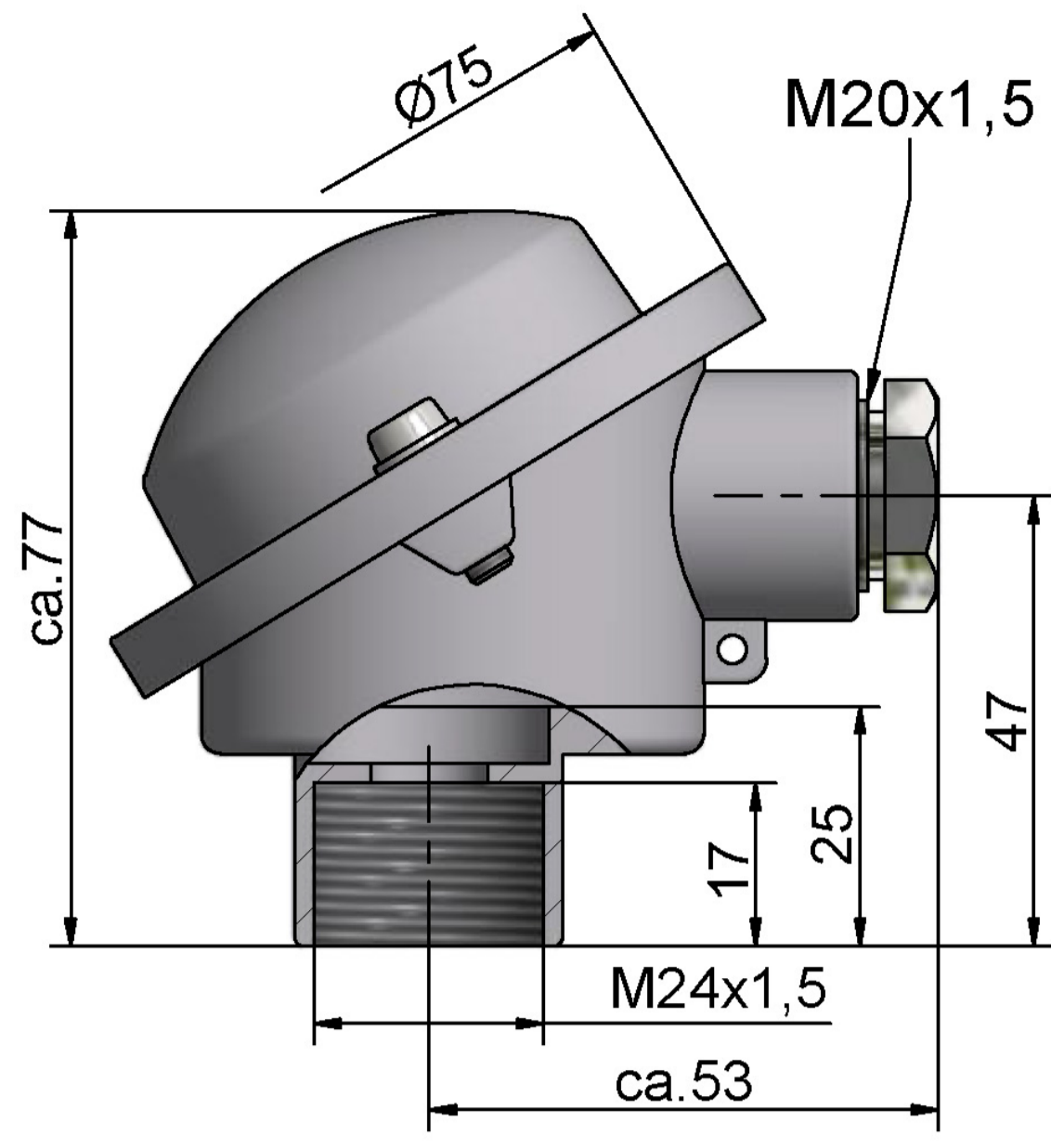


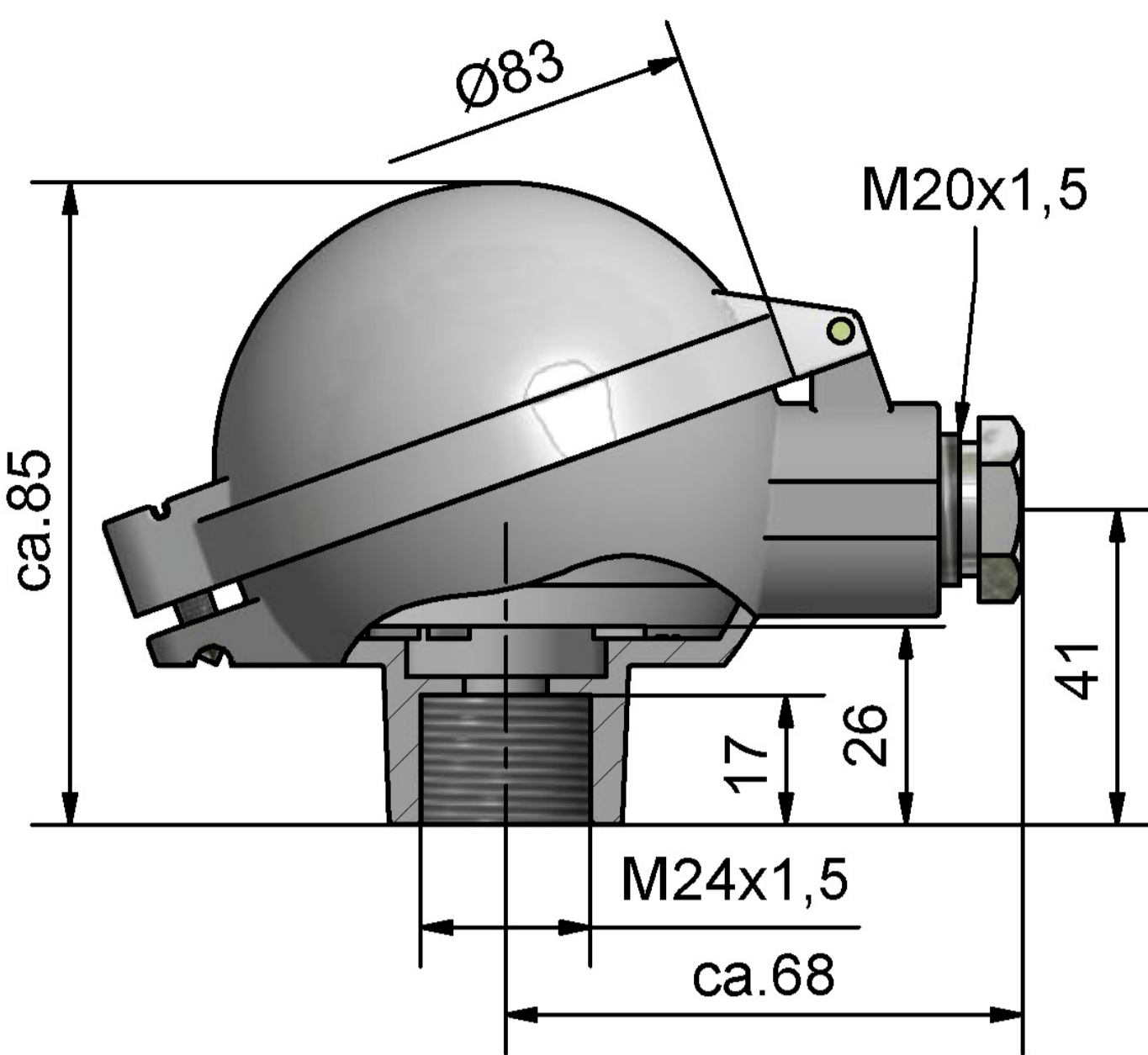
fig. 1

# Optional connecting heads / circuit diagram

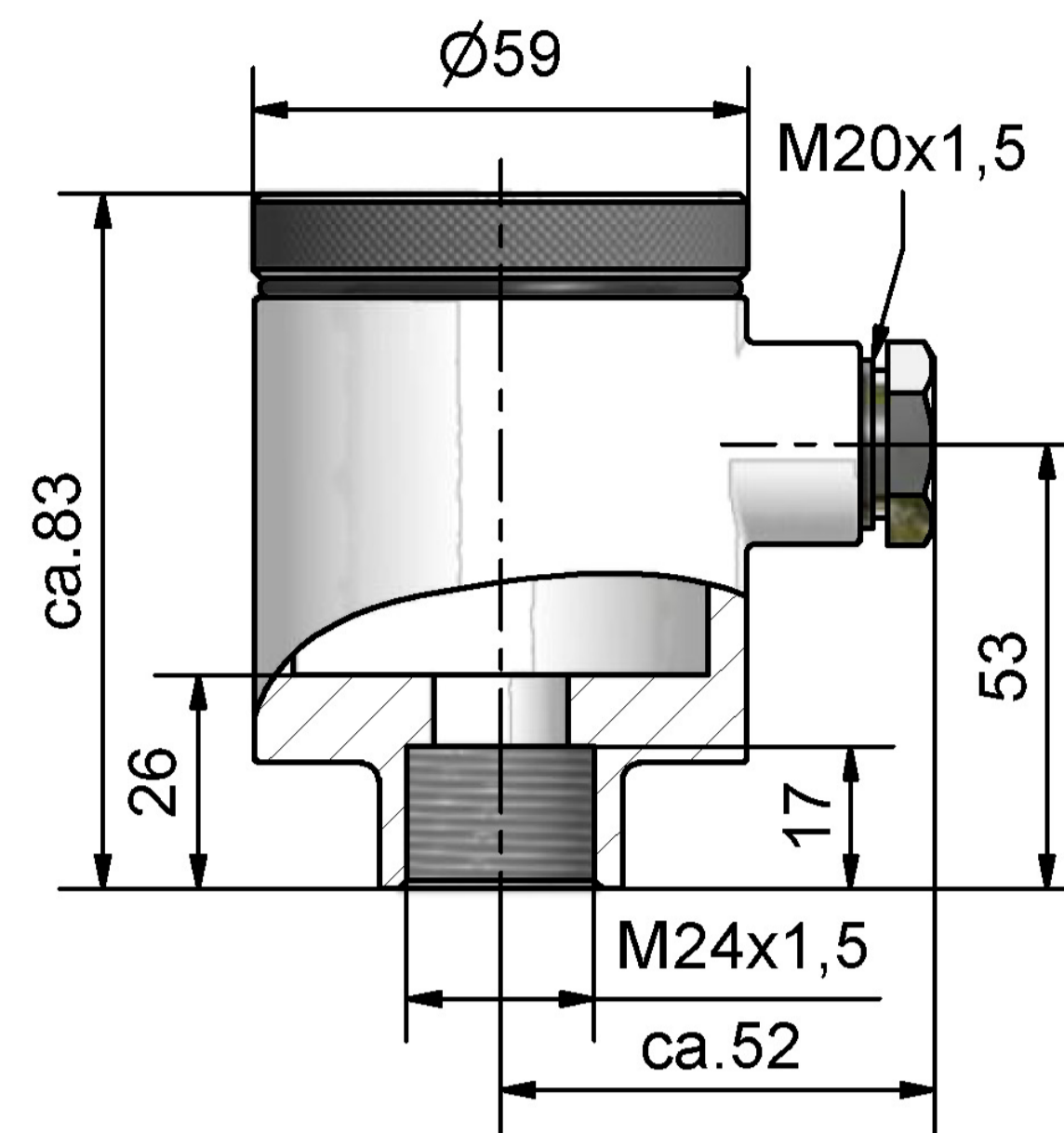
Alternative to the cable gland a M12 insert plug is possible.



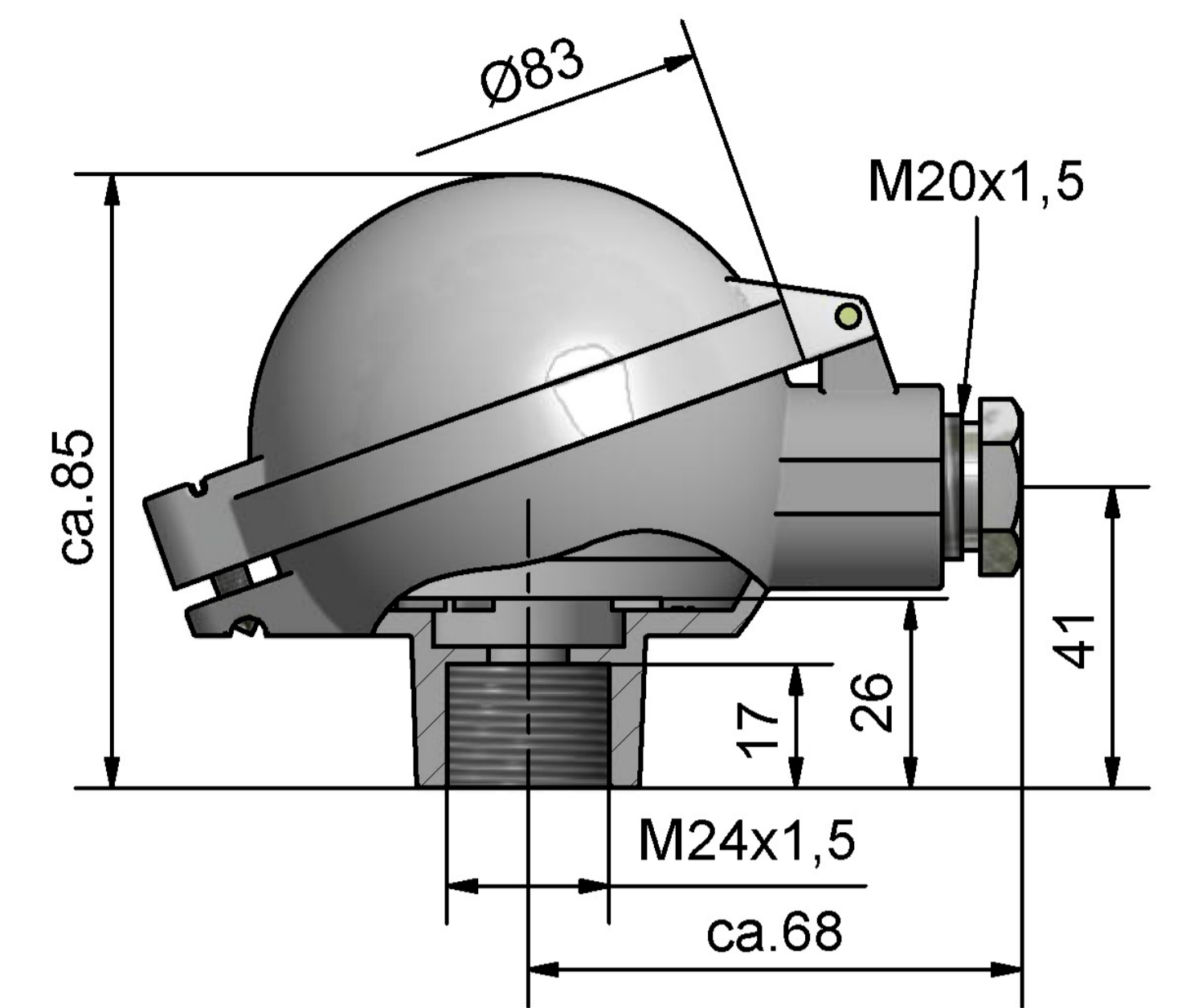
connection head model B-G12  
M24 x 1,5



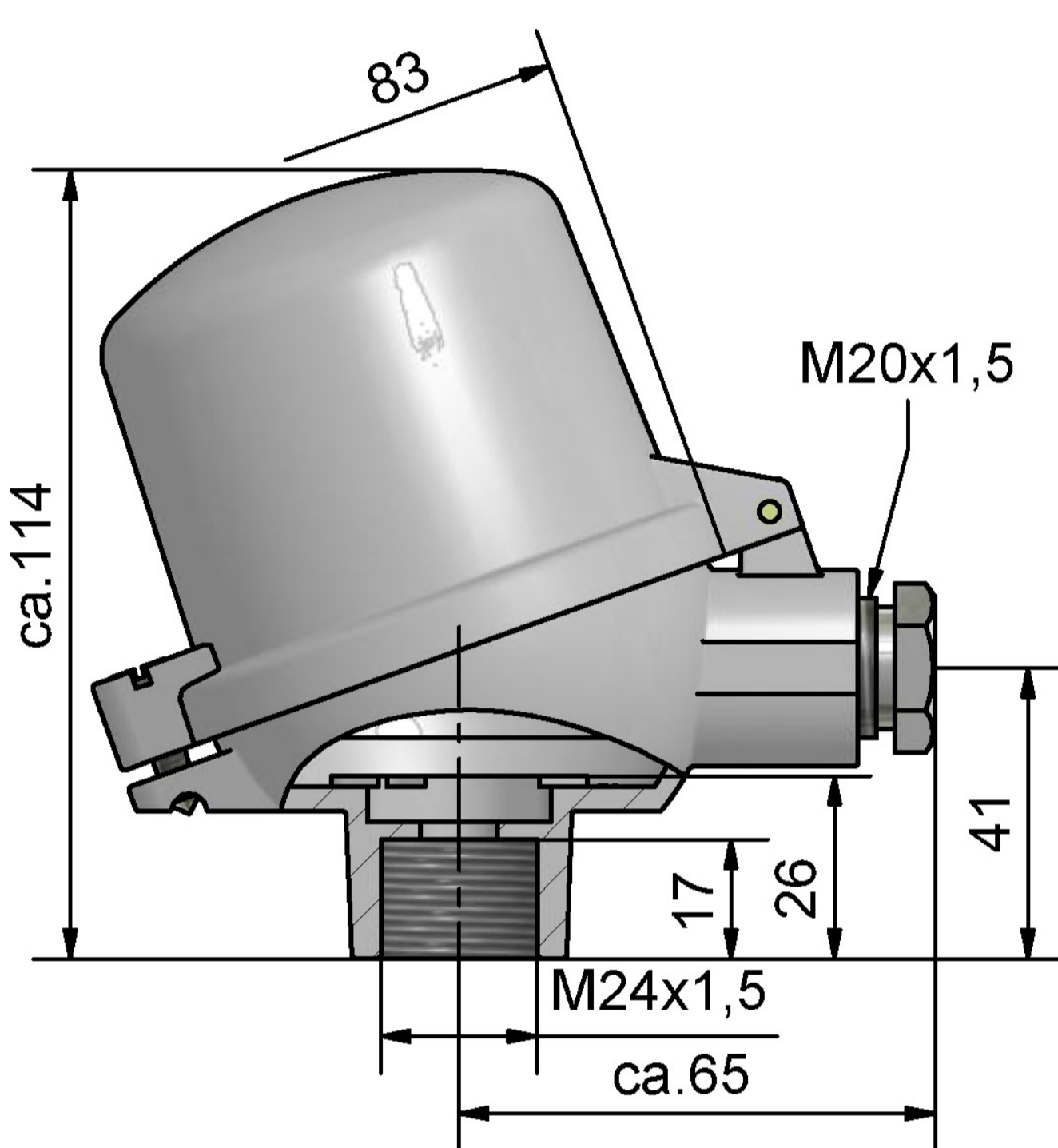
connection head model B-KL  
M24 x 1,5



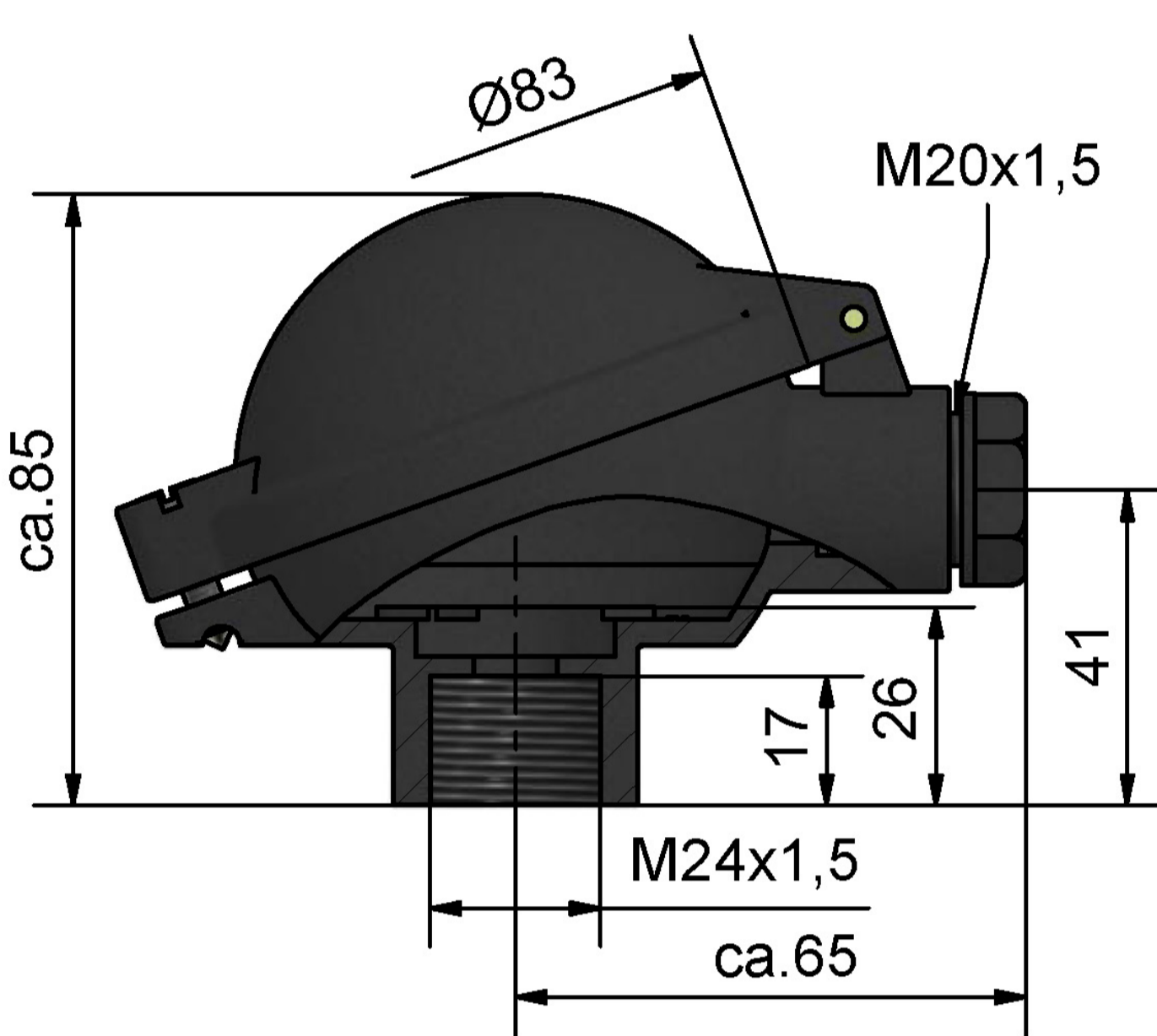
connection head model B-VA  
M24 x 1,5



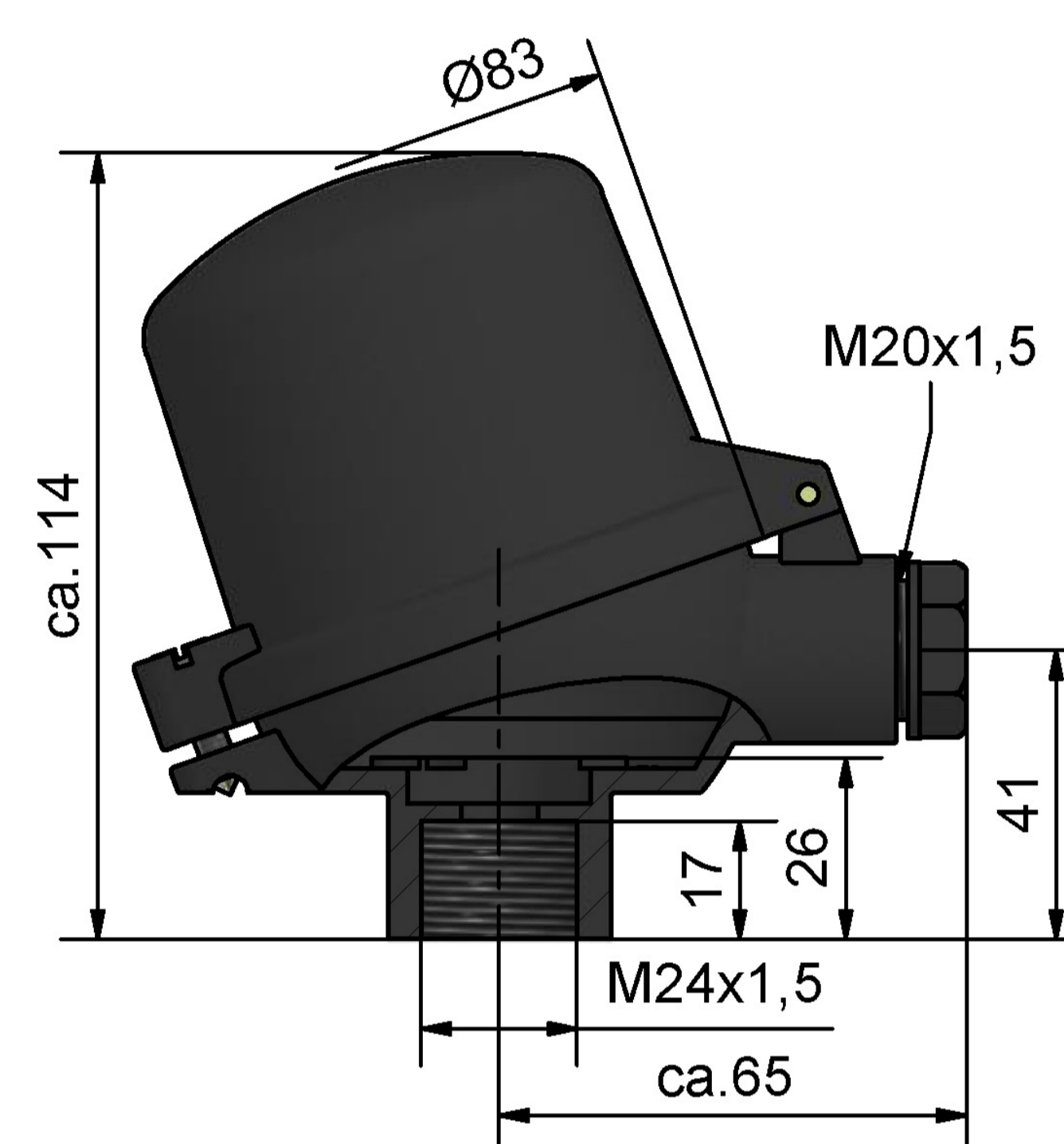
connection head model BA-KL  
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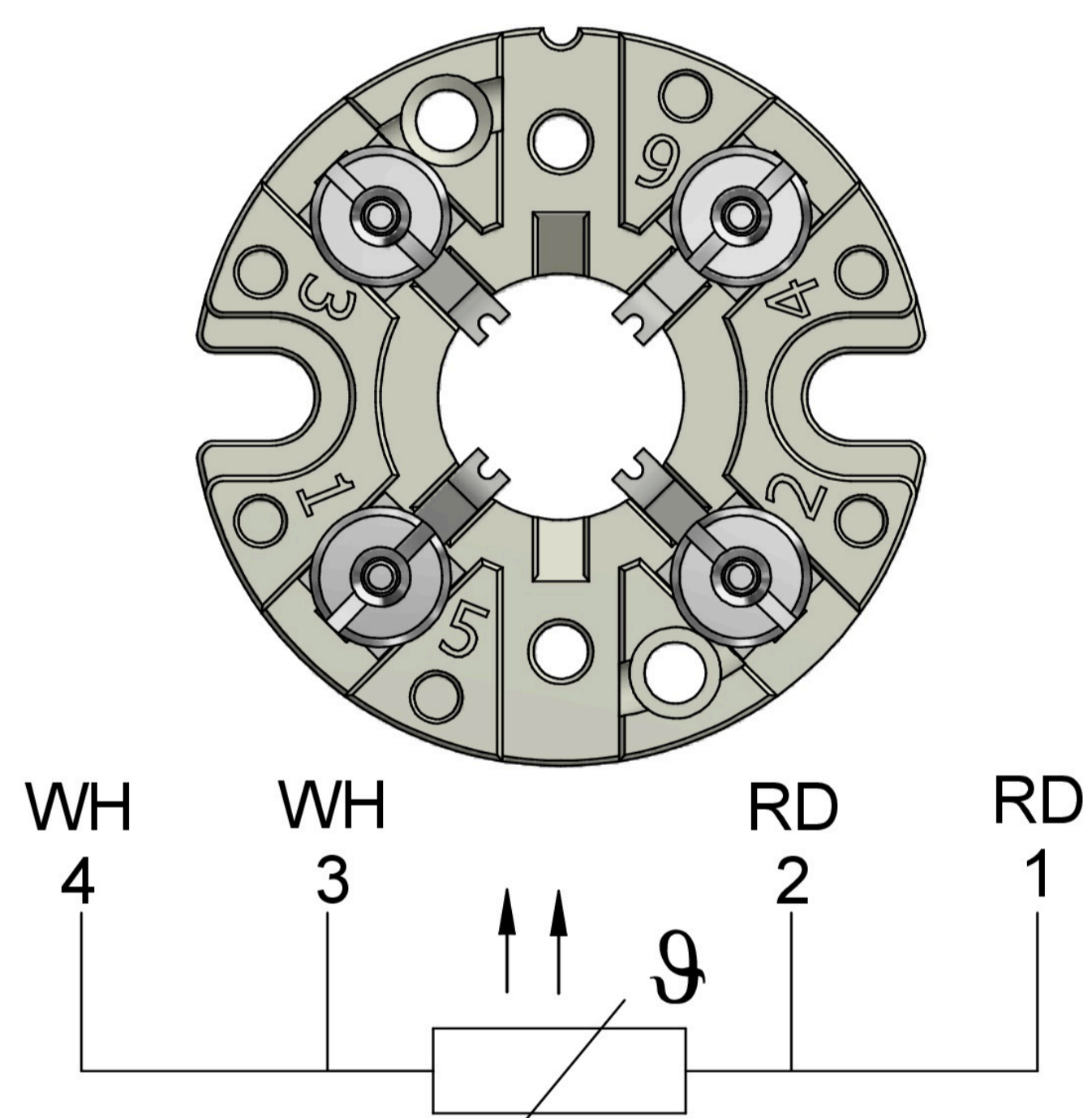
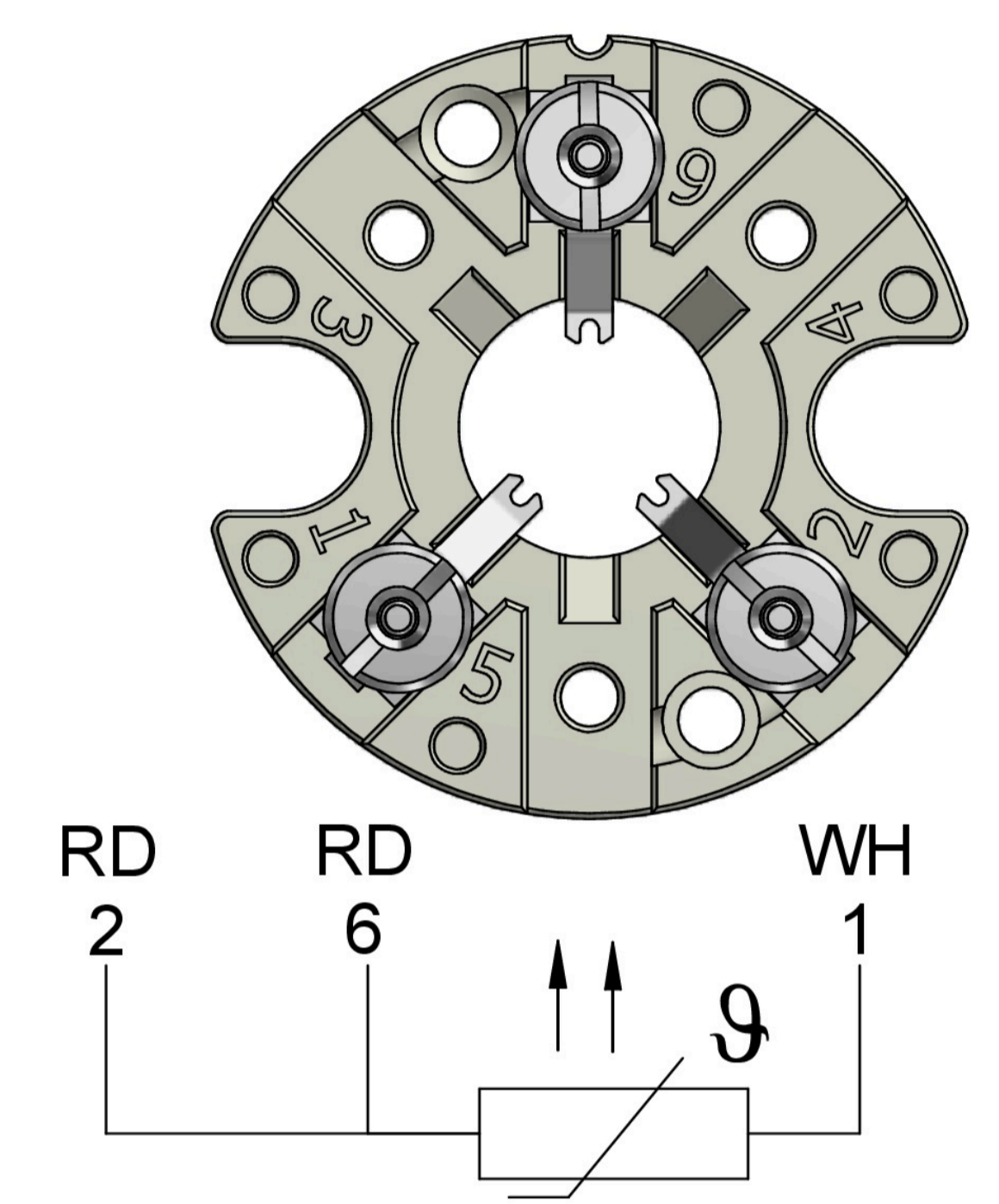
connection head model BA-KLH  
M24 x 1,5



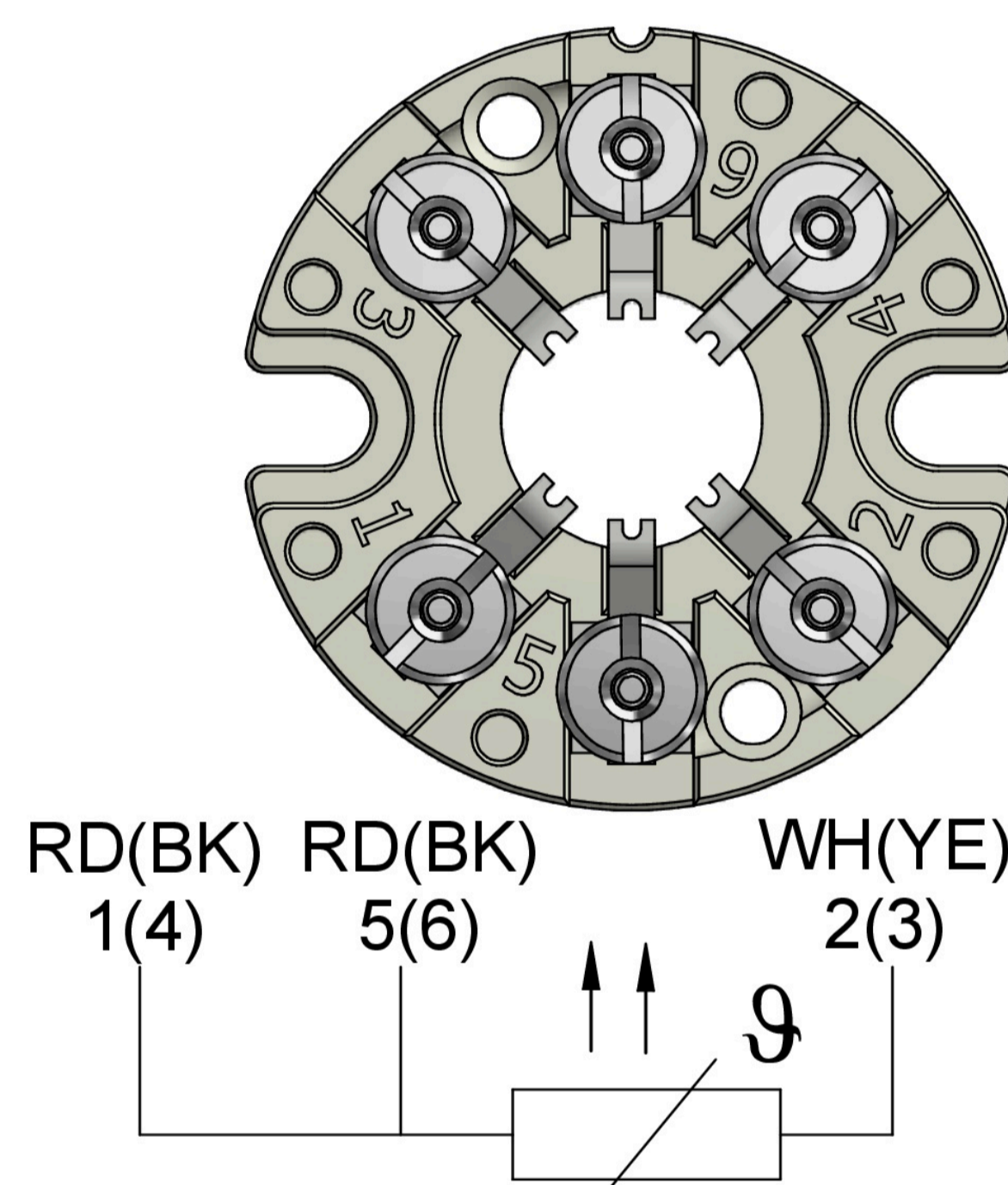
connection head model B-KUKL  
M24 x 1,5



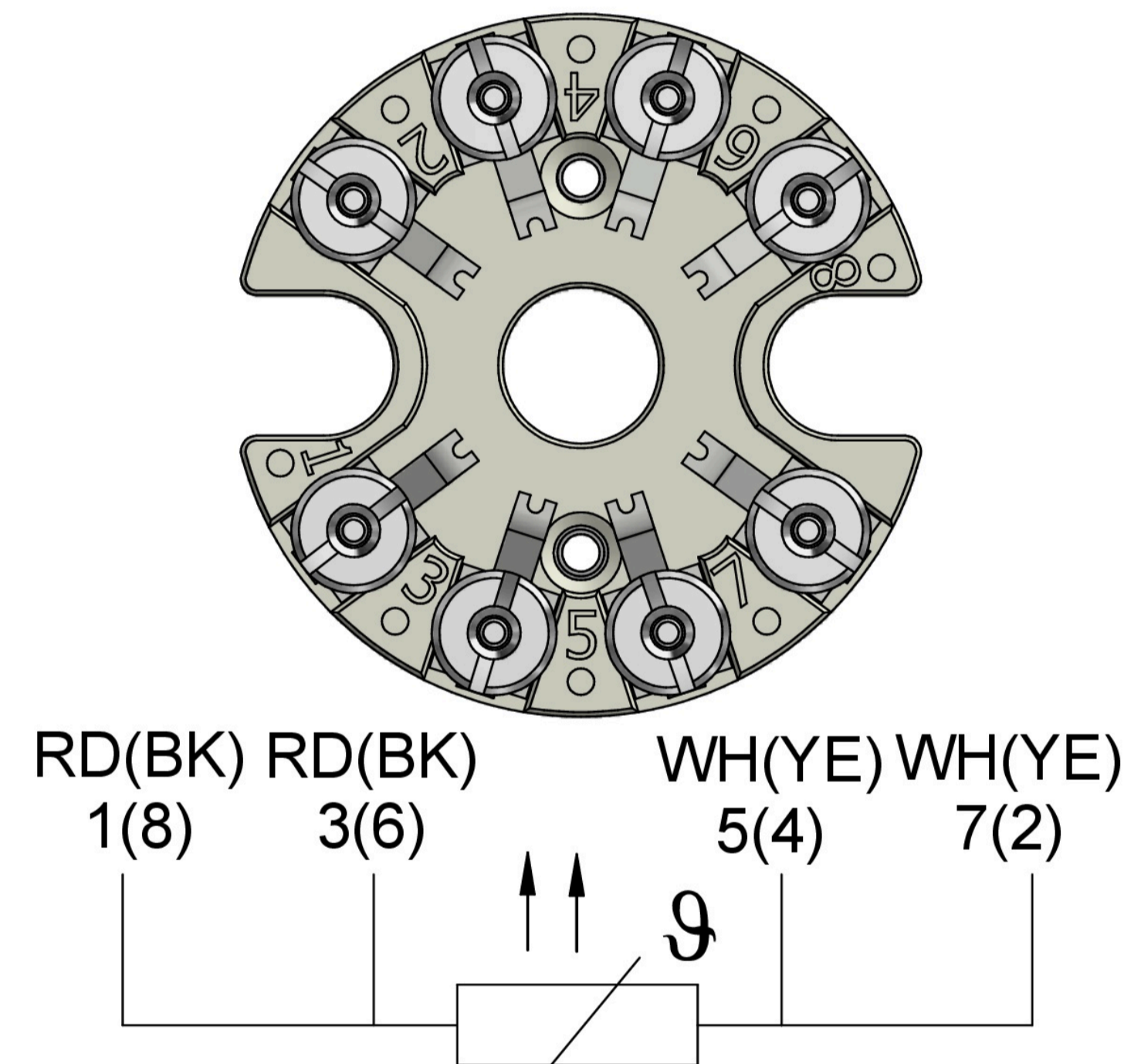
connection head model B-KUHKL  
M24 x 1,5



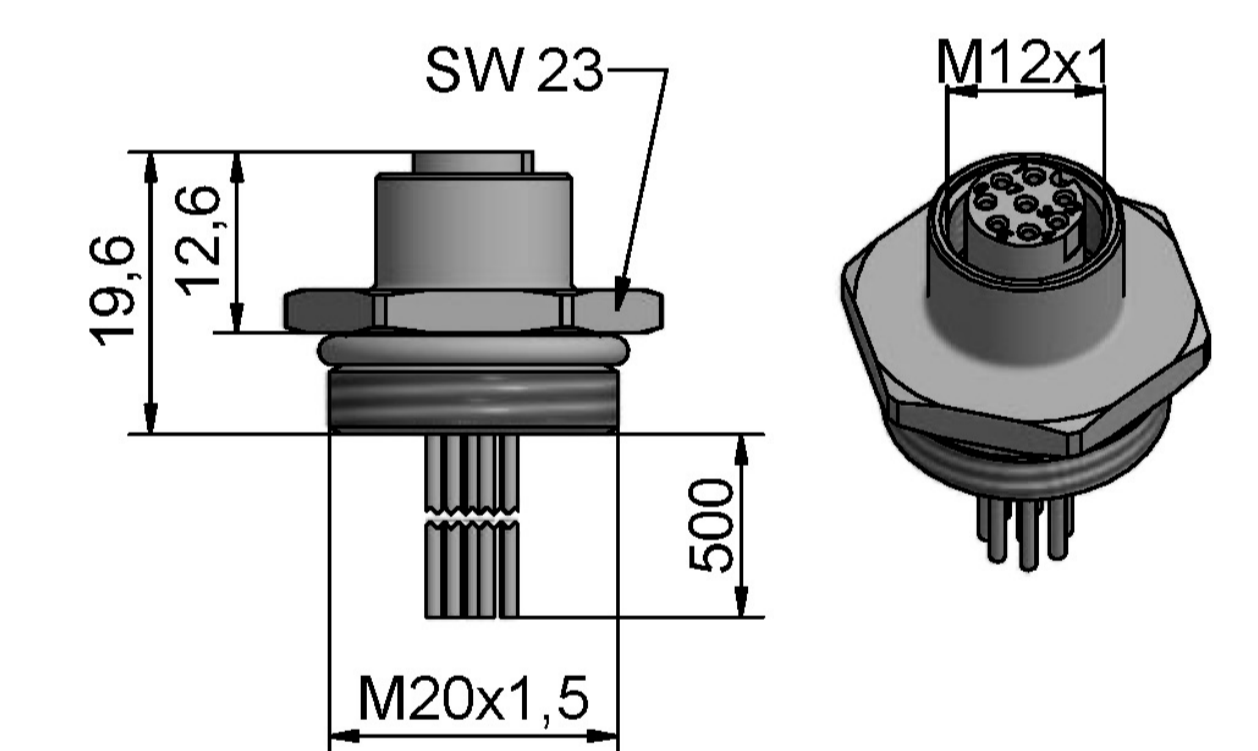
terminal base  
1 x PT100 4 wire



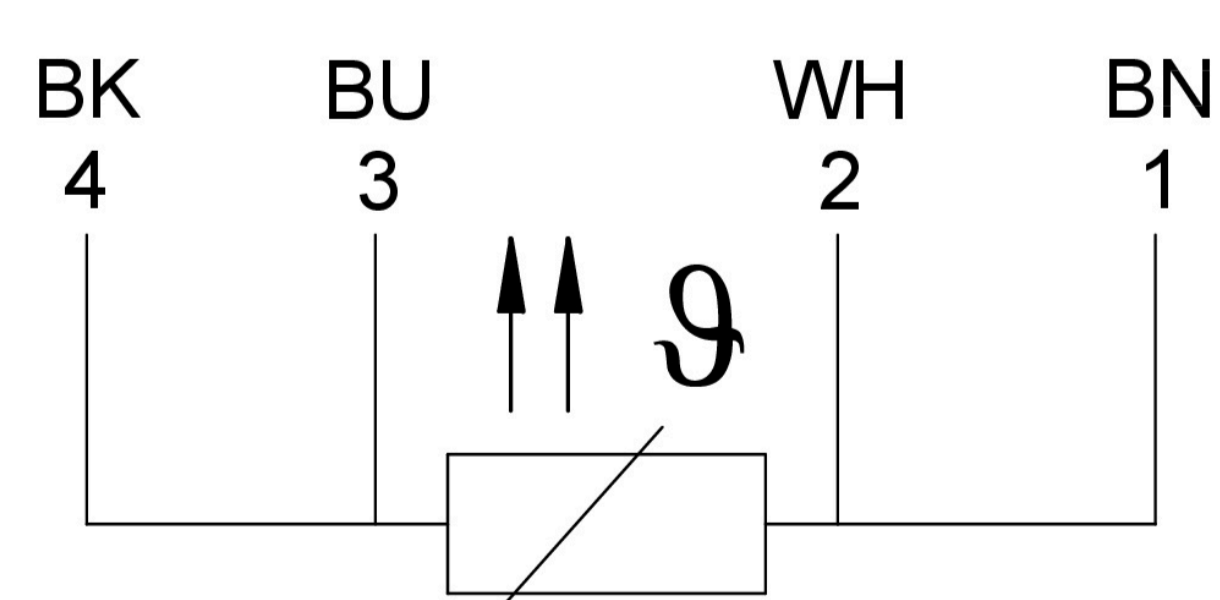
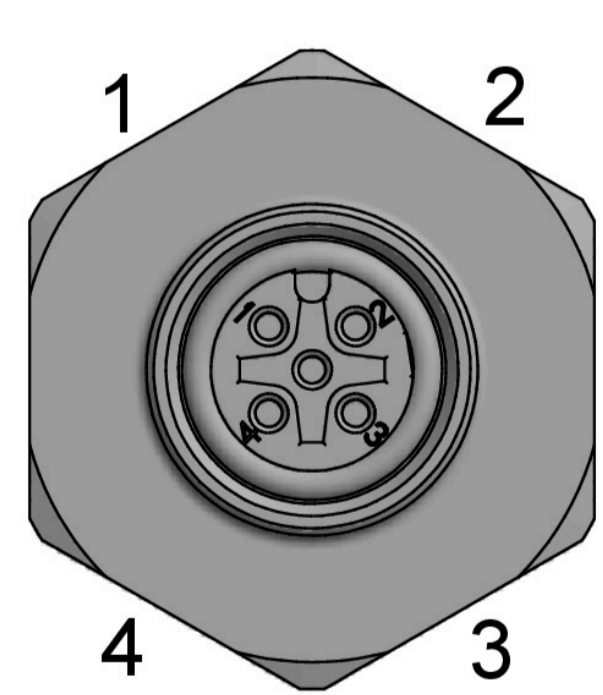
terminal base  
2 x PT100 3 wire



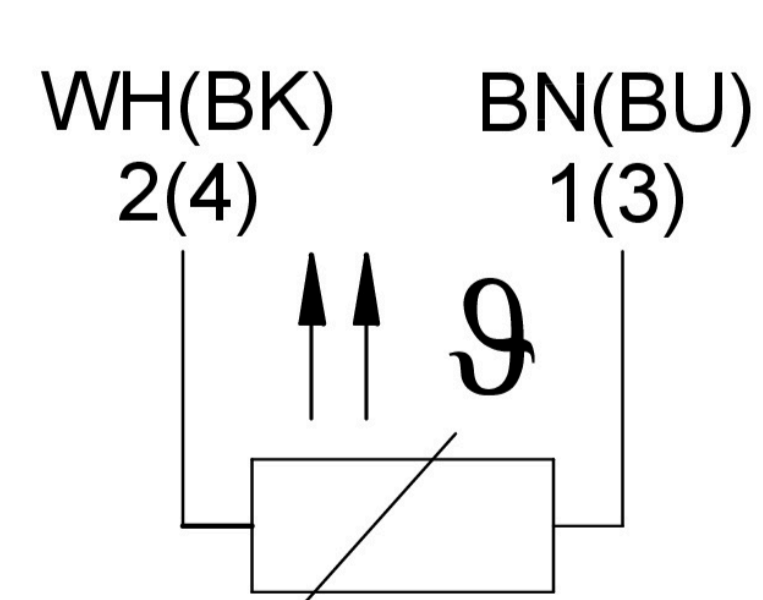
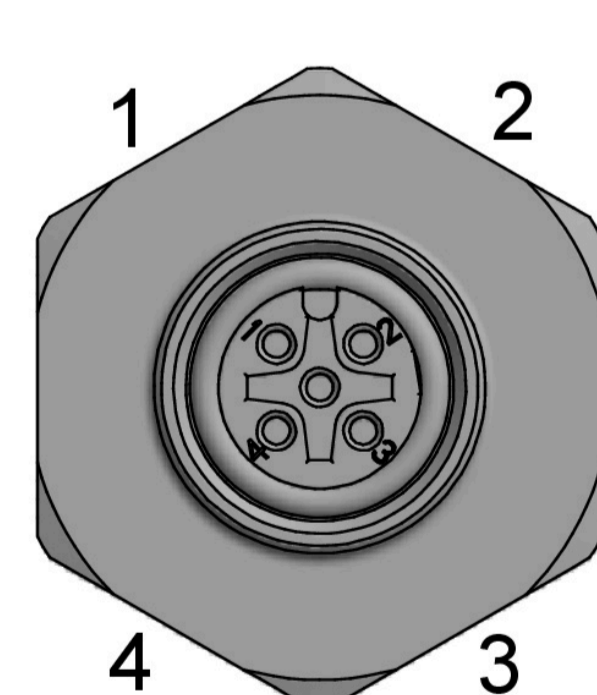
terminal base  
2 x PT100 4 wire



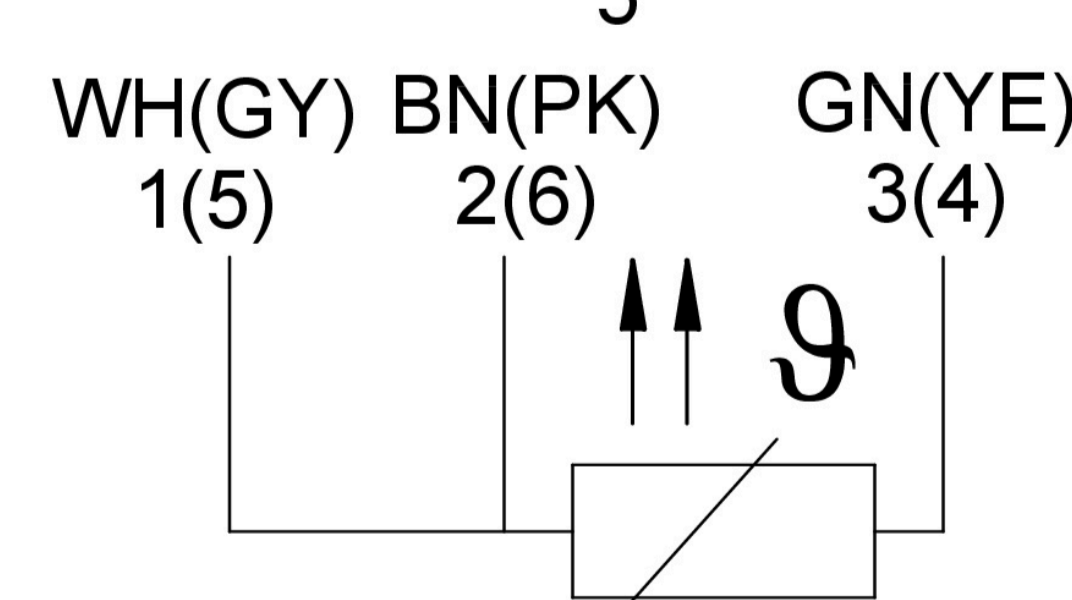
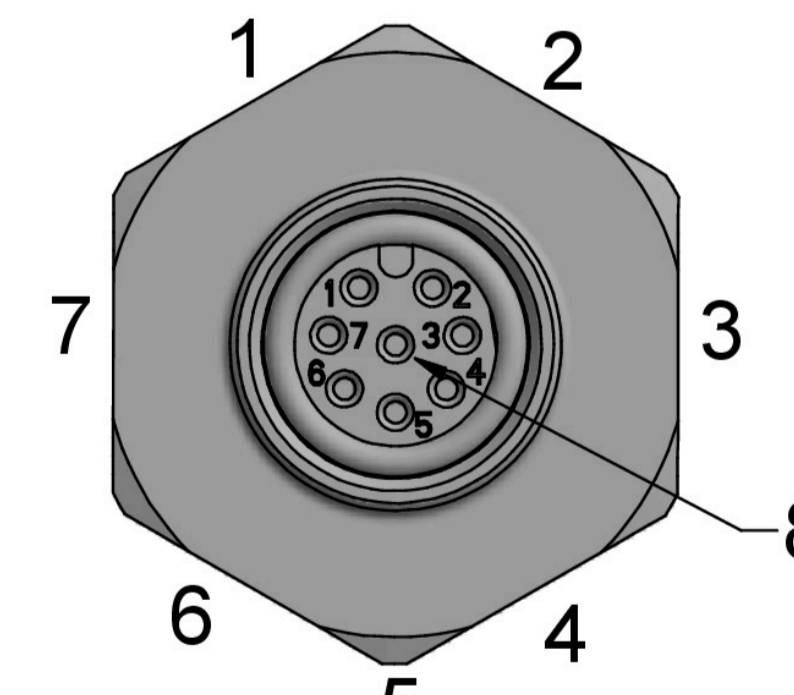
M12 insert socket  
8 - terminal



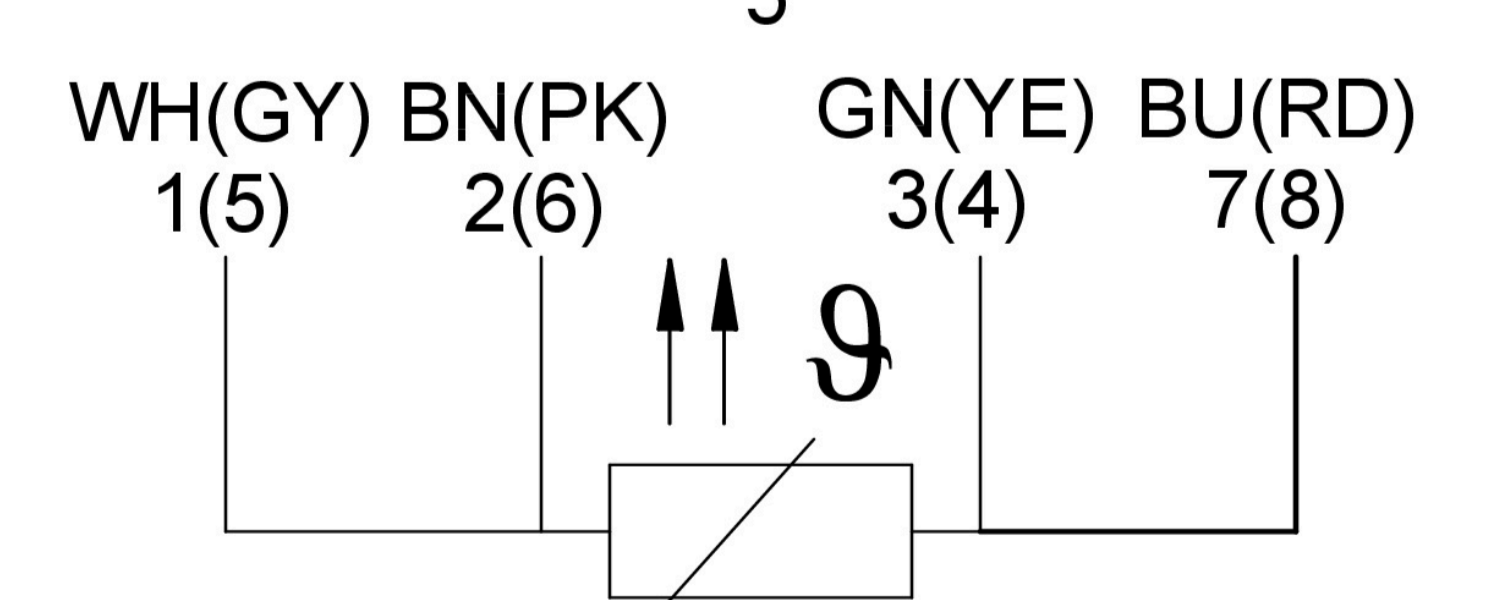
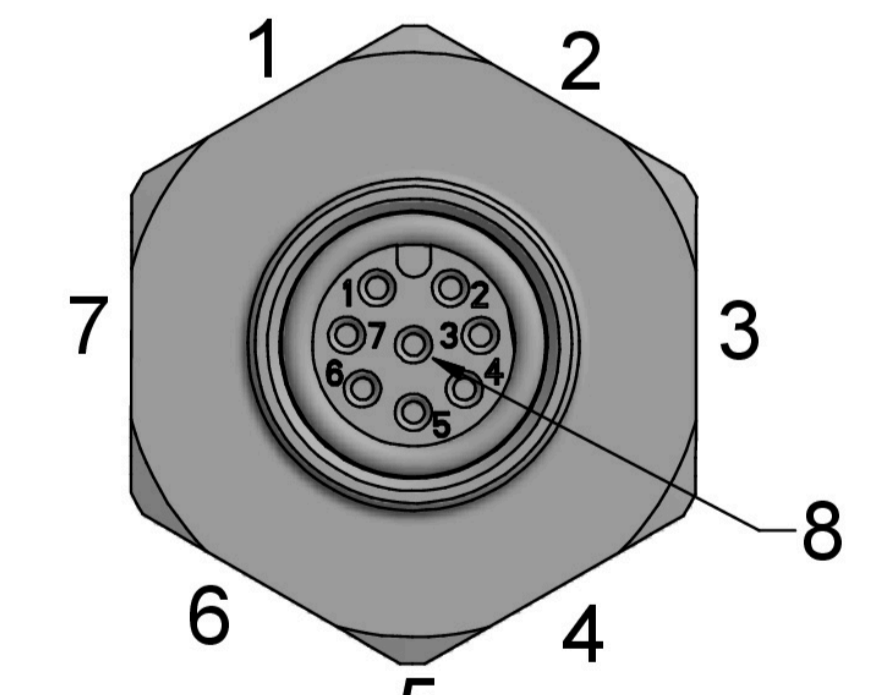
M12 insert socket  
1 x PT100 4 wire



M12 insert socket  
2 x PT100 2 wire



M12 insert socket  
2 x PT100 3 wire



M12 insert socket  
2 x PT100 4 wire