

# Mineral insulated Thermocouple model 1

## MIT with protection tube model 1 according or similar to DIN 43772

### 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. By using a movable gas tight screw socket or a compression fitting, this design allows a variable installation length.

#### Application area:

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

**For installation please see our Operating instructions for Mineral Insulated Thermocouple (MIT).**

**Stock-number-code:1R9-A0.**

### Technical datas

- **Connection head** (fig. 1/1) according to DIN EN 50446.  
Standard connection heads: Form B, B-KL, B-KS, BA-KL, BA-KS  
BA-KLH, BA-KSH, B-GR.  
Dimension see page 2, Protection IP 53
- **Protection tube** (fig. 1/2) according or similar to DIN 43772.  
Standard material 1.4571.  
Standard diameter: 9,11 or 15 mm.
- **Process connection** via sliding screw socket or compression fitting, standard thread: G1/2".
- **Measuring insert** (fig. 1/2) exchangeable, according to or similar to DIN 43735.  
Sensor depending on application:  
with 1 or 2 thermocouples according to IEC / EN 60584-1.  
Recommended application temperature depending on thermocouple type and diameter:  
Type K: Ø 3.0 mm up to 1070 °C, 6.0 and 8.0 mm up to 1100 °C.  
Type J: Ø 3.0 mm up to 520 °C, 6.0 and 8.0 mm up to 720 °C.  
Type N: Ø 3.0 mm up to 1070 °C, 6.0 and 8.0 mm up to 1100 °C.  
Type E: Ø 3,0 mm up to 650 °C, 6,0 and 8,0 mm up to 820 °C.  
Type T: Ø 3.0 mm up to 315 °C, 6.0 and 8.0 mm up to 350 °C.  
**Note:** TYPE S/R with sheath of 2.4816 and SR of stainless steel only for 0 °C to max. 900 °C ("risk of poisoning").
- **Sheath material** Design according to IEC / EN 61515.  
standard material 2.4816.  
standard diameter 3; 6 or 8 mm.
- **Optional:** Class 3 requirements (-200 °C to 40 °C) on request. For requirements of class 1 and class 3 only possible with specially selected sheath material, high expense and not with type T.

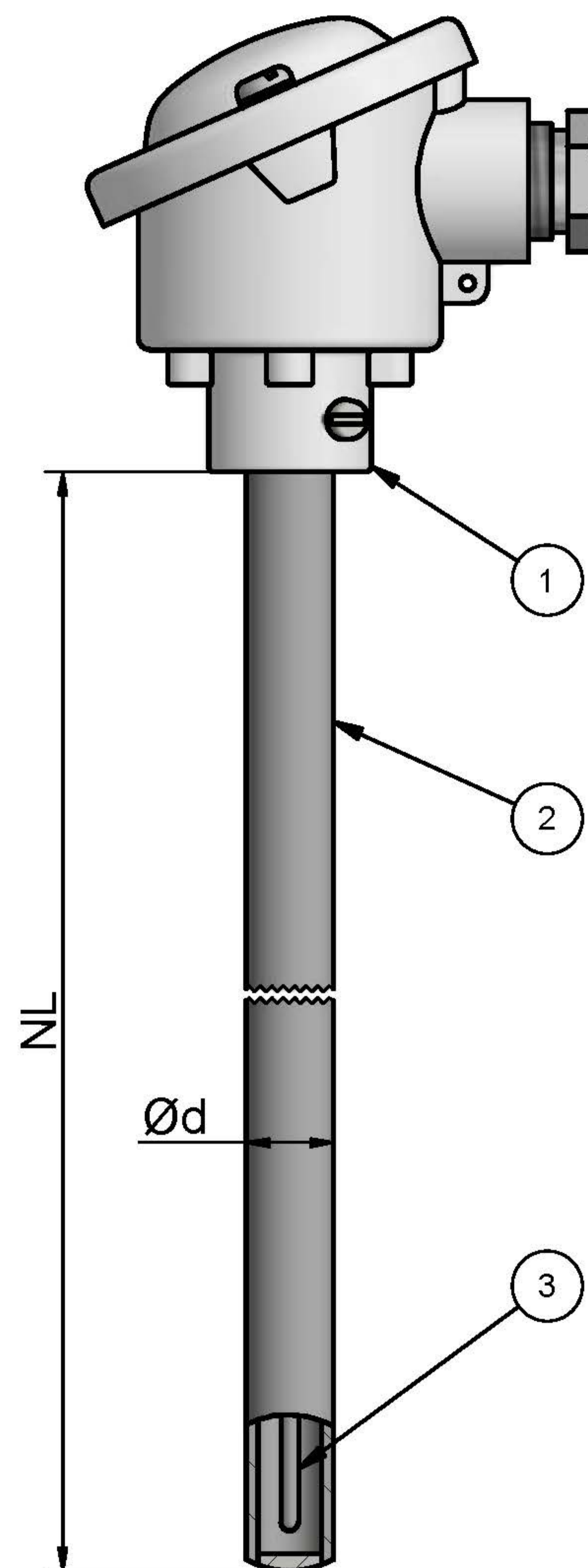
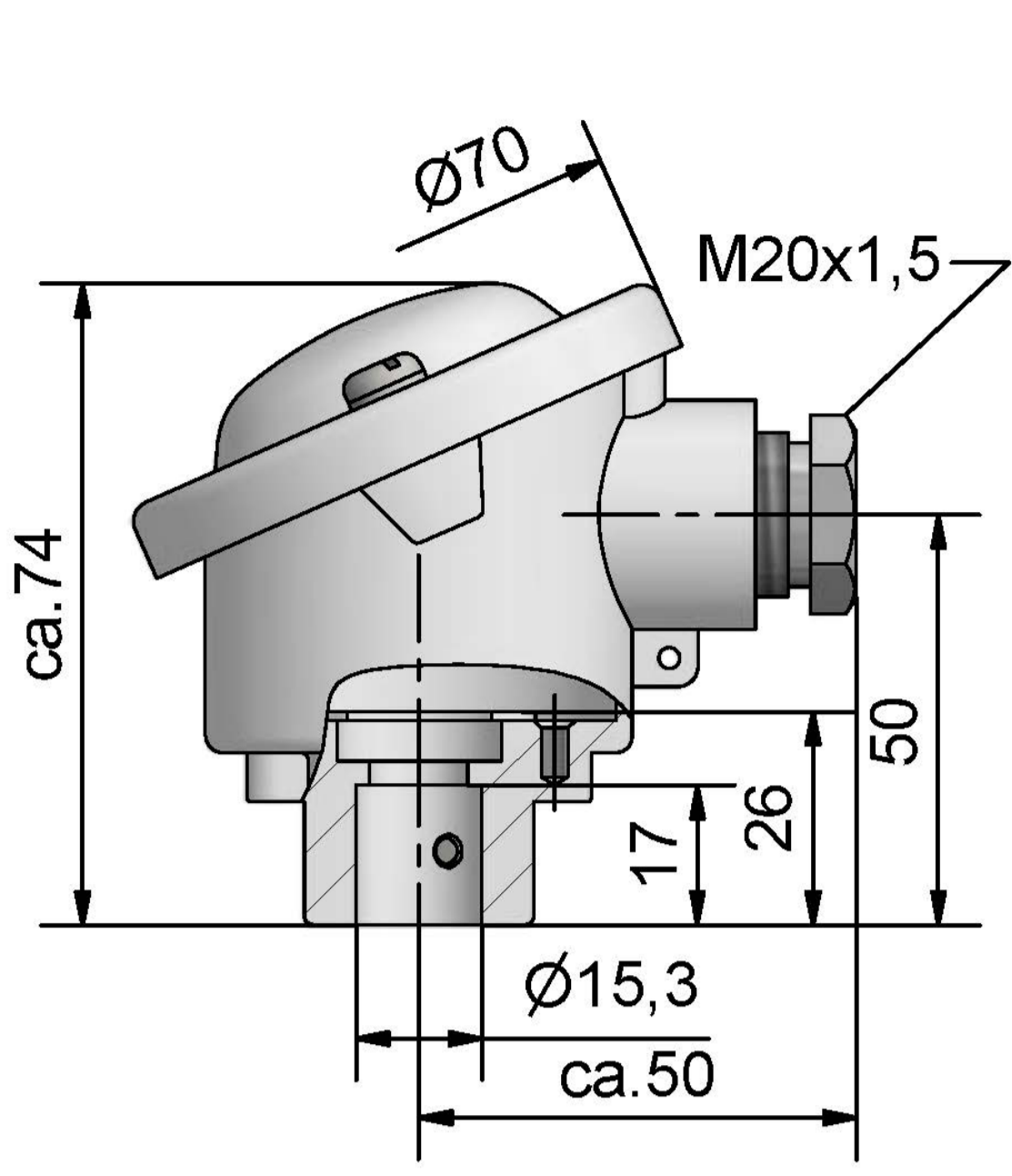


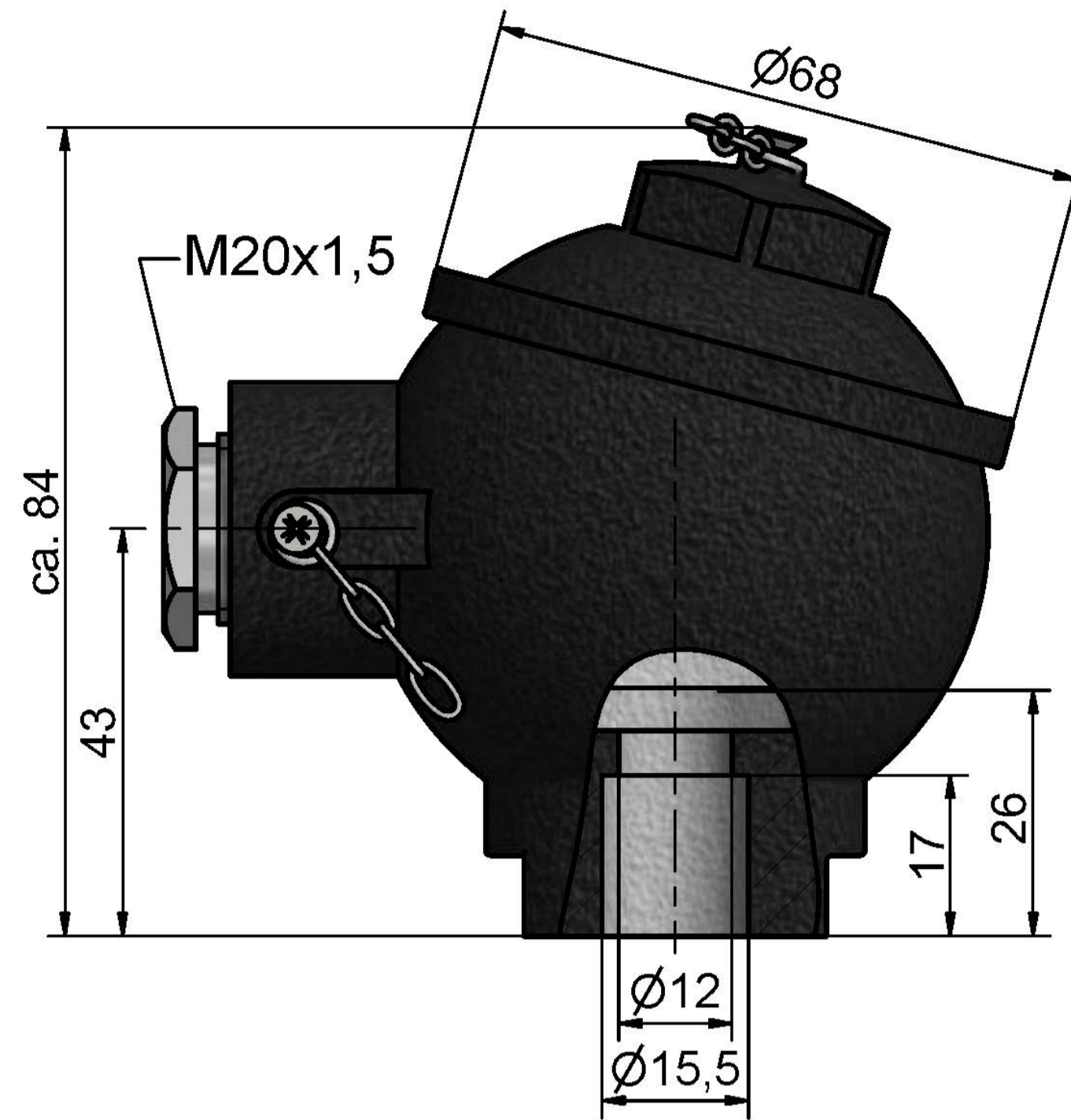
fig. 1

# Optional connecting heads / circuit diagram

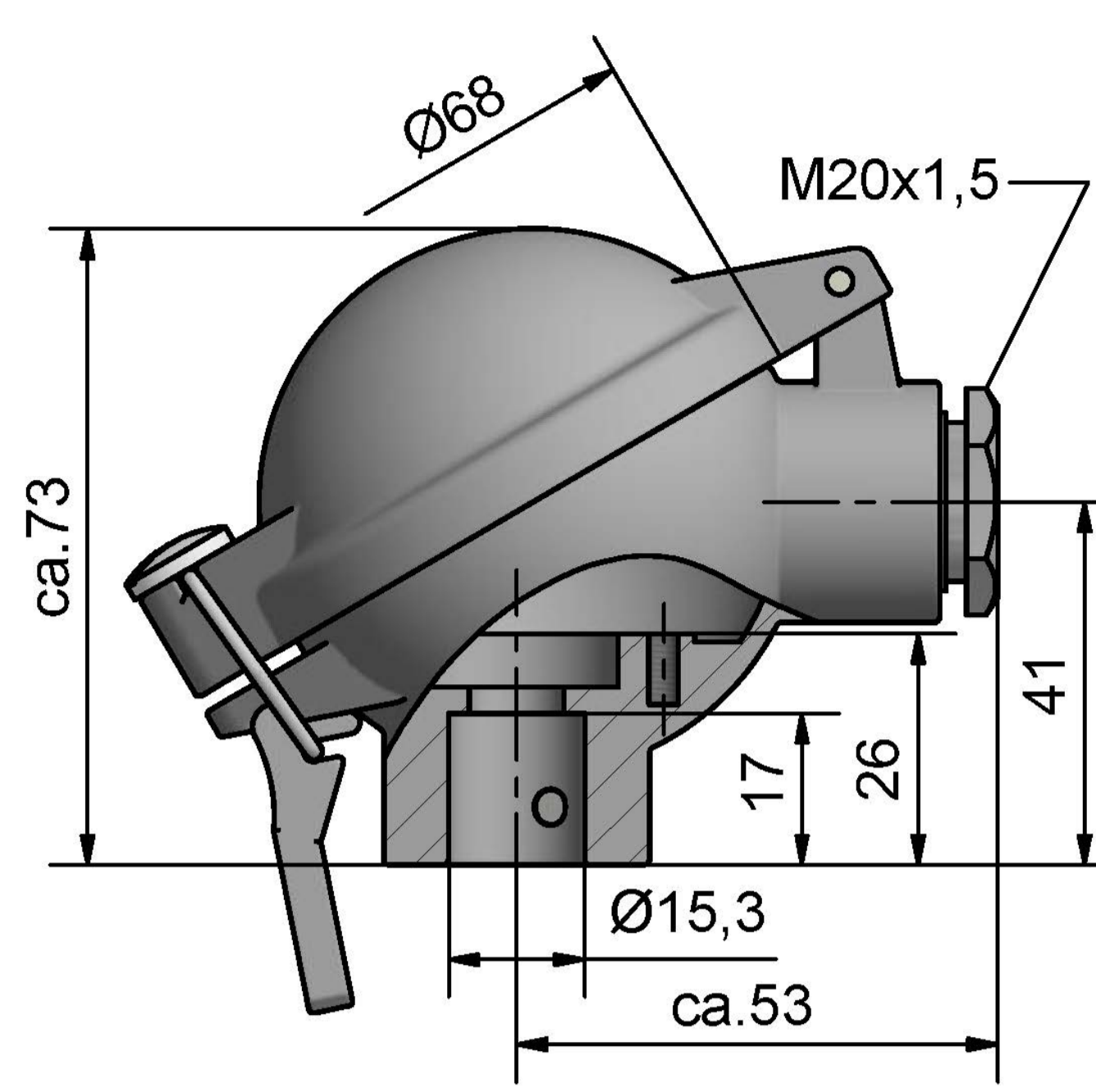
Alternative to the cable gland a M12 insert plug connector is possible.



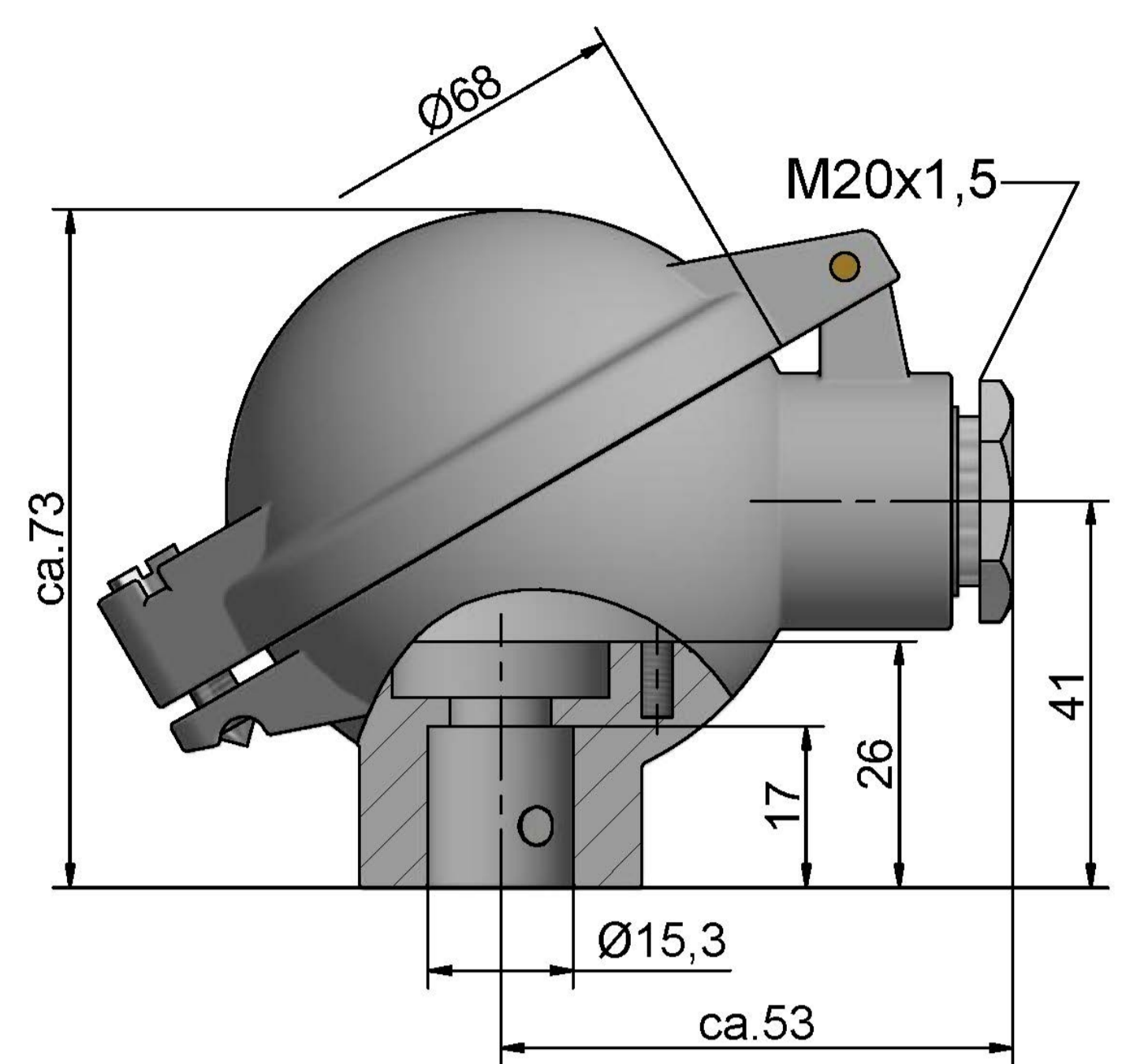
connection head model B  
PA = 15 mm



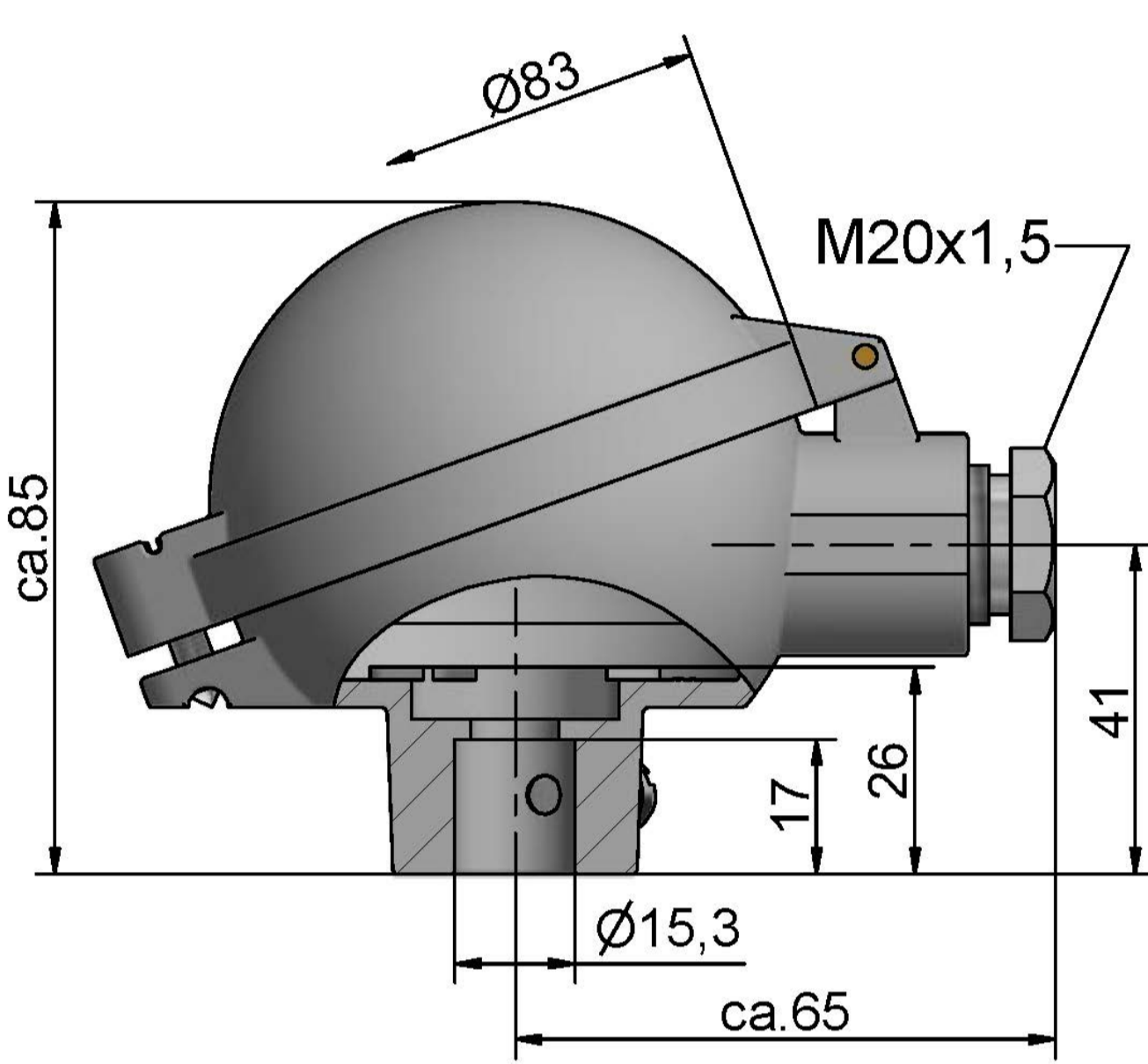
connection head model B-GR  
PA = 15 mm



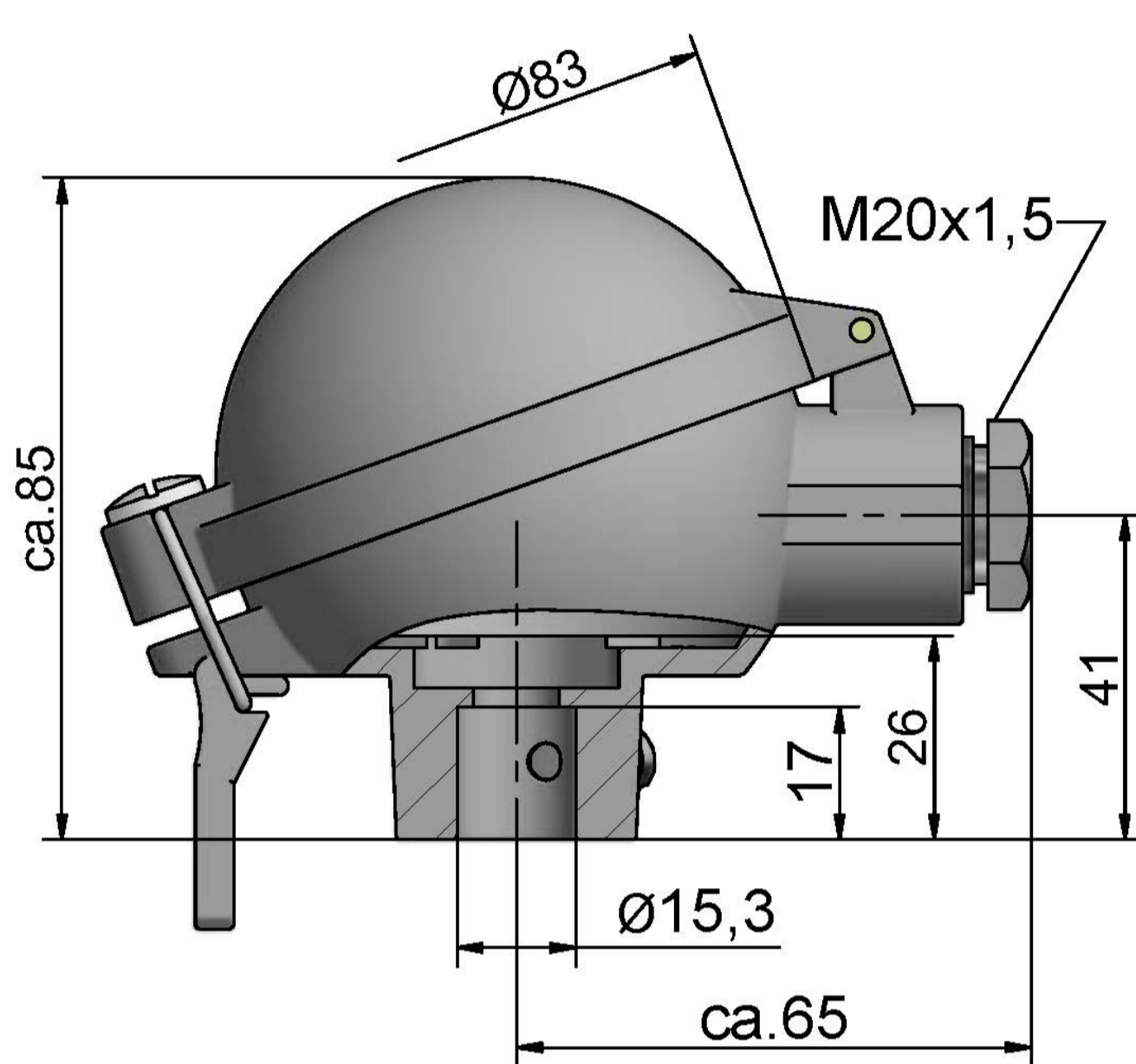
connection head model B-KS  
PA = 15 mm



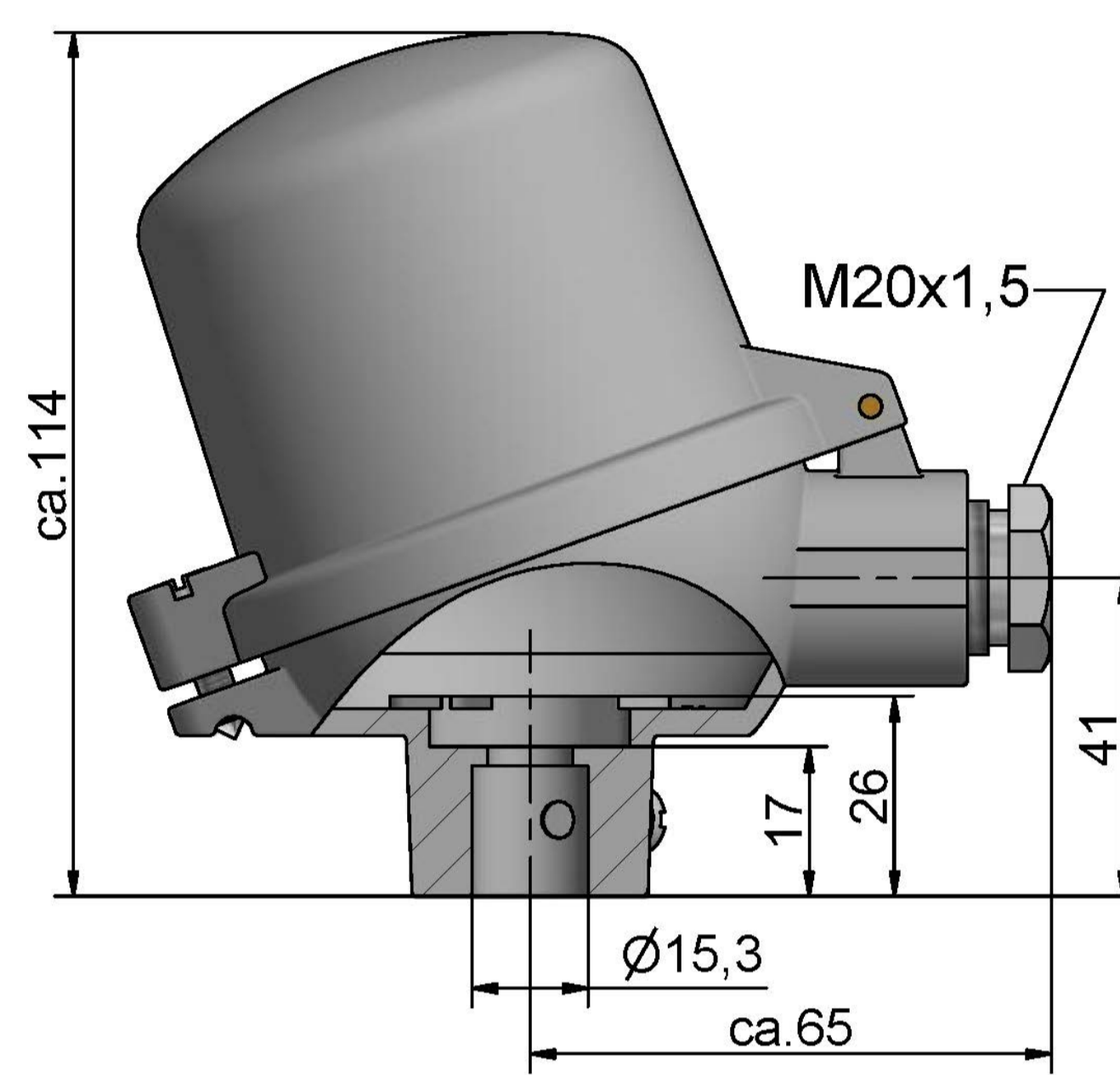
connection head model B-KL  
PA = 15 mm



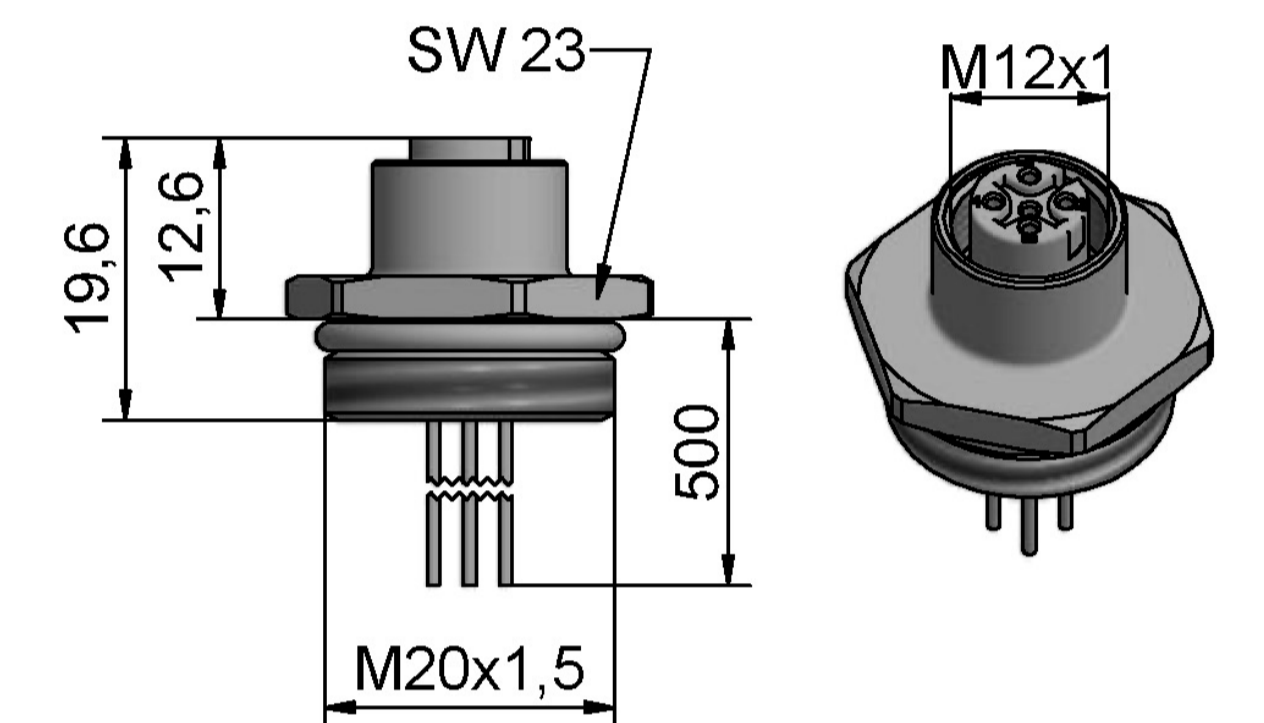
connection head model BA-KL  
PA = 15 mm



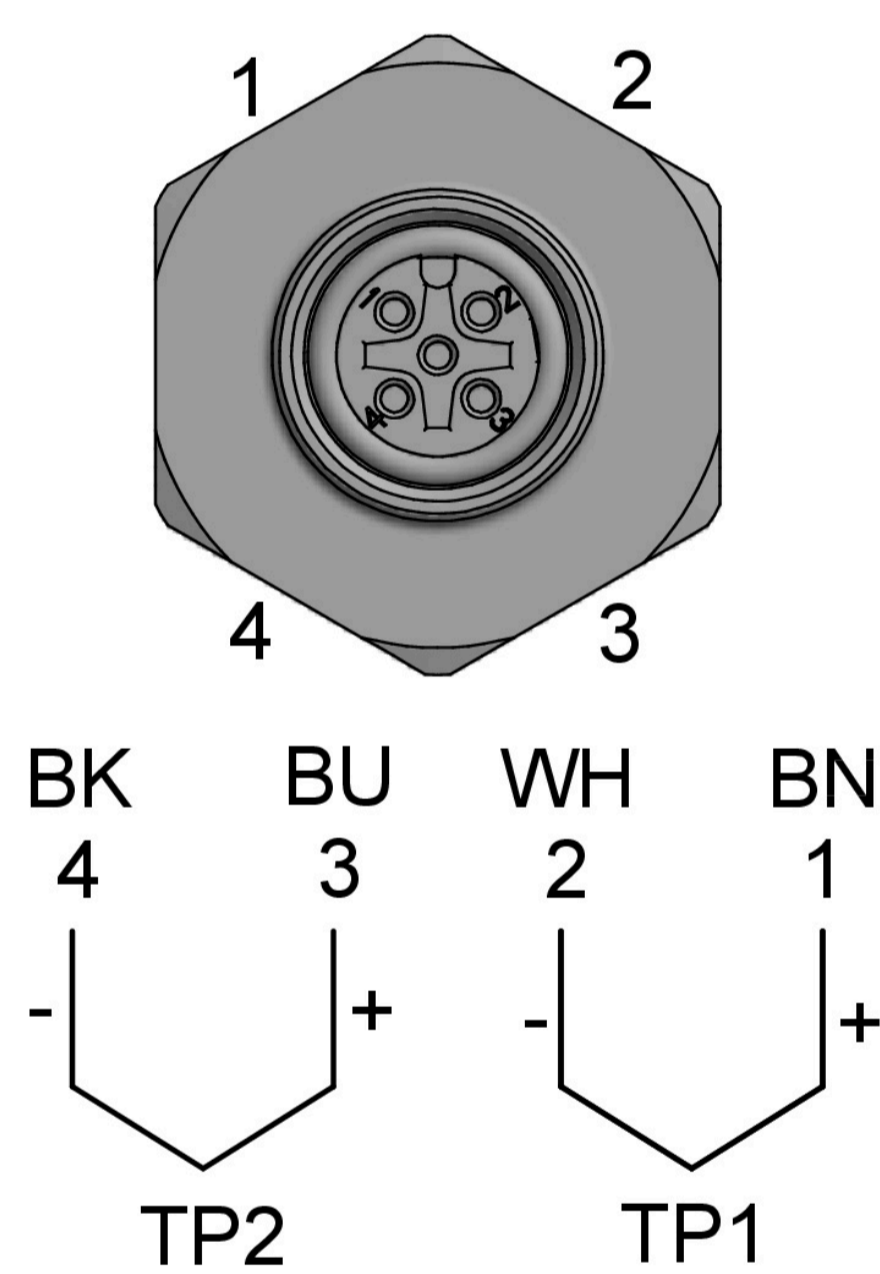
connection head model BA-KS  
PA = 15 mm



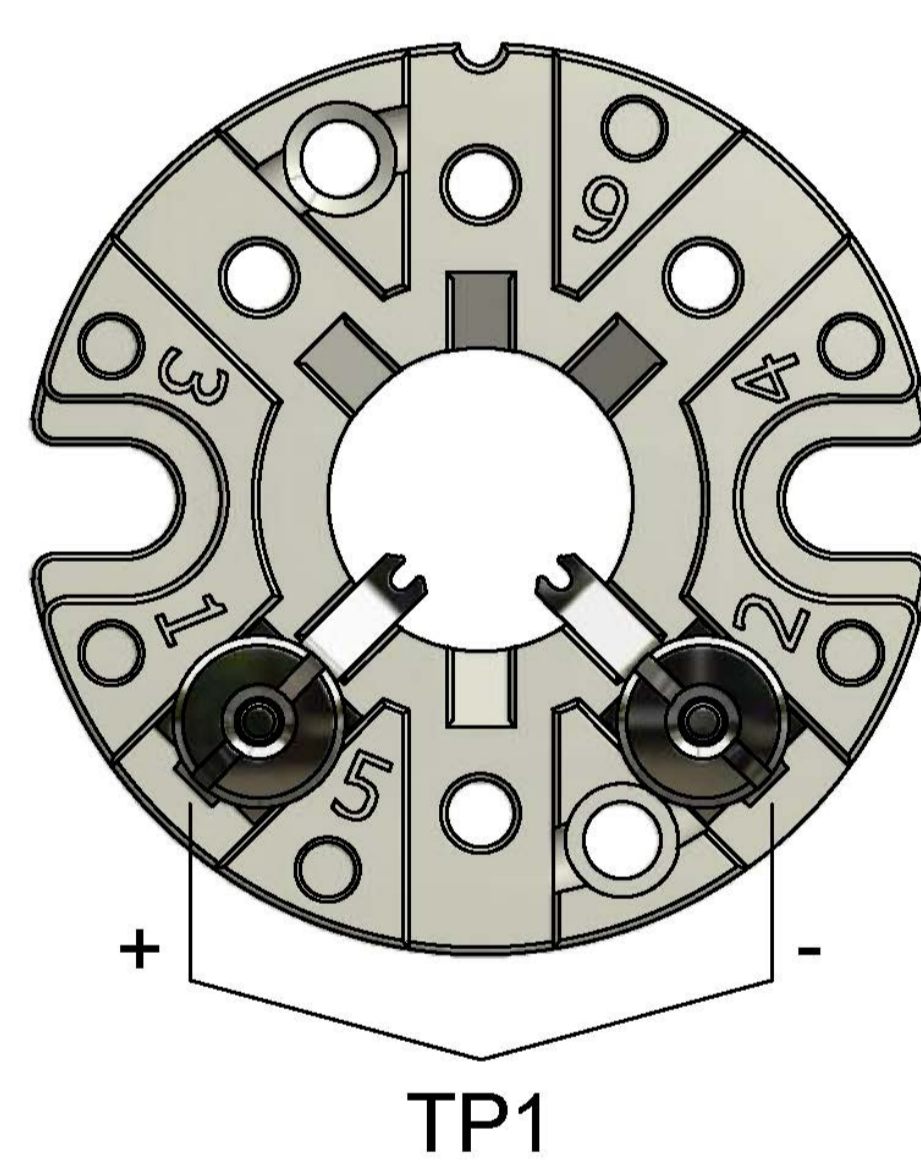
connection head model BA-KLH  
PA = 15 mm



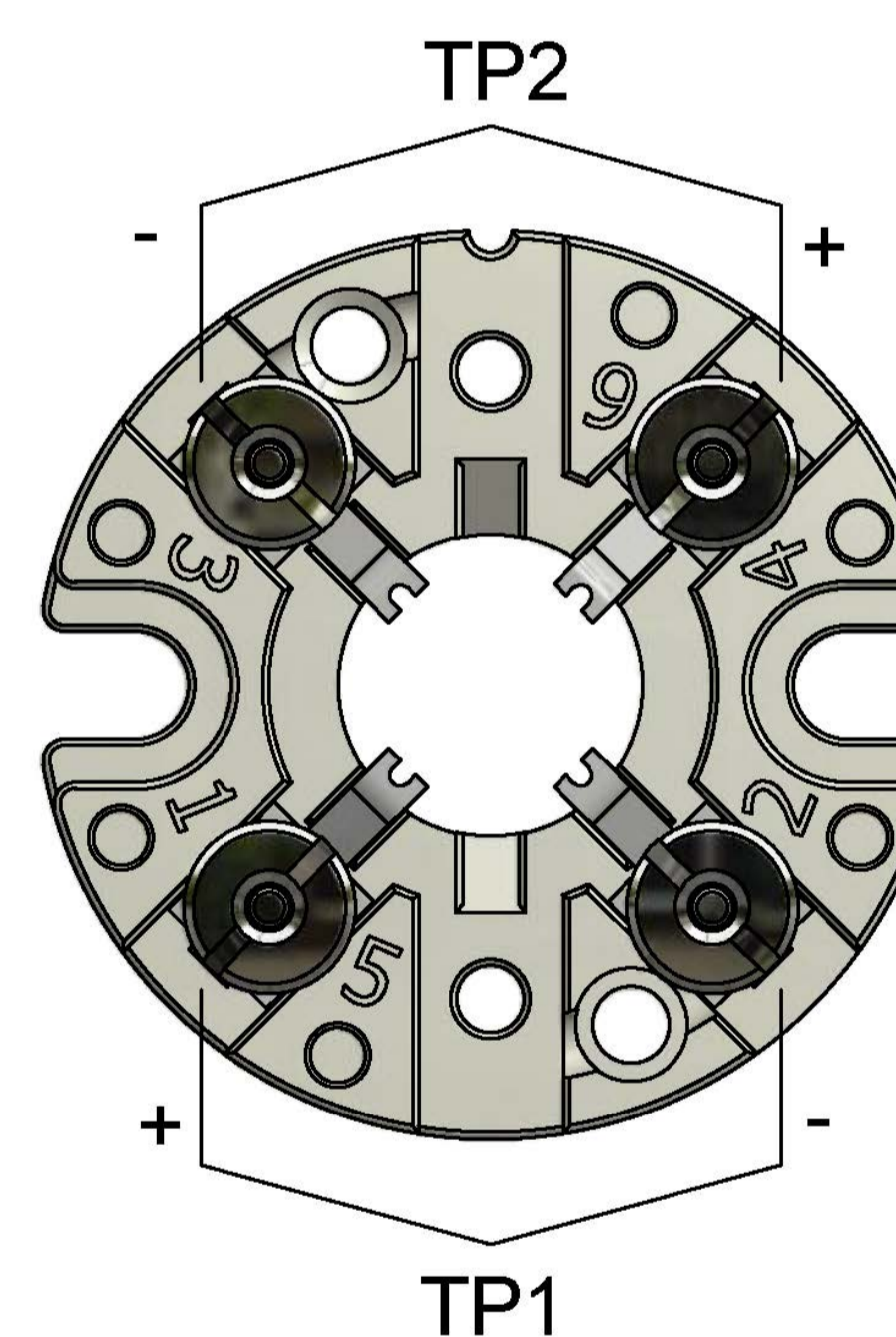
M12 Insert socket  
4 terminals



M12 Insert socket  
2 thermocouples



standard socket  
1 thermocouple



standard socket  
2 thermocouples