

Ex-resistance temperature detector WR15 model 8 (2GoH)

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.

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-C.

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 diameter 9 or 11 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- or 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 \varnothing 3 mm and more than 4 inner conductors, \varnothing < 3 mm, \varnothing > 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 bis 6) the following demension are acceptable:

outer diameter(D) \geq 6,0 mm, wall thickness(S) \geq 1,0 mm,

ground high \geq 1,3 x S [mm]. Fitting length (EBL) max. 8000 mm.

- **Optional** use of temperature sensors combined with customer-specific approved Ex i transmitters, Ex i digital display and / or a connecting cable, the proof of the Intrinsic safety required. Ex i-certificate and operating instructions of the additional components are then part of the Ex documentation.

- **Optional materials for gas and dust explosion protection:**

please see ex-operating instructions chapter 4 X-Conditions

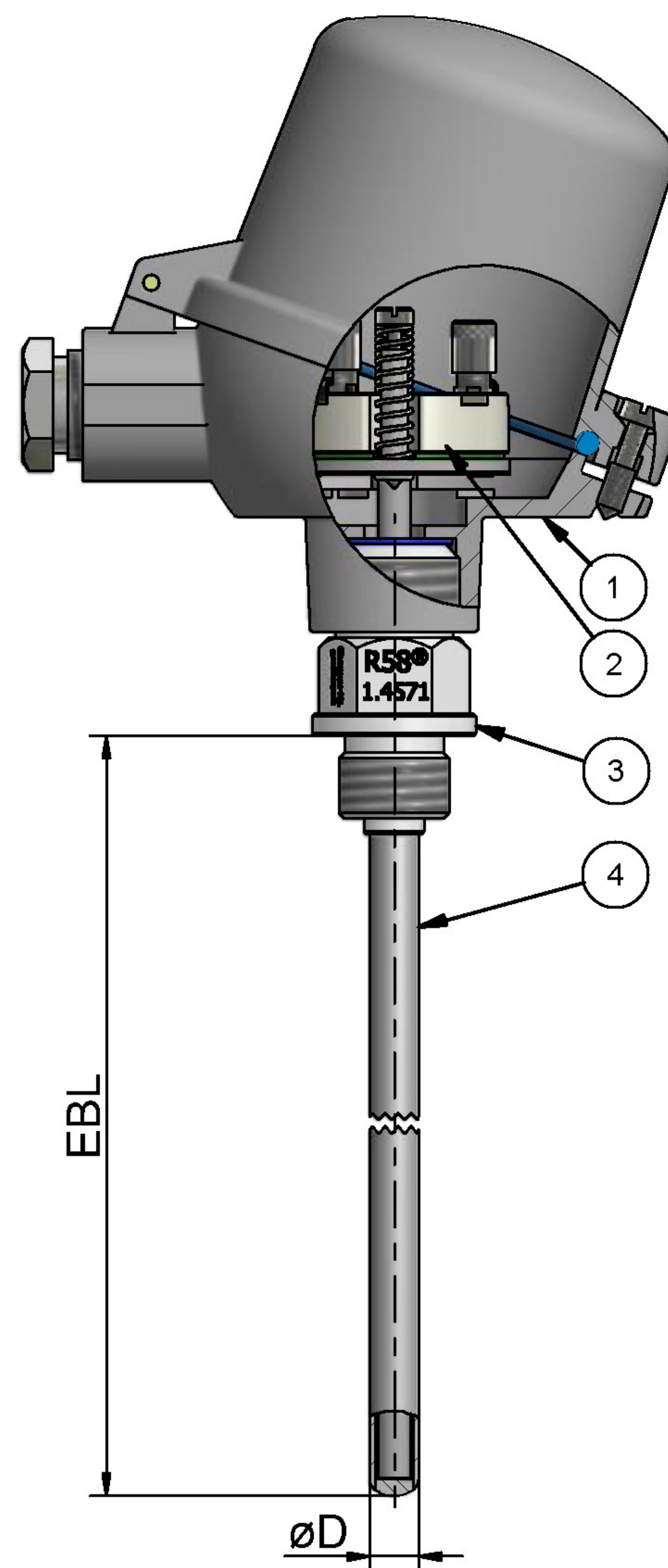
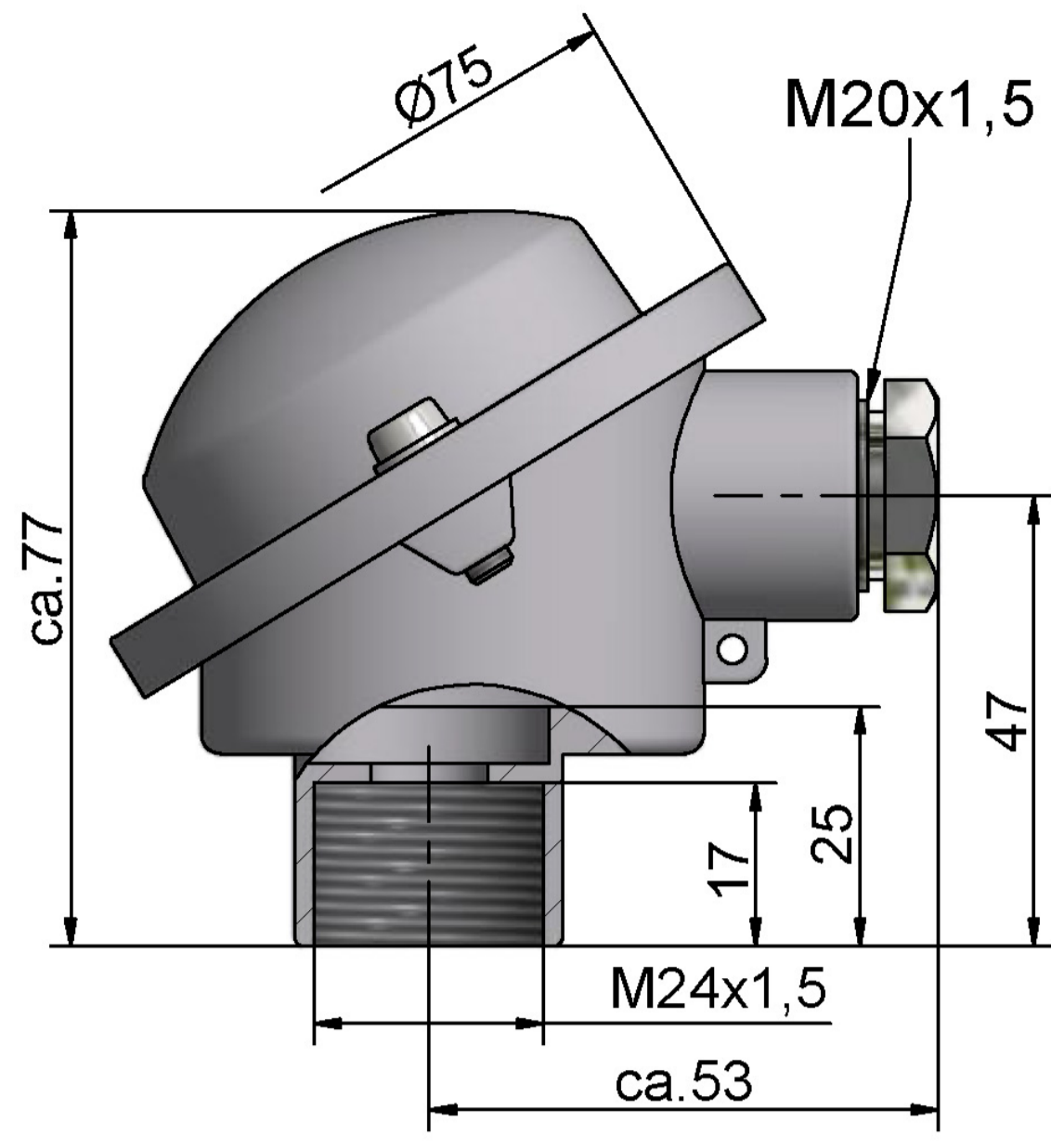


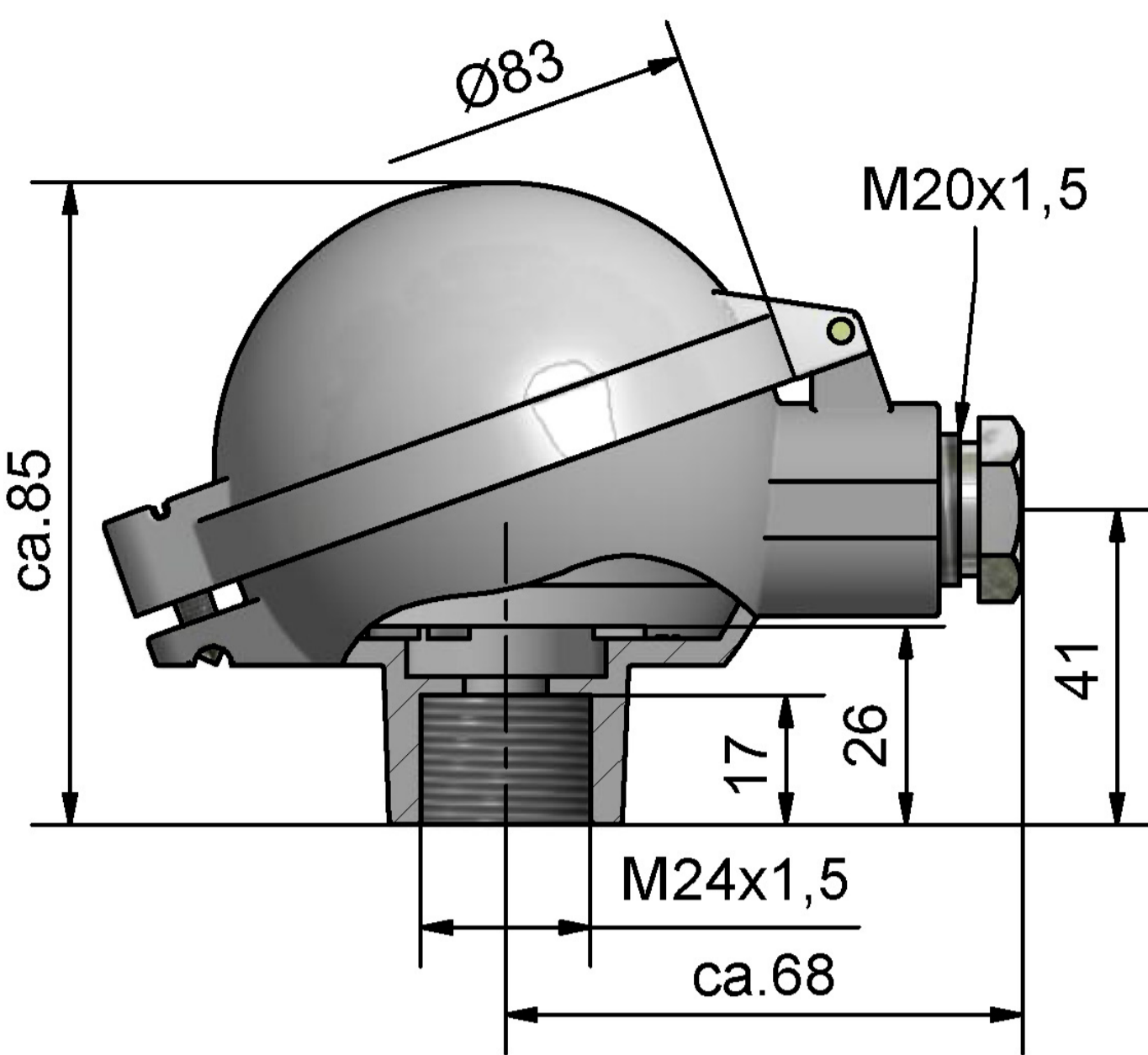
fig. 1

Optional connecting heads / circuit diagram

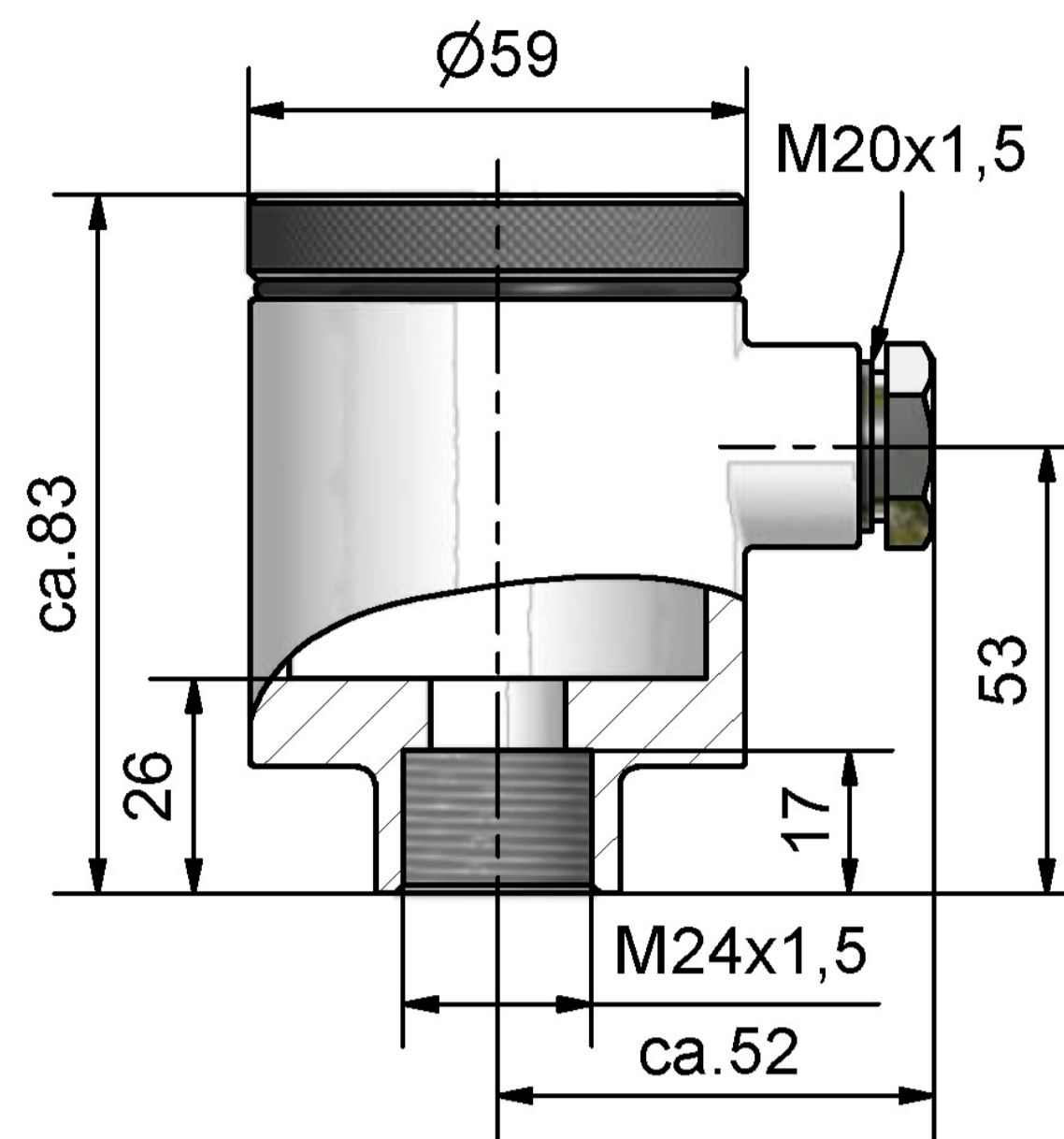
Alternativ zur Kabelverschraubung ist ein M12 Einbau - Steckverbinder möglich



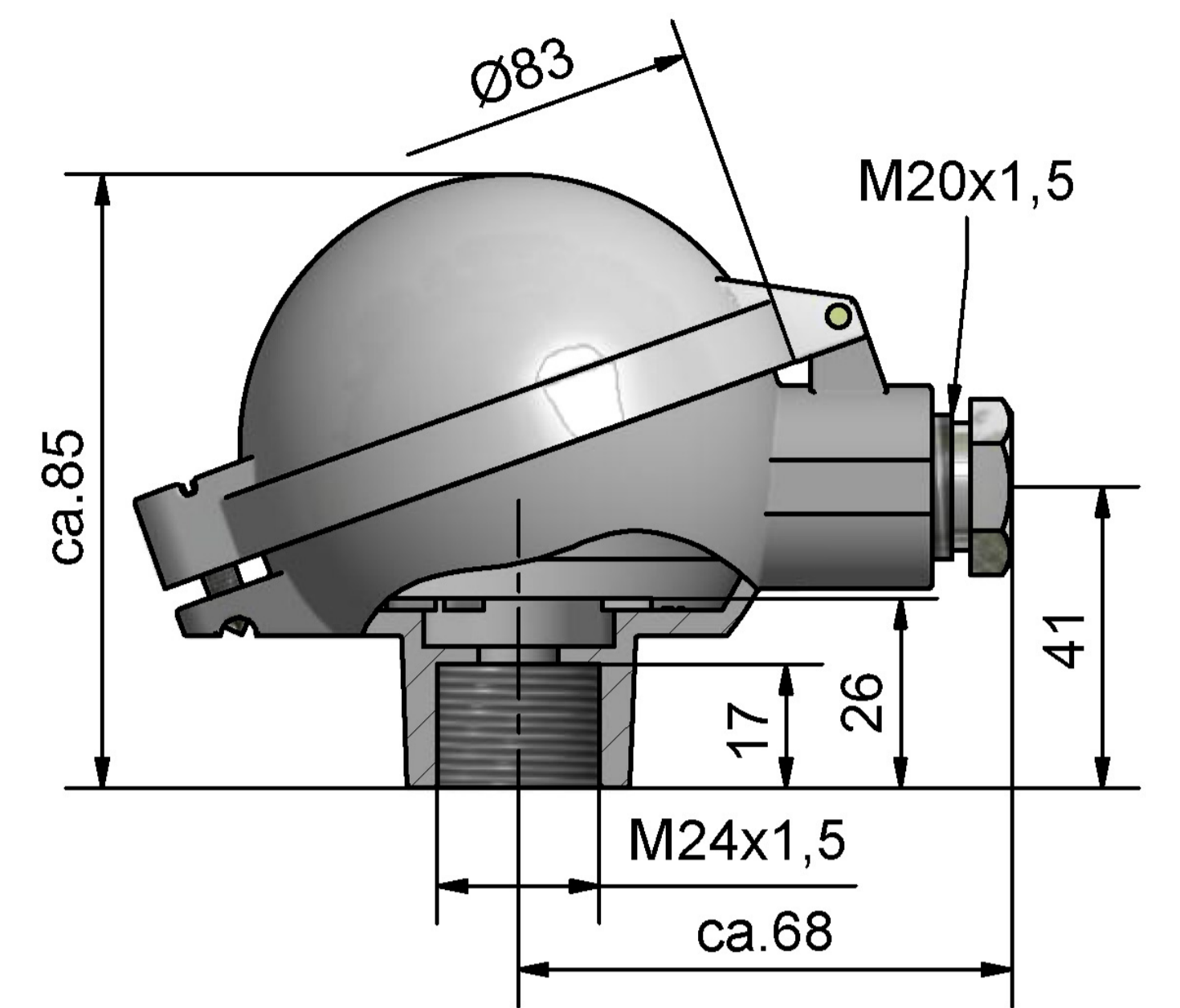
connection head model B-G12
M24 x 1,5



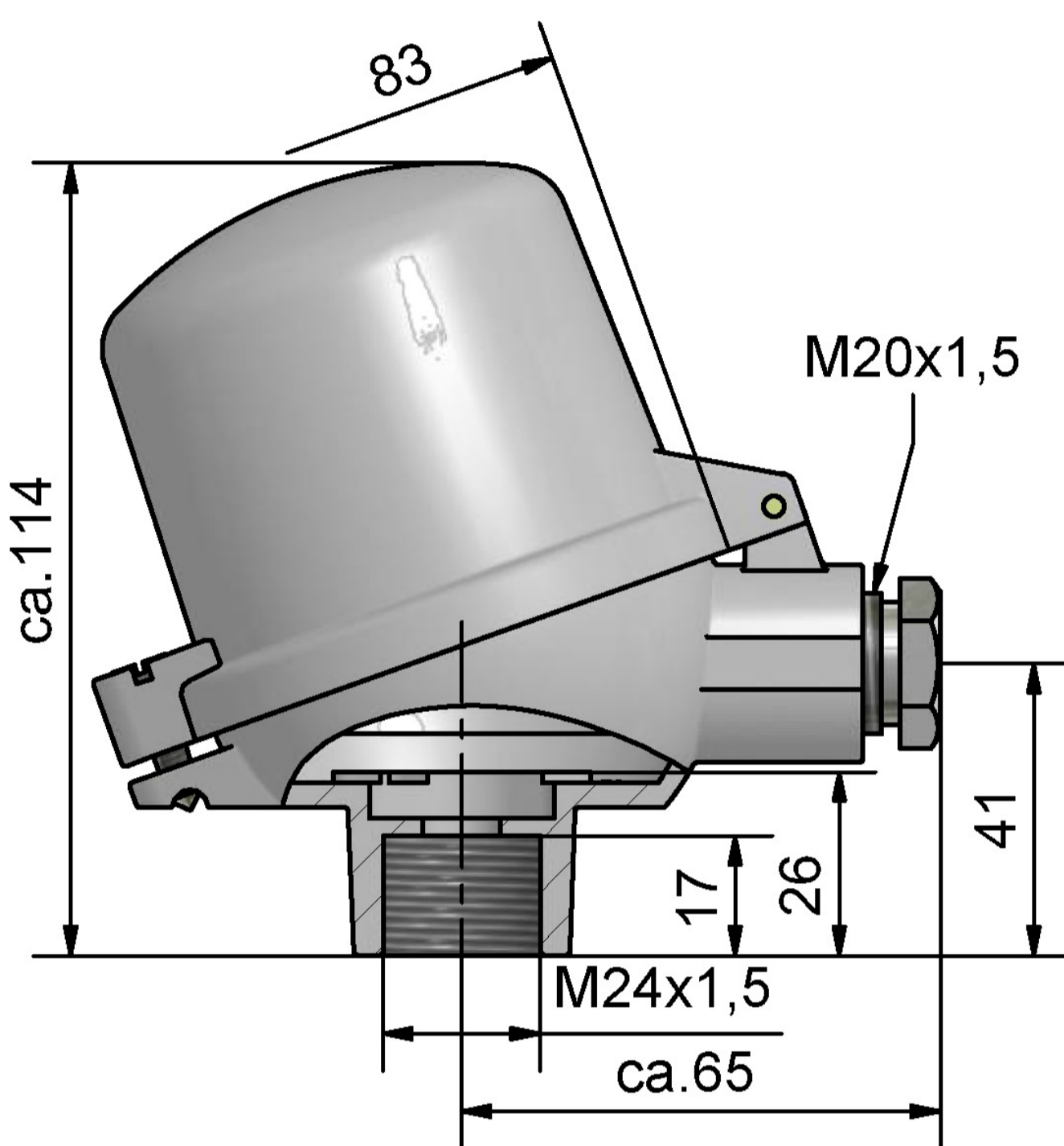
connection head model B-KL
M24 x 1,5



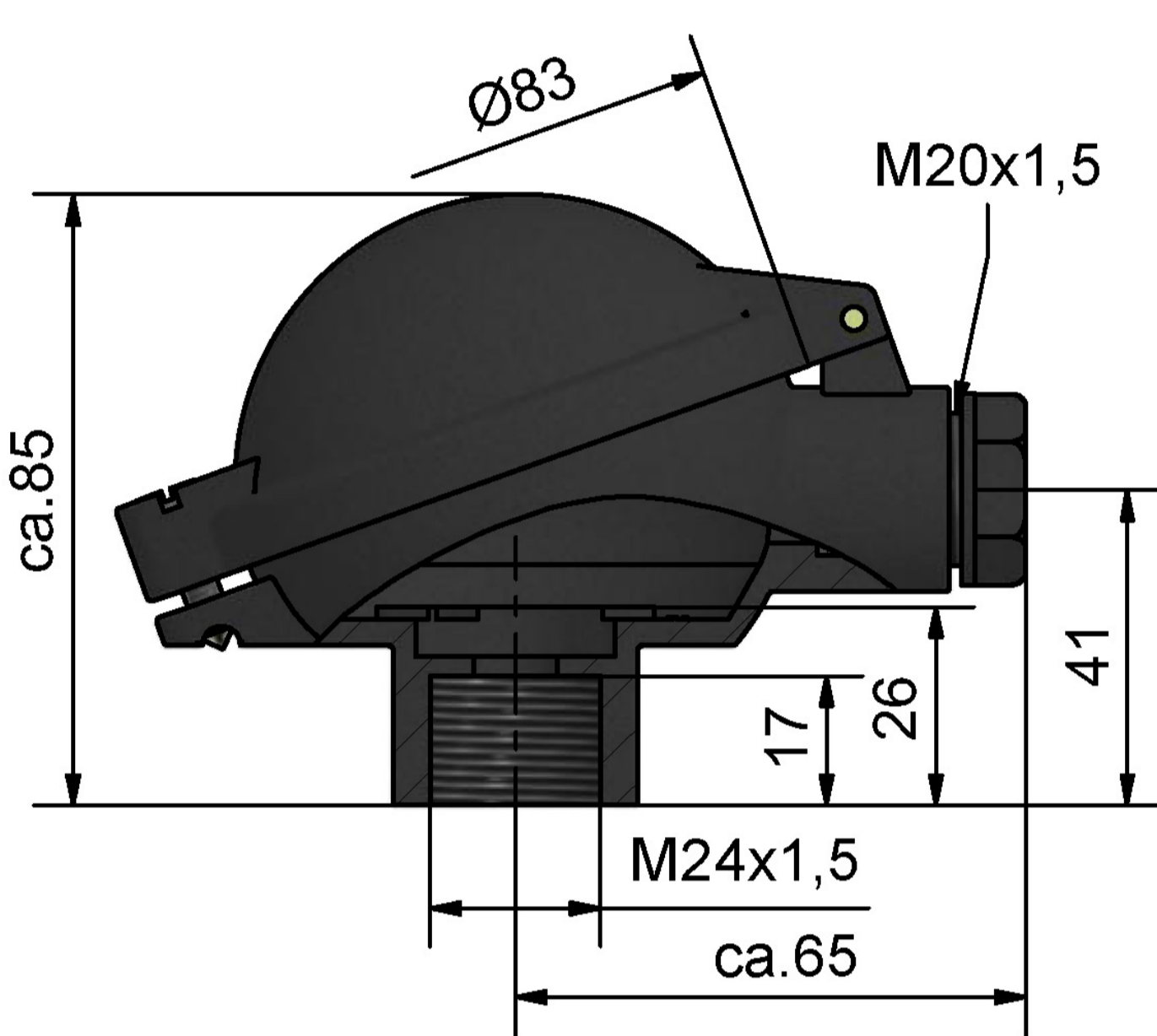
connection head model B-VA
M24 x 1,5



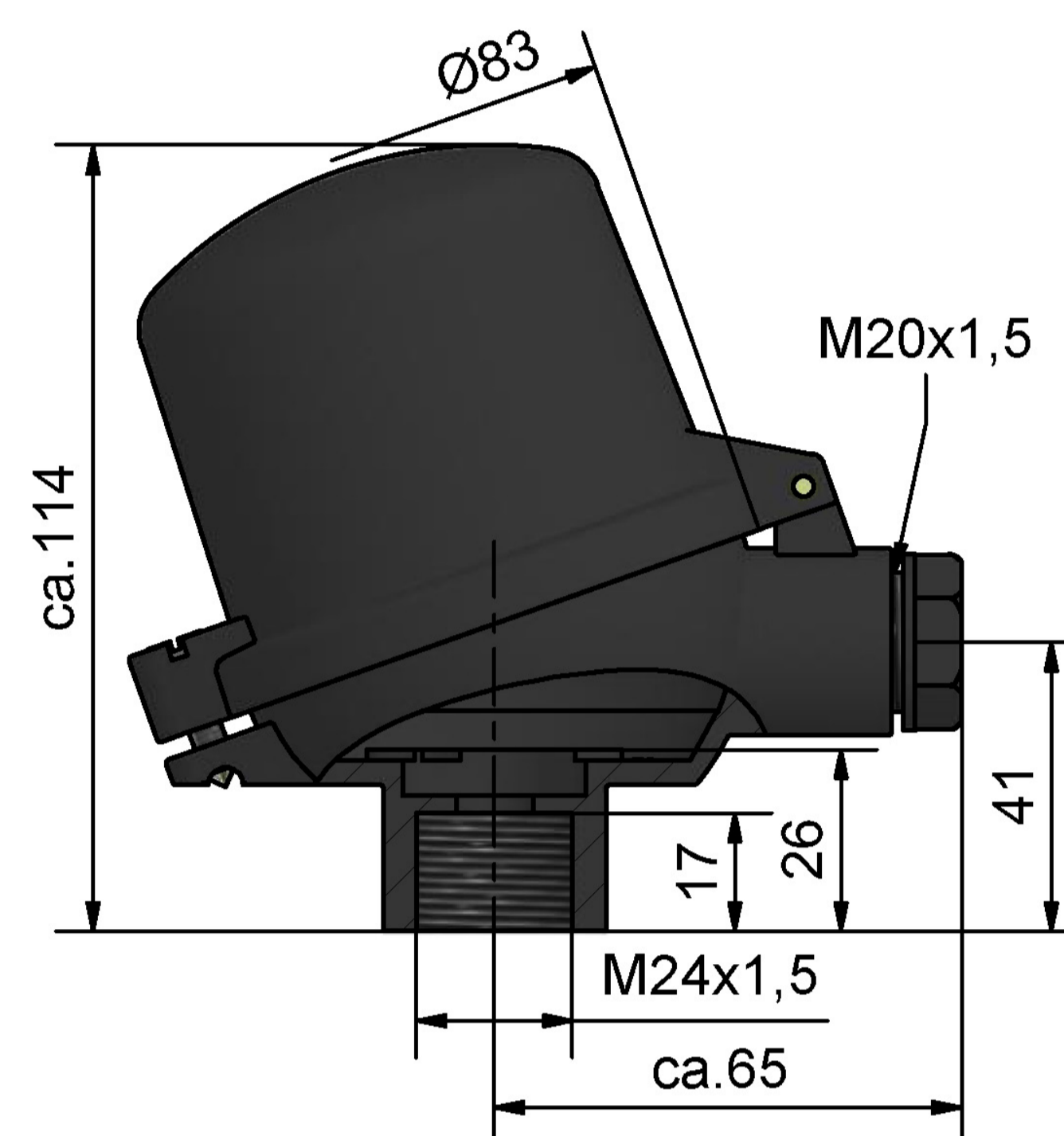
connection head model B-KL
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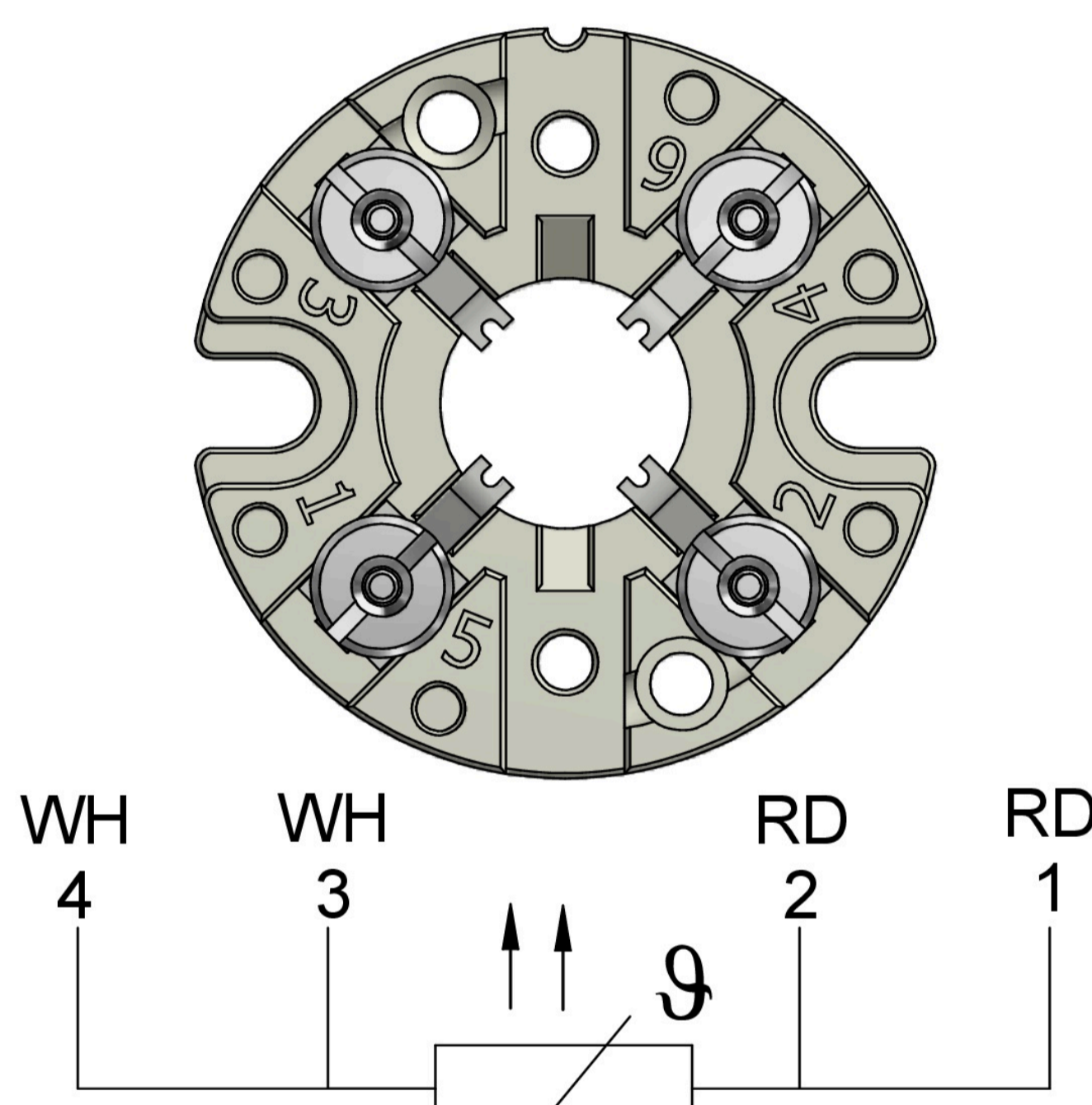
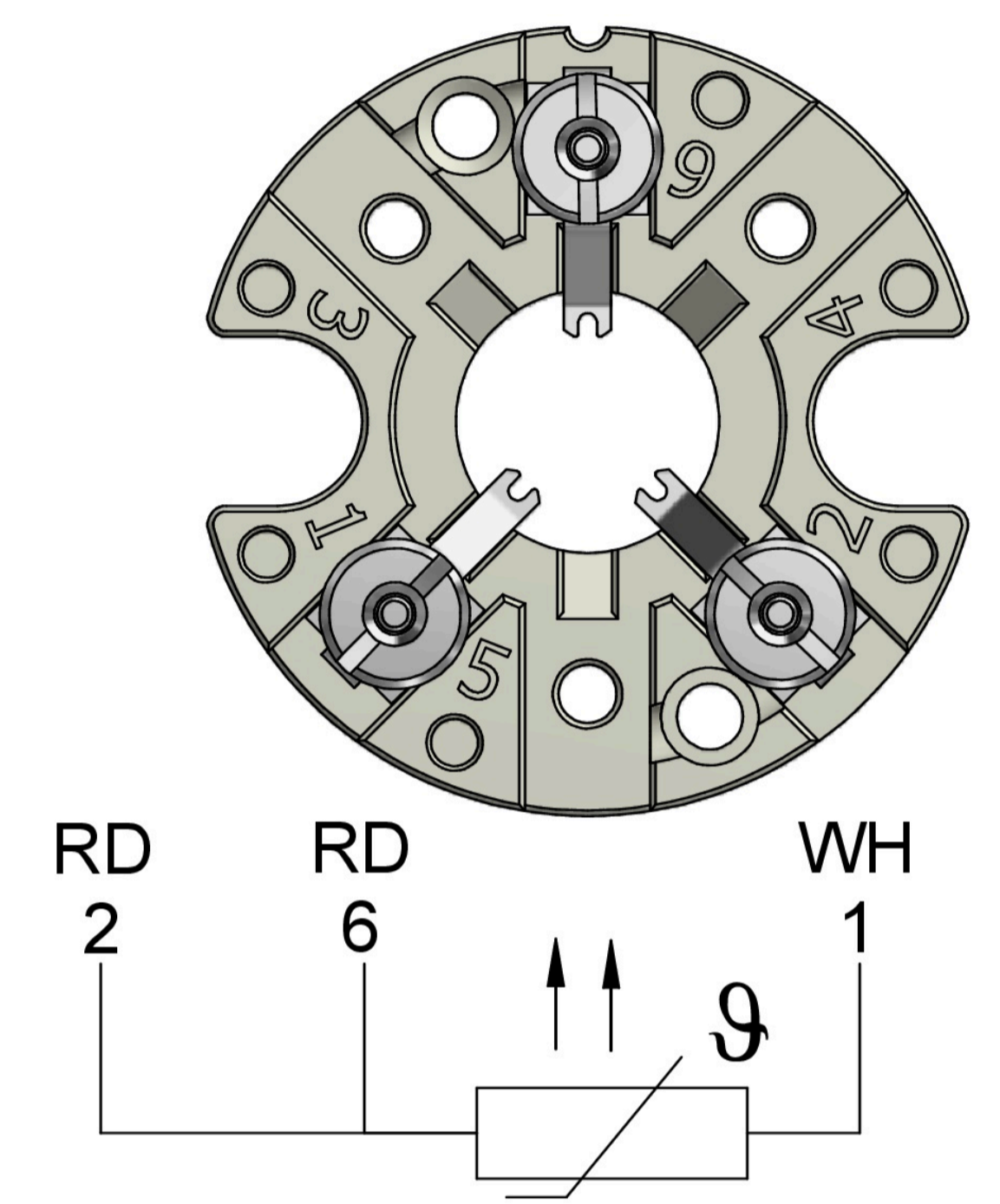
connection head model BA-KLH
M24 x 1,5



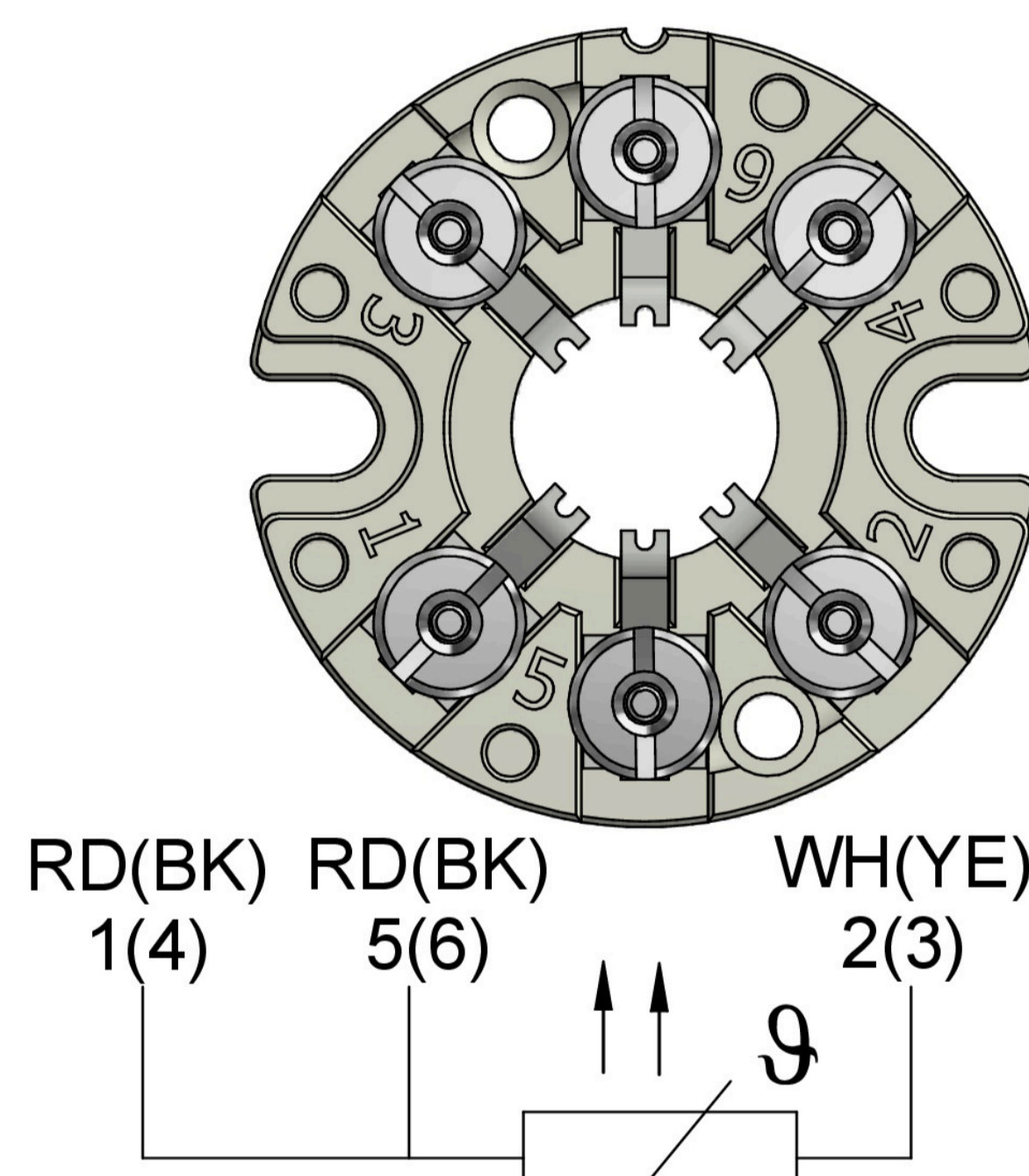
connection head model B-KUKL
M24 x 1,5



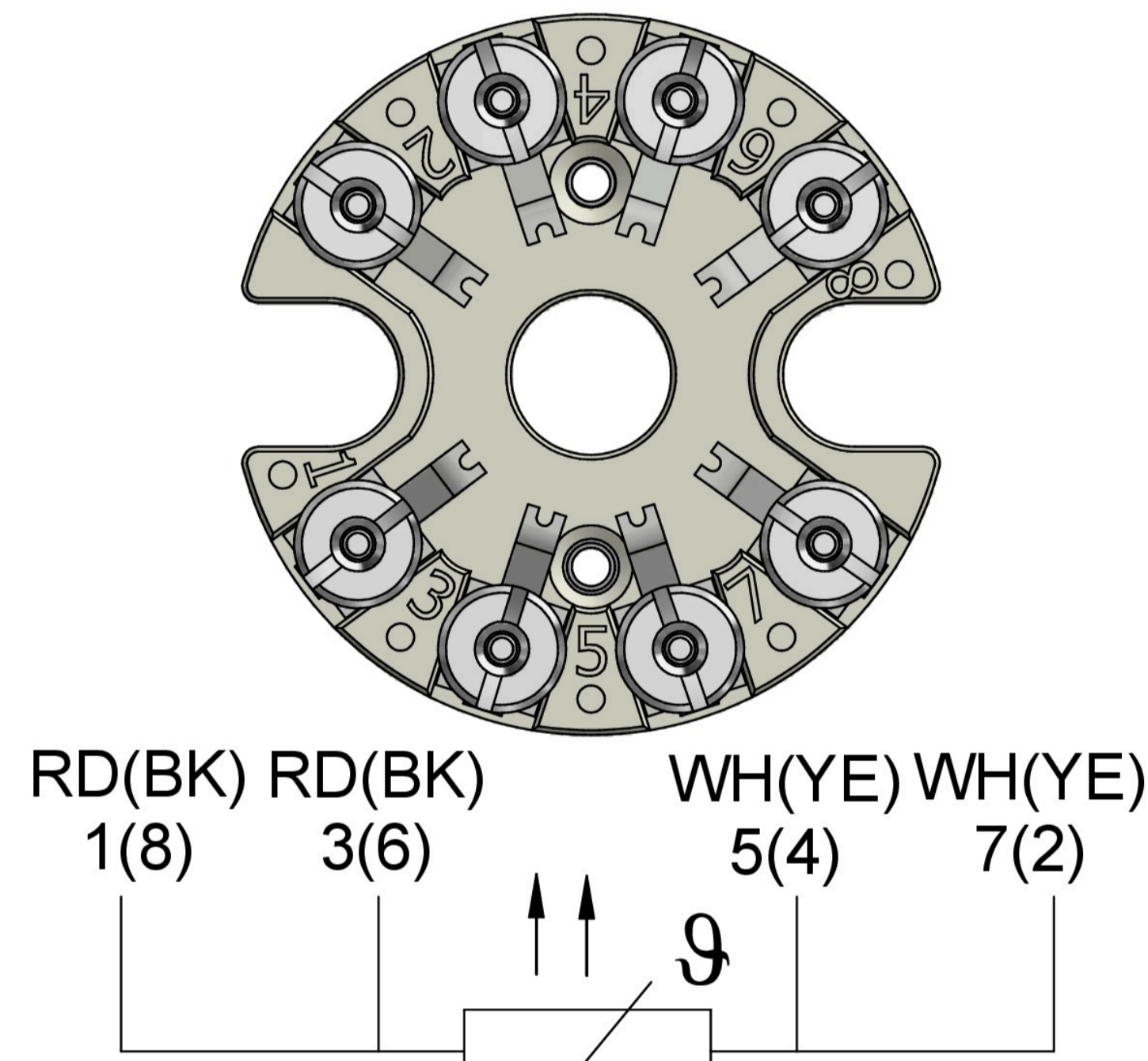
connection head model B-KUKHL
M24 x 1,5



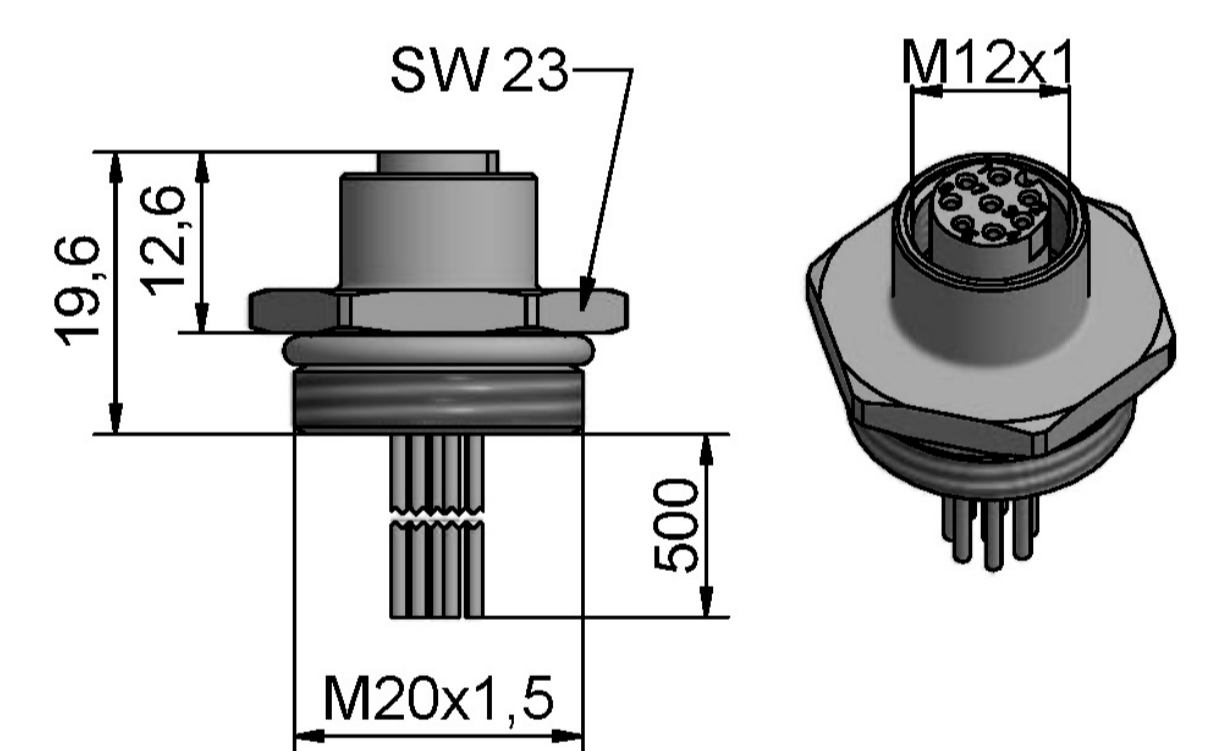
terminal base
1 x PT100 4 wire



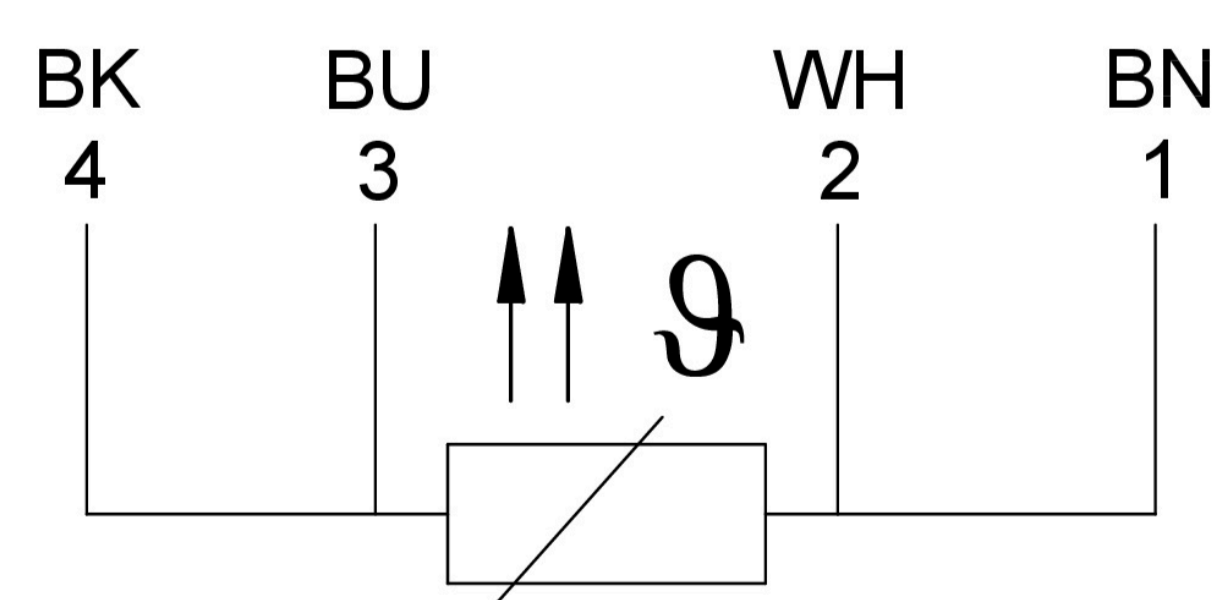
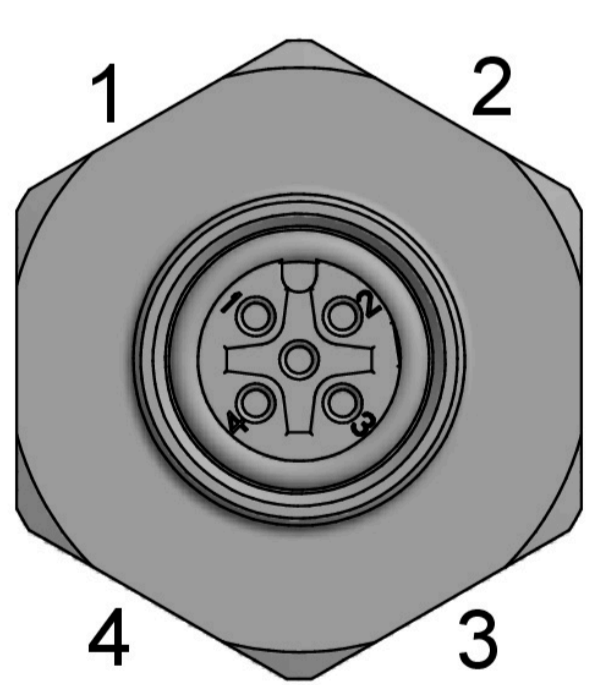
terminal base
2 x PT100 3 wire



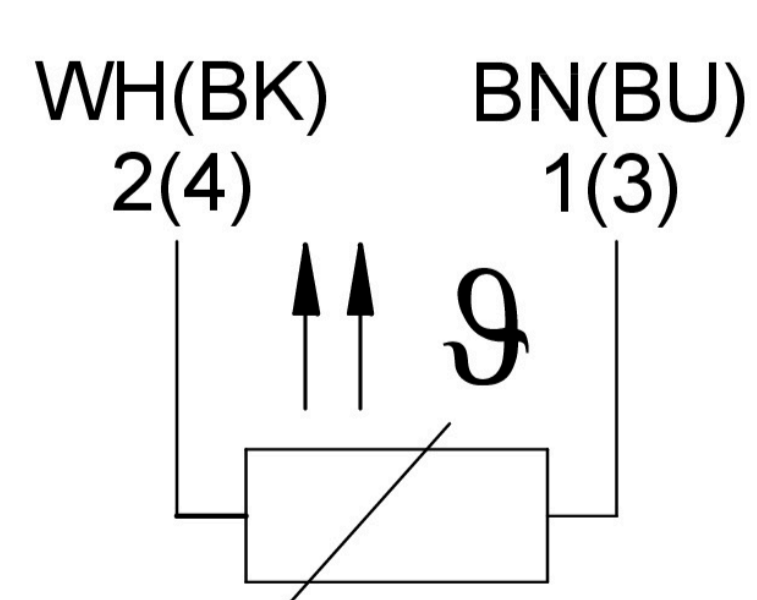
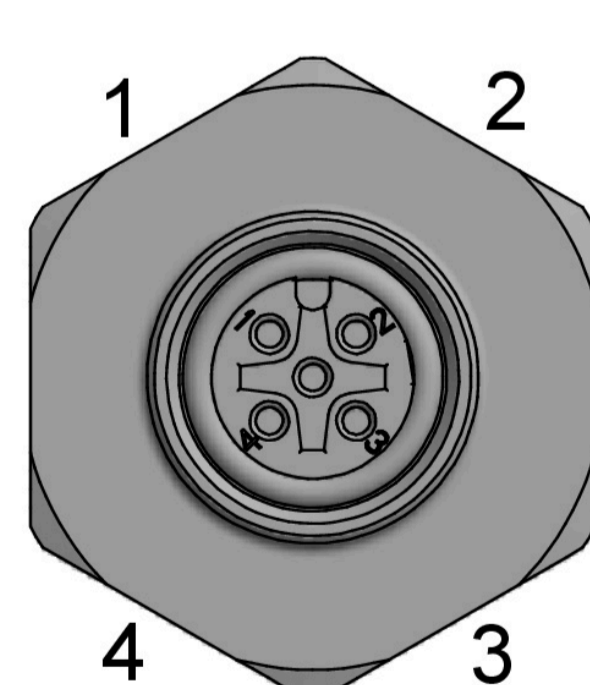
terminal base
2xPT100 4-wire



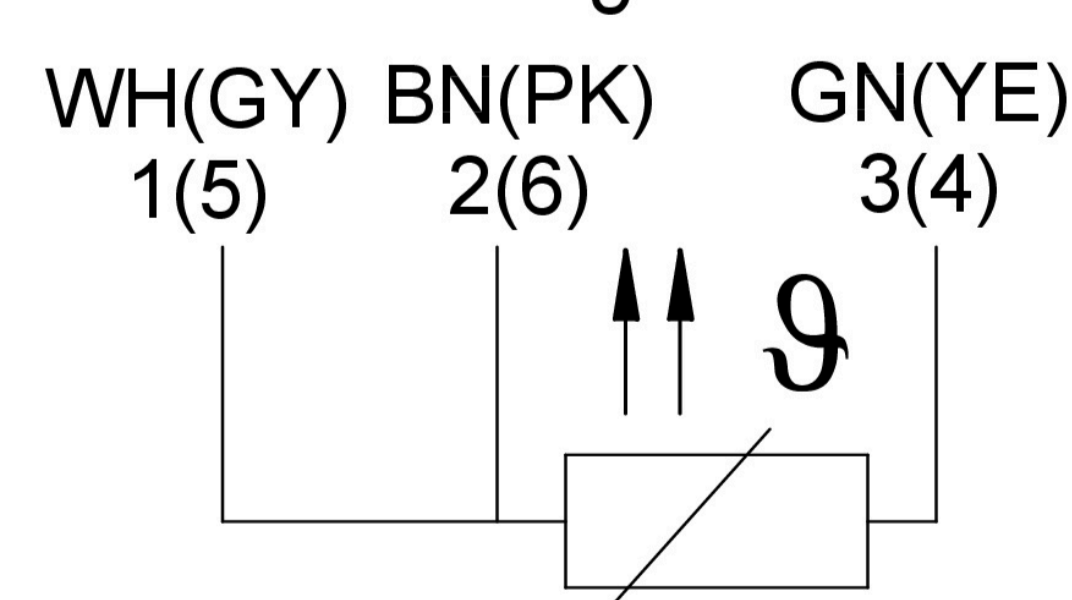
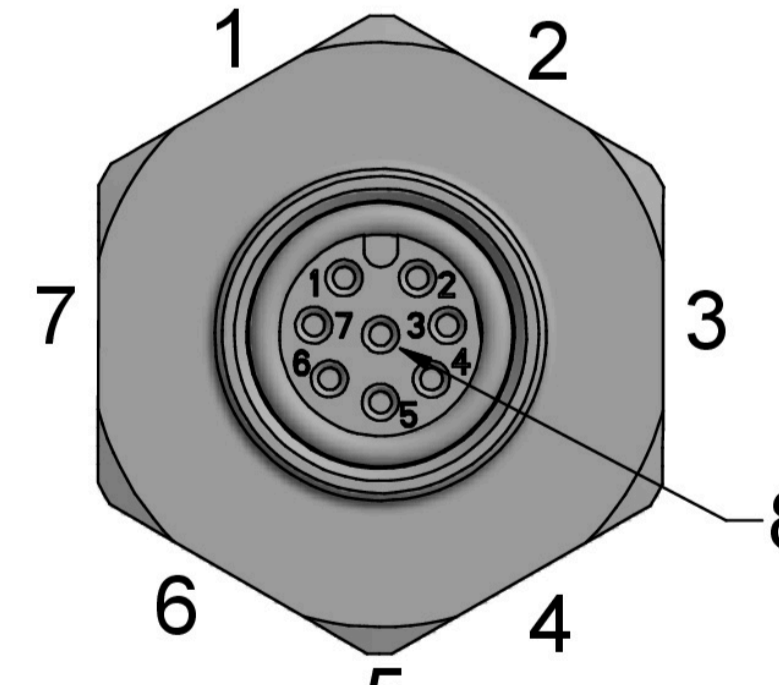
M12 insert socket
8-terminal



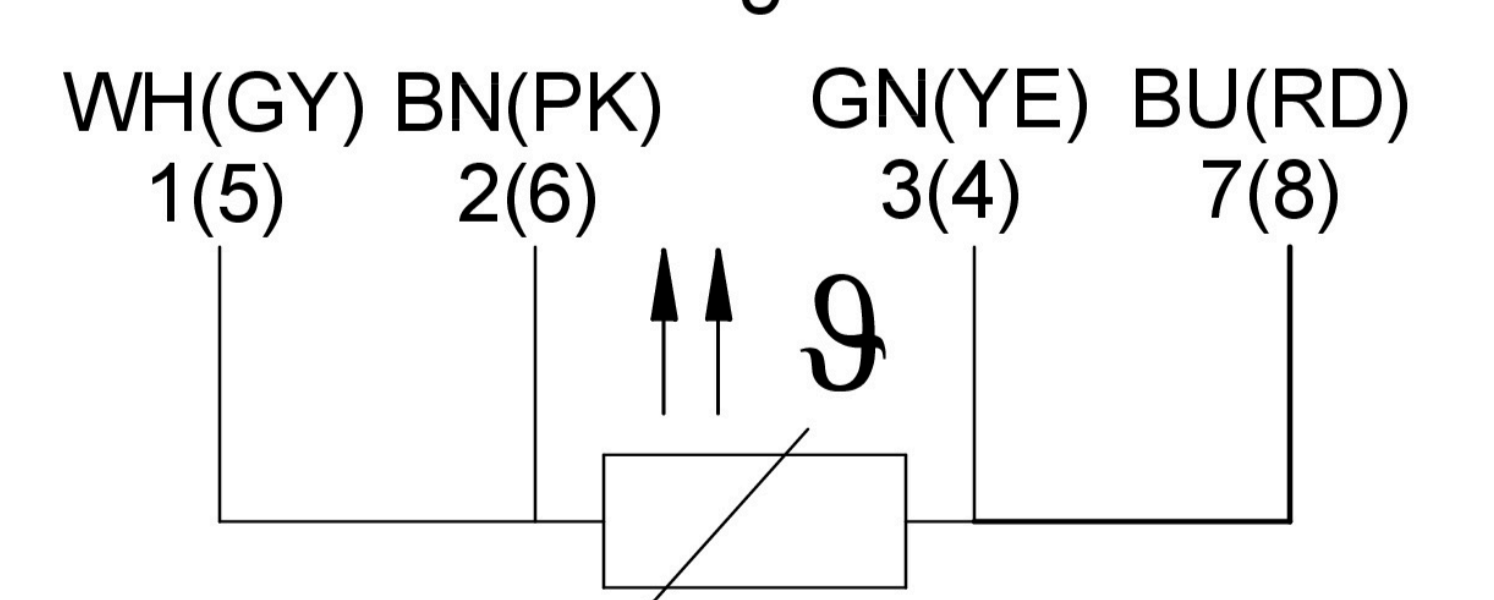
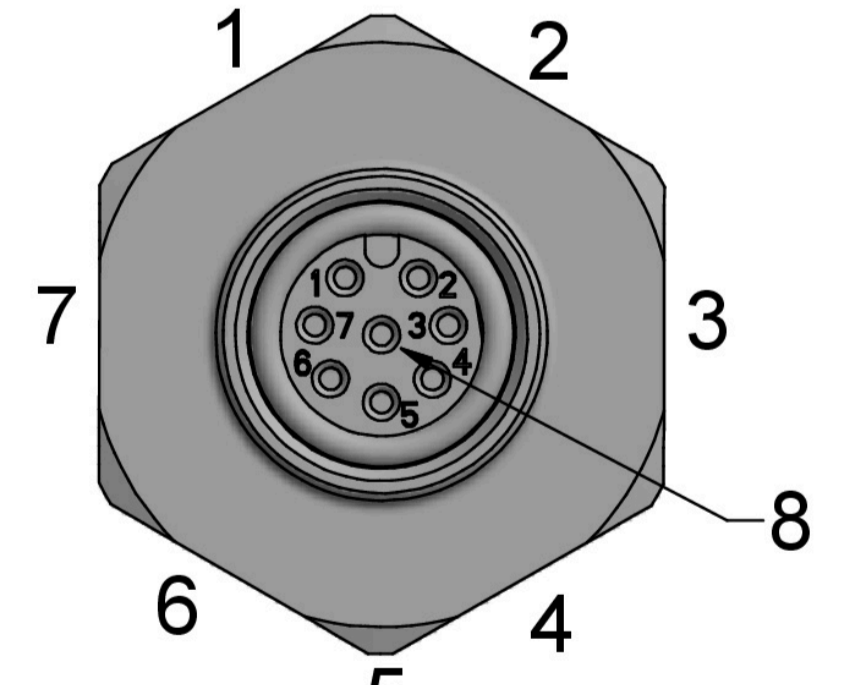
M12 insert socket
1 x PT100 4 wire



M12 insert socket
2 x PT100 2 wire



M12 insert socket
2 x PT100 3 wire



M12 insert socket
2 x PT100 4 wire