

# Resistance temperature detector R11 model RKW 3

## RTD cable- sensor model RKW 3 with 118° measuring tip and bayonet- fastening

### 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. The compression spring / bayonet combination guarantees a very good heat transfer due to the contact pressure.

#### Application area:

Uncritical process conditions at plant engineering, hot runner mould, synthetic material industry.

**Stock-number-code: 1R11-W3**

### Technical datas

- **Measuring insert** (fig.1/2 + 5) cable and sensor are directly connected, isolated and mounted in the sensor sleeve.
- **Sensor:**
  - thin film according to IEC / EN 60751,
  - in 1 x 2-, 1 x 3-, 1 x 4-, 2 x 2-, 2 x 3- or 2 x 4 wire.
  - Recommended operating temperature on the measuring tip up to 350 °C.
  - Accuracy class according to IEC / EN 60751
- **Operating temperature**
  - 50°C up to + 500°C for thin film sensors,
  - 200°C up to + 600°C for ceramic sensors
  - 200°C up to + 450°C for glass sensors.
- **Sensor sleeve** (fig. 1/5)
  - Standard material 1.4305
  - Standard diameter 6 or 8 mm with 118°C tip
  - Standard Length at Ø 6 in 12 or 20 mm, at Ø 8 in 12 mm
- **Pressure spring** (fig. 1/3): Standard Length 195 mm, other on request.
- **Bayonet nut** (fig. 1/4) depended on sleeve:
  - for spring- diameter (SD) 6 mm type RN (article-No. 101350) or 8 mm (article-No. 101351), (SD) 6 mm type RK (article-No. 101348) or 8 mm (article-No. 101346), other on request.
- **Optional with screw nipple** dependend on bayonet nut (see page 2):
  - Type RN: Ø 14 mm, IØ 8,5 mm, SW 17, L=30 mm: thread - article-No.:**  
G3/8" - 101285 / G1/4" - 101290 / M14x1,5 - 101286 / M12x1 - 101301 / M12 - 101294.
  - Typ RN: Ø 14 mm, IØ 8,5 mm, SW 17, L=60 mm: thread - article-No.:**  
G1/4" - 101295 / M12x1 - 101296.
  - Typ RN: Ø 14 mm, IØ 8,5 mm, without SW: L in mm / thread / article-No.:**  
25 - M12x1 - 101302 / 40 - M14x1,5 - 101291 / 50 - M12x1 - 101292 / 50 - M14x1,5 - 101288 / 60 - M12x1 - 101293 / 60 - M14x1,5 - 101297 / 80 - M14x1,5 - 101298.
- **Temperature range** of the cable (fig.1/2) static cable system:
  - PVC isolated -20 °C up to 80 °C, silicone isolated -50 °C up to 180 °C, FEP isolated -100 °C up to 205 °C, PFA with VA shield -190 °C up to 250°C, PTFE isolated -100 °C up to 260 °C, Gls isolated shield -50 °C up to 350 °C.
- **Temperature range** of optional plug connector (fig.1/1):
  - Compensation plug connector (type B) up to 200 °C, Lemo up to 200 °C and M12 up to 85 °C.

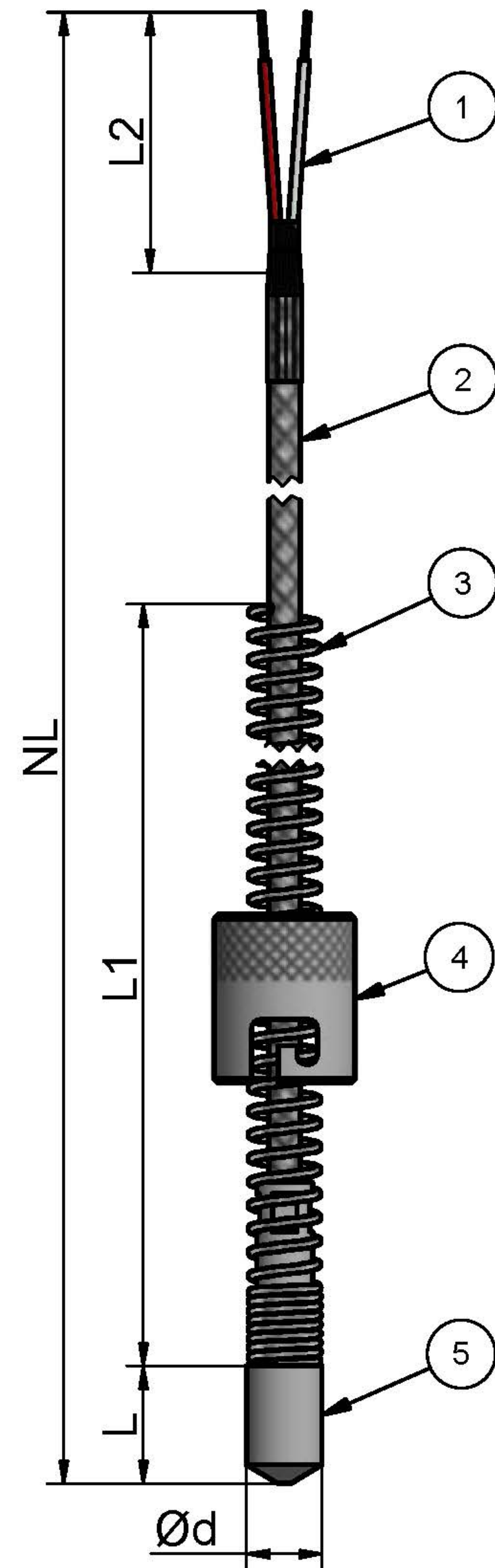
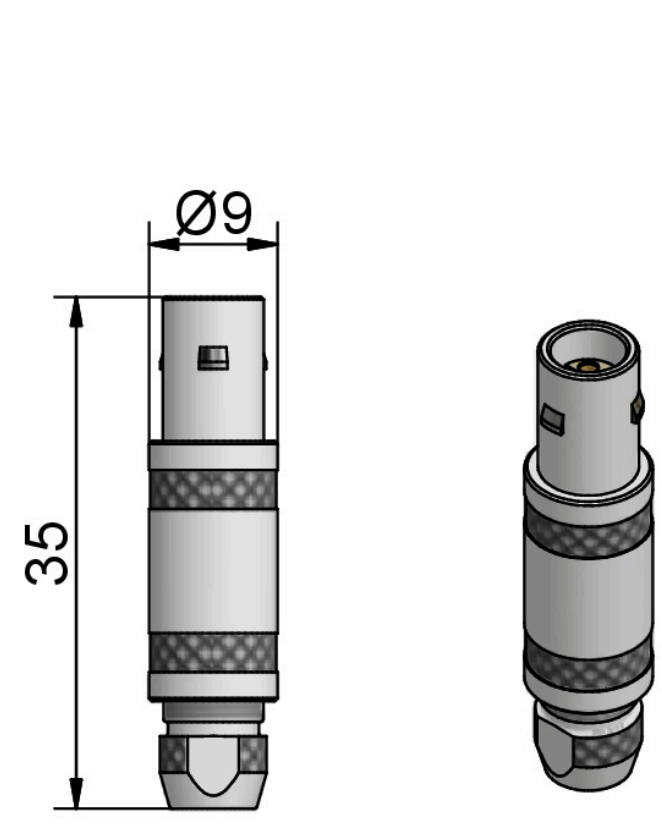


fig. 1

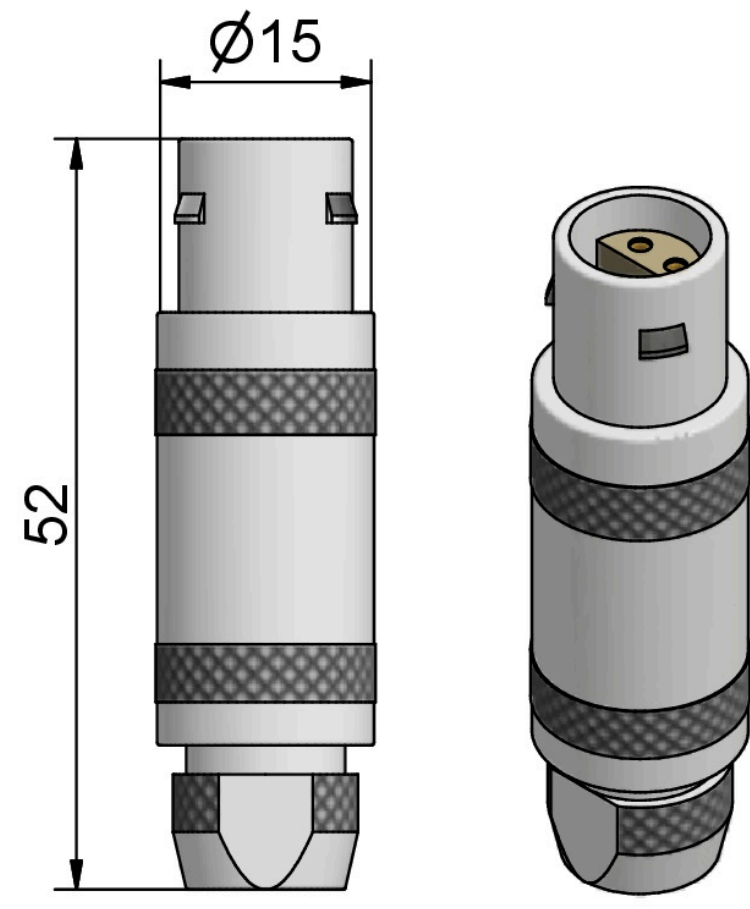


# Optional plug connector

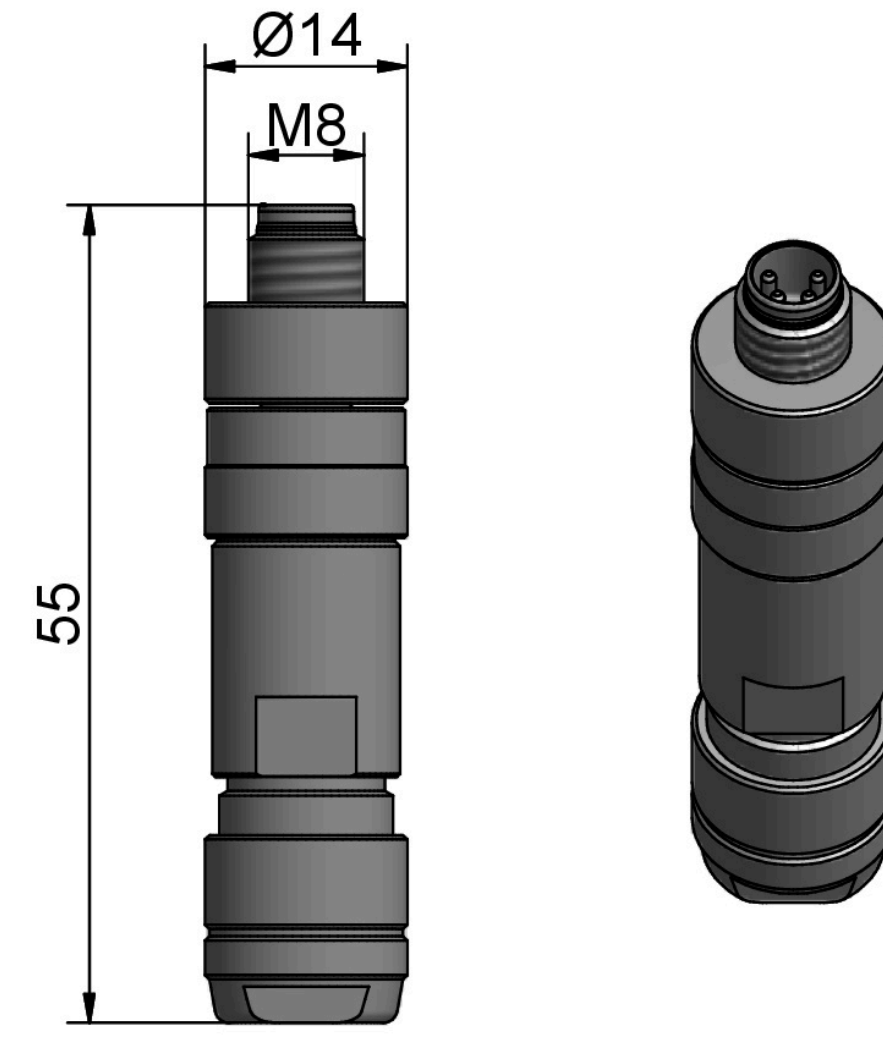
Examples of plug connectors with wiring diagram:



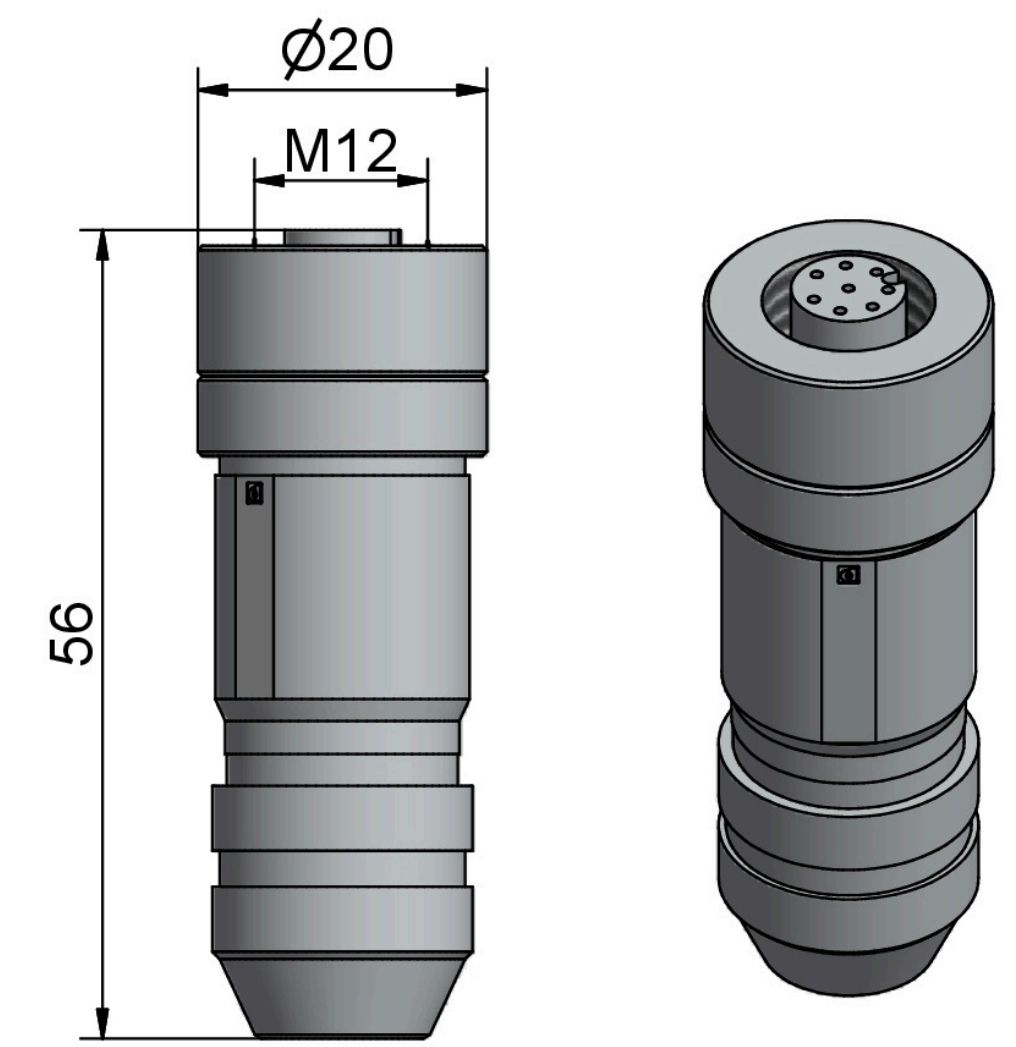
Lemo plug size 0



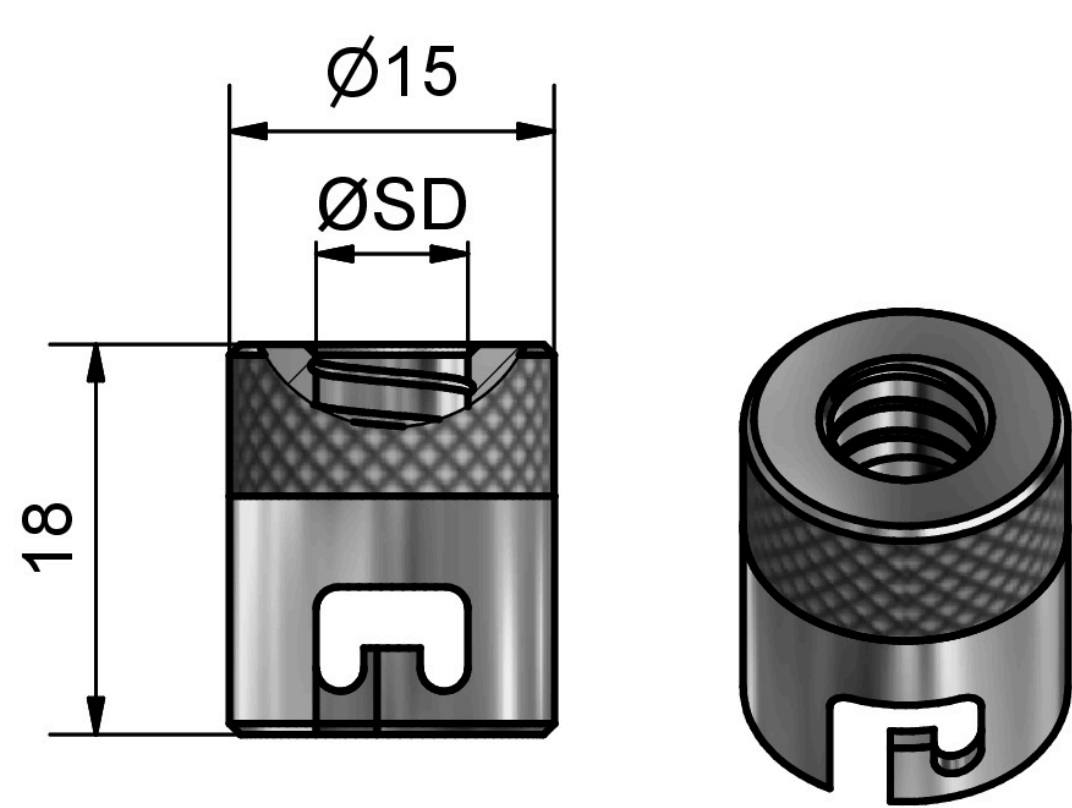
Lemo plug size 2



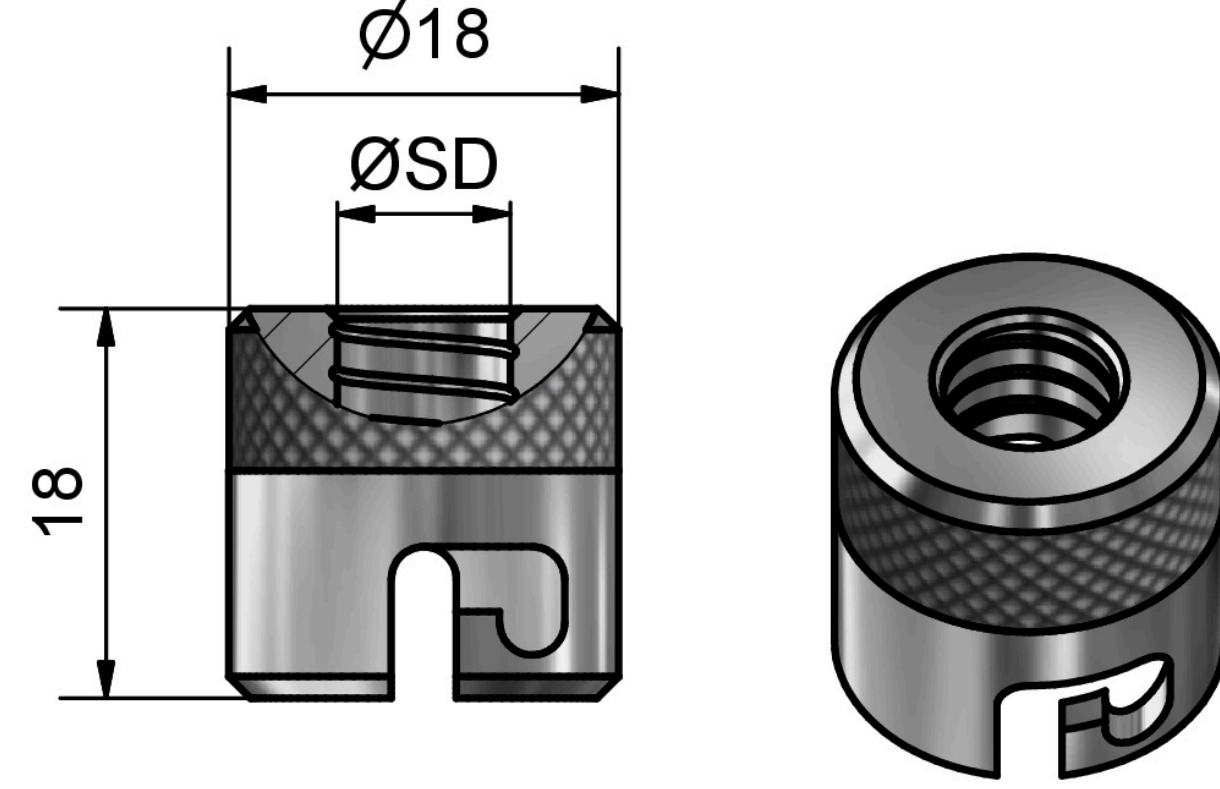
M8 plug 4 - terminal screened



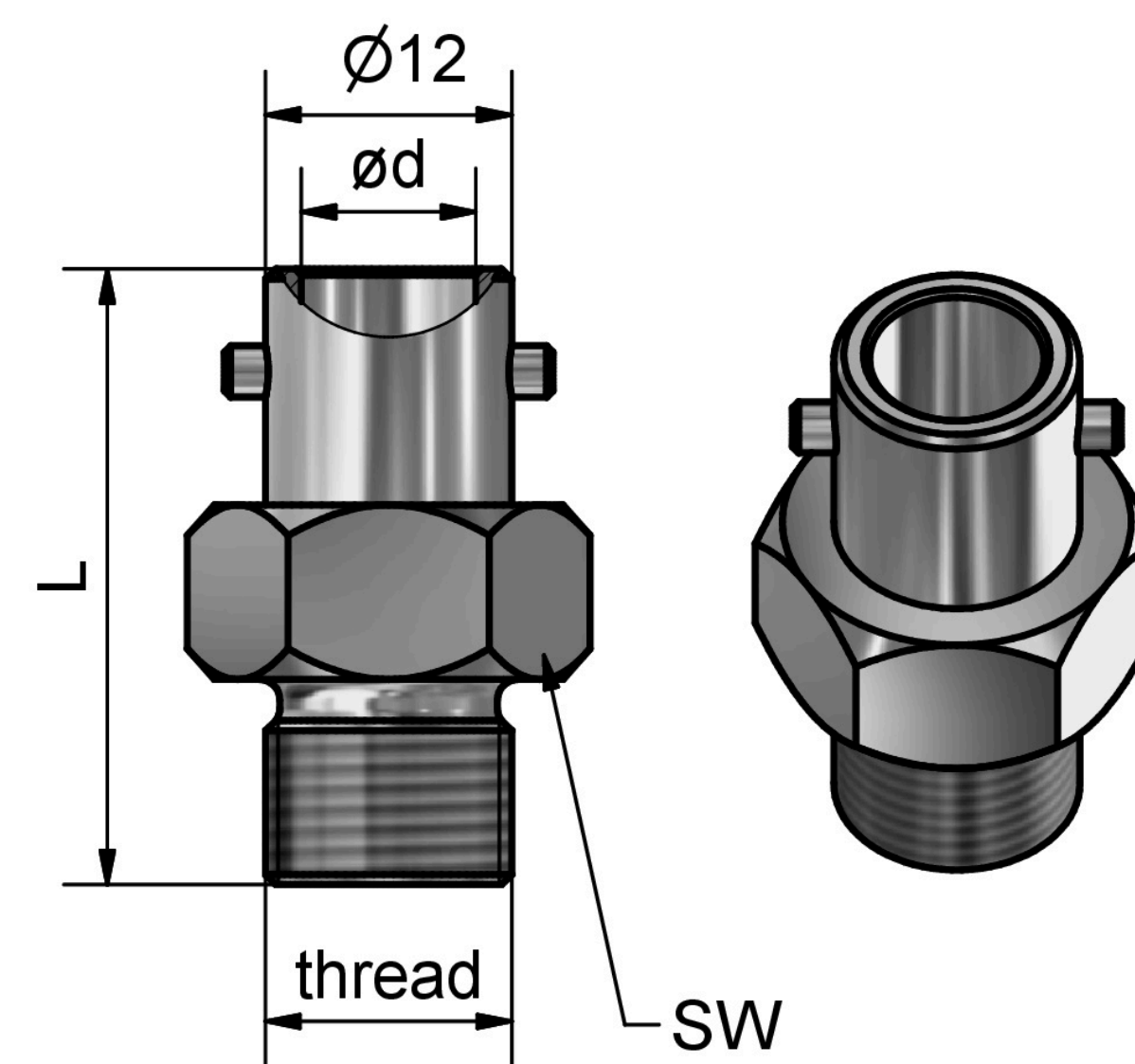
M12 socket 8 - terminal screened



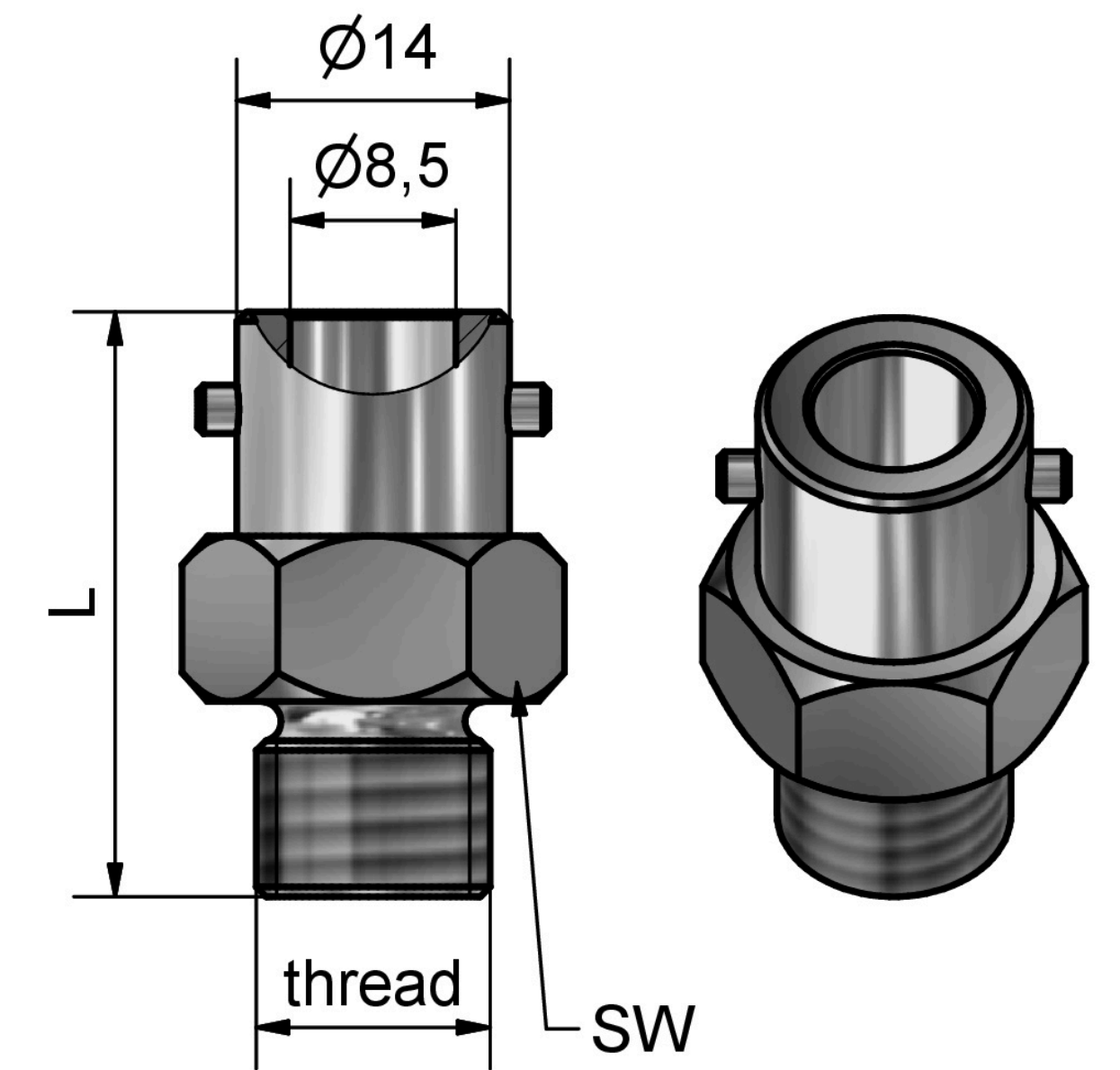
bayonet cup type RK



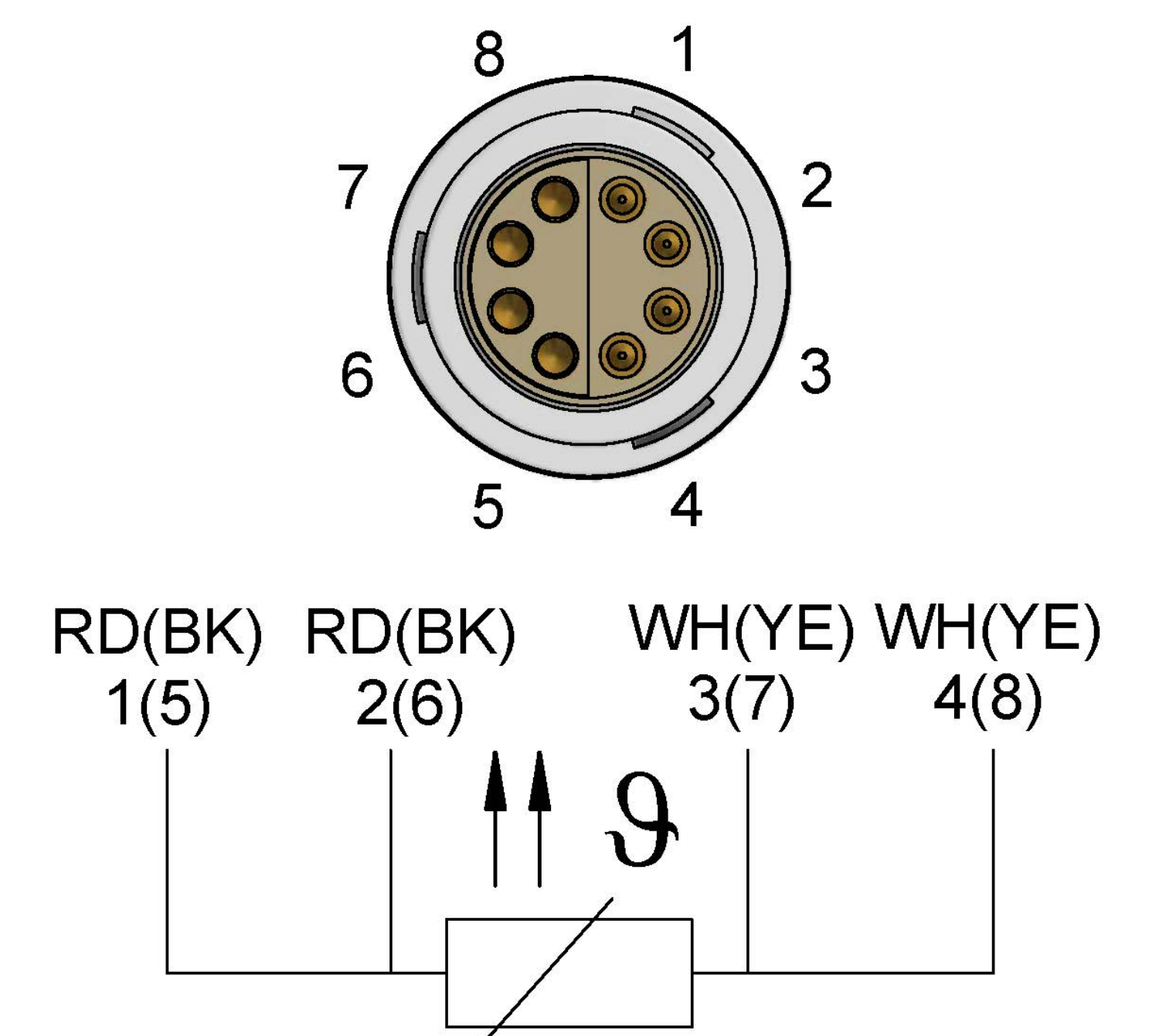
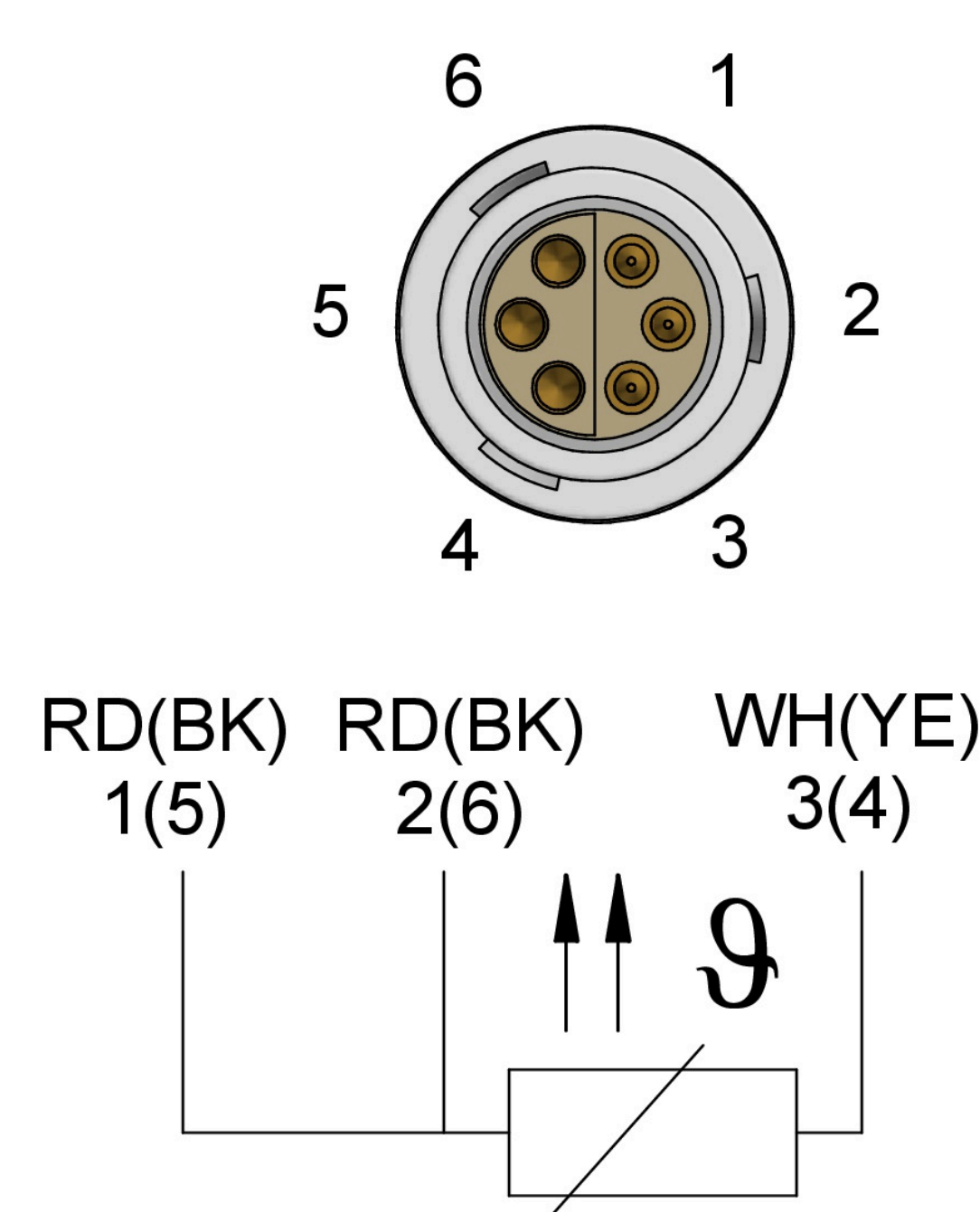
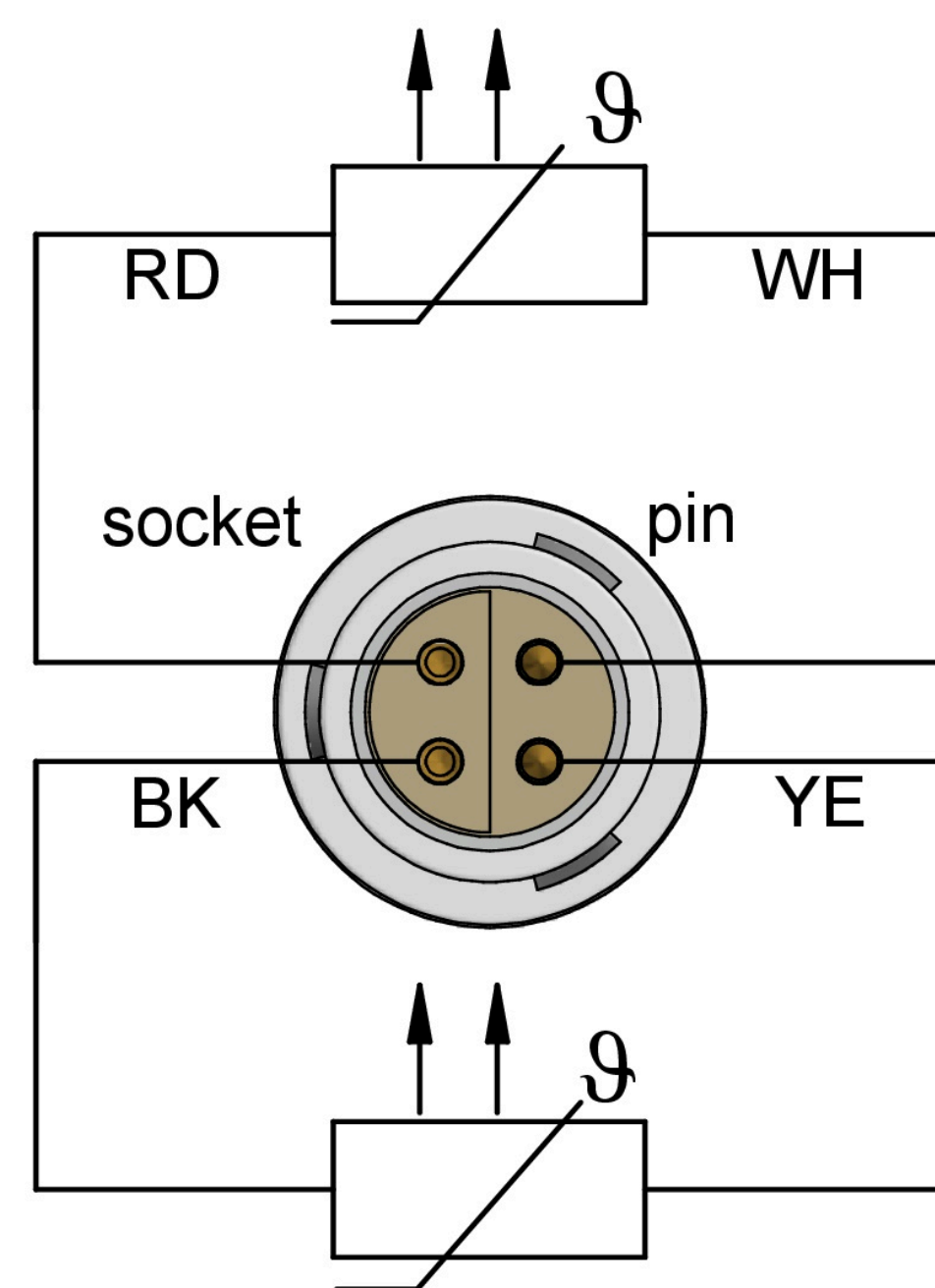
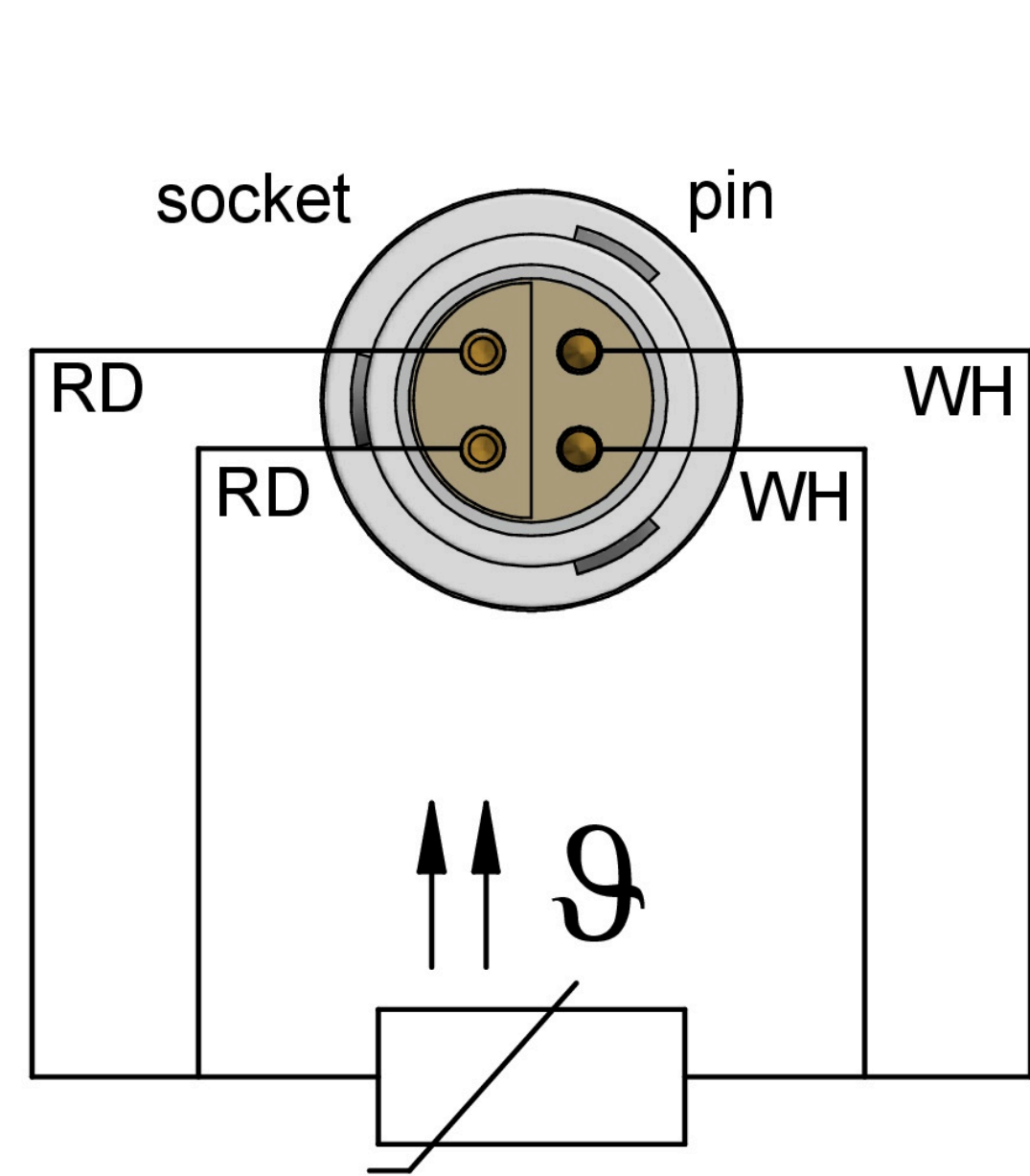
bayonet cup type RN



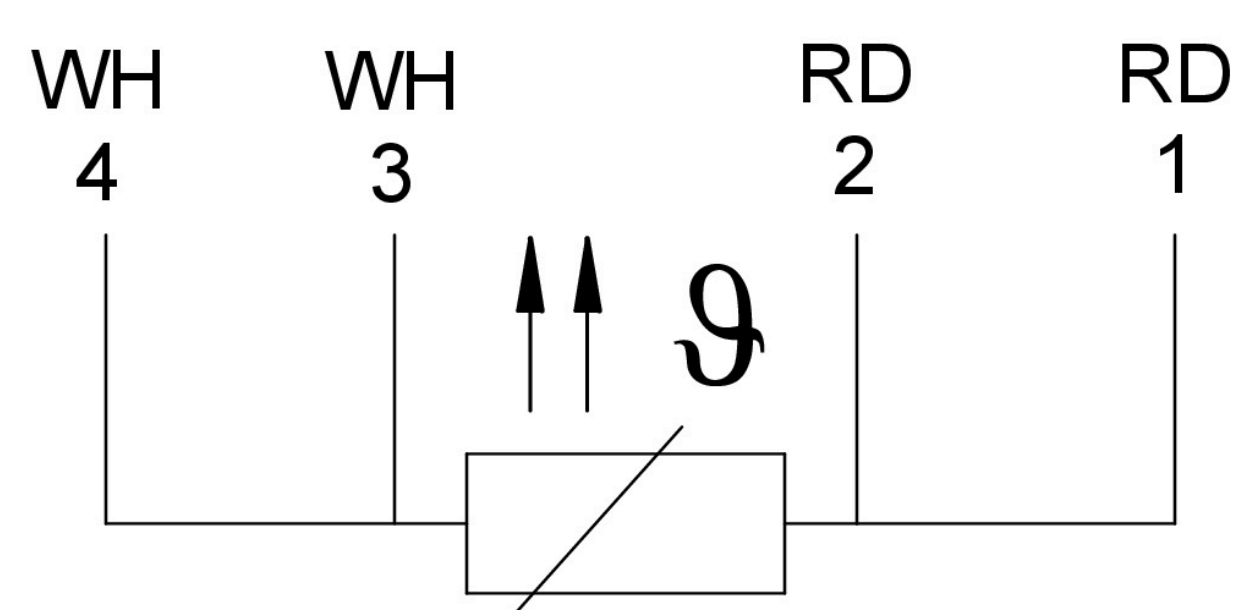
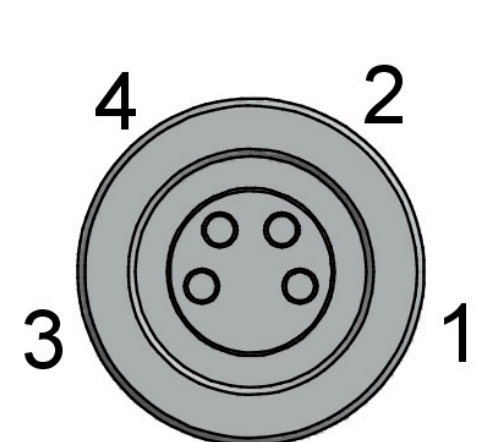
screw nipple type RK



screw nipple type RN

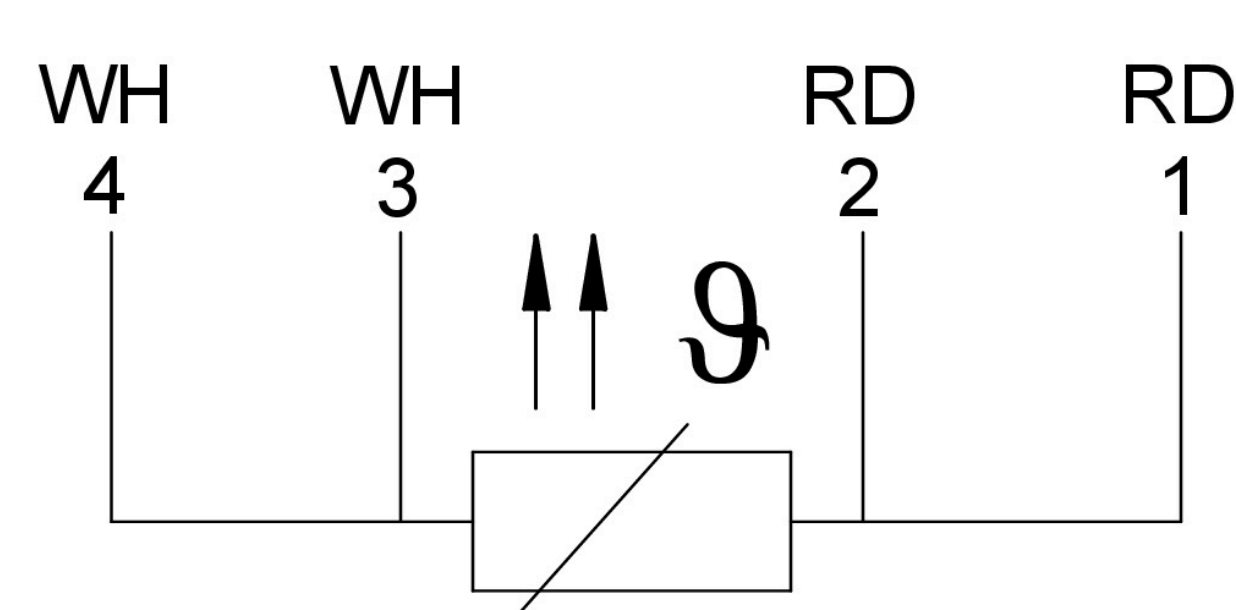
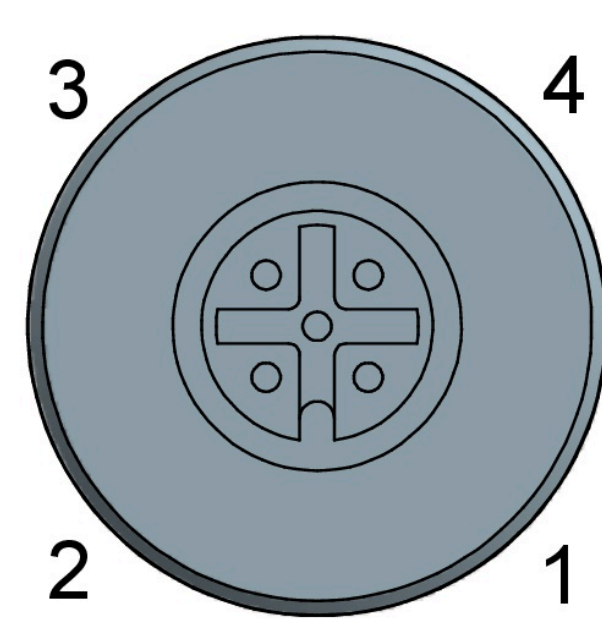


Lemo plug 1 x 4 wire front view



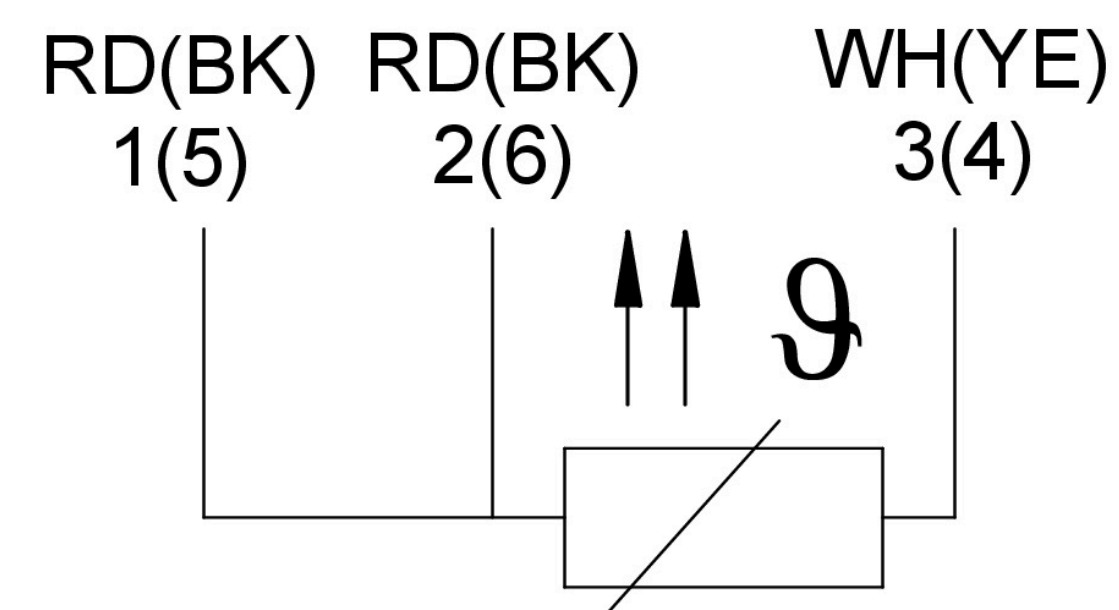
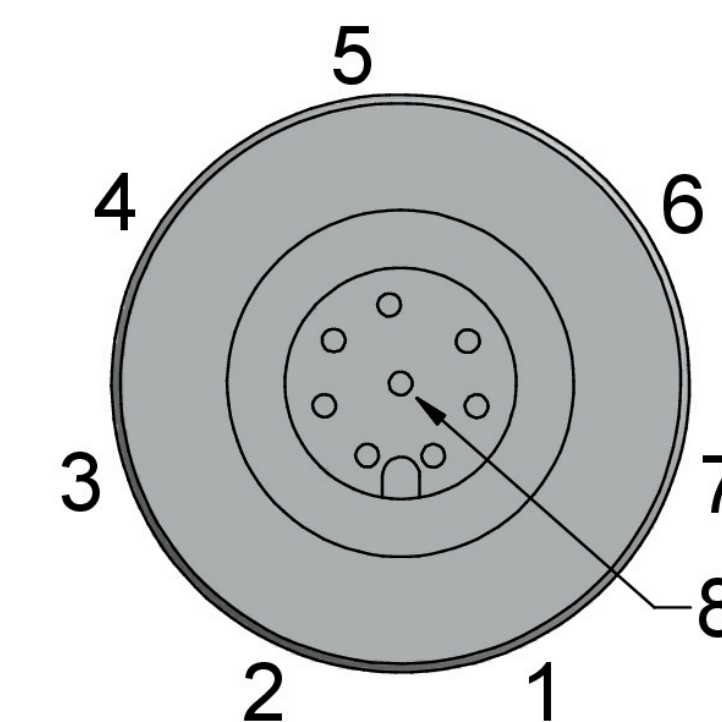
M8 socket 1 x 4 wire front view

Lemo plug 2 x 2 wire front view



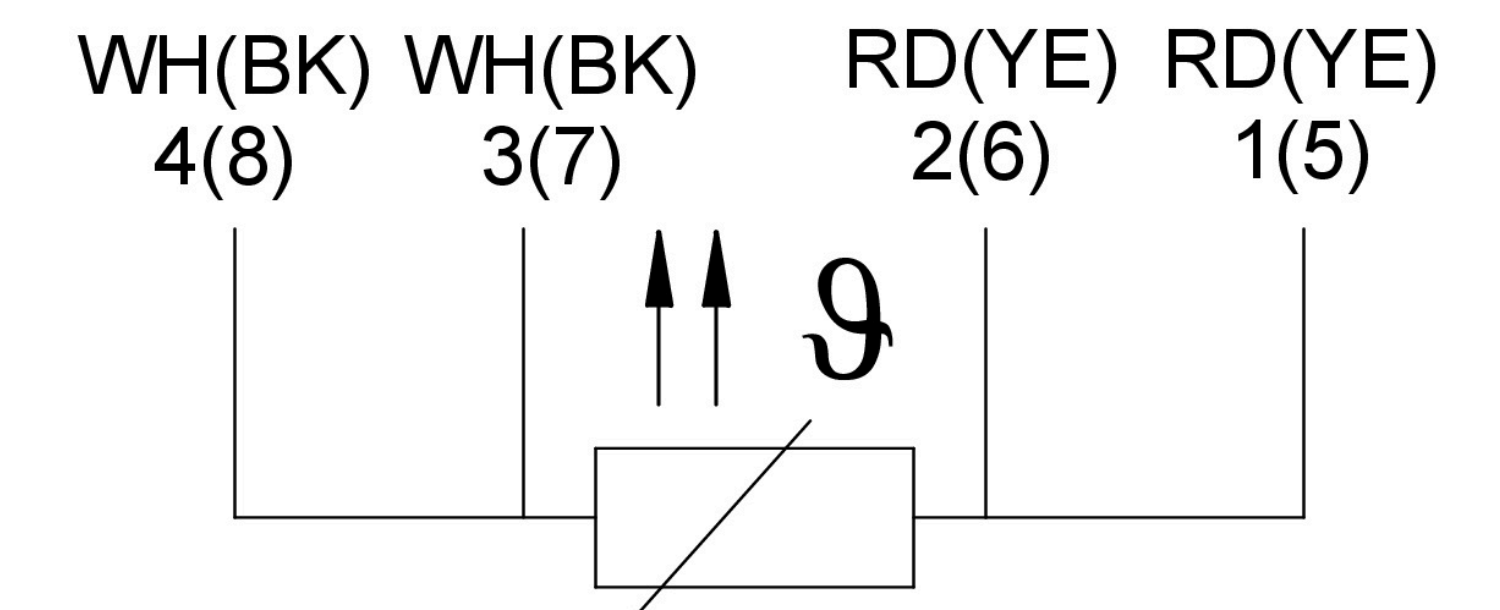
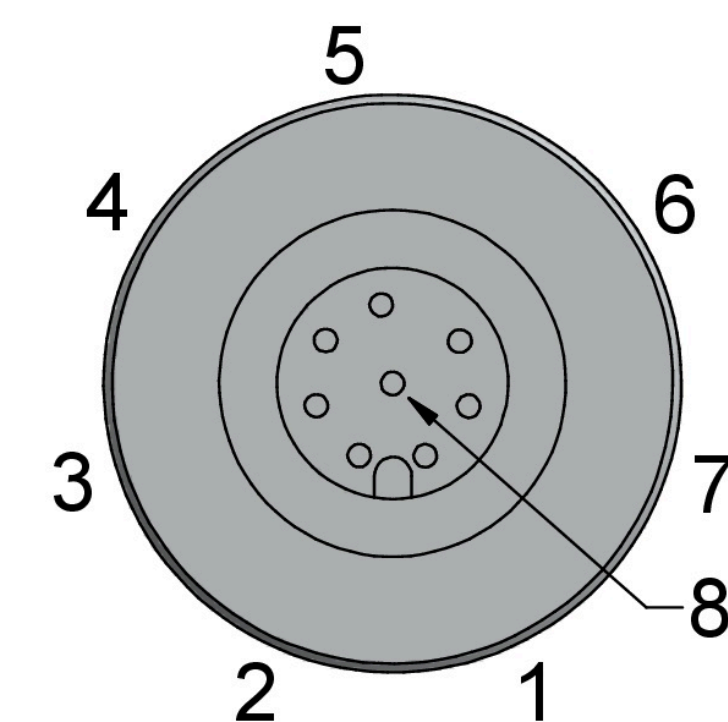
M12 socket 1 x 4 wire front view A- code

Lemo plug 2 x 3 wire front view



M12 socket 2 x 3 wire front view A- code

Lemo plug 2 x 4 wire front view



M12 socket 2 x 4 wire front view A- code