

Resistance Temperature Detector R14 model L / KM

Sheath - RTD with Lemo- or mini - compensation (type B) - plug connector

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 version with flexible sheath material allows to detect the temperature even in hard-to-reach places. The plug connection simplified the exchange of the sensor.

Application area:

Autoclave, machine and plant engineering, chemicals industry, food and beverage industry, power plant technology, pipeline construction, Research and Development, Cement/building materials, paper, pipeline and tank construction, air conditioning technology.

For installation please see our operating instructions.

Stock-number-code: WR14-M.

Technical datas

- **Measuring insert** (fig.1/2) similar to DIN 43735.
- **Sensor** depending on use:
 - thin film or ceramic according to IEC / EN 60751, in 1 x 3-, 1 x 4-, 2 x 3- or 2 x 4 wire circuit, Tolerance 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.
- **Sheath material** according to IEC / EN 61515.
 - Standard material 1.4404,
 - Standard diameter 1,5; 3 or 6 mm.
- **Process connection** via sliding compression fitting, union nut or welded-on clamping fitting DIN 32676.
- **Temperature range plug connector** (fig. 1/1):
 - Lemo -40 °C up to 200 °C,
 - compensation plug (type B) -40 °C up to 200 °C,
 - Note:** Compensation plug only for 1x3 and 1x4 wire circuit.

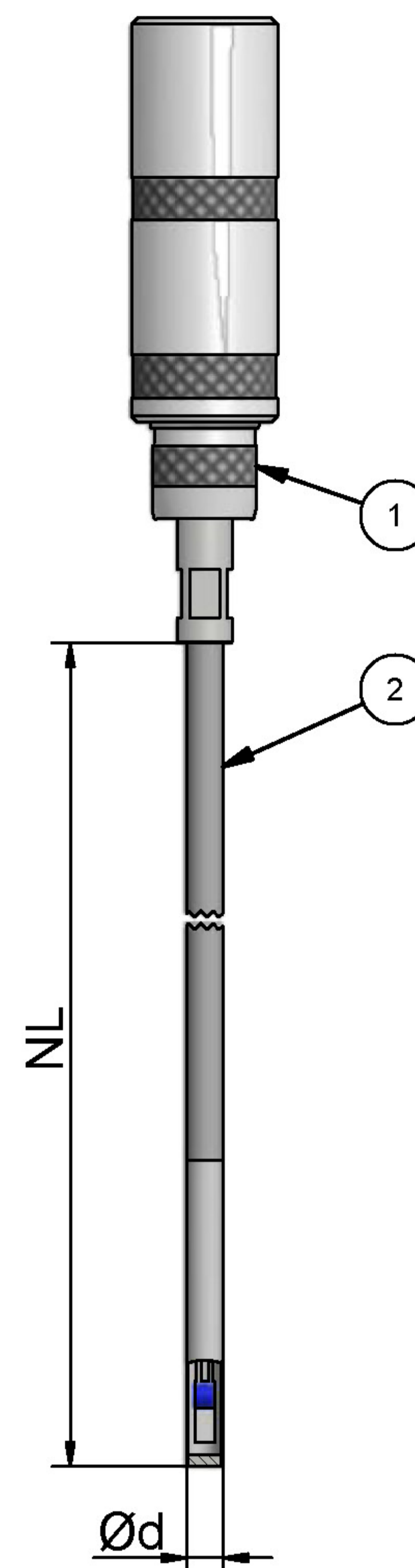


fig. 1

Deviations according to the sensor type

Resistance temperature detector with PT 100 sensor

table 1

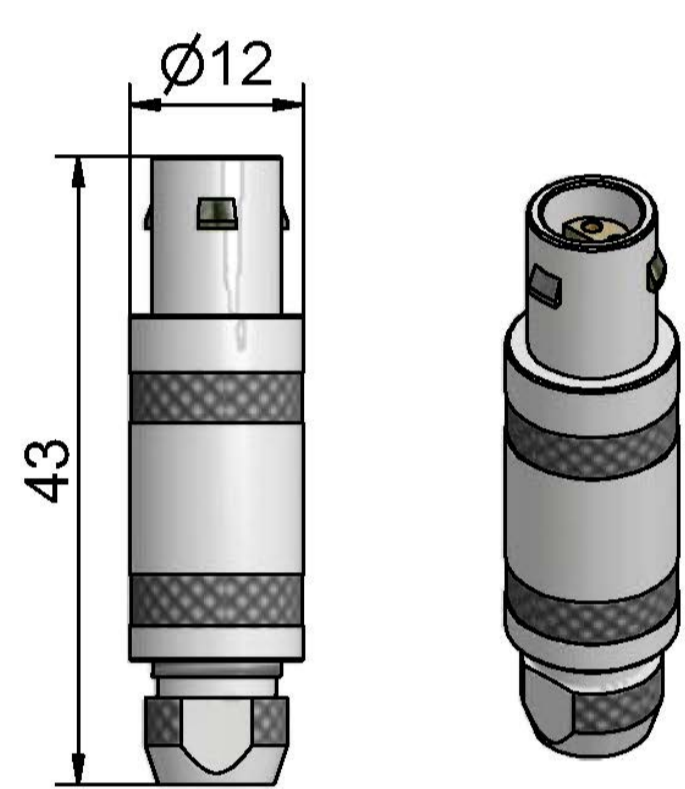
class	accuracy in °C		Deviations in °C
	ceramic	thin film	
AA ¹⁾	-50 bis +250	0 bis +150	$\pm (0,1 + 0,0017 \times t)$ ²⁾
A	-100 bis +450	-30 bis 300	$\pm (0,15 + 0,002 \times t)$ ²⁾
B	-196 bis +600	-50 bis +500	$\pm (0,3 + 0,005 \times t)$ ²⁾
C	-196 bis +600	-50 bis +600	$\pm (0,6 + 0,01 \times t)$ ²⁾

¹⁾ out of date marking 1/3 DIN, ²⁾ t = unsigned amount of the measured temperature in °C

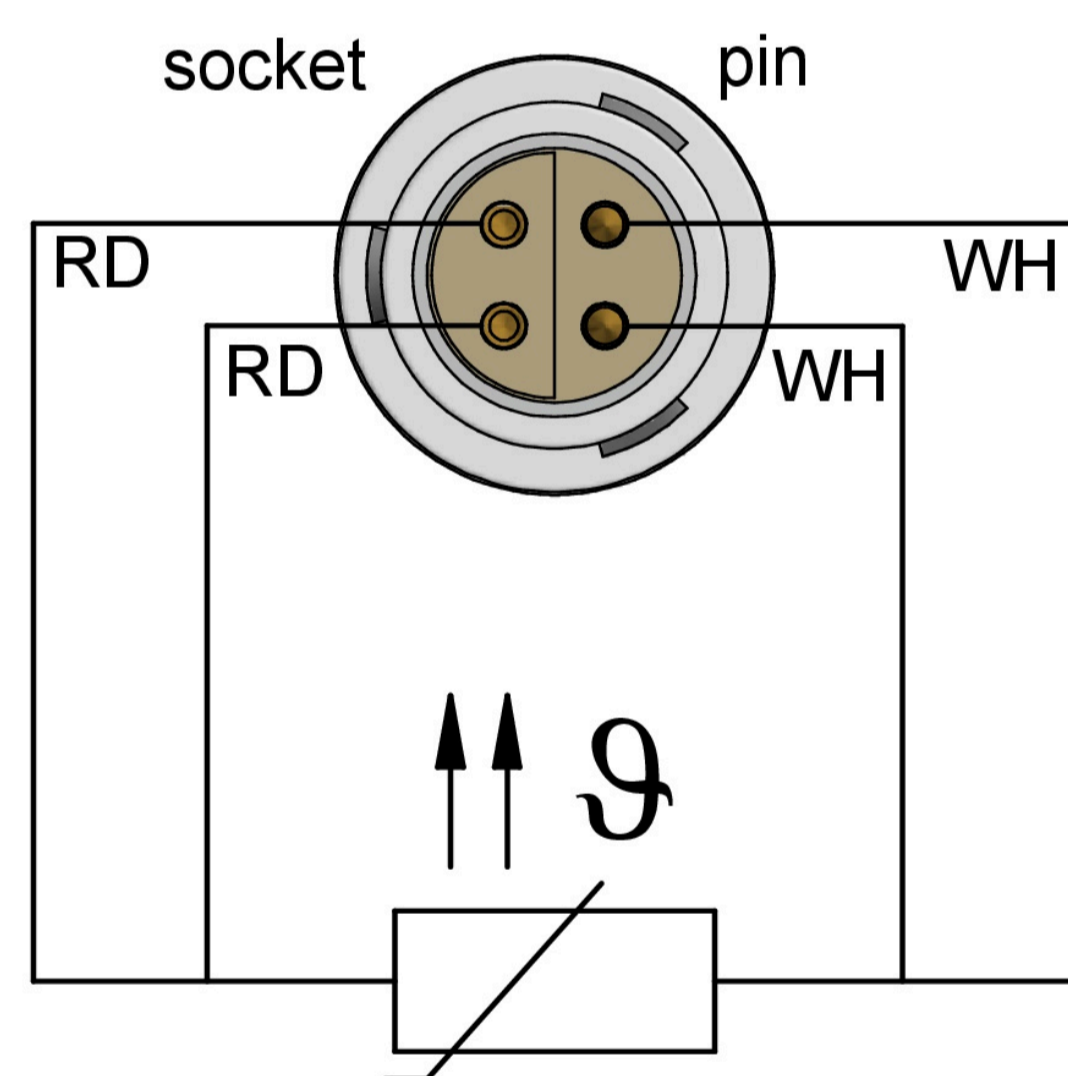
Source: Technical dates from IEC / EN 60751:2009-05 chapter 5.1.3

Examples of plug connectors with connection scheme

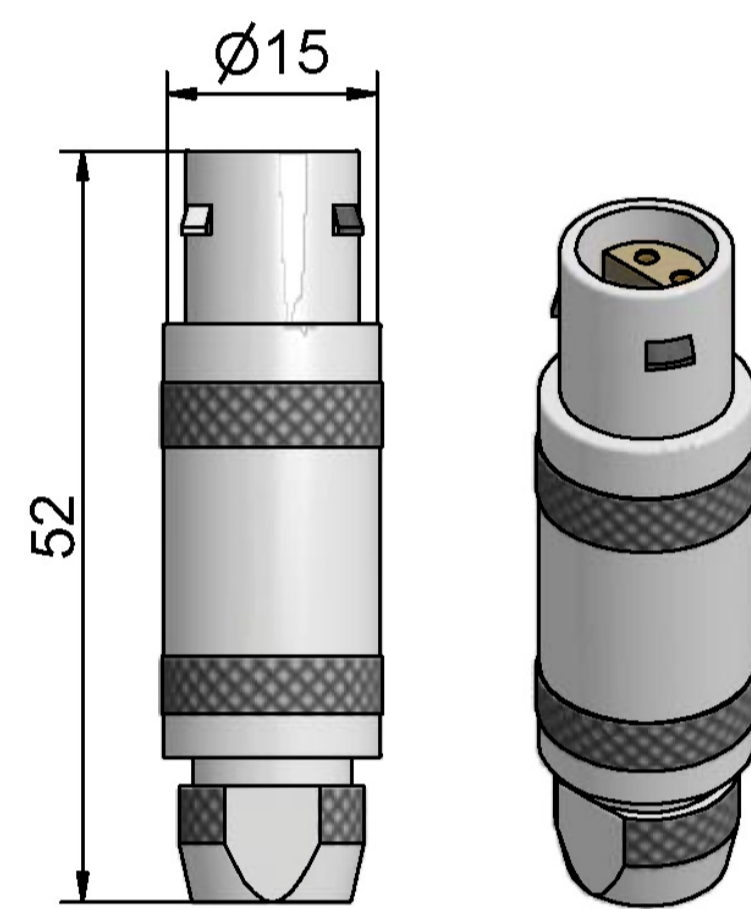
Examples of plug connectors with connection scheme



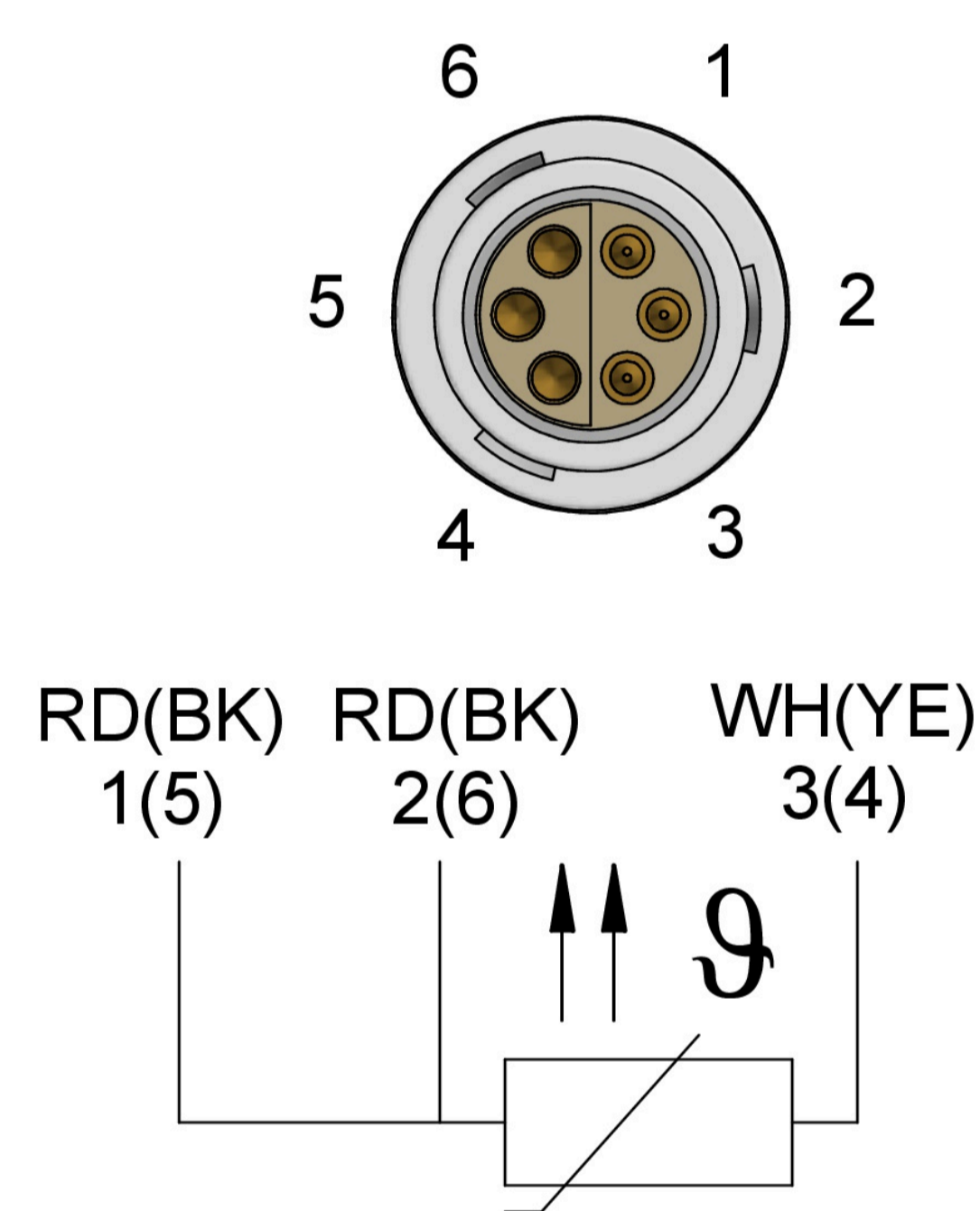
Lemo plug size 1



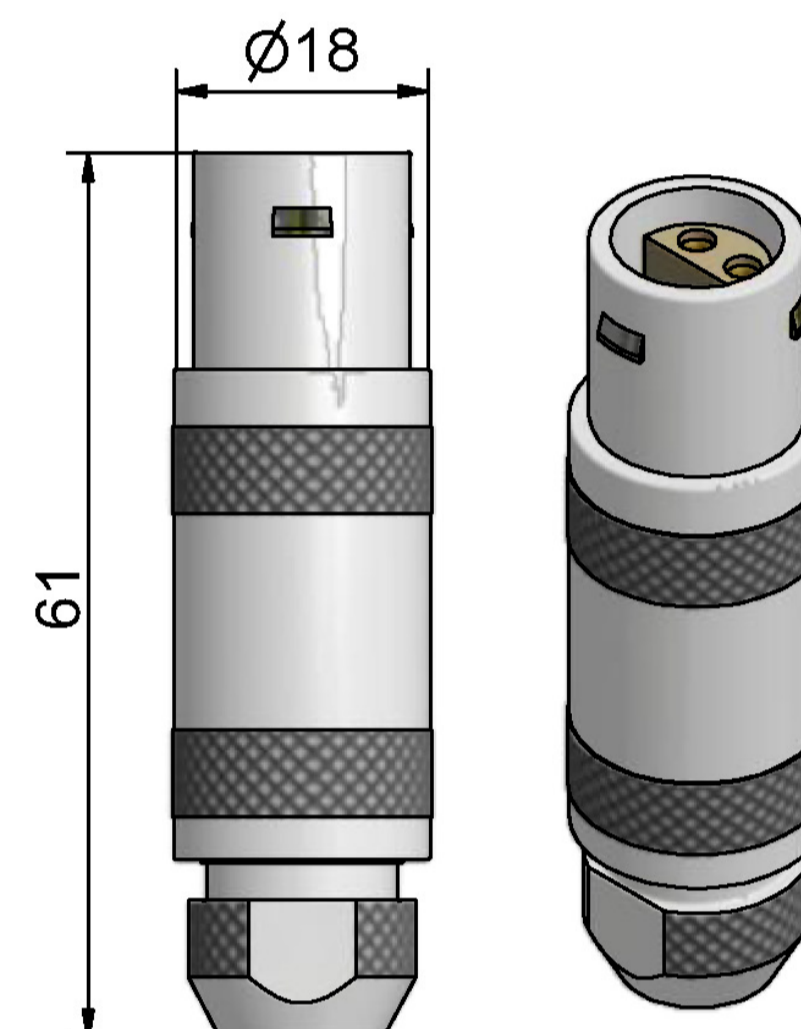
Lemo plug 1 x 4 wire front view



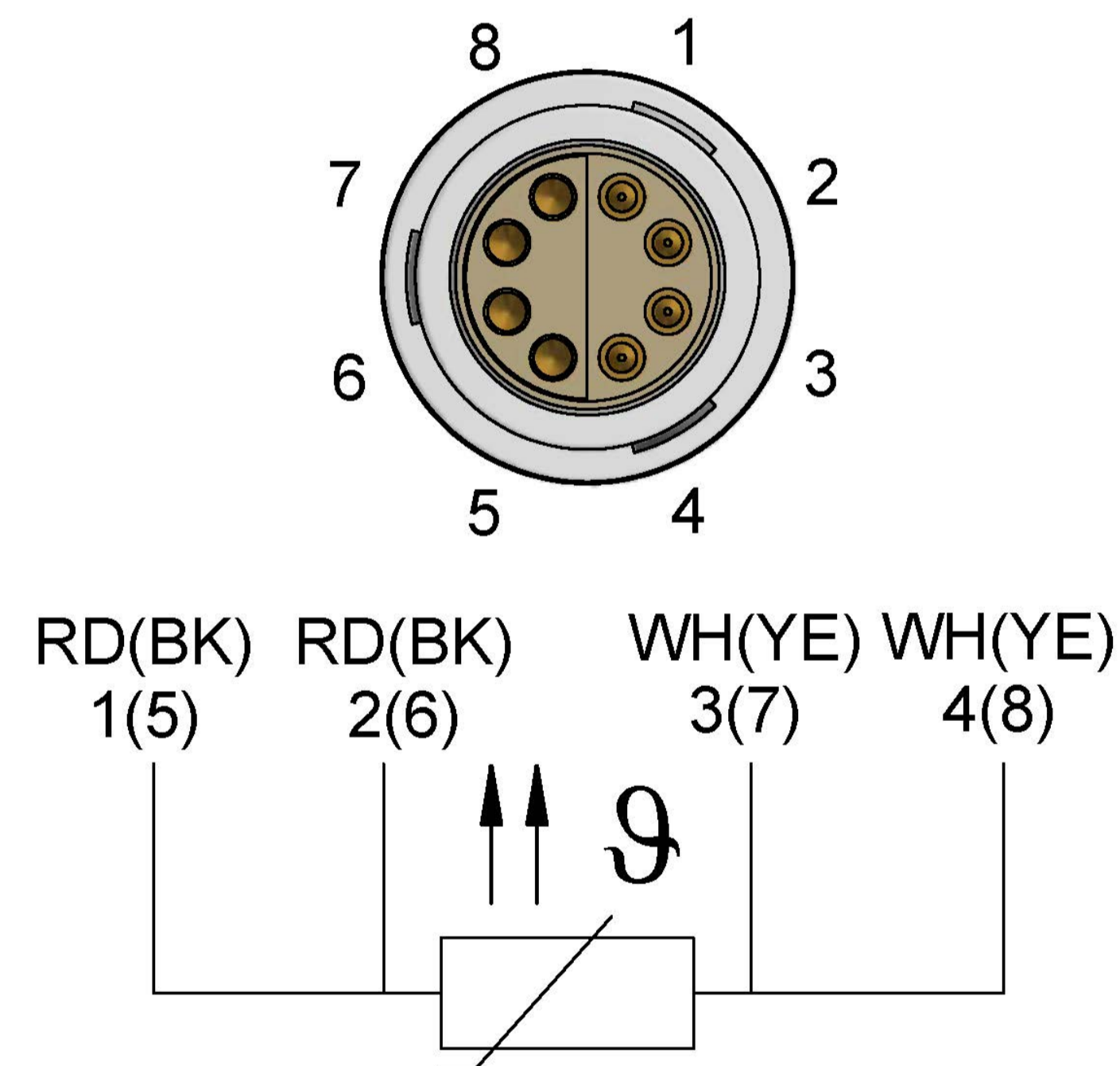
Lemo plug size 2



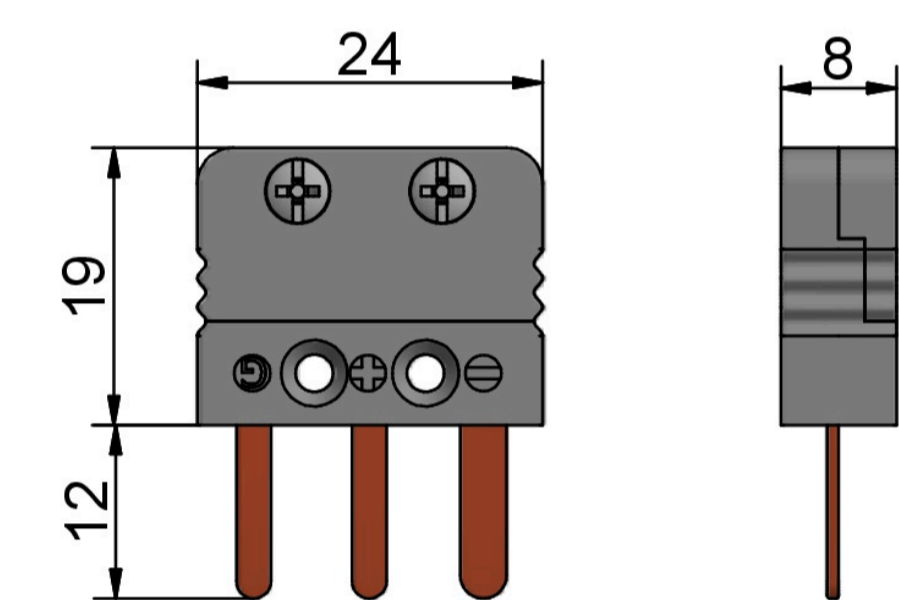
Lemo plug 2 x 3 wire front view



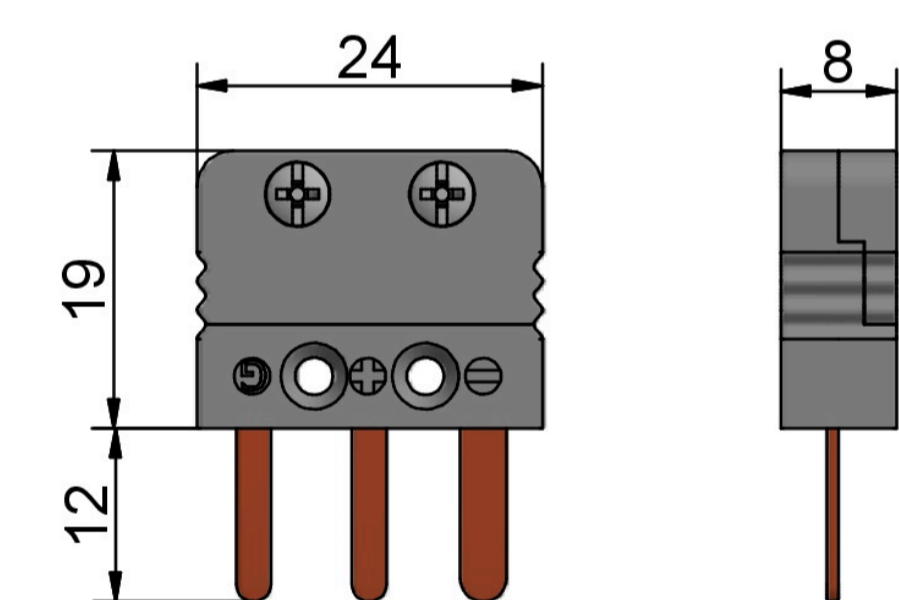
Lemo plug size 3



Lemo plug 2 x 4 wire front view



Mini plug type B 3 - wire, Cu



Mini plug 3 - terminal 1 x PT100 3 wire