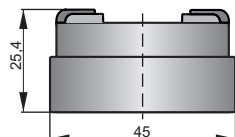
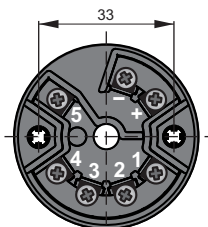


# Head-mounted smart temperature transmitter type LI-24G



**SIL2/SIL3**  
Safety version



**HART**  
COMMUNICATION PROTOCOL

- ✓ Galvanic insulation (In, out)
- ✓ Programmable sensor type
- ✓ Programmable measuring range
- ✓ Resistant thermoresistance line compensation
- ✓ Compensation of thermocouple cold junction
- ✓ Output signal 4...20mA + Hart protocol
- ✓ Hart protocol
- ✓ Safety version SIL2/SIL3
- ✓ Intrinsic Safety version



I M1 Ex ia I Ma  
II 1G Ex ia IIC T5/T6 Ga  
II 1D Ex ia IIIC T105°C Da

**IECEx**

Ex ia I Ma  
Ex ia IIC T5/T6 Ga  
Ex ia IIIC T105°C Da

## Technical data

Input signal	L, K, J, S, B, N, T, R, E voltage Pt10, Pt50, Pt98, Pt100, Pt200, Pt500, Pt1000, Ni100, Cu50, Cu100, resistance
Limit process	- 10mV < E < 100mV or - 100mV < E < 1000mV 0Ω < R < 400Ω or 0Ω < R < 2000Ω
Min. measuring range	10mV or 10Ω
Output signal	4...20mA + HART
Power supply	10...36V DC Safety: 10...36V DC Ex, Safety Ex: 10...30V DC
Max. sensor resistance	150Ω/200Ω
Alarm signal	21,6mA or 3,75 mA or setting by user
Sensor current	0,42mA
Accuracy	± 0,1%
Time constant	0,2...1s
Additional electronic damping	0...30s
Ambient temperature	-40...85°C Ex, Safety Ex: -40...70°C

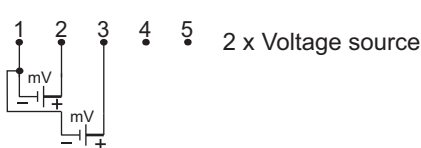
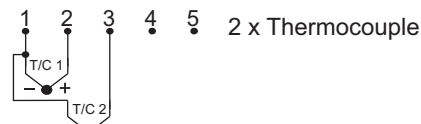
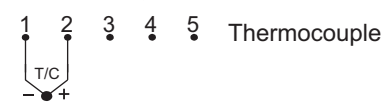
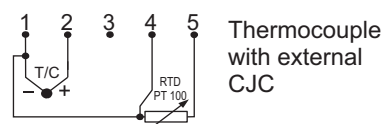
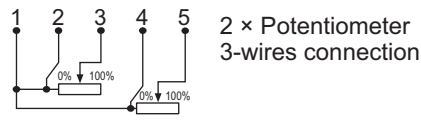
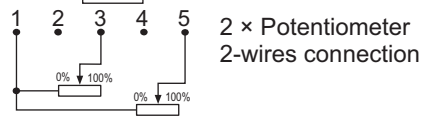
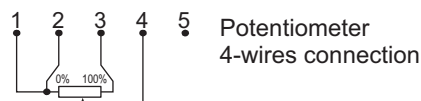
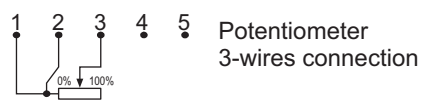
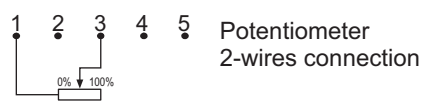
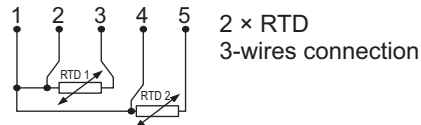
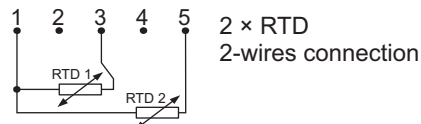
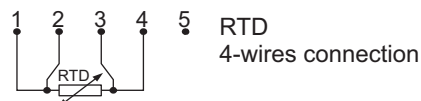
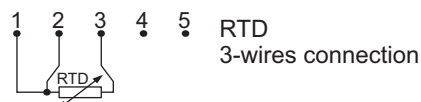
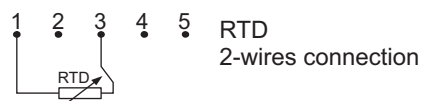
## Application and function

The temperature transmitter LI-24G is applicable to converting resistance of temperature or voltage of thermocouple sensor to standard current signal 4-20mA. The transmitter has two separate measuring channels enabling measurement of temperature difference, average, average with redundancy, max or min temperature. Transmitter has compensation of ambient temperature influence and compensation of thermocouple cold junction using internal/external (Pt100) sensor or constant temperature.

Most of parameters such as: sensor type, measuring range, current alarm signal when electric circuit is broken, output characteristic correction, user characteristic (60 points) are programmed using PC with HART/USB converter and Report 2 configuration software.

For request Aplisens can set temperature transmitter parameters like measuring range, type of sensor. Their values are printed on label.

## Electrical diagrams.



LI-24G / / / /

Version: **Safety, Ex, none**      Alarm signal  
Sensor type      Measuring range