



Description

The transmitters series PI are proposed for signal conversion from resistive temperature sensors Pt100, Pt500, Pt1000, Ni1000, Ni10000, resistive sensors OV100 (0 to 100 Ω), OV105 (5 to 105 Ω) and OV1000 (0 to 1000 Ω) and voltage input 0 to 10V to the standard current signal 4 to 20mA or 0 to 20mA. The output signal has got a linear temperature or resistance dependence. The transmitters are supplied by 24 Vdc. The transmitters are not equipped with galvanic separation between input and output signals. The given degree of ingress protection and possibility of fitting on the mounting bar DIN TS 35 determinate the transmitters for use in the distribution cases, boards and panels.

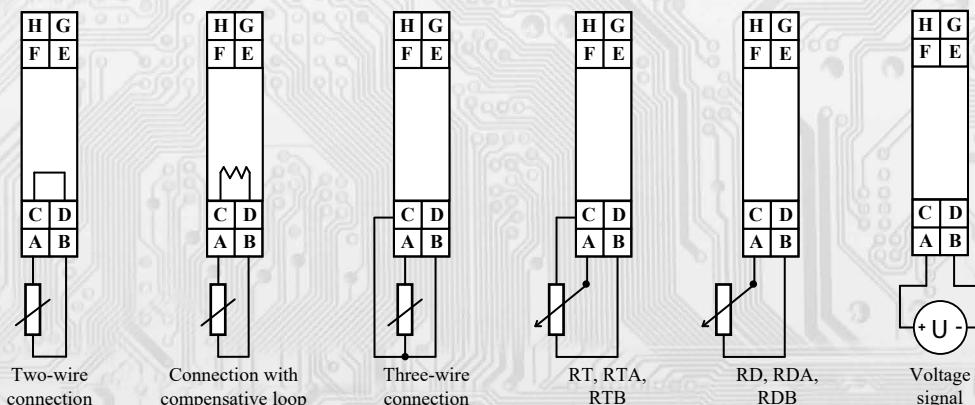
Summary of types

| TYPE | INPUT | TYPE | INPUT |
|--------|------------------|---------|--------------------------|
| PI-1P | Pt100 | PI-1RT | OV100 3-wire connection |
| PI-1PA | Pt1000 | PI-1RD | OV100 2-wire connection |
| PI-1PB | Pt500 | PI-1RTA | OV105 3-wire connection |
| PI-1L | Ni1000/5000 ppm | PI-1RDA | OV105 2-wire connection |
| PI-1S | Ni1000/6180 ppm | PI-1RTB | OV1000 3-wire connection |
| PI-1J | Ni891/6371 ppm | PI-1RDB | OV1000 2-wire connection |
| PI-1SA | Ni10000/6180 ppm | PI-1RU3 | 0 + 10V |

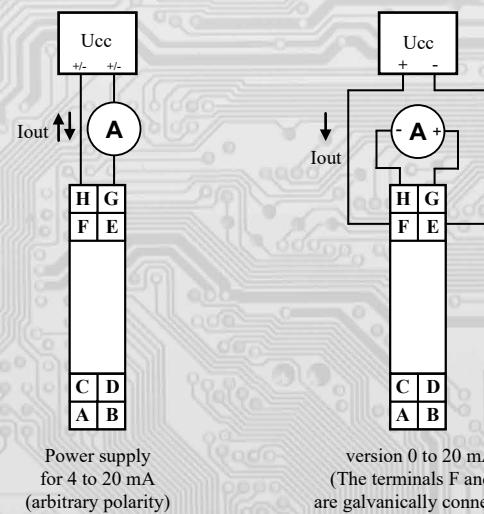
Technical parameters

| | | | |
|-----------------------|---|---------------------|-----------------------------------|
| Power supply | 11 ÷ 35 Vss | Ambient temperature | -20 ÷ 60°C |
| Load resistance R_Z | $< (U_{cc} - 11) \times 50 \text{ } [\Omega]$ | Storage temperature | -20 ÷ 80°C |
| Sensing element short | $< 3 \text{ mA}$ | Relative humidity | < 80 % |
| Sensing element break | $> 24 \text{ mA}$ | Terminal board | max. diameter 1,5 mm ² |
| Measurement error | < 0,8 % | Dimension | 18 x 62 x 64 mm |

Wiring - inputs signals

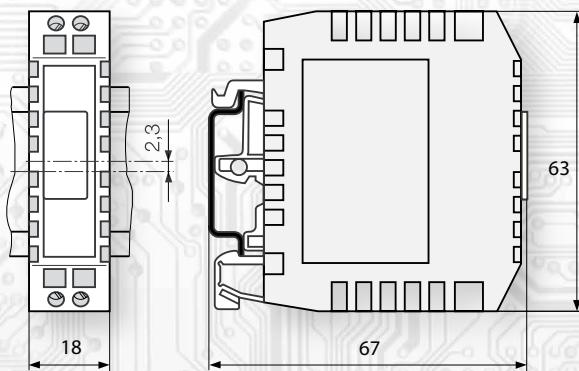


Wiring diagram of output signals

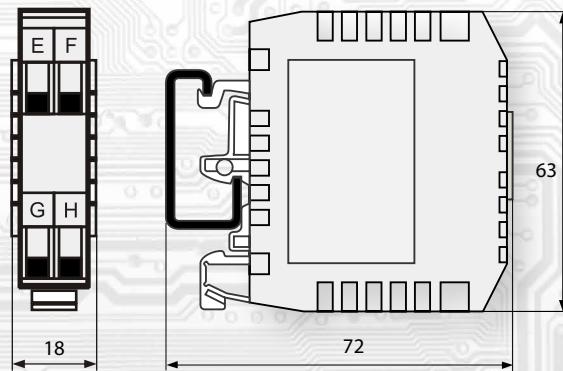


Montage and wiring

The transmitters are designed for DIN rail mounting.
Wiring to terminal: max. wire cross section to 1,5 mm²



Attachment to DIN bar EN 50 022 – 35 x 7,5



Attachment to DIN bar G EN 50 035 – G32

How to order the transmitter

There have to be given the number of pieces and the type of temperature or resistance transmitter in the order.
E. g.: 5 pieces transmitter PI-1P.2

i. e. transmitter for Pt100,
measuring range 0 ÷ 100°C

transmitter type temperature range
(order number)

| Transmitter type | PI-1P, PI-1PA PI-1PB | Order number | PI-1L, PI-1S, PI-1J | Order number |
|-------------------|----------------------|--------------|---------------------|--------------|
| Temperature range | -30 ÷ 60°C | 1 | -30 ÷ 60°C | 1 |
| | 0 ÷ 100°C | 2 | 0 ÷ 35°C | 2 |
| | 0 ÷ 200°C | 3 | 0 ÷ 100°C | 3 |
| | 0 ÷ 400°C | 4 | 0 ÷ 150°C | 4 |
| | 0 ÷ 600°C | 5 | 0 ÷ 250°C | 5 |
| | 200 ÷ 600°C | 6 | 0 ÷ 50°C | 6 |