

Description:

Programmable 4...20 mA transmitter for the installation into B connection heads. Measuring range, input type and other parameter can be adjusted with the configuration software and the serial interface.

Output: 4...20 mA Two-wire technique

Load:
$$R_B = \frac{U_B - 9V}{21,6 \text{ mA}}$$

R_B = Load resistance

U_B = Supply Voltage

Failure Signal:

Current raises above 21,6 mA or falls below 3,5 mA (configurable)

Input RTD (Pt100) :

Smallest span : 10 K

Characteristic : temperature- linear

Temperature Influence : $\pm 0,01\%$

Connection: three- or four-wire technique

Accuracy : 0,2%

Input Thermocouples :

Smallest span : 2 mV

Characteristic : temperatur- linear

Temperature Influence : $\pm 0,025\%$

Accuracy : $\pm 0,2\%$

Thermocouple types according to DIN IEC 584:

NiCr - Ni (K) • Fe - CuNi (J)

Cu - CuNi (T) • NiCr - CuNi (E)

NiCrSi - NiSi (N) • Pt10Rh - Pt (S)

Pt13Rh - Pt (R) • Pt30Rh - Pt6Rh (B)

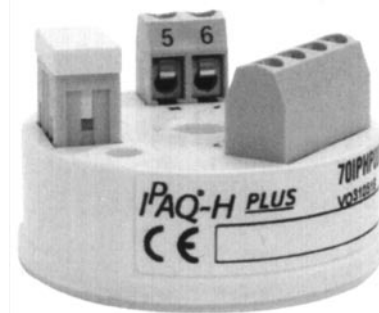
Thermocouple types according to DIN 43710:

Fe - CuNi (L) • Cu - CuNi (U)

Supply : 8...36 V DC

Working and Ambient Temperature Limits :

- 40 ... + 85 °C



Housing : Material Polycarbonat
Diameter 44 mm suitable for connection heads type B according to DIN 43 729

Clamps : Screw- clamps max. dia. 1,5 mm²

Ex Data :

Statement of conformity :

Approval Demko 02 ATEX 132033

CE 0539 - II 1G EEx ia IIC

Supply - / Signal - Current loop :

Protection class : intrinsically safe EEx ia IIC

Nominal Current : 4...20 mA

Maximum Voltage : 30 V DC

Maximum Current : 100 mA

Maximum Power : 900 mW

Inner Capacity : 0 nF

Inner Inductivity : 0 mH

Input Current Loop :

Protection class : intrinsically safe EEx ia IIC

Maximum Voltage : 30 V

Maximum Current : 25 mA

Maximum Power : 188 mW

Transmitter for Connection Heads

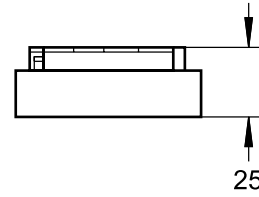
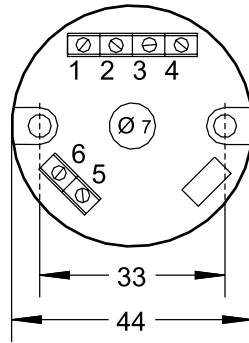
Datasheet 84.7

Transmitter for Thermocouples and Resistance thermometers type IPAQ - HX

Transmitter

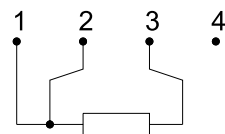
Measuring ranges	
Ordering - code	F G
- 200 ... + 200 °C	4 1
- 200 ... + 50 °C	4 2
- 50 ... + 50 °C	4 9
0 ... + 60 °C	5 8
0 ... + 100 °C	6 0
0 ... + 200 °C	6 3
0 ... + 300 °C	6 5
0 ... + 400 °C	6 7
Special - range	9 9

Please declare special ranges in plain language - see bottom

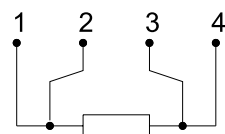


Input	
Ordering - code	H I
Pt 100 DIN ISO	1 1
Pt 100 JIS	1 2
Pt 500 DIN ISO	1 3
Pt 1000 DIN ISO	1 4
Ni 100	1 5
Ni 1000	1 6
FeCu / Ni (J)	2 0
FeCu / Ni (L)	2 1
Ni / CrNi (K)	2 2
NiCr / CuNi (E)	2 3
NiCrSi / NiSi (N)	2 4
Pt Rh 10 / Pt (S)	2 5
Pt Rh 13 / Pt (R)	2 6
Pt Rh 30 / Pt 6 (B)	2 7
Cu / CuNi (T)	2 8
Cu / CuNi (U)	2 9

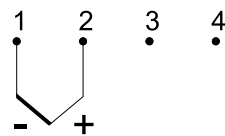
Input-Connection



Resistance
3-wire connection

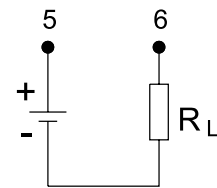


Resistance
4-wire connection



Thermocouples

Output-Connection



Behaviour on Probe Rupture	
Ordering - code	J
Current > 21,6 mA	1
Current < 3,5 mA	2

Behaviour on Probe - Shortcut *	
Ordering - code	K
Current > 21,6 mA	1
Current < 3,5 mA	2

* A detection of probe shortcut is not possible with thermocouples

Ordering-code :

for ordering please fill out all empty digits in the order code on the right.

The code numbers for all free digits you find in the charts above.

For ordering please declare in plain language :

Special ranges (Min. - Measuring range 10 K) :

.....°C to°C correspond to 4...20 mA

