

# **Temperature Transmitters**



measuring

monitoring

analysing

DISCONTINUED

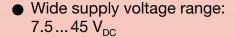
(shipmant as long as stock lasts)



**KM** 







- Operation, visualisation and maintenance via PC
- Fault signal on sensor break or short circuit, pre-settable to NAMUR NE 43
- 2-wire technology,4...20 mA analog output
- High accuracy



## **Application**

- Linearised temperature measurement
  - Resistance thermometers









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#### **Temperature Transmitters** Model KM



#### **Description**

Transmitters for head mounting model KM, transform resistance values into a standard current signal 4...20 mA. Transmission is absolute interference-free over long distances. Programming of measuring ranges is via U-pro. Connection head for mounting these U-pro transmitters is according to DIN 43729 form B.

Housing: PC and potting silicone

Applied harmonised standards and normative

documents:

IEC 60529: Degree of protection provided by housing (IP-CODE)

IEC 61010: Safety requirements for

electrical measurement

IEC 61326: Electromagnetic compatibility (EMC requirements)

NAMUR: Standard working group for measurement and control

technology in the chemical industry

## **Technical Details**

#### KM-110 (only Pt100)

Supply voltage:  $7.5...45 \text{ V}_{DC}$ 

Input type: 1 x Pt100 3-wires (acc. to IEC

60751)

Sensor current: 0.5 mA

Range limit: -200...+850°C

Min. mesasuring range: 10 K

Output signal: 4 ... 20 mA

Max. load: (supply - 7.5 V) / 0.022 A

Signal on alarm: under range:

linear drop to 3.8 mA

over range: linear rise to 20.5 mA

sensor open or short circuit:

3.6 mA or 22 mA

Accuracy: 0.2 K or 0.1% of span

Response time: 1 s

Test conditions: calibration temperature:

+23°C (73.4 K) ±5 K

Long term stability: ≤0.05% / year

Switch on delay:  $\leq 5 \text{ s}$  Resolution:  $1 \mu A$ 

Ambient temperature: -40....+85°C Storage temperature: -40...+100°C

Degree of protection: enclosure IP66, terminals IP00

Relative humidity: <95% RH (non-cond.)

Shock and vibration

resistance: 4 g / 2...150 Hz as per IEC 60068-

2-6

Electromagnetic

compatibility (EMC): acc. to GB/T17626.2-1998,

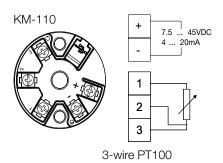
compliance with IEC 61326-1:2005

Dimensions: 44 mm x 18 mm Weight: approx. 27 g

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#### Wiring Diagram



#### Order Details (Example: KM-110)

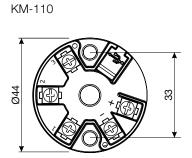
Model*	Input	Output	Galvanic isolation	Programming mode"
KM-110	Pt100	420 mA	No	U-pro

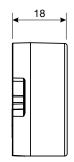
### Accessories (for programming the transmitters with programming modes U-pro/HART®)

Model	Description
HARTCOMM (includes configuration software KM-Soft)	HART® modem

<sup>\*</sup> Download software KM-Soft free of charge from www.kobold.com

### Dimensions [mm]





<sup>\*</sup> Add suffix "V" if factory setting of desired measuring range is required
\*\* For programming the transmitters use a standard HART® modem. Models with U-pro don't support Hand-Held HART® Communicator