




Characteristics

1 - RESISTANCE THERMOMETER -

		Number of certificate 47 922-03 HH	
	Measuring element RTD: Pt 100, Pt 1000 (2-, 3-, 4-wire) Process terminal thread: several options available Optional transmitter 4...20 mA (1x Pt100) Measuring range programmable, Windows necessary Protection IP 67, inside of case completely potted Protection tube and case made of stainless steel 1.4571 Connection: several options available Standard thermowell: Ø6 x 1 mm, optionally Ø6 x 0,5 mm		

Technical data

Input

Resistance thermometer: 1 x Pt 100(0) (2-, 3- or 4-wire), 2 x Pt 100(0) (2-wire)

Output

Transmitter: 4...20 mA, 2-wire (load: max. (U_b - 10 V) / 0,023 A)

Accuracy

Resistance thermometer: Class A, DIN EN 60751 (sensor: HERAEUS M222)
 Transmitter: 0,1K / 0,8% of adjusted range
 Sensor current: <0,6 mA / Response time electronics: 1 s
 Response time in water: protecting tube 6x0,5 mm: z0,5~12,0 s / z0,9~30,9 s
 protecting tube 6x1,0 mm: z0,5~7,6 s / z0,9~22,1 s

Usability and measuring range

Pt 100(0): usability -50...+200°C
 Transmitter: measuring range programmable (standard: 0...100°C)
 minimum span: 10 K

Power supply

Transmitter: 10...35 V, supply out of current loop

Ambient temperature conditions

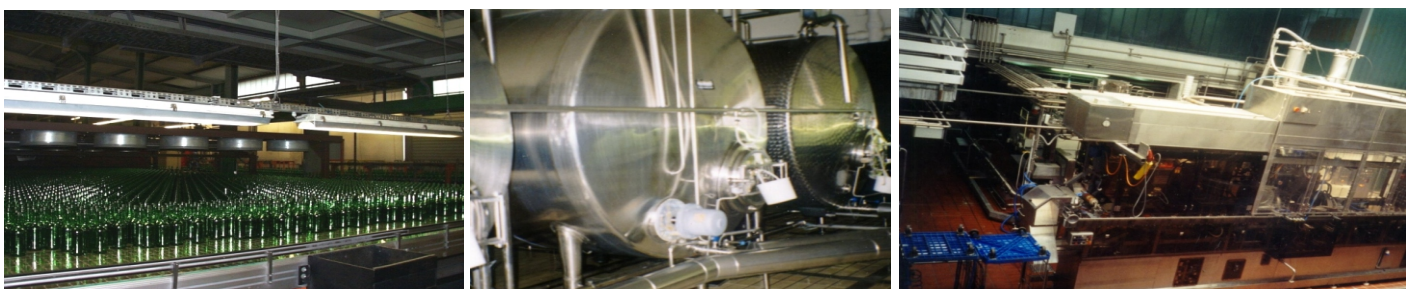
Operating: -50...+100°C, with transmitter: -40...+85°C
 Storing: -50...+100°C, with transmitter: -40...+100°C

Mechanics

Case: Ø 26 x 63...86 mm + fitting length (dependent on electrical connection)
 Material: protection tube, body of case: stainless steel 1.4571
 Weight: 200...240 g, fitting length 50 mm
 Process connection: 1/4" / 3/8" / 1/2" / 3/4" / 1" / 1/4NPT / 3/8NPT / 1/2NPT
 Electrical connection: MIL plug D 38999, 6-pole / valve plug DIN EN 175301-803, 4-pole
 plug M12x1, 4-pole / cable entry M12x1,5 with 2 m cable
 Protection: degree IP 67

Applications

For use in climating, ventilating and heating installations. Due to the used materials and the compact design, this sensor with its small dimensions is very robust. The programmable transmitter reduces storekeeping considerably.



● Ordering code

M K X X X X X X - X X X

Model:	without transmitter with transmitter	A B																		
Measuring element:	RTD Pt100 other sensor (please indicate) ¹⁾	0 1																		
Sensor:	2-wire 3-wire 4-wire	0 1 2																		
Accuracy:	class A	0																		
Fitting length:	up to 200 mm (please indicate) ²⁾	0																		
Process connection:	1/2" other (please indicate) ³⁾	0 1																		
Electr. connection:	M12x1, 4-pole, RSE4 compatibel valve plug DIN EN 175301-803, 4-pole other (please indicate) ⁴⁾	0 1 2																		
Range transmitter:	standard (0...100 °C) other (please indicate) ⁵⁾	0 1																		
Other:	special model	0																		

- 1): RTD: 2x Pt 100, Pt 1000, 2x Pt1000 (only 2-wire, without transmitter)
 2): within range 10...200 mm
 3): 1/4" / 3/8" / 3/4" / 1" / 1/4" NPT / 3/8" NPT / 1/2" NPT
 4): MIL-plug 6-pole D38999 / srewed cable gland with 2 m cable (Teflon/silicone)
 5): within -50...+200°C

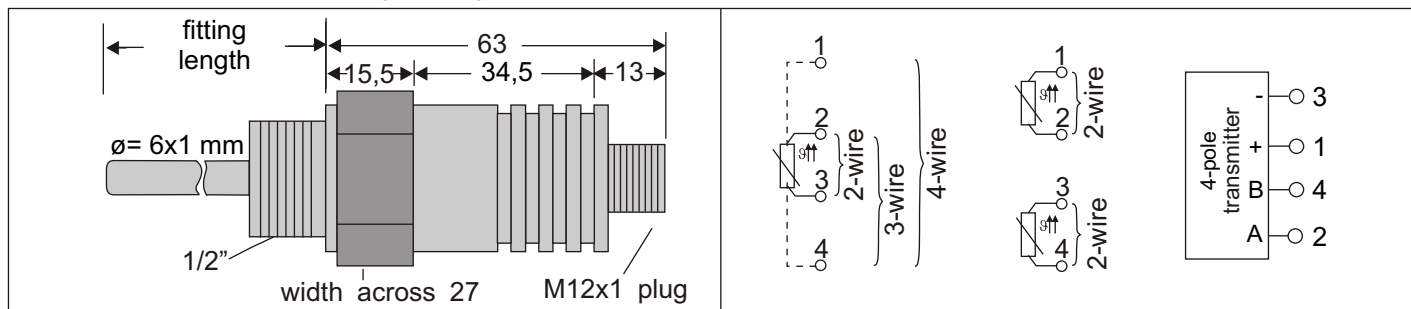
Note: the model M12x1 with transmitter has a special connector only. For the connection of the sensor it is possible to use a standard M12x1 socket. For the programming of the sensor a special socket connector is necessary, which is included in the cable set for programming (the plug of the sensor has lowered pins).

● Transmitter

Presetable parameters:

- connection (2-, 3-, 4-wire)
- compensation resistance
- damping (0... 60s)
- identification/TAG
- units (°C/°F)
- fault condition reaction
- offset (-9,9...+9,9 K)
- measurement ranges
- output (analog standard/inverse)
- measurement point

● Dimension, connection (M12x1)



● Accessories

- Socket: M12x1, 4-pole / valve, DIN EN 175301-803, 4-pole / MIL, D3899, 6-pole
 Cable set for programming: M12x1 / MIL / valve / cable
 Adaptor for programming, software / software
 Flange for ventilating tube
 Protecting tubes