

● Characteristics

0630 - RTD PT100 - PROGRAMMABLE -



- Input RTD Pt100:	2-wire / -50...250 °C
- Input RTD Pt1000:	2-wire / -50...250 °C
- Output:	4...20 mA HART
- Supply:	12...40 VDC out of current loop
- Accuracy:	0,3% of nominal range
- Operation temperature:	-20...+80 °C
- Configuration:	HART interface
- Connection:	Terminal screws
- Protection:	IP20
- Dimensions:	Ø45x23 mm
- Enclosure:	Synthetics PA66

● Technical data

Eingang

RTD Pt100:	Sensor:	1x RTD Pt100
	Connection:	2-wire
	Nominal range:	-50...250 °C
	Minimum range:	50 °C
	Sensor current:	0,3 mA
RTD Pt1000:	Sensor:	1x RTD Pt1000
	Connection:	2-wire
	Nominal range:	-50...250 °C
	Minimum range:	50 °C
	Sensor current:	0,3 mA

Output

Current signal:	4...20 mA with superimposed communication signal (HART), 2-wire current loop
Current range:	3,8...20,5 mA
Signal on error:	3,6 mA (sensor short circuit, underflow) 21 mA (sensor break, sensor open circuit, overflow)

Ambient conditions

Temperature:	Operating range:	-20...+80 °C
	Storage:	-20...+85 °C
Air humidity:	30...90% rH (40 °C, no condensation)	

Performance

Measuring amplifier:	Accuracy:	0,3% of range
	Resolution:	16 Bit
	Filter setting:	0...99 s
	Measuring rate:	10 measurements/s
	Configuration:	Via software (HART communication)
	Transmission behaviour:	Temperature linear
	Turn-on delay time:	<5 s
Response time:	20 ms	

● Applications

The transmitter is suitable in all areas where temperatures have to be measured. It is operated in a 2-wire current loop and can be customized on the application with a HART modem and an additional software.



● Technical data (continued)

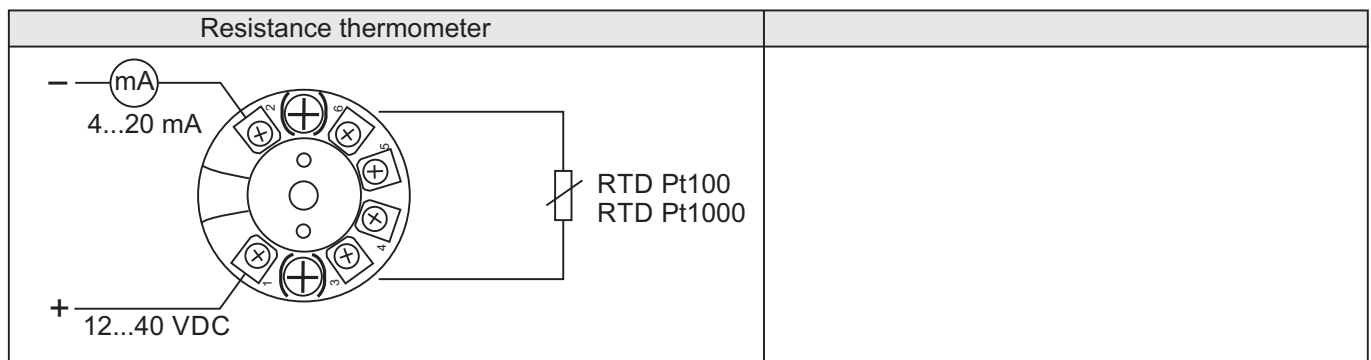
Supply

Voltage: HART current loop: 12...40 VDC VDC
 Load: $R = (U_B - 12 \text{ V}) / 21 \text{ mA}$
 Reverse battery protection: available (no function, no damage)

Mechanics

Enclosure: Dimensions: Ø45x23 mm
 Material: Synthetics black (PA66)
 Protection: IP 20
 Electrical connection: Terminal screws
 Cross-sectional area: 1 mm²
 Strip length: 8 mm
 Weight: ca. 35 g
 EMC Conformity: EN 61000-6-4, EN 61000-6-2

● Electrical connection



● HART Communication

The HART-Tool is a graphical user interface for the ME series with menu-driven program for configuration. It can be used for putting into operation, configuration, analysis of signals, data backup and documentation of the device.

Operating systems: Windows XP, Windows 7 and 8.1

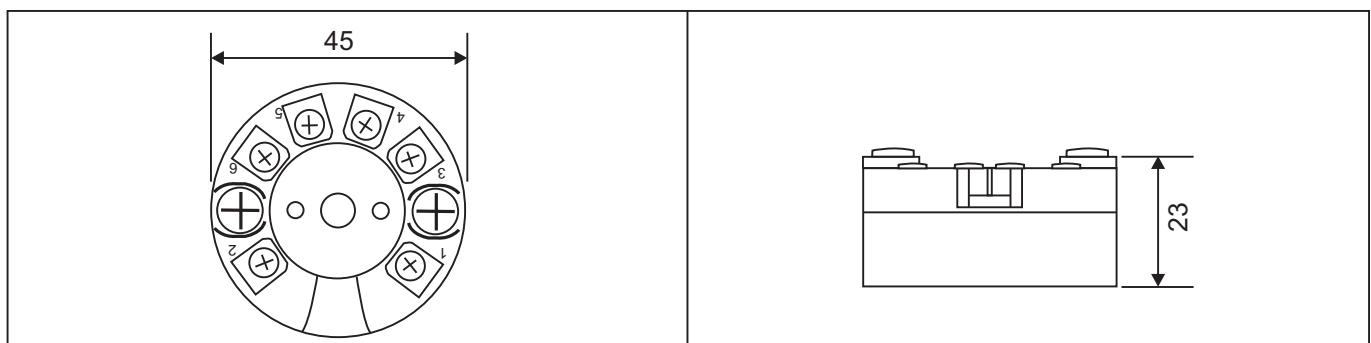
Connection via HART interface (modem) with USB interface of a PC or hand-held HART communicator

Settings:

- Adjustment of output current
- Simulation of output current
- Filter function
- Limits of measuring range
- Linear output signal
- HART address
- 2-point calibration

Please note: When using communication via a HART modem, a communication resistance of 250 Ω has to be taken into account.

● Dimensions (in mm)



● Order numbers

TH-RTD:	Transmitter Resistance Thermometer with factory configuration (RTD Pt100, 2-wire, 0...150 °C)	Order-No.: 600-00???
	with customized configuration (please indicate)	Order-No.: 600-00???
DEV-HM:	HART interface USB, software	Order-No.: 1310-00220

Subject to change, version 42-338