


## ● Characteristics

1500 - RTD - THERMOMETER - MODULAR -

	- Input:	RTD Pt100 (maximum range -50...+200 °C)
	- Output:	Relay with changeover contact
	- Voltage supply:	24...30 VDC
	- Accuracy:	±0,5 °C
	- Process connection:	several options
	- Electrical connection:	M12x1, 8-pole
	- Indication:	LED red
	- Temperature range:	-40...+80 °C (ambient)
	- Switch point adjustment:	by magnet / with HART tool
	- Material:	stainless steel 1.4571 (medium contact)
	- Protection:	at least IP65

## ● Technical Data

### Input

Sensor:	Type:	RTD Pt100, 3-wire
	Range:	-50...200 °C
	Connection:	3-wire

### Output

Relay:	Type:	Changeover contact
	Switching capacity:	1 A, 30 VDC (resistive load) 0,3 A, 125 VAC (resistive load)
	Switching power:	30 W or 37,5 VA (resistive load)
	Switching cycles:	> 100000

### Performance

Sensor:	RTD Pt100:	Class B (class A optional)
Switching amplifier:	Accuracy:	±0,5 °C
	Switching delay:	0 s (Standard), with HART configuration: 0...99,9 s
	Hysteresis:	0,1 °C (Standard), with HART configuration: >0,1 °C
	Damping:	0 s (Standard), with HART configuration: 0...99,9 s
	Measuring rate:	10 Messungen/s
	Response time:	20 ms
	Switching point:	100 °C (Standard)
	Switch point adjustment:	With magnet (recalibration)
	Turn-on delay time:	<5 s
Indication:	LED:	Red, 360°
	Relay active:	LED lights
	Relay inactive:	LED off

### Programmable Features

Switching amplifier:	With magnet:	Switching point adjustment (recalibration)
	With HART tool:	Hysteresis, switching delay, switching point, damping

## ● Applications

The temperature switch is for use in the whole range of industrial application and is connected e. g. to the digital input of a SPS. With the different types and the very simple in-situ switch point adjustment the temperature switch is also suitable for applications with higher requirements.



## ● Technical Data (Continued)

### Supply

Voltage:	24...30 VDC
Current consumption:	ca. 20 mA maximum
Reverse battery protection:	available (no function, no damage)

### Ambient Conditions

Temperature:	Operating range:	-40...+80°C (ambient)
	Medium:	-50...+200 °C
	Storing:	-40...+100 °C
Condensation:		uncritical

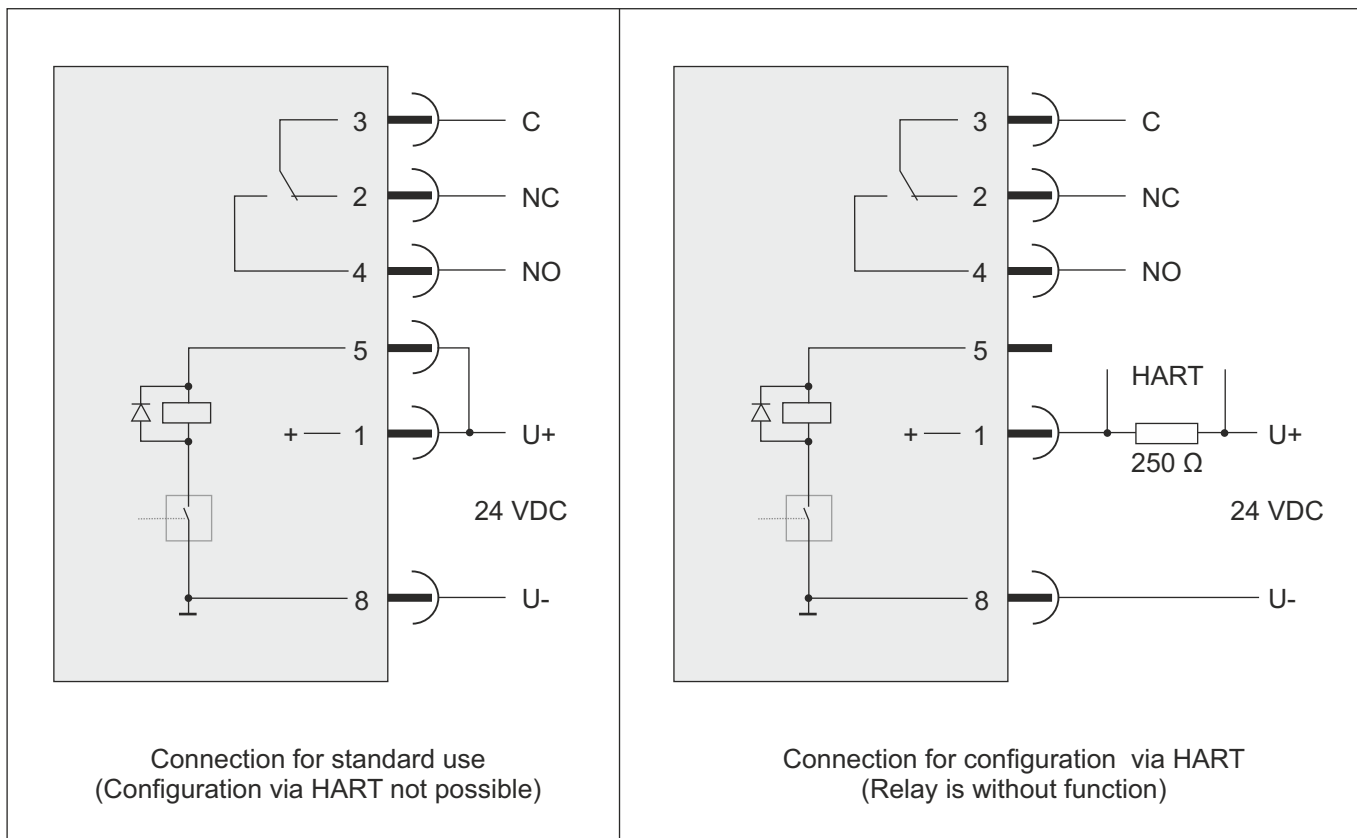
### Mechanics

Dimensions:	see page 3	
Process connection:	1/4" / 3/8" / 1/2" / 3/4" / 1" / 1/4NPT / 3/8NPT / 1/2NPT	
Protecting tube:	Ø6 mm (standard), 9 mm, other on request	
Extension:	100 mm (option)	
Electrical connection:	M12x1, 8-pole	
Material:	Protecting tube:	stainless steel 1.4571
	Extension:	stainless steel 1.4571
	Process connection:	stainless steel 1.4571
	Body:	PBT GF30
	Cover:	PBT GF30
	Lens:	PMMA
Weight:	approx. 140 g	
Fitting position:	any	
System pressure:	PN 25	
Protection of device:	Ingress protection:	at least IP 65 (electronics)
	PCB:	potted

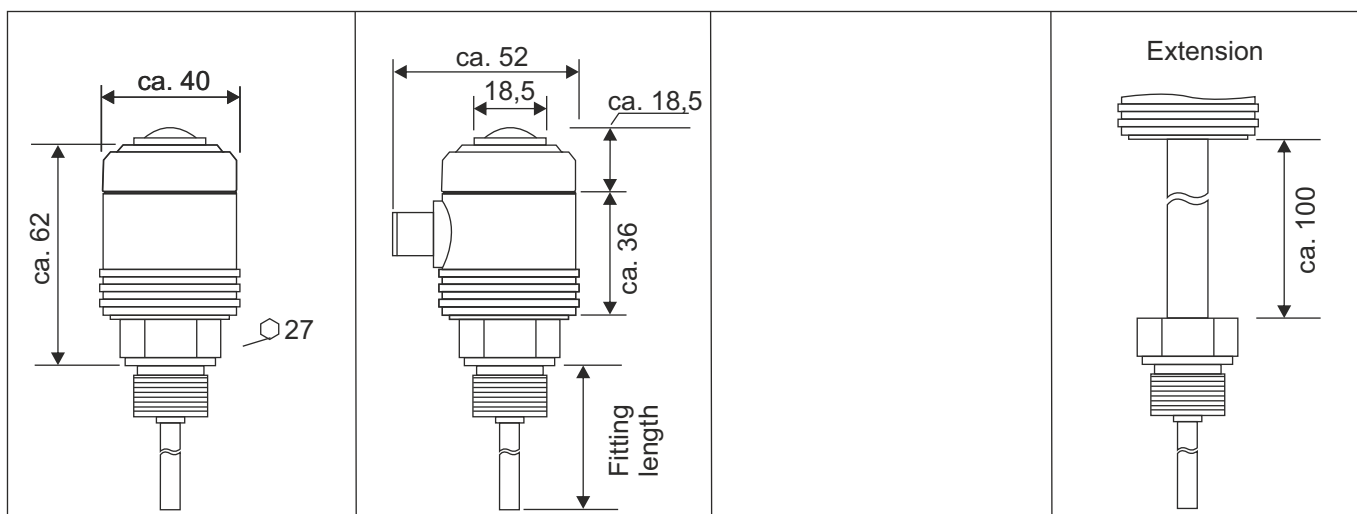
## ● Electrical Connection



### Pin assignment



## ● Dimensions (in mm)



## ● Order Code

N	T	X	X	X	X	-	X	-	X	X	X	X	X	X
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<b>Input:</b>	RTD Pt100, 3-wire	1												
<b>Accuracy:</b>	Class B	2												
	Class A (option)	1												
<b>Connection RTD:</b>	3-wire	2												
<b>Protecting tube:<sup>1)</sup></b>	Ø6 mm		6											
	Ø9 mm		9											
	Ø6 mm with extension 100 mm		L											
	Ø9 mm with extension 100 mm		O											
<b>Fitting length:<sup>2)</sup></b>	50 mm						050							
	100 mm						100							
	200 mm						200							
	250 mm						250							
	400 mm						400							
	600 mm						600							
	1000 mm						A00							
<b>Process connection:</b>	1/4"								1					
	3/8"								2					
	1/2"								3					
	3/4"								4					
	1"								5					
	1/4NPT								7					
	3/8" NPT								8					
	1/2" NPT								9					
<b>Electr. connection:</b>	M12, 8-polig									3				
<b>Configuration:</b>	Factory configuration <sup>3)</sup>										1			
	Customized (to specify) <sup>4)</sup>											2		
<b>Special model:</b>	No												0	
	Yes (to specify)													1

1) Protecting tube: Other diameter on request

2) Fitting length: Other fitting lengths on request or see price list

3) Factory configuration: Switching point: 100 °C, Accuracy: ±0,5 K, Hysteresis: 0,1 °C, Switching delay: 0 s  
Filter: 0 s, RTD Pt100: 3-wire

4) Customized configuration: Please specify, for options see technical data

## ● HART Communication and Configuration

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. Connection via HART interface DEV-HM for operating systems: Windows XP, Windows 7, 8.1 and 10.

Possible settings are:

Filter function, limits of nominal measuring range (URL, LRL), limits of used measuring range (URV, LRV), HART address, hysteresis, switching delay, switching point, damping

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

### Accessories:

Interface HART, USB, software

Order No.: **01310-00220**