

# Evaluates temperatures up to 600 °C: the TR with a new look



## Improved display and evaluation unit for Pt100 / Pt1000 sensors

- Clearly indicate the acceptable ranges: programmable red/green display
- Quick and easy handling via 3 pushbuttons with VDMA menu
- Visualisation of the switching states by clearly visible LEDs
- Flexible installation thanks to modular concept
- Versions with analogue (4...20 mA / 0...10 V) or switching output (2 x PNP/NPN)



### One unit for many sensors

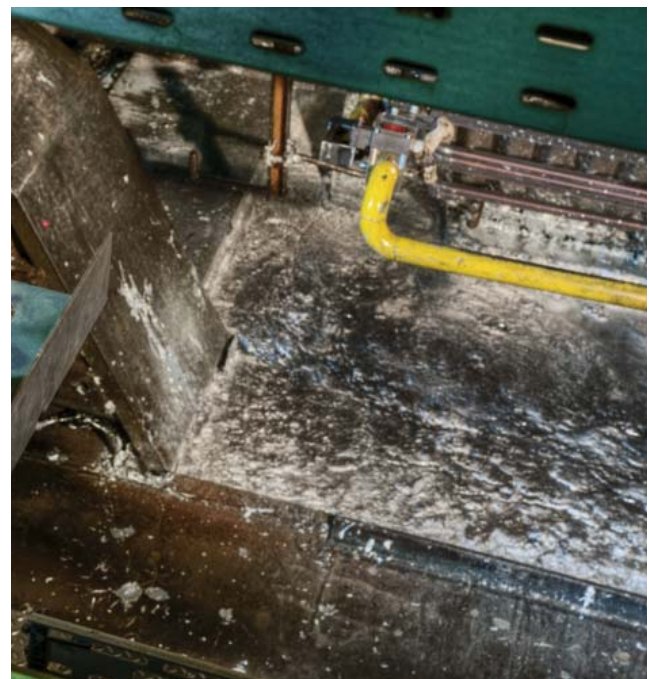
The TR evaluation unit is a universal control and display unit for connection of PT100 / PT1000 sensors (TT, TM and TS series)

### Automatic detection of the probe

The evaluation unit automatically detects whether two-wire, three-wire or four-wire Pt100 or Pt1000 sensors are connected.

### Wide measuring range

Thanks to the extended measuring range of -100...600 °C, an enormous number of common temperature measurement and monitoring tasks in the manufacturing and process industries can be solved. And, of course, ifm also offers the corresponding temperature sensors.



Measuring range [°C]	Factory setting [°C]	Process connection	Pressure resistance [bar]	Response dynamics T05 / T09 [s]	Order no.
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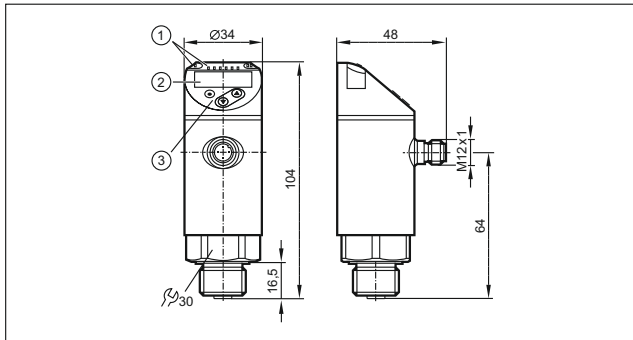
**Output function 1 x NO / NC programmable · 1 x analogue output 4...20 mA or 0...10 V programmable**

-100...600	-40...300	G 1/2 A		depends on the connected sensor	TR2439
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**Output function 2 x NO / NC programmable**




-100...600	-40...300	G 1/2 A		depends on the connected sensor	TR7439
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**Dimensions**


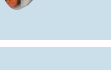

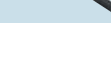


- 1) LEDs (display unit / switching status)
- 2) 4-digit alphanumeric display / alternating indication of red and green
- 3) Programming buttons

**Accessories**

Type	Description	Order no.
	Protective cover for fluid sensors with M12 connector, polypropylene homopolymer	E30420
	Mounting clamp, Ø 34 mm, PBT	E10017
	Mounting clamp, Ø 34 mm, PA	E10193

**Connection technology**

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	EVC001
	Socket, M12, 5 m black, PUR cable	EVC002
	Socket, M12, 2 m black, PUR cable	EVC004
	Socket, M12, 5 m black, PUR cable	EVC005





**Further technical data**

Operating voltage	[V]	18...32 DC
Current rating	[mA]	250
Accuracy	[K]	± 0,3 + (± 0,1 % MS)
Resolution display	[K]	0,1
Electrical design		PNP / NPN
Protection		IP 67
Communication interface		IO-Link

**Temperature sensors for connection to the TR type**

Version High-temperature cable sensor	Installation length [mm]	Order no.
2 m, PFA / PTFE cables	100	TS2451
2 m, PFA / PTFE cables	150	TS2452
2 m, PFA / PTFE cables	200	TS2453
2 m, PFA / PTFE cables	250	TS2454

**IO-Link accessories**

Type	Description	Order no.
	USB IO-Link master for parameter setting and analysis of units Supported communication protocols: IO-Link (4.8, 38.4 and 230 Kbits/s)	E30390
	IO-Link interface for parameter setting and analysis of units with DTM specification, current consumption from USB port: max. 500 mA	E30396
	Memory plug, parameter memory for IO-Link sensors	E30398
	LINERECORDER SENSOR, software for parameter setting and setting up IO-Link sensors	QA0001

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