



Head transmitter – a thing of the past. Temperature plug – the future.



Type TP: Modular transmitter – great benefit.

- Small, light housing with M12 connections.
- Reduced mounting complexity and error sources.
- Scalable Pt100 / Pt1000 evaluation from -50...300 °C.
- Status LED signals the operating status.
- Full potting and ecolink M12 technology guarantee high vibration resistance.

 4...20 mA	Resistant to oils and coolants	Vibration and shock resistant	 IO-Link
---------------	---	-------------------------------------	-------------

Minimised installation and error sources.

Because of the use of two standardised M12 connections, the installation complexity of the TP temperature plug is reduced to a minimum as compared to a common head / DIN rail transmitter. Furthermore, error sources such as cable clamps are eliminated.

Versatile use.

Thanks to 4-wire Pt100 / Pt1000 evaluation, the transmitter can also be connected to a Pt element using connection cables. Due to its small size, it is also suited for harsh applications, because it can be installed in a safe position.

In addition to the scalability of the TP between -50...300 °C, using the USB interface E30396 allows individual adaptation of the measuring range to almost any application.



fluid sensors
and diagnostic
systems

position
sensors
and object
recognition

bus,
identification
and control systems

Factory setting measuring range (Measuring range scalable) [°C]	Order no.
--	------------------

M12 connections · output function 4...20 mA / IO-link

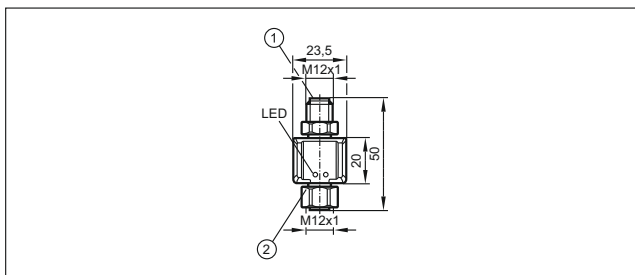
0...100 TP3237

More factory settings in preparation

**Technical data
TP temperature plug**

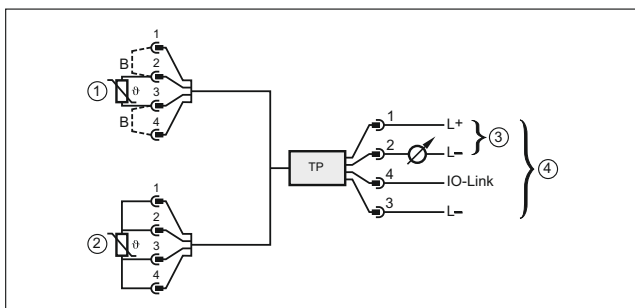
Operating voltage	[V DC]	20...32
Ambient temperature	[°C]	-25...70
Max. measuring range (4...20 mA)	[°C]	-50...300
Accuracy via:		
IO-Link		± 0.3 K
Analogue output		± 0.3 K + (± 0.1 %) of the scaled span
Temperature coefficient (in % of the span per 10 K)		< 0.1 %
Vibration resistance		20 g
4-wire evaluation Pt100 and Pt1000		•
Housing material		TPU black transparent; seal: Viton
Material coupling nut		high-grade stainless steel (1.4404)
Protection		IP 67, III

Dimensions



- 1) Connection for voltage supply and output signals
- 2) Connection for temperature sensor

Wiring diagram



- 1) Two-wire sensor
 - 2) Four-wire sensor
 - 3) Operation as 2-wire temperature transmitter
 - 4) Operation as 3-wire unit, IO-Link communication possible
- B) Link

Accessories sensors (extract)

Description	Order no.
-------------	-----------


Probe sensors

Pt100 probe sensor, Ø 10 mm, L = 160 mm	TT1081
Pt100 probe sensor, Ø 10 mm, L = 260 mm	TT2081
Pt100 probe sensor, Ø 10 mm, L = 360 mm	TT3081
Pt100 probe sensor, Ø 10 mm, L = 560 mm	TT5081





Cable sensors

Pt100 bolt-on sensor for M6, 32 x 12	TS2229
Pt100 cable sensor, Ø 10 mm, 2 m cable	TS2056
Pt100 cable sensor, Ø 6 mm, 2 m cable	TS2256
Pt100 screw-in sensor, M6, 2 m cable	TS2659





Accessories

Type	Description	Order no.
	USB IO-Link interface	E30396

Sockets (extract)

Type	Description	Order no.
	Socket, M12, 2 m orange, PVC cable	EVT067
	Socket, M12, 5 m orange, PVC cable	EVT004
	Socket, M12, 2 m black, PUR cable	EVC004
	Socket, M12, 5 m black, PUR cable	EVC005

Connection cables (extract)

Type	Description	Order no.
	Connection cable, M12, 2 m orange, PVC cable	EVT043
	Connection cable, M12, 5 m orange, PVC cable	EVT050
	Connection cable, M12, 2 m black, PUR cable	EVC013
	Connection cable, M12, 5 m black, PUR cable	EVC034

ifm article no. 7511392 · Printed in Germany on non-chlorine paper · We reserve the right to make technical alterations without prior notice · 04.2010