

SPRING-LOADED SENSOR, IO-LINK



- SPRING-LOADED TIP
- IO-LINK
- PT100 OR TYPE J · K · N
- MEDIUM UP TO +150 °C
- NO PROCESS PRESSURE



IP65



IO-Link

KEY DATA

Property	Value	Property	Value
Input	Pt100 3-wire · thermocouple J, K, N	Medium	-50 ... +150 °C
Output	IO-Link, 0/24 V	Ambient	-20 ... +80 °C (1)
Accuracy	max. 0.02 % of span	Supply	24 VDC
Spring travel	14 mm, ±1 mm	System pressure	not possible (2)
Electrical connection	M12x1, 4-pole — the only choice	Product code	MY

The spring-loaded contact sensor with an IO-Link interface — the same mechanics as TSMA but an IO-Link transmitter instead of HART, and with it thermocouples of type J, K and N. It holds no process pressure — see note (2).

TECHNICAL DATA

INPUT AND OUTPUT

Pt100	1x Pt100, 3-wire, sensor current 0.9 mA
Nominal range Pt100	-50 ... +150 °C
Classes Pt100	A · B · AA · C on request
Thermocouple type J	-50 ... +150 °C
Thermocouple type K	-50 ... +150 °C
Type K, crossed tape	-50 ... +150 °C
Thermocouple type N	-50 ... +150 °C
Interface	IO-Link
Signal level	0/24 V to the IO-Link specification
Adjustable values	see device description (IODD)

PERFORMANCE

Accuracy	max. 0.02 % of span + sensor error
Resolution	16 bit
Filter	25 s
Transfer characteristic	linear with temperature
Switch-on delay	< 5 s
Response time	20 ms
Signal level	0/24 V to the IO-Link specification
Current standard	< 30 mA
Switching current SIO	max. 100 mA
Total current	max. 130 mA

SUPPLY AND ENVIRONMENT

Supply	24 VDC
Reverse polarity	protected, no destruction
Ambient	-20 ... +80 °C (1)
Medium	-50 ... +150 °C
Storage	-40 ... +85 °C
System pressure	not possible (2)
Condensation	harmless
Weight	approx. 200 g (1/2", 45 mm, M12)

MECHANICS

Process connection	3/8" · 1/2" · 3/4" — no sealing effect (2)
Fitting length	45 mm · 65 mm · customer-specific
Spring travel	14 mm, ±1 mm
Sensor tube	Ø 6 mm, stainless steel 1.4571
Knurled screw	stainless steel 1.4541
Compression spring	spring steel 1.4310
Insulating body	PTFE white
Protection	IP 65 electronics · IP 68 sensor, potted inside

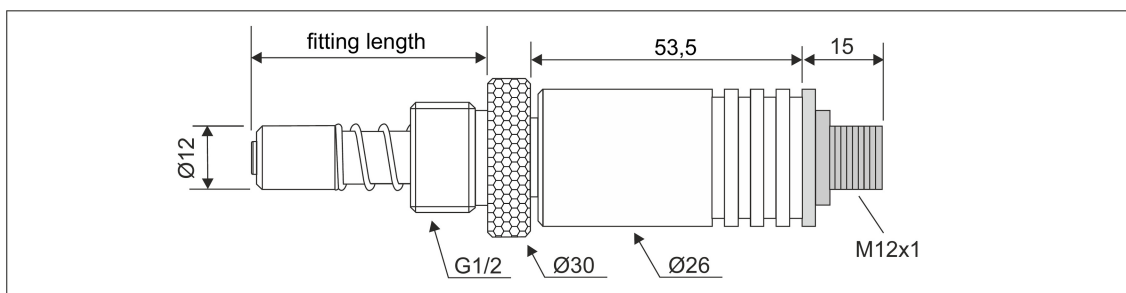
- (1) The ambient temperature is not the medium temperature.
 (2) This sensor holds no process pressure: the process connection has no sealing effect. It measures at a surface and in a bearing, not in a closed medium. The spring-loaded tip presses against the measuring point over 14 mm of travel.

ELECTRICAL CONNECTION

One single connection: M12x1, four-pole. Pin 1 = U+, pin 3 = U-, pin 4 = C/Q. The connector insert is plastic (standard) or stainless steel at a surcharge. No other kind of connector is provided for this version.



DIMENSIONS



Dimensions in mm.



CONFORMITY

Protection	IP 65 electronics, IP 68 sensor
Material at the measuring point	stainless steel 1.4571

ORDER INFORMATION

Accessories

- No configurator is needed. The sensor is set over the IO-Link interface of the master; the description of the values is in the device file (IODD).

ORDER KEY

Field	Value	Meaning
Product code	MY	stands at the beginning of every order code
Transmitter	0	IO-Link — the only possibility
Sensor	0 ... 4	Pt100 · type J · type K · type N · type K with crossed tape
Sensor connection	0	3-wire
Sensor accuracy	1 ... 4 · X	Pt100 class A · B · AA · C on request · X for a thermocouple
Fitting length	45 · 65 · A	45 mm · 65 mm · other length, please state (5 mm steps)
Diameter	6	Ø 6 mm
Process connection	2 · 3 · 4	3/8" · 1/2" · 3/4" (2)
Connector insert	1 · 2	plastic · metal
Electrical connection	1	M12x1, 4-pole — the only possibility
Configuration	1 · 2	factory setting -50...150 °C, span 0...100 °C · customer-specific
Special model	0 · 1	no · yes, please state

The order code is formed from the product code and the fields of the key.

