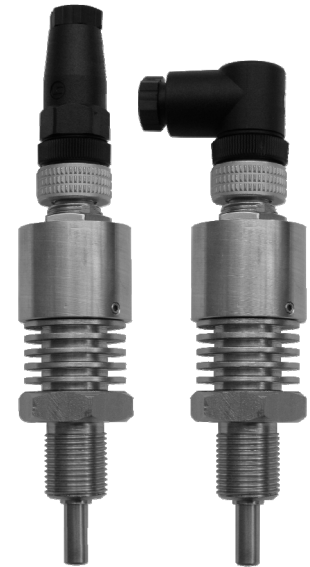


Programmable RTD Probe with Current Output TSOJ

- ◆ Programmable conversion range
- ◆ 2-wire 4...20 mA output
- ◆ Easy & Fast connection plug
- ◆ Straight or angled cable connector
- ◆ Small dimensions
- ◆ Vibration-proof design
- ◆ High protection class - IP65

TSOJ measures temperature within the -50...200 °C range via a Pt100 sensitive element and converts it into standard 4...20 mA 2-wire signal. The configuration software "TraCon" enables programming of the measurement range and output direction as well as other parameters. The probe has a robust vibration-proof stainless steel sheath with IP65 protection class, and its interior is filled with special compound, which protects the electronics from the harsh ambient influences. TSOJ is equipped with a detachable connector that allows fast and easy electrical decoupling. Various stem diameters and lengths as well as stainless steel types are available. Thanks to its robust design and flexible programming, the TSOJ probe is a fast and convenient solution to varying problems involving temperature measurement and conversion in industrial environments.



Technical specifications

Input		(programmable)
Input (RTD) type		Pt100 (w=1.385)
Measurement range	min. -50...max. 200 °C, programmable	
Minimum programmable span		50 °C
Output		(programmable)
Signal type		4...20 mA or 20...4 mA, 2-wire
Maximum load		800 Ω at 24V/20mA
Sensor failure reaction		< 3.9 or > 20.2 mA, programmable
Accuracy		
Measurement error		0.2% from span or 0.2 °C ⁽¹⁾
RTD error		according to the accuracy class
Non-linearity		within measurement error
Temperature drift		0.01% from span for 1 °C
Power supply		
Loop voltage		10...32 VDC
Admissible variations		1 Vp-p at 50 Hz

⁽¹⁾ Which is greater

⁽²⁾ Ordered separately

Serial interface

Interface type	RS232, requiring special cable ⁽²⁾
Configuration software	"TraCon", free
Operating conditions	
Medium pressure	max. 25 bar
Ambient temperature	-20...70 °C
Ambient humidity	0...95 %RH, non-condensing
EM compatibility	according to EN 61326
Design and materials	
Case material	stainless steel
Wiring	4-pin detachable connector M12 or DIN 43650 (incl. female part)
Dimensions	ø30x max. 66 mm (w/o stem and connector)
Mounting thread	M16, M18, M20, 3/8", 1/2", or other
Stem diameter	6 or 8 mm
Stem length	20...300 mm, step 5 mm
Protection class	IP65

Ordering code TSOJ - G4.G6.G9.G10.G11.G14.G15 - #1

Code	Feature or option	Code values
G4	Stem diameter 'd' [mm]	6, 8
G6	Stem length 'n' [mm]	20 ⁽³⁾ ... 300 (step 5 mm)
G9	Mounting thread	cylindrical (15 mm length) Q0 - M16x1.5, Q1 - M18x1.5, Q2 - M20x1.5, Q3 - G3/8", Q4 - G1/2", QZ - other (specify!)
		tapered (standard length) Q9 - 3/8" NPT, Q10 - 1/2" NPT, QZ - other (specify!)
G10	Sheath material	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4404
G11	Accuracy class ⁽⁴⁾	A - 'A', B - 'B'
G14	Tip shape	X - standard closed, N - narrowed
G15	Wiring connector	C1A - angled connector M12, C1S - straight connector M12, C7 - DIN 43650 connector
#1	Options	X - none, OP - electrochemically polished sheath surface

⁽³⁾ Minimum thread length + 5 mm!

⁽⁴⁾ Of the built-in Pt100 sensor