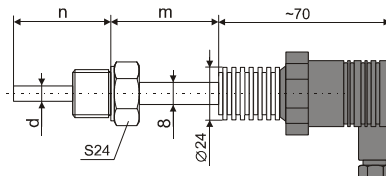


TSOK series RTD Probe with 2 wire 4-20mA signal output

- ◆ Pt100 or Pt1000 sensitive element
- ◆ 2-wire 4...20 mA output
- ◆ Easy & Fast connection plug
- ◆ Vibration-proof design
- ◆ Small dimensions
- ◆ Extended design for higher temperature available
- ◆ High protection class - IP65
- ◆ Local indicator available



Technical specifications

Input

Input (RTD) type	Pt100 or Pt1000 (w=1.385), class B
Measurement range	-50...50 °C; -20...60 °C; 0...50 °C; 0...100 °C; -50...100 °C; 0...150 °C; 0...200 °C; 0...300 °C ⁽¹⁾ ; 0...400 °C ^(1,5)
Range on request	minimum span 50 °C

Output

Signal type	4...20 mA, 2-wire
Linearity proportional to	measured value
Output at sensor burnout	32 mA
Output at sensor shorted	0.2 mA

Accuracy

Electronic measurement error	0.2% from span or 0.2 °C ⁽²⁾
RTD measurement error	according to accuracy class
Non-linearity	within measurement error
Temperature drift	0.01% from span for 1 °C

⁽¹⁾ Only for the extended-design variant!

⁽²⁾ Which is greater

Power supply

Loop voltage	10...32 VDC
Admissible variations	1 Vp-p at 50 Hz
Maximum line load	750 Ω at 24V/20mA

Operating conditions

Medium pressure	max. 25 bar
Ambient temperature	-40...85 °C
Ambient humidity	0...98 %RH
EM compatibility and safety	according to EN 61000, EN 61010

Design and materials

Sensor sheath	stainless steel
Wiring	4-pin detachable connector DIN 43650
Mounting thread	M16, M18, M20, 3/8", 1/2", or other
Stem diameter	6 or 8 mm
Stem length	20...300 mm
Extension length ⁽¹⁾	50...100 mm
Protection class	IP65

Ordering code TSO★ - G3.G4.G6.G7.G9.G10.G14 - #1.#2

Base model

TSOK - T19.6.20.Q0.M1.X - X.X **54.50 EUR**
TSOK1 - T19.6.20.50.Q0.M1.X - X.X **62.00 EUR**

Code	Feature or option	Code values	
★	Variant	K - short-design, K1 - extended-design	
G3	Temperature range	T17 - -50...50 °C, T25 - -20...60 °C, T18 - 0...50 °C, T19 - 0...100 °C, T12 - -50...100 °C, T20 - 0...150 °C, T7 - 0...200 °C, T23 - 0...300 °C ⁽¹⁾ , T8 - 0...400 °C ^(1,5)	0.00 EUR
		TZ - other (specify, ΔT ≥ 50 °C)	+5.00 EUR
G4	Stem diameter 'd' [mm]	6 per mm (n) over base	+0.015 EUR
		8 per mm (n) over base	+0.50 EUR
			+0.015 EUR
G6	Stem length 'n' [mm]	20 ⁽³⁾ ... 300 (step 5 mm)	
G7	Extension length 'm' [mm] ⁽¹⁾	50 ... 100 (step 5 mm)	per mm (m) over base +0.015 EUR
G9	Mounting thread	cylindrical (15 mm length) Q0 - M16x1.5, Q1 - M18x1.5, Q2 - M20x1.5, Q3 - G3/8", Q4 - G1/2"	0.00 EUR
		QZ - other (specify!)	*
		tapered (standard length) Q9 - 3/8" NPT, Q10 - 1/2" NPT	+2.00 EUR
		QZ - other (specify!)	*
G10	Sheath material	M1 - 1.4301, M2 - 1.4541	0.00 EUR
		M9 - 1.4404, M3 - 1.4571	+3.00 EUR +60% of G4
G14	Tip shape	X - standard closed	0.00 EUR
		N - narrowed	+2.00 EUR
#1	Options	X - none	0.00 EUR
		OP - electrochemically polished sheath surface	per cm ² +0.10 EUR
#2	Local indicator TI200	X - none	0.00 EUR
		A - local indicator TI200 ⁽⁴⁾	*

⁽³⁾ Minimum thread length + 5 mm!

⁽⁴⁾ See TI200 specifications and order separately! ⁽⁵⁾ Contact factory!

*contact factory