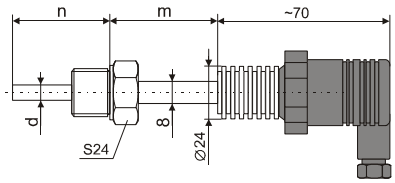
TSOK series RTD Probe with 2 wire 4-20mA signal output

- **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

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

[1] Only for the extended-design variant!
[2] Which is greater

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

Base models **TSOK-T19.6.20.Q0.M1.X-X.X**
TSOK1-T19.6.20.50.Q0.M1.X-X.X

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]	
			TZ - other (specify, ΔT ≥ 50 °C)	
G4	Stem diameter 'd' [mm]		**6**	per mm (n) over base
			8	per mm (n) over base
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
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	
			M9 - 1.4404, **M3** - 1.4571	
G14	Tip shape		**X** - standard closed	
			N - narrowed	
#1	Options		**X** - none	
			OP - electrochemically polished sheath surface	per cm^2
#2	Local indicator TI200		**X** - none	
			A - local indicator TI200 [4]	*

[3] Minimum thread length + 5 mm!
[4] See TI200 specifications and order separately! [5] Contact factory!

*contact factory