

Radio probes

Radio handles and probe head for air-/ immersion-penetration-meas.

Part no.

Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO; Radio freq. 869.85 MHz FSK	0554 0189	
T/C probe head for air/immersion/penetration measurement (T/C Type K)	0602 0293	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK	0554 0191	
T/C probe head for air/immersion/penetration measurement (T/C Type K)	0602 0293	

Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t ₉₉
0 5 mm 0 30 mm 0 3,4 m	-50 to +350 °C Short-term to +500 °C	Radio handle: ±(0.5 °C +0.3% of m.v.) (-40 to +500 °C) ±(0.7 °C +0.5% of m.v.) (remaining range) T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	t ₉₉ (in water) 10 s

Radio handles and probe head for surface measurement

Part no.

Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO; Radio freq. 869.85 MHz FSK	0554 0189	
T/C probe head for surface measurement (T/C Type K)	0602 0394	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK	0554 0191	
T/C probe head for surface measurement (T/C Type K)	0602 0394	

Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t ₉₉
120 mm 40 mm Ø 5 mm Ø 12 mm	-50 to +350 °C Short-term to +500 °C	Radio handle: $\pm (0.5 ^{\circ}\text{C} + 0.3\% \text{ of m.v.}) (-40 \text{ to } +500 ^{\circ}\text{C}) \\ \pm (0.7 ^{\circ}\text{C} + 0.5\% \text{ of m.v.}) (remaining range) \\ T/C probe head: Class 2$	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	5 s

Radio handles for attachable T/C probes

Part no.

Illustration	Posolution		
Radio handle for plug-in probe heads, inc	0554 0191		
Radio handle for plug-in probe heads, inc DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT,	0554 0189		

Illustration	Measuring range	Accuracy	Resolution	
0	-50 to +1000 °C	$\pm (0.7~^{\circ}\text{C}~+0.3\%~\text{of m.v.})~(-40~\text{to}~+900~^{\circ}\text{C})\\ \pm (0.9~^{\circ}\text{C}~+0.5\%~\text{of m.v.})~\text{(remaining range)}$	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	

Technical data Radio probes

Radio immersion/penetration probe, NTC

Battery type	2 x 3V button cell (CR 2032)
Battery life	150 h (meas. rate 0.5 s) 2 months (meas. rate 10 s)
Radio handle	
Battery type	2 x 3V button cell (CR 2032)
Battery life	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)

Common Technical Data

Measuring rate	0.5 s or 10 s, adjustable on handle
Radio coverage	Up to 20 m (without obstructions)
Radio transmission	Unidirectional
Operating temperature	-20 to +50 °C
Storage temperature	-40 to +70 °C



Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no.
Air probes					
Robust air probe, T/C Type K, Fixed cable 1.2 m	115 mm	-60 to +400 °C	Class 2 1)	200 s	0602 1793
	Ø 4 mm				
Immers./penetr. probes					
Efficient and fast-action immersion probe, waterproof, TC Type K, Fixed cable 1.2 m	Ø 1.5 mm 300 mm	-60 to +1000 °C	Class 1 1)	2 s	0602 0593
Fast-action, waterproof immersion/ penetration probe, TC Type K, Fixed cable 1.2 m	60 mm 14 mm	-60 to +800 °C	Class 1 1)	3 s	0602 2693
Immersion tip, flexible, TC Type K	Ø 1.5 mm 500 mm	-200 to +1000 °C	Class 1 1)	5 s	0602 5792
Immersion measurement tip, flexible, for measurements in air/ exhaust gases (not suitable for measurements in smelters), TC Type K	Ø 3 mm 1000 mm	-200 to +1300 °C	Class 1 1)	4 s	0602 5693
Immersion tip, flexible, TC Type K	Ø 1.5 mm 500 mm	-200 to +40 °C	Class 3 1)	5 s	0602 5793
Waterproof immersion/penetration probe, TC Type K, Fixed cable 1.2 m	114 mm 50 mm Ø 5 mm Ø 3.7 mm	-60 to +400 °C	Class 2 1)	7 s	0602 1293
Surface probes					
Fast-reaction paddle surface probe, for measurements in inaccessible places, e.g. narrow apertures and slots, TC Type K, Fixed cable	145 mm 40 mm Ø 8 mm	0 to +300 °C	Class 2 ¹⁾	5 s	0602 0193
Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500°C, TC Type K, Fixed cable 1.2 m	0 5 mm Ø 12 mm	-60 to +300 °C	Class 2 ¹⁾	3 s	0602 0393
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type K, Fixed cable 1.2 m	115 mm 0 5 mm Ø 6 mm	-60 to +400 °C	Class 2 ¹⁾	30 s	0602 1993

The measuring instrument inside TopSafe is waterproof with this probe.

1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K). A probe always corresponds to only one accuracy class.



Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no.
Surface probes					
Fast-action surface probe with sprung thermocouple strip, bent, also for uneven surfaces, measurement range short-term to +500°C, TC Type K, Fixed cable 1.2 m	80 mm 50 mm 0 12 mm	-60 to +300 °C	Class 2 ^{t)}	3 \$	0602 0993
Efficient, waterproof surface probe with small measurement head for flat surfaces, TC Type K, Fixed cable 1.2 m	150 mm Ø 2.5 mm Ø 4 mm	-60 to +1000 °C	Class 1 ¹⁾	20 s	0602 0693
Flat head surface probe with telescopic handle max. 680 mm for measurements at hard-to-access points, TC Type K, Fixed cable 1.6 m (correspondingly shorter when telescope extended)	985 ±5 mm 12 mm	-50 to +250 °C	Class 2 ¹⁾	3 s	0602 2394
Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K, Fixed cable 1.6 m	35 mm Ø 20 mm	-50 to +170 °C	Class 2 ¹⁾	150 s	0602 4792
Magnetic probe, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces, TC Type K, Fixed cable	75 mm Ø 21 mm	-50 to +400 °C	Class 2 ¹⁾		0602 4892
Pipe wrap probe with velcro strip; for temperature measurement on pipes with diameter up to max. 120 mm; Tmax. +120 °C; TC Type K , Fixed cable	395 mm 20 mm	-50 to +120 °C	Class 1 ¹⁾	90 s	0628 0020
Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Meas. range short-term up to +280 °C, TC Type K, Fixed cable	5	-60 to +130 °C	Class 2 ¹)	5 s	0602 4592
Spare meas. head for pipe wrap probe, TC Type K	35 mm	-60 to +130 °C	Class 2 1)	5 s	0602 0092
Clamp probe for measurements on pipes, pipe diameter 15 to 25 mm (max. 1"), meas. range short-term up to +130°C, TC Type K, Fixed cable		-50 to +100 °C	Class 2 1)	5 s	0602 4692

The measuring instrument inside TopSafe is waterproof with this probe.

1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K). A probe always corresponds to only one accuracy class.



Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no.
Food probes					
Waterproof food probe made of stainless steel (IP65), TC Type K, Fixed cable	125 mm 30 mm 0 3.2 mm	-60 to +400 °C	Class 2 1)	7 s	0602 2292
Waterproof robust immersion/ penetration probe with metal protection hose Tmax +230°C, e.g. for monitoring temp. in cooking oil, T/C Type K, Fixed cable	Ø 4 mm	-50 to +230 °C	Class 1 ¹⁾	15 s	0628 1292
Thermocouples				'	
Thermocouple with TC adapter, flexible, 800 mm long, fibre glass, TC Type K	800 mm Ø 1.5 mm	-50 to +400 °C	Class 2 1)	5 s	0602 0644
Thermocouple with TC adapter, flexible, length 1500 mm , fibreglass, TC Type K	1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2 1)	5 s	0602 0645
Thermocouple with TC adapter, flexible, 1500 mm long, PTFE, TC Type K	1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2 ¹⁾	5 s	0602 0646

The measuring instrument inside TopSafe is waterproof with this probe.

1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K). A probe always corresponds to only one accuracy class.

Information on surface measurement:

- \bullet The response times $\rm t_{\rm 99}\,$ stated are measured on ground steel or aluminium plates at +60 °C.
- The stated accuracies are sensor accuracies.
- The accuracy in your application is dependent on the surface structure (roughness), material of the measurement object (heat capacity and heat transfer), as wel as sensor accuracy. Testo creates a corresponding calibration certificate for the deviations of your measurement system in your application. For this purpose, Testo uses a surface test bench developed in cooperation with the PTB (Physikalisch Technische Bundesanstalt).