

Radio probes

Radio probes for immersion/penetration measurements

Part no.

Radio immersion/penetration probe, NTC, 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							
Radio immersion/penet	ation probe, NT	C, approval for U	JSA, CA, CL; Radio freq. 915.00 MHz F	SK		0613 1002	
Dimensions Probe shaft/probe sh	aft tip	Measuring range	Accuracy	Resolution	t ₉₉		
105 n		-50 to +275 °C	±0.5 °C (-20 to +80 °C) ±0.8 °C (-50 to -20.1 °C) ±0.8 °C (-80.1 to +200 °C) ±1.5 °C (remaining range)	0.1 °C	t ₉₉ (in water) 12 s		

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

Part no.

Dimensions	Measuring	Accuracy	Resolution	t ₉₉		
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	
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						

Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t ₉₉
0 5 mm 30 mm 0 3,4 mm	-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 with 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: ±(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)	5 s

Radio handles for attachable T/C probes

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	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK	0554 0191	

Illustration	Measuring range	Accuracy	Resolution
•	-50 to +1000 °C	$\pm (0.7~^{\circ}\text{C} + 0.3\%$ of m.v.) (-40 to +900 $^{\circ}\text{C})$ $\pm (0.9~^{\circ}\text{C} + 0.5\%$ of m.v.) (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 AAA micro batteries
Battery life	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)

Common Technical Data

0.5 s or 10 s, adjustable on handle
Up to 00 m (without aboty of one)
Up to 20 m (without obstructions)
Unidirectional
-20 to +50 °C
-40 to +70 °C



Probe type	Dimensions Probe shaft/probe shaft t	ip	Measuring range	Accuracy	t ₉₉	Part no
Laboratory probes		,	'			
Laboratory probe Pt100, glass- coated, exchangeable glass pipe (Duran 50), resistant to corrosive	200 mm	30 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) 1)	45 s 12 s Without	0609 7072
substances, Fixed cable	Ø 6 mm	Ø 5 mm			protecti ve glass	
Air probes						
Robust air probe, T/C Type K, Fixed cable	115 mm		-60 to +400 °C	Class 2 ²⁾	25 s	0602 1793
	Ø 4 mm					
Efficient, robust air probe, Pt100, Fixed cable	114 mm		-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) 1)	70 s	0609 1773
	Ø 5 mm					
Robust, affordable air probe, T/C Type T, Fixed cable 1.2 m	112 mm	50 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) ²⁾	25 s	0603 1793
	Ø 5 mm	Ø 4 mm				
Surface probes						
Robust, waterproof surface temperature probe, Pt100, Fixed	114 mm		-50 to +400 °C	Class B 1)	40 s	0609 1973
cable	Ø 5 mm	Ø 9 mm				
Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500°C, TC Type K, Fixed cable	115 mm Ø 5 mm	Ø 12 mm	-60 to +300 °C	Class 2 ²⁾	3 s	0602 0393
Fast-reaction paddle surface probe, for measurements in inaccessible places, e.g. narrow apertures and slots, TC Type K, Fixed cable	0 8 mm	40 mm	0 to +300 °C	Class 2 ²⁾	5 s	0602 0193
		Ø				
Efficient, waterproof surface probe with small measurement head for	150 mm		-60 to +1000 °C	Class 1 2)	20 s	0602 0693
flat surfaces, TC Type K, Fixed cable	Ø 2.5 mm	Ø 4 mm				
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	80 mm Ø 5 mm	Ø 12 mm	-60 to +300 °C	Class 2 ²⁾	3 s	0602 099

¹⁾ According to standard 60751, the accuracies of Class A and B refer to -200 to +600 °C (Pt100)
2) 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.



Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no.	
Surface probes			<u> </u>			
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)	680 mm 12 r	-50 to +250 °C	Class 2 ²⁾	3 s	0602 2394	
Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K, Fixed cable	35 mm Ø 20 mm	-50 to +170 °C	Class 2 ²⁾	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 ²⁾		0602 4892	
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type K, Fixed cable	115 mm Ø 5 mm	-60 to +400 °C	Class 2 ²⁾	30 s	0602 1993	
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	-50 to +120 °C	Class 1 ²⁾	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		-60 to +130 °C	Class 2 ²⁾	5 s	0602 4592	
Spare meas. head for pipe wrap probe, TC Type K	35 mm	-60 to +130 °C	Class 2 ²⁾	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 ²⁾	5 s	0602 4692	
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type T, Fixed cable	112 mm 50 r	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) ²⁾	30 s	0603 1993	
1.2 m	Ø 5 mm Ø 6	mm				
Immers./penetr. probes						
Robust, waterproof Pt100 immersion/penetration probe, Fixed cable	114 mm 50 r	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) 1)	12 s	0609 1273	
Cabio	Ø 5 mm Ø 3	.7 mm				
Highly accurate Pt100 immersion/penetration probe incl.	295 mm	-40 to +300 °C	±0.05 °C (0 to +100 °C) ±(0.05 °C +0.05% of mv) (remaining range)	60 s	0614 0235	
calibration protocol (test points 0 °C and +157 °C), Fixed cable	Ø 4 mm					

- Information on surface measurement:

 The response times t_{sg} 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).

¹⁾ According to standard 60751, the accuracies of Class A and B refer to -200 to +600 °C (Pt100)
2) 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.



Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no.
Immers./penetr. probes					
Efficient and fast-action immersion probe, waterproof, TC Type K, Fixed cable	Ø 1.5 mm 300 mm	-60 to +1000 °C	Class 1 2)	2 s	0602 0593
Fast-action, waterproof immersion/penetration probe, TC Type K, Fixed cable	60 mm 14 mm	-60 to +800 °C	Class 1 ²⁾	3 s	0602 2693
Immersion tip, flexible, TC Type K	Ø 1.5 mm 500 mm	-200 to +1000 °C	Class 1 ²⁾	5 s	0602 5792
Immersion tip, flexible, TC Type K	Ø 1.5 mm 500 mm	-200 to +40 °C	Class 3 ²⁾	5 s	0602 5793
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 ²⁾	4 s	0602 5693
Waterproof immersion/penetration probe, TC Type K, Fixed cable	114 mm 50 mm Ø 5 mm	-60 to +400 °C	Class 2 2)	7 s	0602 1293
Flexible, low-mass immersion measurement tip, ideal for measurements in small volumes such as petri dishes, or for surface measurements (e.g. attached with adhesive tape), TC Type K, 2 m, FEP insulated thermal wire, temperature proof up to 200 °C, oval wire with dimensions: 2.2 mm x 1.4 mm	Ø 0.25 mm 500 mm	-200 to +1000 °C	Class 1 ²⁾	1 s	0602 0493
Thermocouples					
Thermocouple with TC adapter, flexible, 800mm long, fibre glass, TC Type K	800 mm Ø 1.5 mm	-50 to +400 °C	Class 2 ²⁾	5 s	0602 0644
Thermocouple with TC adapter, flexible, 1500mm long, fibre glass, TC Type K	1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2 ²⁾	5 s	0602 0645
Thermocouple with TC adapter, flexible, 1500mm long, PTFE, TC Type K	1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2 2)	5 s	0602 0646

²⁾ 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.



Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no.
Food probes					
Robust, Pt100 stainless steel food probe (IP65), Fixed cable	125 mm 15 mm 0 4 mm 0 3 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	10 s	0609 2272
Waterproof food probe made of stainless steel (IP65), TC Type K, Fixed cable	125 mm 30 mm Ø 4 mm Ø 3.2 mm	-60 to +400 °C	Class 2 ²⁾	7 s	0602 2292
Waterproof super-fast needle probe, highly accurate measurements without visible penetration hole. Specially for food, ideal for hamburgers, steaks, pizza, eggs etc., T/C Type K, Fixed cable	150 mm 15 mm − 15 mm Ø 1.4 mm	-60 to +250 °C	Class 1 ²⁾	1s	0628 0026
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	240 mm Ø 4 mm	-50 to +230 °C	Class 1 ²⁾	15 s	0628 1292
Stable, robust surface probe with PTFE standing area and metal protection hose Tmax +230 °C for cooking surfaces, heating and baking trays, T/C Type K, Fixed cable	120 mm Ø 60 mm	-50 to +230 °C	Class 2 ²⁾	45 s	0628 9992
Robust food penetration probe with special handle, reinforced cable (PVC), T/C Type T, Fixed cable	115 mm 30 mm 0 5 mm 0 3.5 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) ²⁾	6 s	0603 2492

Testo Inc. 40 White Lake Rd. Sparta, NJ 07871 800-227-0729

Email: info@testo.com

¹⁾ According to standard 60751, the accuracies of Class A and B refer to -200 to +600 °C (Pt100)
2) 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.