

Temperature measuring instrument (3-channel)

testo 735 - Highest accuracy thanks to system adjustment



Highest precision over the entire measuring range thanks to system adjustment

System accuracy up to 0.05 °C

Display, storage and print-out of Delta T, min., max. and mean values

Audible alarm (adjustable limit values)

Cyclic printing of measurement values, e.g. once per minute

Protection class IP65

Certified according to EN 13485



The robust and compact measuring instrument testo 735 is universally applicable and is available in two versions:

testo 735-1: Precise temperature measuring instrument without measurement value store

testo 735-2: Precise temperature measuring instrument with measurement value store (10,000 values) PC software and USB data transfer cable

The instrument has a probe input for highly accurate Pt100 probes and two inputs for fast thermocouple probes. The measurement values from up to three further temperature probes can be shown in the clear measuring instrument

display wirelessly, i. e. using measurement data transfer by radio. A system accuracy of 0.05 °C at a resolution of 0.001 °C is achieved using the highly accurate plug-in Pt100 immersion/penetration probe.

The measurement system is thus ideal for use as a working standard. Selectable user profiles, i.e. programming of the buttons adapted to the application, enable intuitive and fast operation.

Technical data

testo 735-1

testo 735-1, 3 channel temperature measuring instrument T/C Type K/T/J/S/Pt100, audible alarm, connection for max. 3 optional radio probes, incl. battery and calibration protocol

Part no. 0560 7351

£ 257.00



General technical data

Operating temperature	-20 to +50 °C
Storage temperature	-30 to +70 °C
Battery type	Alkali manganese, mignon, Type AA
Protection class	IP65
Dimensions	220 x 74 x 46 mm
Weight	428 g
Housing material	ABS/TPE/Metal
Warranty	2 years
Standard	EN 13485

testo 735-2

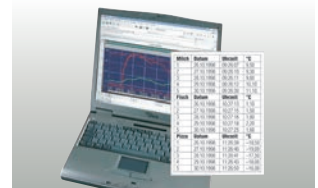
testo 735-2, 3 channel temp. meas. instr. T/C Type K/T/J/S/Pt100, audible alarm, connection for max. 3 optional radio probes, with readings memory, PC software and USB data transmission cable, with battery and calibration protocol

Part no. 0563 7352

£ 332.00



Wireless measurement with radio probes for air/immersion/penetration measurement



Analyze and document measurement values by measurement site with PC software (included in delivery of testo 735-2)

Sensor type	Measuring range	Accuracy ± 1 digit	Resolution	Battery life
Pt100 with probe 0614 0235	-40 to +300 °C	See probe data	0.001 °C (-40 to +199.999 °C) 0.01 °C (remaining range)	Approx. 60 h
Pt100	-200 to +800 °C	± 0.2 °C (-100 to +199.9 °C) $\pm 0.2\%$ of mv (remaining range)	0.05 °C	Approx. 250 h
Type K (NiCr-Ni)	-200 to +1370 °C	± 0.3 °C (-60 to +60 °C) $\pm (0.2$ °C + 0.3% of mv) (remaining range)	0.1 °C	Approx. 300 h
Type T (Cu-CuNi)	-200 to +400 °C	± 0.3 °C (-60 to +60 °C) $\pm (0.2$ °C + 0.3% of mv) (remaining range)	0.1 °C	Approx. 300 h
Type J (Fe-CuNi)	-200 to +1000 °C	± 0.3 °C (-60 to +60 °C) $\pm (0.2$ °C + 0.3% of mv) (remaining range)	0.1 °C	Approx. 300 h
Type S (Pt10Rh-Pt)	0 to +1760 °C	± 1 °C (0 to +1760 °C)	1 °C	Approx. 300 h

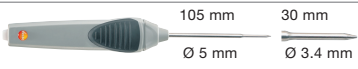
Accessories

Accessories for measuring instrument	Part no.	£
Plug-in mains adapter, 5 VDC 500 mA with European adapter, 100-250 VAC, 50-60 Hz	0554 0447	17.49
Radio module for upgrading measuring instrument with radio option		
Radio module for measuring instrument, 869.85 MHz, 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	0554 0188	32.45
Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL	0554 0190	34.22
Printer and Accessories		
Testo fast printer IRDA with wireless infrared interface; 1 roll thermal paper; 4 AA batteries	0554 0549	171.00
Spare thermal paper for printer (6 rolls), permanent ink measurement data documentation legible for up to 10 years	0554 0568	19.49
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610	60.27
Transport and Protection		
Service case for basic equipment of measuring instrument and probes, dimensions: 400 x 310 x 96 mm	0516 0035	68.04
Other features		
Handle for attachable measurement tips, applicable for all Testo probes with miniature thermocouple plugs	0409 1092	69.30
Extension cable, 5m, for thermocouple probe Type K	0554 0592	39.69
Silicone heat paste (14g), Tmax = +260°C, improves heat transfer in surface probes	0554 0004	10.29
Calibration Certificates		
ISO calibration certificate/temperature for air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001	122.37
ISO calibration certificate/temperature meas. instr. with air/immersion probe; cal. points 0°C; +150°C; +300°C	0520 0021	155.54
ISO calibration certificate/temperature meas. instr. with surface probe; calibration points +60°C; +120°C; +180°C	0520 0071	162.74
DAkkS calibration certificate/temperature meas. instr. with air/immersion probe; calibration points -20 °C; 0 °C; +60 °C	0520 0211	562.73
DAkkS calibration certificate/temperature contact surface temperature probes; calibration points +100°C; +200°C; +300°C	0520 0271	846.86
4-point adjustment incl. ISO calibration certificate , calibration points freely selectable for probe 0614 0235	0520 0142	410.30
4-point adjustment incl. DAkkS calibration certificate, calibration points freely selectable for probe 0614 0235	0520 0241	988.00
Calibration certificates incl. adjustment for testo 735-2		
2-point adjustment incl. ISO calibration certificate, calibration points freely selectable	0520 0178	230.34
4-point adjustment incl. ISO calibration certificate , calibration points freely selectable	0520 0142	410.30
2-point adjustment incl. DAkkS calibration certificate, calibration points freely selectable	0520 0278	611.62
4-point adjustment incl. DAkkS calibration certificate, calibration points freely selectable	0520 0241	988.00

Radio probes

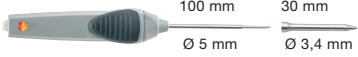
Radio probes for immersion/penetration measurements

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					0613 1001	79.82
Radio immersion/penetration probe, NTC, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK					0613 1002	88.38
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t ₉₉		
	-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		

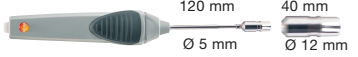
Radio handles with probe head for air-/ immersion-penetration-meas.

Part no. £

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	83.27
T/C probe head for air/immersion/penetration measurement (T/C Type K)					0602 0293	42.00
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK					0554 0191	83.63
T/C probe head for air/immersion/penetration measurement (T/C Type K)					0602 0293	42.00
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t ₉₉		
	-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	83.27
T/C probe head for surface measurement (T/C Type K)					0602 0394	53.55
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK					0554 0191	83.63
T/C probe head for surface measurement (T/C Type K)					0602 0394	53.55
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t ₉₉		
	-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	83.27
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK					0554 0191	83.63
Illustration	Measuring range	Accuracy	Resolution			
	-50 to +1000 °C	±(0.7 °C +0.3% of m.v.) (-40 to +900 °C) ±(0.9 °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)

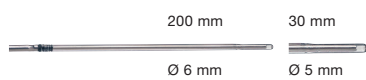


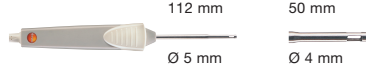
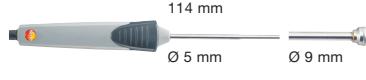
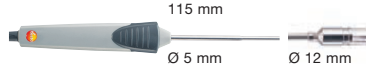
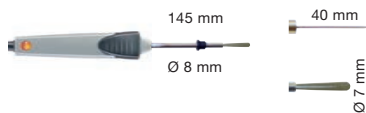


Radio handle

Battery type	2 AAA micro batteries
Battery life	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)

Common Technical Data

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




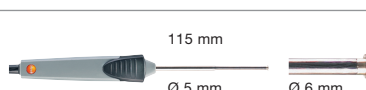
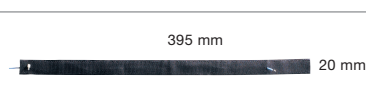
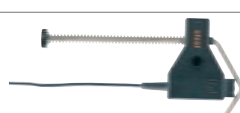
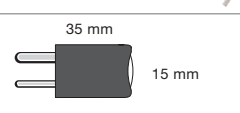

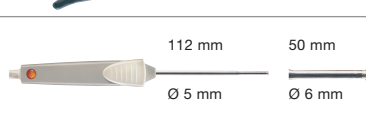


Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no. £
Laboratory probes					
Laboratory probe Pt100, glass-coated, exchangeable glass pipe (Duran 50), resistant to corrosive substances, Fixed cable		-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	45 s 12 s Without protective glass	0609 7072 117.00
Air probes					
Robust air probe, T/C Type K, Fixed cable		-60 to +400 °C	Class 2 ²⁾	25 s	0602 1793 47.83
Efficient, robust air probe, Pt100, Fixed cable		-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	70 s	0609 1773 79.59
Robust, affordable air probe, T/C Type T, Fixed cable 1.2 m		-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) ²⁾	25 s	0603 1793 56.18
Surface probes					
Robust, waterproof surface temperature probe, Pt100, Fixed cable		-50 to +400 °C	Class B ¹⁾	40 s	0609 1973 94.48
Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500°C, TC Type K, Fixed cable		-60 to +300 °C	Class 2 ²⁾	3 s	0602 0393 98.39
Fast-reaction paddle surface probe, for measurements in inaccessible places, e.g. narrow apertures and slots, TC Type K, Fixed cable		0 to +300 °C	Class 2 ²⁾	5 s	0602 0193 105.00
Efficient, waterproof surface probe with small measurement head for flat surfaces, TC Type K, Fixed cable		-60 to +1000 °C	Class 1 ²⁾	20 s	0602 0693 89.25
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		-60 to +300 °C	Class 2 ²⁾	3 s	0602 0993 120.00

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.

Probes


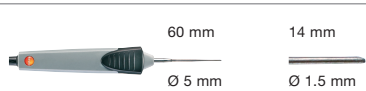
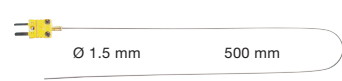
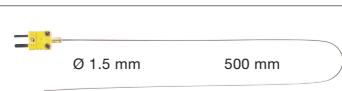

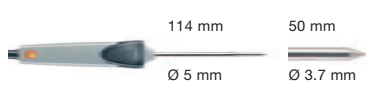

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no. £
Surface probes					
Flat head surface probe with telescopic handle max. 680 mm for measurements at hard-to-access points, TC Type K, Fixed cable 1.6 m (correspondingly shorter when telescope extended)	 680 mm 12 mm Ø 25 mm	-50 to +250 °C	Class 2 ²⁾	3 s	0602 2394 272.00
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 192.00
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 204.00
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type K, Fixed cable	 115 mm Ø 5 mm Ø 6 mm	-60 to +400 °C	Class 2 ²⁾	30 s	0602 1993 46.94
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 ²⁾	90 s	0628 0020 44.73
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 123.00
Spare meas. head for pipe wrap probe, TC Type K	 35 mm 15 mm	-60 to +130 °C	Class 2 ²⁾	5 s	0602 0092 41.58
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 52.29
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type T, Fixed cable 1.2 m	 112 mm 50 mm Ø 5 mm Ø 6 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) ²⁾	30 s	0603 1993 58.28
Immers./penetr. probes					
Robust, waterproof Pt100 immersion/penetration probe, Fixed cable	 114 mm 50 mm Ø 5 mm Ø 3.7 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	12 s	0609 1273 70.41
Highly accurate Pt100 immersion/penetration probe incl. calibration protocol (test points 0 °C and +157 °C), Fixed cable	 295 mm Ø 4 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 376.00

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.

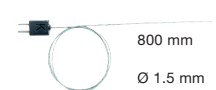


Information on surface measurement:

- The response times t₉₉ 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 well 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).

Probes

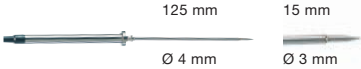
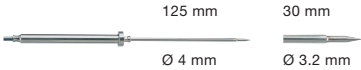
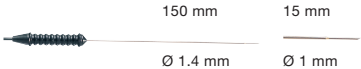
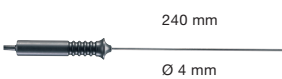

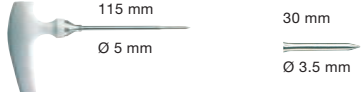
Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t ₉₉	Part no. £
Immers./penetr. probes					
Efficient and fast-action immersion probe, waterproof, TC Type K, Fixed cable		-60 to +1000 °C	Class 1 ²⁾	2 s	0602 0593 81.00
Fast-action, waterproof immersion/penetration probe, TC Type K, Fixed cable		-60 to +800 °C	Class 1 ²⁾	3 s	0602 2693 101.00
Immersion tip, flexible, TC Type K		-200 to +1000 °C	Class 1 ²⁾	5 s	0602 5792 30.77
Immersion tip, flexible, TC Type K		-200 to +40 °C	Class 3 ²⁾	5 s	0602 5793 31.40
Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable for measurements in smelters), TC Type K		-200 to +1300 °C	Class 1 ²⁾	4 s	0602 5693 39.06
Waterproof immersion/penetration probe, TC Type K, Fixed cable		-60 to +400 °C	Class 2 ²⁾	7 s	0602 1293 32.55
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		-200 to +1000 °C	Class 1 ²⁾	1 s	0602 0493 130.00

Thermocouples

Thermocouple with TC adapter, flexible, 800 mm long, fibre glass, TC Type K		-50 to +400 °C	Class 2 ²⁾	5 s	0602 0644 18.19
Thermocouple with TC adapter, flexible, length 1500 mm, fibreglass, TC Type K		-50 to +400 °C	Class 2 ²⁾	5 s	0602 0645 32.10
Thermocouple with TC adapter, flexible, 1500 mm long, PTFE, TC Type K		-50 to +250 °C	Class 2 ²⁾	5 s	0602 0646 32.10

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.

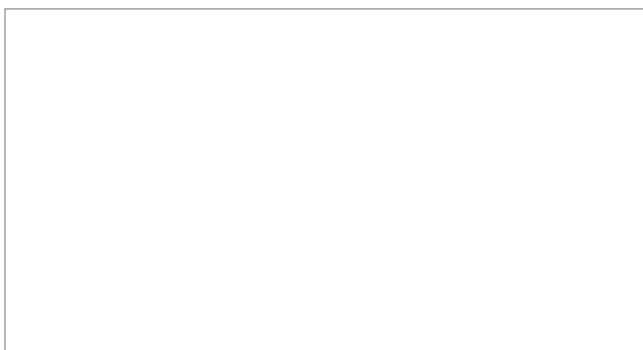
Probes

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 Ø 4 mm Ø 3 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range) ¹⁾	10 s	0609 2272 152.00
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 95.13
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 Ø 1.4 mm Ø 1 mm	-60 to +250 °C	Class 1 ²⁾	1s	0628 0026 102.00
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 73.71
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 130.00
Robust food penetration probe with special handle, reinforced cable (PVC), T/C Type T, Fixed cable	 115 mm 30 mm Ø 5 mm Ø 3.5 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) ²⁾	6 s	0603 2492 85.26

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.

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Subject to change without notice.
 All prices are net and valid until 31.12.2014.
 Shipping costs & VAT not included.



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