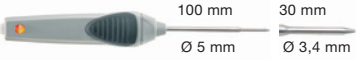


Radio probes

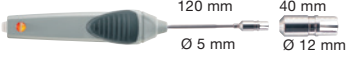
Radio handles and probe head for air-/ immersion-penetration-meas.

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} | |
|  100 mm 30 mm \varnothing 5 mm \varnothing 3,4 mm | | -50 to +350 °C Short-term to +500 °C | Radio handle: $\pm(0.5\text{ °C} + 0.3\% \text{ of m.v.})$ (-40 to +500 °C) $\pm(0.7\text{ °C} + 0.5\% \text{ of m.v.})$ (remaining range) T/C probe head: Class 2 | 0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range) | 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 \varnothing 5 mm \varnothing 12 mm | | -50 to +350 °C Short-term to +500 °C | Radio handle: $\pm(0.5\text{ °C} + 0.3\% \text{ of m.v.})$ (-40 to +500 °C) $\pm(0.7\text{ °C} + 0.5\% \text{ of m.v.})$ (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.

| 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 | $\pm(0.7\text{ °C} + 0.3\% \text{ of m.v.})$ (-40 to +900 °C) $\pm(0.9\text{ °C} + 0.5\% \text{ of m.v.})$ (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) |

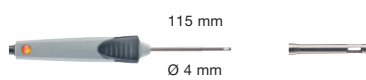

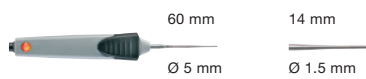


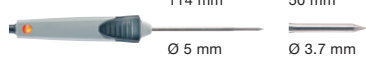
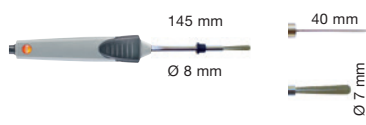
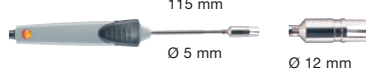
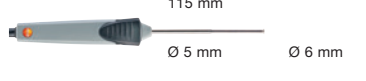
Radio handle

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

Common Technical Data


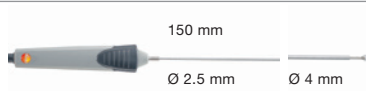



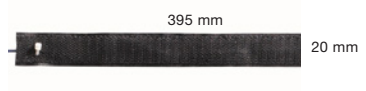

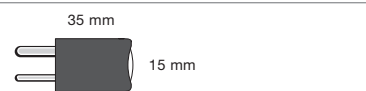

| | |
|-----------------------|-------------------------------------|
| Measuring rate | 0.5 s or 10 s, adjustable on handle |
| Radio coverage | Up to 20 m (without obstructions) |
| Radio transmission | Unidirectional |
| Operating temperature | -20 to +50 °C |
| Storage temperature | -40 to +70 °C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

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 |  | -60 to +400 °C | Class 2 ¹⁾ | 200 s | 0602 1793 |
| Immers./penetr. probes | | | | | |
| ◆ Efficient and fast-action immersion probe, waterproof, TC Type K, Fixed cable 1.2 m |  | -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 to +800 °C | Class 1 ¹⁾ | 3 s | 0602 2693 |
| Immersion tip, flexible, TC Type K |  | -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 |  | -200 to +1300 °C | Class 1 ¹⁾ | 4 s | 0602 5693 |
| ◆ Waterproof immersion/penetration probe, TC Type K, Fixed cable 1.2 m |  | -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 |  | 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 |  | -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 |  | -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.

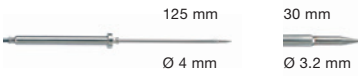
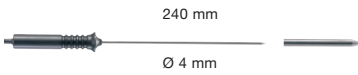
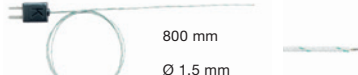
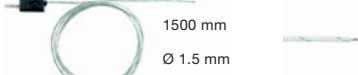

Probes

| 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 |  | -60 to +300 °C | Class 2 ¹⁾ | 3 s | 0602 0993 |
| ◆ Efficient, waterproof surface probe with small measurement head for flat surfaces, TC Type K, Fixed cable 1.2 m |  | -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) |  | -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 |  | -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 |  | -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 |  | -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 |  | -60 to +130 °C | Class 2 ¹⁾ | 5 s | 0602 4592 |
| Spare meas. head for pipe wrap probe, TC Type K |  | -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 |  | -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 |  | -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 |  | -50 to +400 °C | Class 2 ¹⁾ | 5 s | 0602 0644 |
| Thermocouple with TC adapter, flexible, length 1500 mm, fibreglass, TC Type K |  | -50 to +400 °C | Class 2 ¹⁾ | 5 s | 0602 0645 |
| Thermocouple with TC adapter, flexible, 1500 mm long, PTFE, TC Type K |  | -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:

- 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).