# KombiTemp® // Head type J

-30...200 °C



*K 110*



*K 120*

## Highlights

- High measurement reliability due to two independent measuring points
- Fast detection of malfunctioning probes or dial thermometers in the system to be checked
- Low installation costs, advantages of the industrial thermometer

| Technical data | |
|---|---|
| **Version** | Straight |
| **Dimensions housing** | 110 x 30 mm |
| **Measuring range** | -30…200 °C |
| **Medium / Application** | Liquid and gaseous media |
| **Immersion tube length**<br>→ Clamp connection<br>→ Fixed thread connection | <br>135 mm or 160 mm<br>63 mm, 100 mm or 160 mm |
| **Immersion tube diameter** | 12 x 1 mm |
| **Process connection**<br>→ Clamp connection<br>→ Fixed thread connection | <br>G½<br>G½ or M20 x 1.5 |
| **Nominal pressure**<br>→ Immersion tube brass<br>→ Immersion tube stainless steel | <br>PN 16<br>PN 40 |
| **Thermometer capillary** | Prismatic, Ø approx. 6 mm |
| **Thermometer filling**<br>→ Blue | <br>-30...200 °C |
| **Medium temperature** | Depending on measuring range |
| **Ambient temperature** | -20…60 °C (only for indoor use) |
| **Storage temperature** | -25…60 °C |
| **Degree of protection EN 60529** | IP65 |

| Electrical data | |
|---|---|
| **Measuring element** | 1 x Pt100 / 3-wire<br>1 x Pt1000 / 2-wire |
| **Accuracy** | Class B |
| **Electrical connection** | Head type J |

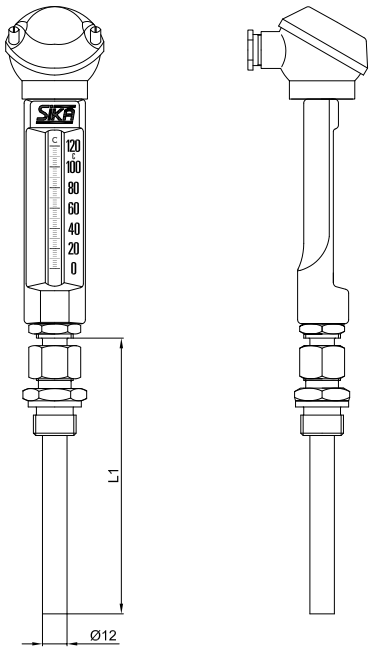
| Options | |
|---|---|
| **For type** | **See order code** |
| **K 110 / K 120** | Analogue output<br>4...20 mA for 1 x Pt100 |



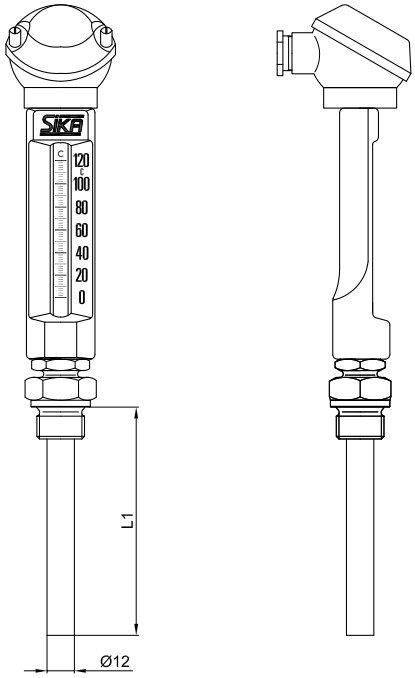
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# Technical drawings

### K 110




### K 120




# Materials

| Materials | |
|---|---|
| **Not in contact with medium** | |
| **Housing** | Warm pressed aluminium part, silver anodized |
| **In contact with medium** | |
| **Process connection** | Brass or stainless steel 1.4571 |
| **Immersion tube** | Brass or stainless steel 1.4571 |


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# Article numbers

| Order code | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Type** | | | | | | | |
| **K110** | | | | | | | |
| Straight, clamp connection | K110 | | | | | | |
| **K120** | | | | | | | |
| Straight, fixed thread connection | K120 | | | | | | |
| **Display ranges** | | | | | | | |
| -30...50 °C | | 35 | | | | | |
| 0...60 °C | | 06 | | | | | |
| 0...100 °C | | 10 | | | | | |
| 0...120 °C | | 12 | | | | | |
| 0...160 °C | | 16 | | | | | |
| 0...200 °C | | 20 | | | | | |
| **Immersion tube length $L_1$** | **adjusted immersion depth** | | | | | | |
| **Clamp connection (K 110)** | | | | | | | |
| 135 mm | 50 mm | | 135 | | | | |
| 160 mm | 73 mm | | 160 | | | | |
| **Fixed thread connection (K 120)** | | | | | | | |
| 63 mm | | | 063 | | | | |
| 100 mm | | | 100 | | | | |
| 160 mm | | | 160 | | | | |
| **Process connection** | | | | | | | |
| **Clamp connection (K 110)** | | | | | | | |
| G½ | | | | 2 | | | |
| **Fixed thread connection (K 120)** | | | | | | | |
| G½ | | | | 2 | | | |
| M20 x 1.5 | | | | 7 | | | |
| **Immersion tube material** | | | | | | | |
| Brass | | | | | 1 | | |
| Stainless steel | | | | | 3 | | |
| **Electrical temperature sensor** | | | | | | | |
| 1x Pt100 / 3-wire / class B | | | | | | 1 | |
| 1x Pt1000 / 2-wire / class B | | | | | | 7 | |
| **Head transmitter** | | | | | | | |
| Without | | | | | | | 0 |
| 4...20 mA* | | | | | | | 1 |
| **Example order number** | **K110** | **35** | **135** | **2** | **1** | **1** | **0** |

* Only for Pt100 / 3-wire / class B (however, for technical reasons, only 2 wires are connected)

**Please note:** We cannot offer small quantities in every configurable combination.
We reserve the right to offer you a common alternative.


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# Accessories

| Accessories | Article number |
|---|---|
| **Measuring point designation**<br>Laser-inscribed stainless steel plate with fixing wire for easy attachment to measuring points<br>→ **Scope of delivery:** Designation plate inscribed according to specification and enclosed fixing wire (sealing wire)<br>→ **Fastening:** Wire (included in delivery), alternatively sealing, cable ties or similar (not included in delivery)<br>→ **Materials:** Plate stainless steel 1.4571, wire stainless steel<br>→ **Dimensions:** Plate 55 x 10 x 0.8 mm, wire length 180 mm<br>→ **Inscription:** one-sided, single-line, max. 11 characters, character height 5 mm, designation width max. 40 mm, letters, numbers, symbols, barcodes, QR codes<br>→ **Transmission of designations:** digital list, file formats Excel, Word or CSV | **ONSITETAG** |

