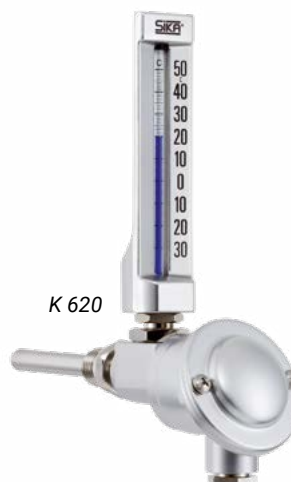


# KombiTemp® // Head type B

-60...200 °C



K 410



K 620



## 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

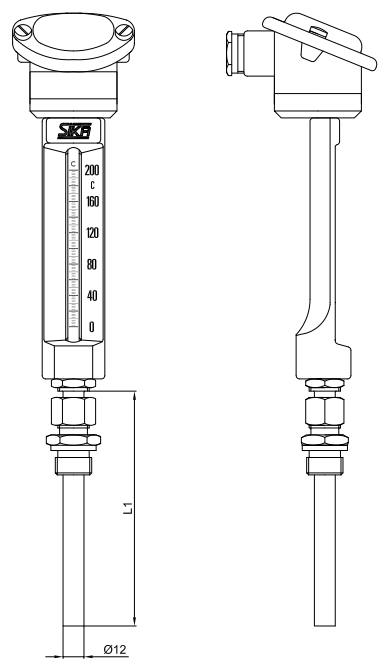
| Technical data                   |                                   |           |
|----------------------------------|-----------------------------------|-----------|
| Version                          | Straight                          | 90° angle |
| Dimensions housing               | 150 x 36 mm                       |           |
| Measuring range                  | -60...200 °C                      |           |
| Medium / Application             | Liquid and gaseous media          |           |
| Immersion tube length            |                                   |           |
| → Clamp connection               | 135 mm or 160 mm                  |           |
| → Fixed thread connection        | 63 mm, 100 mm or 160 mm           |           |
| Immersion tube diameter          | 12 mm                             |           |
| Process connection               |                                   |           |
| → Clamp connection               | G½                                |           |
| → Fixed thread connection        | G½, G¾ or M20 x 1.5               |           |
| Nominal pressure                 |                                   |           |
| → Immersion tube brass           | PN 16                             |           |
| → Immersion tube stainless steel | PN 40                             |           |
| Thermometer capillary            | Prismatic, Ø approx. 6 mm         |           |
| Thermometer filling              |                                   |           |
| → Red                            | -60...40 °C                       |           |
| → Blue                           | -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>2 x Pt100 / 3-wire<br>1 x Pt1000 / 2-wire<br>1 x NiCr-Ni (type K)<br>2 x NiCr-Ni (type K) |
| Accuracy              | Class B<br>Class 1                                                                                              |
| Electrical connection | Head type B (DIN 43729)                                                                                         |

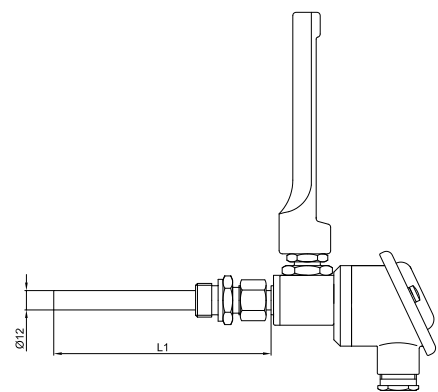
| Options                       |                                            |
|-------------------------------|--------------------------------------------|
| For type                      | See order code                             |
| K 410 / K 420 / K 610 / K 620 | Analogue output<br>4...20 mA for 1 x Pt100 |

# Technical drawings

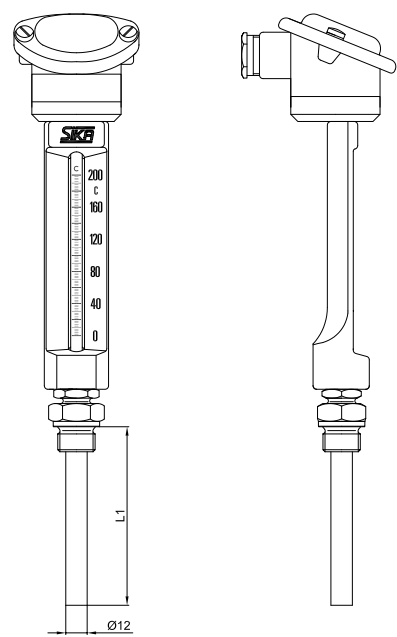
K 410



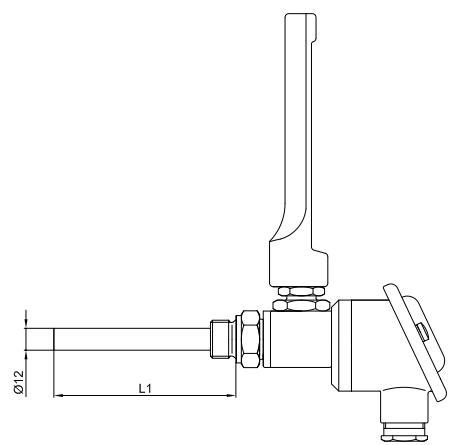
K 610



K 420



K 620



# Materials

| Material                   |                                              |
|----------------------------|----------------------------------------------|
| 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              |

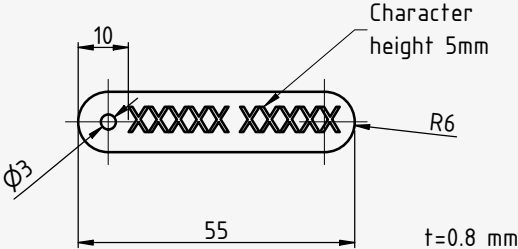
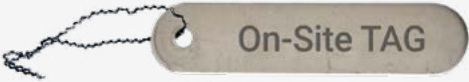
# Article numbers

| Order code                                                    |  |             |           |            |          |          |          |
|---------------------------------------------------------------|--|-------------|-----------|------------|----------|----------|----------|
| Type                                                          |  |             |           |            |          |          |          |
| <b>K 410</b>                                                  |  |             |           |            |          |          |          |
| Straight, clamp connection                                    |  | K410        |           |            |          |          |          |
| <b>K 420</b>                                                  |  |             |           |            |          |          |          |
| Straight, fixed thread connection                             |  | K420        |           |            |          |          |          |
| <b>K 610</b>                                                  |  |             |           |            |          |          |          |
| Angle 90 °, clamp connection                                  |  | K610        |           |            |          |          |          |
| <b>K 620</b>                                                  |  |             |           |            |          |          |          |
| Angle 90 °, fixed thread connection                           |  | K620        |           |            |          |          |          |
| Display ranges                                                |  |             |           |            |          |          |          |
| -60...40 °C                                                   |  | 64          |           |            |          |          |          |
| -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 <sub>1</sub> adjusted immersion depth |  |             |           |            |          |          |          |
| <b>Clamp connection (K 410 / K 610)</b>                       |  |             |           |            |          |          |          |
| 135 mm                                                        |  | 50 mm       | 135       |            |          |          |          |
| 160 mm                                                        |  | 73 mm       | 160       |            |          |          |          |
| <b>Fixed thread connection (K 420 / K 620)</b>                |  |             |           |            |          |          |          |
| 63 mm                                                         |  |             | 063       |            |          |          |          |
| 100 mm                                                        |  |             | 100       |            |          |          |          |
| 160 mm                                                        |  |             | 160       |            |          |          |          |
| Process connection                                            |  |             |           |            |          |          |          |
| <b>Clamp connection (K 410 / K 610)</b>                       |  |             |           |            |          |          |          |
| G½                                                            |  |             |           | 2          |          |          |          |
| <b>Fixed thread connection (K 420 / K 620)</b>                |  |             |           |            |          |          |          |
| G½                                                            |  |             |           | 2          |          |          |          |
| G¾                                                            |  |             |           | 3          |          |          |          |
| M20 x 1.5                                                     |  |             |           | 7          |          |          |          |
| Immersion tube material                                       |  |             |           |            |          |          |          |
| Brass                                                         |  |             |           |            | 1        |          |          |
| Stainless steel                                               |  |             |           |            | 3        |          |          |
| Electrical temperature sensor                                 |  |             |           |            |          |          |          |
| 1x Pt100 / 3-wire / class B                                   |  |             |           |            |          | 1        |          |
| 2x Pt100 / 3-wire / class B                                   |  |             |           |            |          | 4        |          |
| 1x Pt1000 / 2-wire / class B                                  |  |             |           |            |          | 7        |          |
| 1x NiCr-Ni (type K)                                           |  |             |           |            |          | 2        |          |
| 2x NiCr-Ni (type K)                                           |  |             |           |            |          | 5        |          |
| Head transmitter                                              |  |             |           |            |          |          |          |
| Without                                                       |  |             |           |            |          |          | 0        |
| 4...20 mA*                                                    |  |             |           |            |          |          | 1        |
| <b>Example order number</b>                                   |  | <b>K410</b> | <b>64</b> | <b>135</b> | <b>2</b> | <b>1</b> | <b>1</b> |
|                                                               |  |             |           |            |          |          | <b>0</b> |

\* Only for 1 x Pt100 / 3-wire / class B

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

# Accessories

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