

- Head form B
- Head form J
- Cable socket, angle type



KOMBITEMP®  
TEMPERATURE SENSOR WITH LOCAL DISPLAY



Including products with:



# Dual temperature control with only one measuring point!

## Ideal for every application

The combination of electrical sensor with a local display has many advantages:

- Temperature monitoring from two completely independent measuring systems.
- Significantly increased accuracy, because the joint measuring point makes it possible to compare the electrical temperature sensor directly with the „on site“ display and vice versa.
- The installation costs for the temperature measuring instruments decrease because only one measuring point needs to be installed for the electrical temperature sensor and the local temperature measurement.
- The use of SIKA KombiTemp® increases the operational safety of the monitored plants because faulty electrical temperature sensors or industrial thermometers are immediately detected.
- Glass inserts and electrical temperature sensors conform with DIN standards, and can be replaced, except for the models K 122, K 422, K 510, K 520, and K 522.
- Upon request both temperature units, °C and °F, can be printed on the housing label (double scale display).



## Description

The SIKA KombiTemp® consists of:

1. A SIKA-industrial glass thermometer with the following properties:
  - Shock proof
  - Very good readability
  - Very good long-term stability of the capillary accuracy
  - The capillaries of the thermometer are produced and calibrated in accordance with DIN 16195
  - The housing surface is protected against external influences by a thick anodised coating
2. At customer's request, an electrical temperature sensor in the same housing and immersion tube as the industrial thermometer:
  - Temperature sensors in accordance with DIN or customised
  - Any electrical connection options available



# Head form B

K 410 and K 420 for measuring ranges between -60 to 200 °C

## Housing

- Die cast aluminium  
length 150 mm / width 36 mm, silver-coloured anodised

## Thermometer capillaries

- Special glass prismatic, approx. 6 mm diameter  
with black burnt-in scale

## Thermometer filling

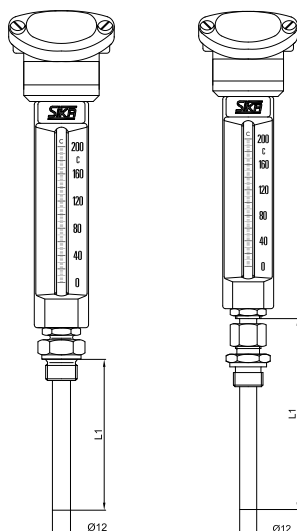
- Red (-60...40 °C)
- Blue (-30...200 °C)

## Immersion tube

- Diameter 12 x 1 mm

## Immersion tube material

- Brass, up to PN 16 bar
- Stainless steel, up to PN 40 bar



## Type K 410



Technical data	Type K 410	Type K 420
<b>Design</b>	Straight, clamp connection	Straight, fixed thread connection
<b>Measuring range</b>	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C	
<b>Immersion tube length L<sub>1</sub></b>	135 mm or 160 mm	63 mm, 100 mm or 160 mm
<b>Electrical connection</b>	Head form B (DIN 43729)	
<b>Mechanical connection</b>	G½ A	G½ A, G¾ A or M20 x 1.5
<b>Electrical temperature sensor</b>	1x NiCr-Ni (type K) or 1x Fe-CuNi (type J), 2x NiCr-Ni (type K) or 2x Fe-CuNi (type J) 1x Pt100 / 3-wire, 2x Pt100 / 3-wire, 1x Pt1000 / 2-wire,	
<b>Option head transmitter</b>	4...20 mA or 0...10 V for Pt100	

## K 510 and K 520 for measuring ranges between -60 to 200 °C

### Housing

- Die cast aluminium  
length 150 mm / width 36 mm, silver-coloured anodised

### Thermometer capillaries

- Special glass, approx. 5.5 mm diameter  
with black burnt-in scale

### Thermometer filling

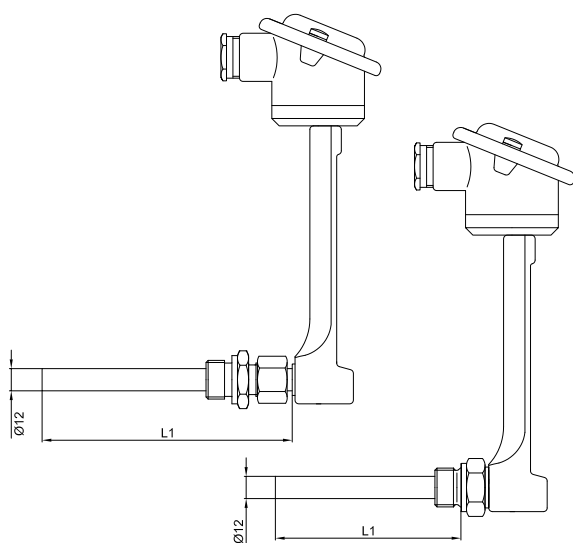
- Red (-60...40 °C)
- Blue (-30...200 °C)

### Immersion tube

- Diameter 12 x 1 mm

### Immersion tube material

- Brass, up to PN 16 bar
- Stainless steel, up to PN 40 bar



### Type K 510



Technical data	Type K 510	Type K 520
<b>Design</b>	90° clamp connection	90° fixed thread connection
<b>Measuring range</b>	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C	
<b>Immersion tube length L<sub>1</sub></b>	135 mm or 160 mm	63 mm, 100 mm or 160 mm
<b>Electrical connection</b>	Head form B (DIN 43729)	
<b>Mechanical connection</b>	G½ A	G½ A or M20 x 1.5
<b>Electrical temperature sensor</b>	1x Pt100 / 3-wire / class B 1x Pt1000 / 2-wire / class B	
<b>Option head transmitter</b>	4...20 mA or 0...10 V for Pt100	

## K 610 and K 620 for measuring ranges between -60 to 200 °C

### Housing

- Die cast aluminium  
length 150 mm / width 36 mm, silver-coloured anodised

### Thermometer capillaries

- Special glass, approx. 5.5 mm diameter  
with black burnt-in scale

### Thermometer filling

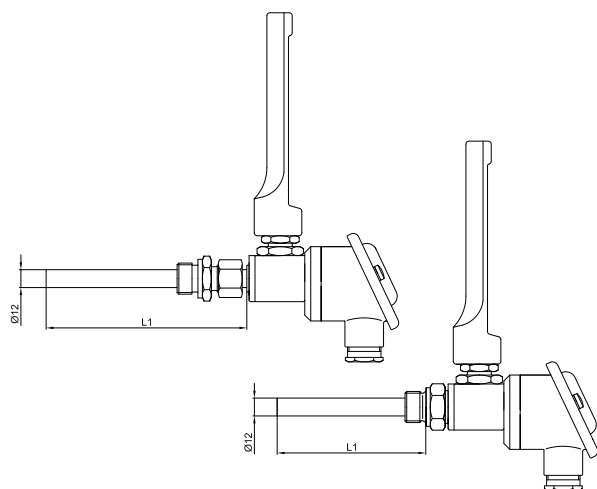
- Red (-60...40 °C)
- Blue (-30...200 °C)

### Immersion tube

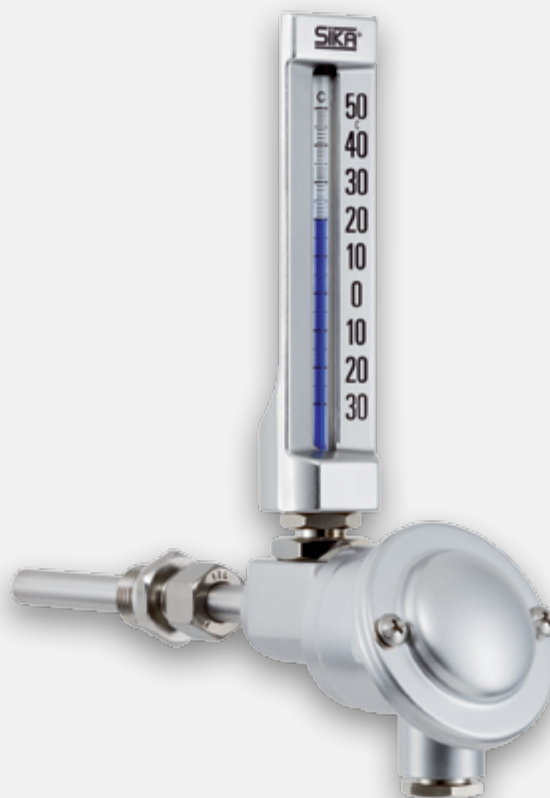
- Diameter 12 x 1 mm

### Immersion tube material

- Brass, up to PN 16 bar
- Stainless steel, up to PN 40 bar



### Type K 610



Technical data	Type K 610	Type K 620
<b>Design</b>	90° clamp connection	90° fixed thread connection
<b>Measuring range</b>	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C	
<b>Immersion tube length L<sub>1</sub></b>	135 mm or 160 mm	63 mm, 100 mm or 160 mm
<b>Electrical connection</b>	Head form B (DIN 43729)	
<b>Mechanical connection</b>	G½ A	G½ A or M20 x 1.5
<b>Electrical temperature sensor</b>	1 x NiCr-Ni (Type K) or 1 x Fe-CuNi (Type J), 2 x NiCr-Ni (Type K) or 2 x Fe-CuNi (Type J) 1 x Pt100 / 3-wire, 2 x Pt100 / 3-wire, 1 x Pt100 / 4-wire or 1 x Pt1000 / 2-wire (class B)	
<b>Option head transmitter</b>	4...20 mA or 0...10 V for Pt100	

## Head form J

K 110 and K 120 for measuring ranges between -30 to 200 °C

### Housing

- Die cast aluminium  
length 110 mm / width 30 mm, silver-coloured anodised

### Thermometer capillaries

- Special glass prismatic, approx. 6 mm diameter  
with black burnt-in scale

### Thermometer filling

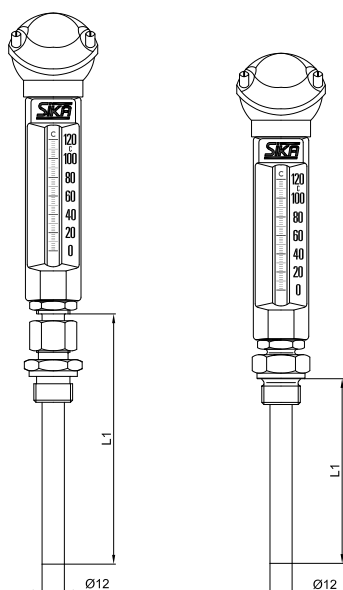
- Blue

### Immersion tube

- Diameter 12 x 1 mm

### Immersion tube material

- Brass, up to PN 16 bar
- Stainless steel, up to PN 40 bar



### Type K 120



Technical data	Type K 110	Type K 120
<b>Design</b>	Traight, clamp connection	Straight, fixed thread connection
<b>Measuring range</b>	-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C	
<b>Immersion tube length L<sub>1</sub></b>	135 mm or 160 mm	63 mm, 100 mm or 160 mm
<b>Electrical connection</b>	Head form J, top	
<b>Mechanical connection</b>	G½ A	G½ A or M20 x 1.5
<b>Electrical temperature sensor</b>	1x Pt100 / 3-wire / class B 1x Pt1000 / 2-wire / class B	
<b>Option head transmitter</b>	4...20 mA for Pt100	

# Cable socket, angle type

K 122 for measuring ranges between -30 to 200 °C

## Housing

- Die cast aluminium  
length 110 mm / width 30 mm, gold-coloured anodised

## Thermometer capillaries

- Special glass prismatic, approx. 6 mm diameter  
with black burnt-in scale

## Thermometer filling

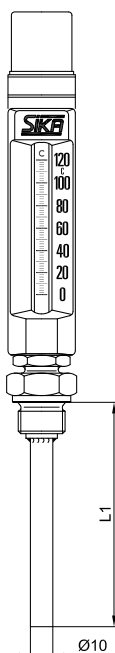
- Blue

## Immersion tube

- Diameter 10 x 1 mm

## Immersion tube material

- Brass, up to PN 16 bar
- Stainless steel, up to PN 40 bar



## Type K 122



Technical data	Type K 122
<b>Design</b>	Straight, fixed thread connection
<b>Measuring range</b>	-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
<b>Immersion tube length L<sub>1</sub></b>	63 mm, 100 mm or 160 mm
<b>Electrical connection</b>	Cable socket, angle type DIN EN 175301-803
<b>Mechanical connection</b>	G½ A or M20 x 1.5
<b>Electrical temperature sensor</b>	1x Pt100 / 3-wire / class B 1x Pt1000 / 2-wire / class B



## K 422 for measuring ranges between -30 to 200 °C

### Housing

- Die cast aluminium  
length 150 mm / width 36 mm, gold-coloured anodised

### Thermometer capillaries

- Special glass prismatic, approx. 6 mm diameter  
with black burnt-in scale

### Thermometer filling

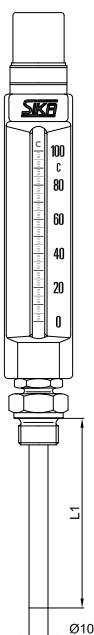
- Blue

### Immersion tube

- Diameter 10 x 1 mm

### Immersion tube material

- Brass, up to PN 16 bar
- Stainless steel, up to PN 40 bar



### Type K 422



Technical data	Type K 422
<b>Design</b>	Straight, fixed thread connection
<b>Measuring range</b>	-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
<b>Immersion tube length L<sub>1</sub></b>	63 mm, 100 mm or 160 mm
<b>Electrical connection</b>	Cable socket, angle type DIN EN 175301-803
<b>Mechanical connection</b>	G½ A or M20 x 1.5
<b>Electrical temperature sensor</b>	1x Pt100 / 3-wire / class B 1x Pt1000 / 2-wire / class B

## K 522 for measuring ranges between -30 to 200 °C

### Housing

- Die cast aluminium  
length 150 mm / width 36 mm, gold-coloured anodised

### Thermometer capillaries

- Special glass prismatic, approx. 6 mm diameter  
with black burnt-in scale

### Thermometer filling

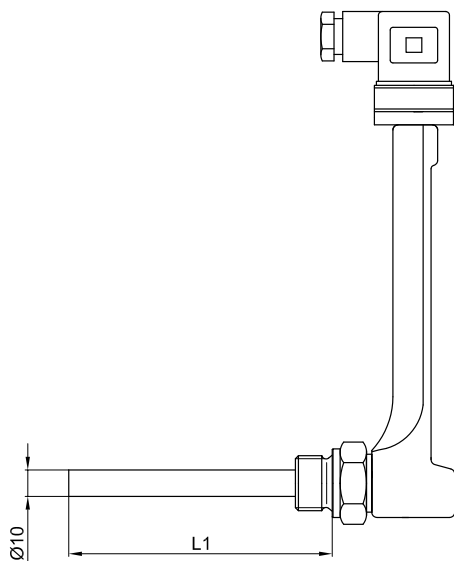
- Blue

### Immersion tube

- Diameter 10 x 1 mm

### Immersion tube material

- Brass, up to PN 16 bar
- Stainless steel, up to PN 40 bar



### Type K 522



Technical data	Type K 522
<b>Design</b>	90° fixed thread connection
<b>Measuring range</b>	-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
<b>Immersion tube length L<sub>1</sub></b>	63 mm, 100 mm or 160 mm
<b>Electrical connection</b>	Cable socket, angle type DIN EN 175301-803
<b>Mechanical connection</b>	G½ A or M20 x 1.5
<b>Electrical temperature sensor</b>	1x Pt100 / 3-wire / class B 1x Pt1000 / 2-wire / class B

## K 130 for measuring ranges between -30 to 200 °C

### Housing

- Die cast aluminium  
length 110 mm / width 30 mm, gold-coloured anodised

### Thermometer capillaries

- Special glass prismatic, approx. 6 mm diameter  
with black burnt-in scale

### Thermometer filling

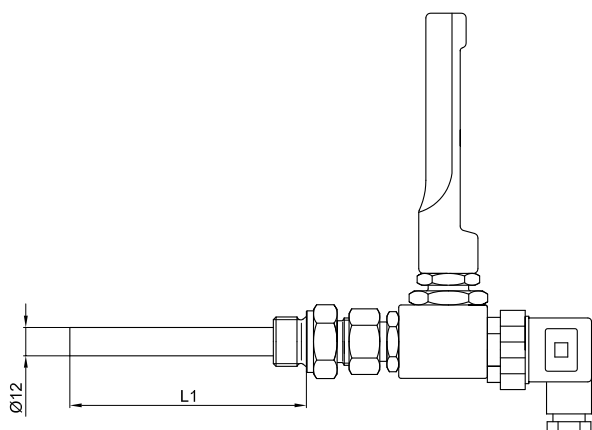
- Blue

### Immersion tube

- Diameter 12 x 1 mm

### Immersion tube material

- Brass, up to PN 16 bar
- Stainless steel, up to PN 40 bar



### Type K 130



Technical data	Type K 130
Design	90° fixed thread connection
Measuring range	-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length L <sub>1</sub>	63 mm, 100 mm or 160 mm
Electrical connection	Cable socket, angle type DIN EN 175301-803
Mechanical connection	G½ A or M20 x 1.5
Electrical temperature sensor	1x Pt100 / 3-wire / class B 1x Pt1000 / 2-wire / class B

# Order code

## Choose your KombiTemp®

	Head form B				
Type	K 410	K 420	K 510	K 520	K 610
<b>Measuring range</b>					
-60...40 °C	64	64	64	64	64
-30...50 °C	35	35	35	35	35
0...60 °C	06	06	06	06	06
0...100 °C	10	10	10	10	10
0...120 °C	12	12	12	12	12
0...160 °C	16	16	16	16	16
0...200 °C	20	20	20	20	20
<b>Immersion tube length</b>					
63 mm		063		063	
100 mm		100		100	
135 mm	135		135		135
160 mm	160	160	160	160	160
<b>Mechanical connection</b>					
G½ A	2	2	2	2	2
G¾ A		3			
M20 x 1.5		7		7	
<b>Immersion tube material</b>					
Brass	1	1	1	1	1
Stainless steel	3	3	3	3	3
<b>Electrical temperature sensor</b>					
1x Pt100 / 3-wire	1	1	1	1	1
2x Pt100 / 3-wire	4	4			4
1x Pt100 / 4-wire					8
1x Pt1000 / 2-wire	7	7	7	7	7
1x NiCr-Ni (Type K)	2	2			2
2x NiCr-Ni (Type K)	5	5			5
1x Fe-CuNi (Type J)	3	3			3
2x Fe-CuNi (Type J)	6	6			6
<b>Head transmitter</b>					
Without transmitter	0	0	0	0	0
With 4...20 mA	1	1	1	1	1
With 0...10 V	2	2	2	2	2
<b>Scale</b>					
Only °C	0	0	0	0	0
°C and °F				2	



Example: KombiTemp® K 110 with measuring range between 0...60 °C, immersion tube length 135 mm, G½ A connection, made of brass with electrical temperature sensor Pt1000 / 2-wire, without head transmitter and scaled in °C is due to order number: K1100613521700

ATTENTION - you have to choose an option on every property to get the 14-character order number

		Head form J		Cable socket, angle type			
	K 620	K 110	K 120	K 122	K 422	K 522	K 130
	64 35 06 10 12 16 20	35 06 10 12 16 20	35 06 10 12 16 20	35 06 10 12 16 20	35 06 10 12 16 20	35 06 10 12 16 20	35 06 10 12 16 20
	063 100 160	135 160	063 100 160	063 100 160	063 100 160	063 100 160	063 100 160
	2 7	2	2 7	2 7	2 7	2 7	2 7
	1 3	1 3	1 3	1 3	1 3	1 3	1 3
	1 4 8 7 2 5 3 6	1 4 7	1 4 7	1 7	1 7	1 7	1 4 7 2 3
	0 1 2	0 1	0 1	0	0	0	0
	0	0	0	0 2	0 2	0	0 2