



KombiTemp®

Temperature sensor with local display



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:

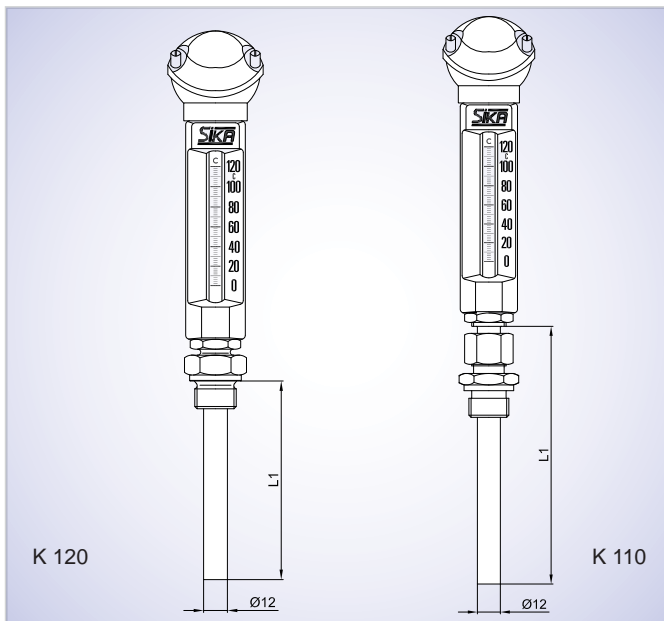
- Temperature sensors in accordance with DIN or customised
- Any electrical connection options available



Type K 110 and Type 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
- st. steel, up to PN 40 bar

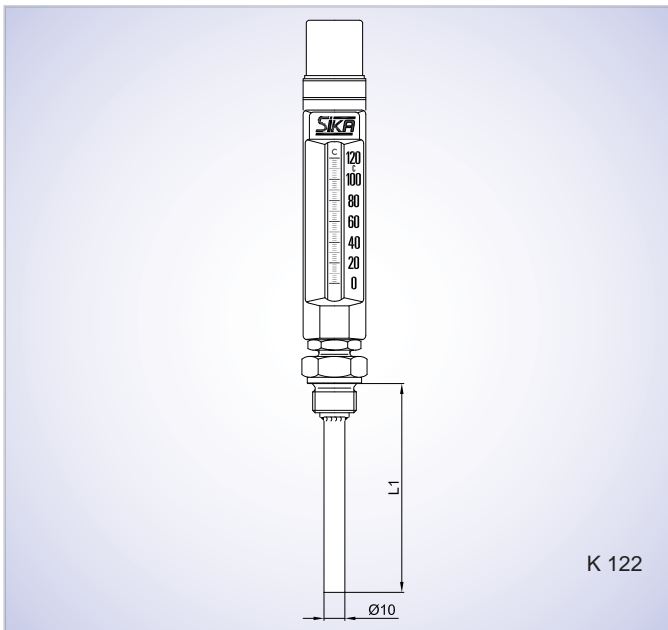


Technical data	Type K 110	Type K 120
Design	straight, clamp connection	straight, fixed thread connection
Measuring range		-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length	135 mm or 160 mm	63 mm, 100 mm or 160 mm
Electrical connection		head form J, top
Mechanical connection	½" BSP male	½" BSP male or M20 x 1.5
Electrical temperature sensor		1x NiCr-Ni (Type K) 1x Fe-CuNi (Type J) 1x Pt100 / 3-wire 1x Pt1000 / 2-wire
Option head transmitter		4...20 mA for Pt100

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
- st. steel, up to PN 40 bar

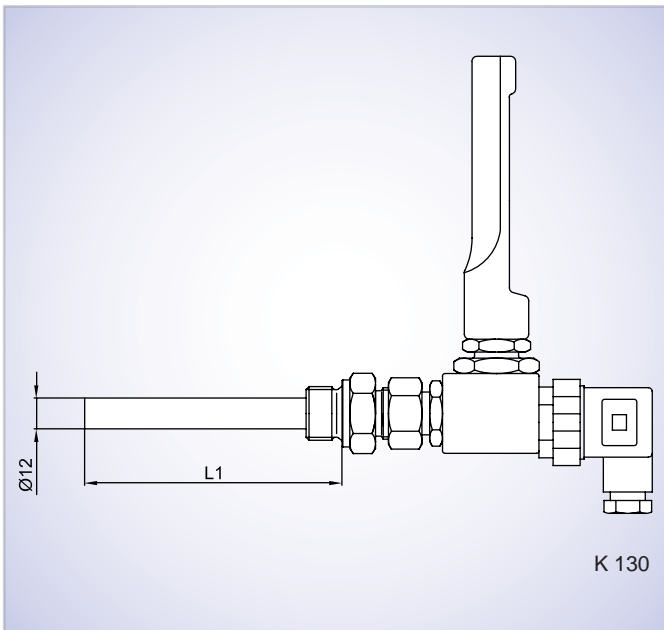


Technical data		Type K 122
Design		straight, fixed thread connection
Measuring range		-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length		63 mm, 100 mm or 160 mm
Electrical connection		cable socket, angle type DIN EN 175301-803
Mechanical connection		½" BSP male or M20 x 1.5
Electrical temperature sensor		1x Pt100 / 3-wire 1x Pt1000 / 2-wire

Type 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
- st. steel, up to PN 40 bar

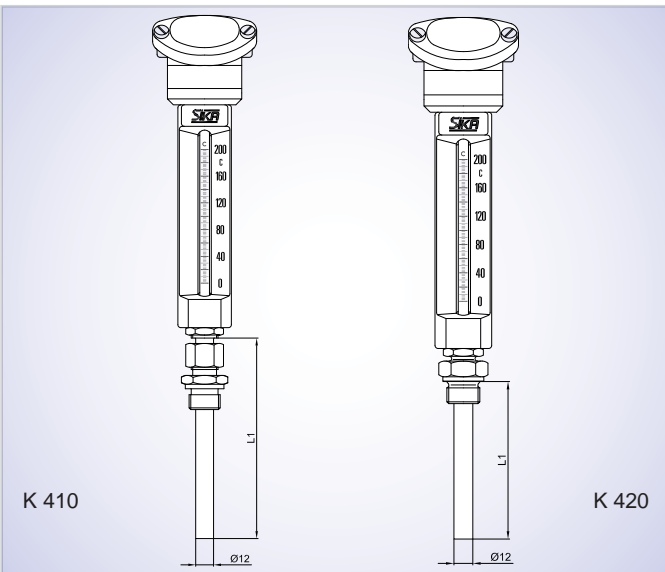


Technical data	
Design	Type K 130 90° ↗, fixed thread connection
Measuring range	-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length	63 mm, 100 mm or 160 mm
Electrical connection	cable socket, angle type DIN EN 175301-803
Mechanical connection	½" BSP male or M20 x 1.5
Electrical temperature sensor	1x Pt100 /3-wire 1x Pt1000 /2-wire

Type K 410 and Type 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
- st. steel, up to PN 40 bar

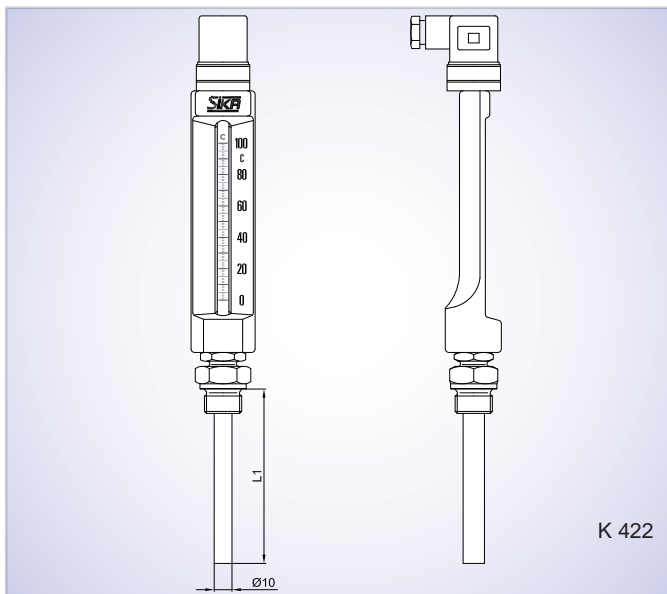


Technical data	Type K 410	Type K 420
Design	straight, clamp connection	straight, fixed thread connection
Measuring range	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length	135 mm or 160 mm	63 mm, 100 mm or 160 mm
Electrical connection	head form B (DIN 43729)	
Mechanical connection	½" BSP male	½" BSP male, ¾" BSP male or M20 x 1.5
Electrical temperature sensor	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,	
Option head transmitter	4...20 mA or 0...10 V for Pt100	

Type 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
- st. steel, up to PN 40 bar

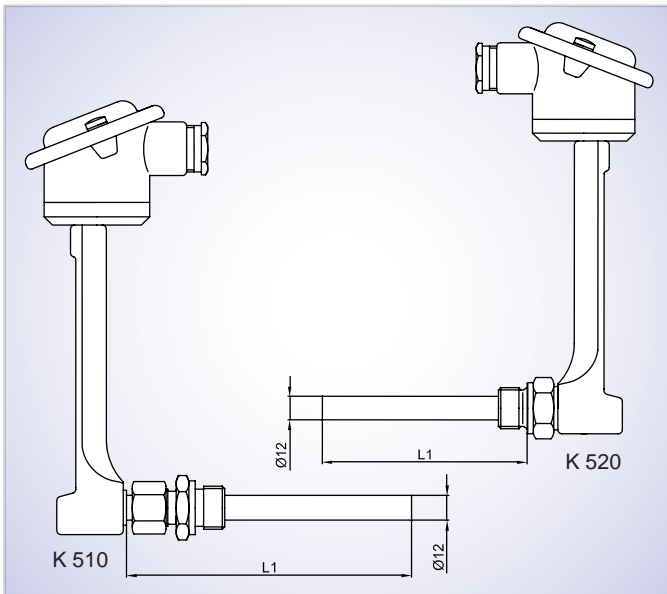


Technical data	
Design	straight, fixed thread connection
Measuring range	-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length	63 mm, 100 mm or 160 mm
Electrical connection	cable socket, angle type DIN EN 175301-803
Mechanical connection	½" BSP male or M20 x 1.5
Electrical temperature sensor	1x Pt100 / 3-wire 1x Pt1000 / 2-wire

Type K 510 and Type 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 - st. steel, up to PN 40 bar

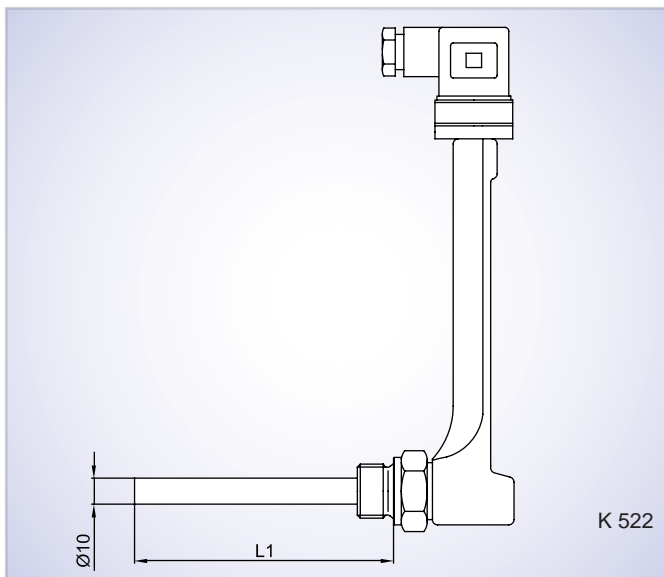


Technical data	Type K 510	Type K 520
Design	90° ↘, clamp connection	90° ↘, fixed thread connection
Measuring range	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length	135 mm or 160 mm	63 mm, 100 mm or 160 mm
Electrical connection	head form B (DIN 43729)	head form B (DIN 43729)
Mechanical connection	½" BSP male	½" BSP male or M20 x 1.5
Electrical temperature sensor	1x Pt100 /3-wire 1x Pt1000 /2-wire	
Option head transmitter	4...20 mA or 0...10 V for Pt100	

Type 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
- st. steel, up to PN 40 bar

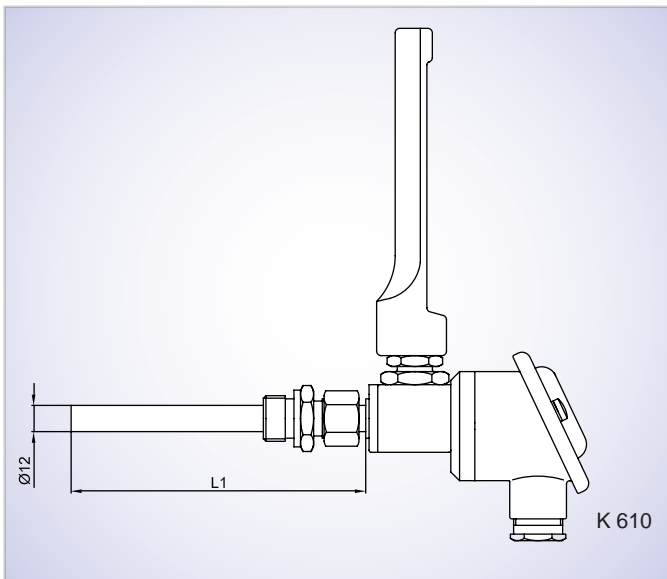


Technical data	
Design	90° ↗, fixed thread connection
Measuring range	-30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length	63 mm, 100 mm or 160 mm
Electrical connection	cable socket, angle type DIN EN 175301-803
Mechanical connection	½" BSP male or M20 x 1.5
Electrical temperature sensor	1x Pt100 / 3-wire 1x Pt1000 / 2-wire

Type K 610

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
- st. steel, up to PN 40 bar

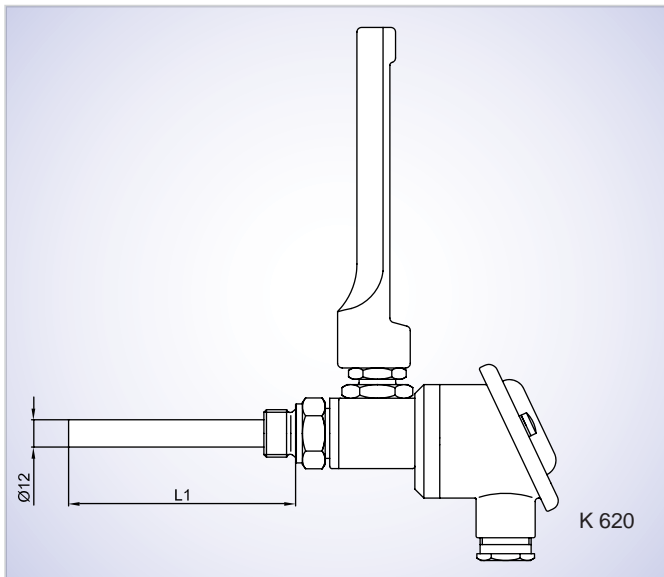


Technical data	Type K 610
Design	90° ↗, clamp connection
Measuring range	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length	135 mm or 160 mm
Electrical connection	head form B (DIN 43729)
Mechanical connection	½" BSP male
Electrical temperature sensor	1x 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 Pt100 / 4-wire or 1x Pt1000 / 2-wire
Option head transmitter	4...20 mA or 0...10 V for Pt100

Type 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
- st. steel, up to PN 40 bar



Technical data	Type K 620
Design	90° ↯, fixed thread connection
Measuring range	-60...40 °C -30...50 °C 0...60 °C 0...100 °C 0...120 °C 0...160 °C 0...200 °C
Immersion tube length	63 mm, 100 mm or 160 mm
Electrical connection	head form B (DIN 43729)
Mechanical connection	½" BSP male or M20 x 1.5
Electrical temperature sensor	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 Pt100 / 4-wire or 1x Pt1000 / 2-wire
Option head transmitter	4...20 mA or 0...10 V for Pt100

SIKA KombiTemp® Order Code

Choose your KombiTemp

Type	K 110	K 120	K 122	K 130	K 410	K 420
Page	3	3	4	5	6	6
Measuring range						
-60...40°C	-	-	-	-	64	64
-30...50 °C	35	35	35	35	35	35
0...60 °C	06	06	06	06	06	06
0...100 °C	10	10	10	10	10	10
0...120 °C	12	12	12	12	12	12
0...160 °C	16	16	16	16	16	16
0...200 °C	20	20	20	20	20	20
Immersion tube length						
63 mm	-	063	063	063	-	063
100 mm	-	100	100	100	-	100
135 mm	135	-	-	-	135	-
160 mm	160	160	160	160	160	160
Mechanical connection						
½" BSP male	2	2	2	2	2	2
¾" BSP male	-	-	-	-	-	3
M20 x 1.5	-	7	7	7	-	7
Immersion tube material						
brass	1	1	1	1	1	
stainless steel	3	3	3	3	3	
Electrical temperature sensor						
1x Pt100/3-wire	1	1	1	1	1	1
2x Pt100/3-wire	-	-	-	-	-	4
1x Pt100/4-wire	-	-	-	-	-	-
1x Pt1000/2-wire	7	7	7	7	7	7
1x NiCr-Ni (type K)	2	2	-	2	2	2
2x NiCr-Ni (type K)	-	-	-	-	-	5
1x Fe-CuNi (type J)	3	3	-	3	3	3
2x Fe-CuNi (type J)	-	-	-	-	-	6
Head transmitter						
without transmitter	0	0	0	0	0	0
with 4...20 mA	1	1	-	-	-	1
with 0...10 V	-	-	-	-	-	2
Scale						
only °C	0	0	0	0	0	0
°C and °F	-	-	2	2	-	-
Order number						



Example: KombiTemp K110 with measuring range between 0...60 °C, immersion tube length 135 mm, ½" BSP male 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

	K 422	K 510	K 520	K 522	K 610	K 620
	7	8	8	9	10	13
	- 35 06 10 12 16 20	64 35 06 10 12 16 20	64 35 06 10 12 16 20	- 35 06 10 12 16 20	64 35 06 10 12 16 20	64 35 06 10 12 16 20
	063 100 - 160	- - 135 160	063 100 - 160	063 100 - 160	- - 135 160	063 100 - 160
	2 - 7	2 - -	2 - 7	2 - 7	2 - -	2 - 7
1 3	1 3	1 3	1 3	1 3	1 3	1 3
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0 1 2	0 - -	0 1 2	0 1 2	0 - -	0 1 2	0 1 2
0 -	0 2	0 -	0 2	0 -	0 -	0 -

Our Production and Sales Range



Flow Sensors without moving Parts



Turbine Flow Sensors



Flow Switches



Pressure Gauges and Pressure Sensors



Industrial Thermometers



Electronic Digital Thermometers, Dial Thermometers



Measuring Instruments



Temperature Sensors



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Dr. Siebert & Kühn GmbH & Co. KG

...measurement...control...calibration

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Subject to technical modification

