

**SIKA®**



↑↑ SIKA thermometers for industrial and marine applications

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↑↑ Special versions and accessories

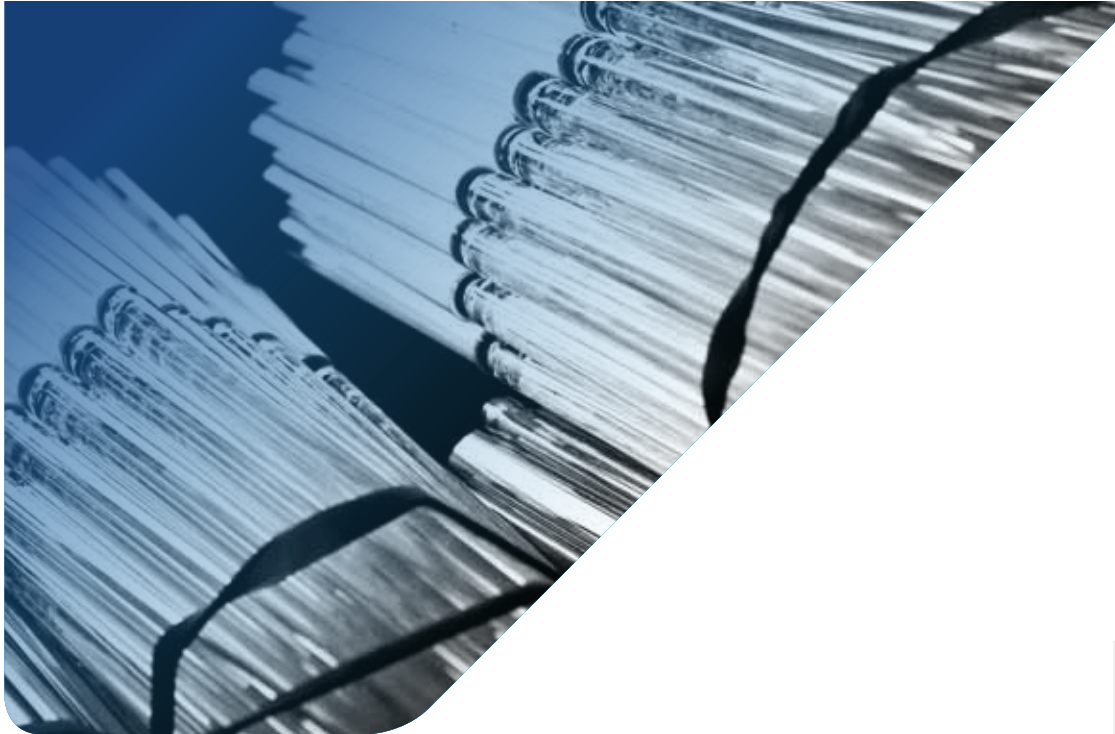
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↑↑ SIKA thermometers for HVAC applications

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## INDUSTRIAL THERMOMETERS



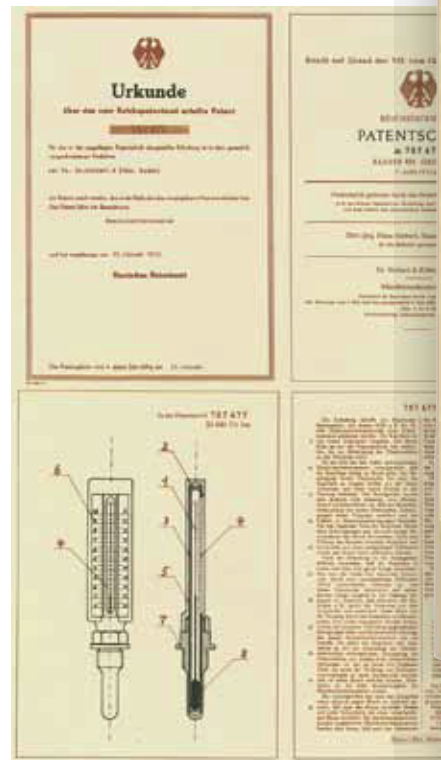
## The Original - Made by the inventor of the industrial thermometer

### Quality by tradition

Since 1901 we at SIKA - Dr. Siebert and Kühn have produced precision measuring and control instruments. The original "SIKA" thermometer was developed and brought to production stage by the engineer Hans Siebert. For its basic mechanical design, Dr. Siebert and Kuehn finally received the patent no. 767477 in 1939. From those early days on, we have been manufacturing these thermometers solely in Kassel / Kaufungen – that is real quality "made in Germany".

Since their invention, SIKA thermometers have been the very embodiment of robustness, reliability and accuracy. They harbour knowledge of many details and the experience of thousands of applications. For this reason, they are now completely indispensable in marine engineering, mechanical and plant engineering, as well as heating and air conditioning technology. Over 15 million reliable temperature monitors have already been produced in Kaufungen.

The advantages of a glass thermometer over other thermometers such as dial thermometers or electronic versions, are obvious: no mechanically moving parts, no material fatigue, no electrical energy requirement, but a high level of accuracy and a very long service life. In other words, as long as a glass thermometer is not mechanically destroyed, it remains accurate for the duration of its service life.



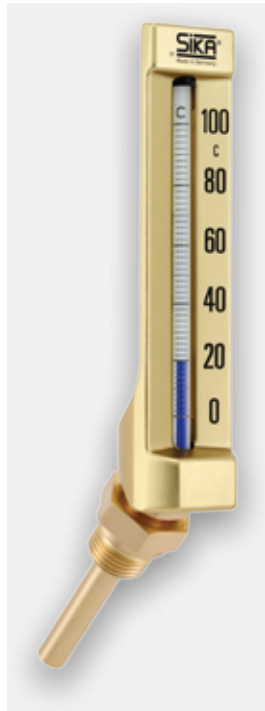
## Our range

Mechanical parts as well as glass inserts of our standard types are produced in automated manufacturing processes. However, the glass inserts of special versions, e. g. high temperature versions are still produced by our glassblowers in traditional handcraft. Thanks to our long-year experience, we are in the position to produce custom versions on request. You can obtain popular types from us off the shelf or within a few days. Rare or customised versions will be produced after the placement of the order.

On the following pages you will find an overview of our extensive range of industrial thermometers. The complete range of V-Thermometers includes more than 17000 different models. In addition, there is a multitude of customer-specific special designs that are used throughout the world.

†† Please ask for special specifications

†† Other case colours and Logo on request



# Details of construction

## Version for industrial and marine applications

### Casing

Aluminum, V-shaped, completely polished, gold-coloured anodized (or silver-coloured upon request). Numerals of reading scale printed on the right side. Printing black-colored for easy readability. Straight types adjustable to any desired viewing position and locked by brass nut, wrench size 22. Angle thermometers (90 degrees) have a grooved adapter piece with locking screw. Advantage: When mounting the thermometer, it is not necessary to turn the casing.

### Glass inserts (Capillaries)

Capillary tube of solid glass, bar-shaped, prismatic (optic enlargement of the column, except for high temperature types), diameter approx. 6 mm, oval opening, with yellow background for mercury and white background for blue fluid column. Scale is deeply burnt in black, thus being absolutely resistant. The main graduations, which correspond with the printing on the casing, are especially clearly outlined.

### Thermometric liquids

Mercury-free standard version from -30 to 250 °C with blue thermometric fluid. For display ranges starting at 0...300 °C only mercury filling is technically possible. According to regulation no. 847 / 2012 of European Union, thermometers with mercury filling are only bound for export outside the EU. Placing them on the market inside the EU after April 10th, 2014 is prohibited. Concerned are industrial thermometers and glass inserts with display ranges 0...300 °C and higher, only. In this case, we are recommending the use of our dial or digital thermometers.

### Immersion tube

Standard version made from brass for temperatures up to 300 °C, from steel for higher max. temperature. On request, high-strength brass or CuNiFe alloy suitable for sea water. Stainless steel for aggressive media. The diameter of the type "B" immersion tube is 10 mm; the wall thickness 1 mm. For more information, see chapter „Protection tubes“.

### Scale intervals and error limits

SIKA thermometers fulfil the requirements of "DIN 16195 Requirements and testing of industrial glass thermometers". Scale intervals and error limits are defined in relation to the casing size and the display range.

# Nominal size 110 (DIN 16181 B, B1 and DIN 16182 S, S1)

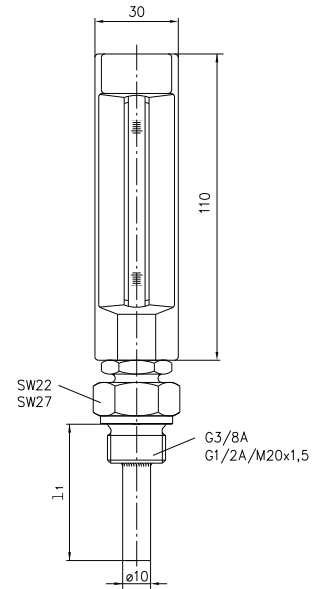
Type 174 B



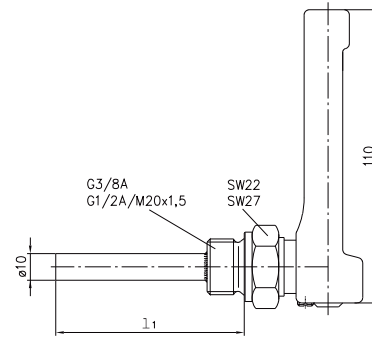
MERCURY-FREE



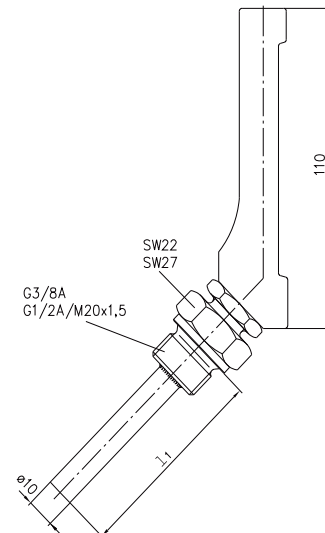
Type 174 B



Type 175 B



Type 176 B



## Order code

Order example	174	2	35	1	1	063	2	1
<b>Thermometer type</b>								
Straight	174							
Angle 90°	175							
Angle 135° (on request)	176							
<b>Immersion tube type</b>								
Type B		2						
<b>Display ranges</b>								
-30...50 °C			35					
0...50 °C			05					
0...60 °C			06					
0...100 °C			10					
0...120 °C			12					
0...160 °C			16					
0...200 °C			20					
<b>Scale</b>								
Celsius °C				1				
Celsius and Fahrenheit (°C + °F)				2				
<b>Thermometric liquid</b>								
Standard blue fluid					1			
<b>Immersion tube length (l<sub>1</sub>)</b>								
30 mm						030		
40 mm						040		
63 mm						063		
100 mm						100		
160 mm						160		
250 mm						250		
<b>Fixed male thread</b>								
G / SW22							1	
G½ / SW27							2	
M20 x 1.5 / SW27							7	
<b>Immersion tube material</b>								
Brass								1
Stainless Steel								3
Special brass								4
Copper-nickel alloy								5

If required please ask for our specification sheet „Immersion tube material“.

# Nominal size 150 (DIN 16185 B and DIN 16186 S)

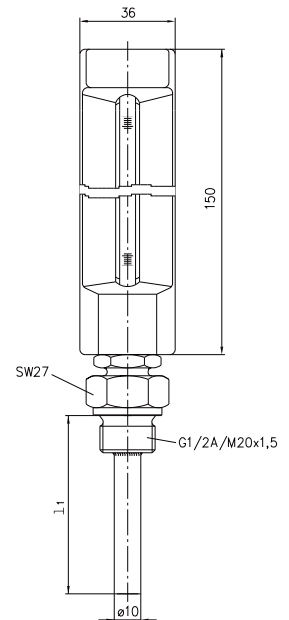
Type 291 B



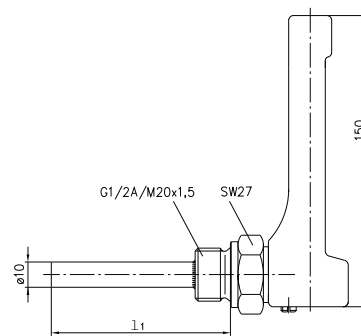
MERCURY-FREE



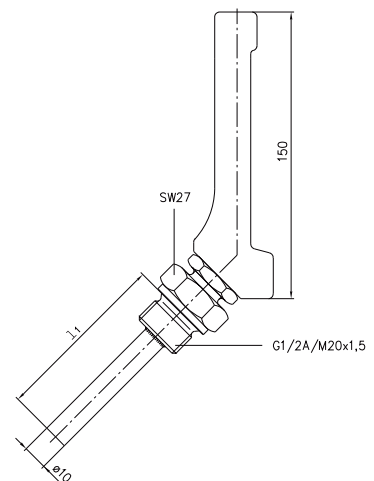
Type 291 B



Type 292 B



Type 293 B



## Order code

Order example	291	2	35	1	1	063	2	1
<b>Thermometer type</b>								
Straight	291							
Angle 90°	292							
Angle 135° (on request)	293							
<b>Immersion tube type</b>								
Type B		2						
<b>Display ranges</b>								
-30...50 °C			35					
0...60 °C			06					
0...100 °C			10					
0...120 °C			12					
0...160 °C			16					
0...200 °C			20					
0...250 °C			25					
0...300 °C			30					
0...600 °C			60					
<b>Scale</b>								
Celsius °C				1				
Celsius and Fahrenheit (°C + °F)				2				
<b>Thermometric liquid</b>								
Standard blue fluid for display ranges up to 0...250 °C					1			
Mercury* for display ranges starting at 0...300 °C					2			
<b>Immersion tube length (l<sub>1</sub>)</b>								
63 mm						063		
100 mm						100		
160 mm						160		
250 mm						250		
<b>Fixed male thread</b>								
G½ / SW27							2	
M20 x 1.5 / SW27							7	
<b>Immersion tube material</b>								
Brass								1
Steel								2
Stainless Steel								3
Special brass								4
Copper-nickel alloy								5

If required please ask for our specification sheet „Immersion tube material“

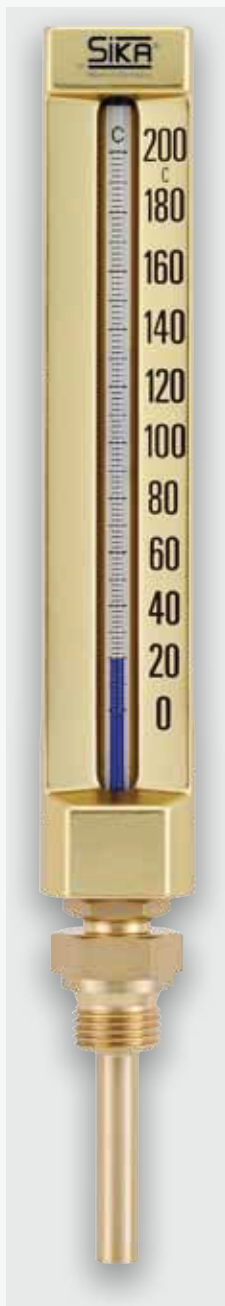
\* See note on availability of thermometric liquids on page 10.



# Industrial thermometers type B with male thread

Nominal size 200 (DIN 16189 B, DIN 16190 S, S1 and DIN 16191 B, B1)

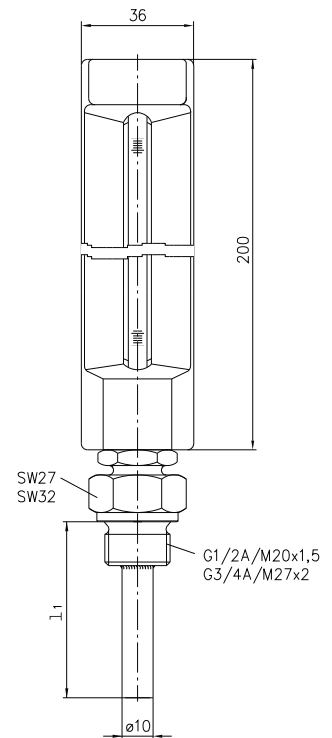
Type 271 B



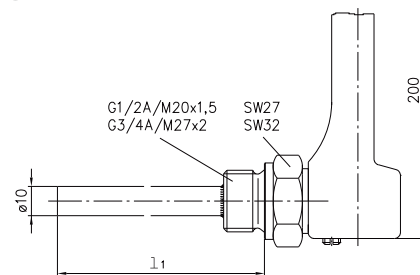
MERCURY-FREE



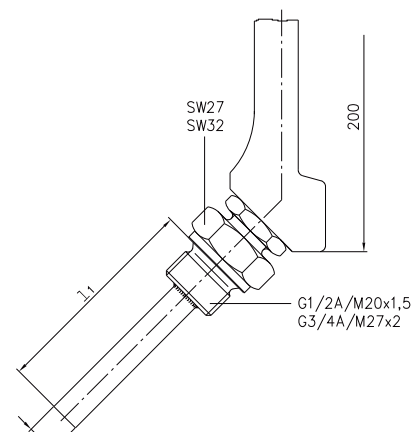
Type 271 B



Type 272 B



Type 273 B



## Order code

Order example	271	2	35	1	1	063	2	1
<b>Thermometer type</b>								
Straight	271							
Angle 90°	272							
Angle 135° (on request)	273							
<b>Immersion tube type</b>								
Type B		2						
<b>Display ranges</b>								
-30...50 °C			35					
0...60 °C			06					
0...100 °C			10					
0...120 °C			12					
0...160 °C			16					
0...200 °C			20					
0...250 °C			25					
0...300 °C			30					
0...600 °C			60					
<b>Scale</b>								
Celsius °C				1				
Celsius and Fahrenheit (°C + °F)				2				
<b>Thermometric liquid</b>								
Standard blue fluid for display ranges up to 0...250 °C					1			
Mercury* for display ranges starting at 0...300 °C					2			
<b>Immersion tube length (l<sub>1</sub>)</b>								
63 mm						063		
100 mm						100		
160 mm						160		
250 mm						250		
<b>Fixed male thread</b>								
G½ / SW27							2	
G¾ / SW32							3	
M20 x 1.5 / SW27							7	
M27 x 2 / SW32							9	
<b>Immersion tube material</b>								
Brass								1
Steel								2
Stainless steel								3
Special brass								4
Copper-nickel alloy								5

If required please ask for our specification sheet „Immersion tube material“

\* See note on availability of thermometric liquids on page 10.