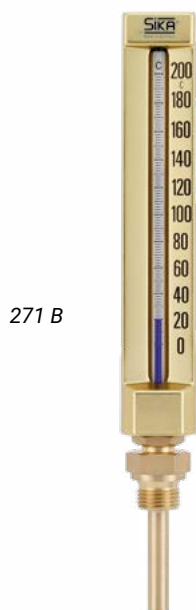
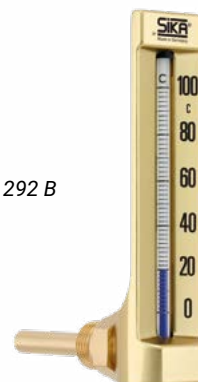


Industrial thermometers type 271, 272, 291, 292 B

Fixed male thread // Nominal size 200 and 150 // Aluminium anodized



271 B



292 B



Highlights

- Accuracy according to DIN 16195
- No aging - no moving parts and no mechanical wear
- Lifetime warranty*
- Completely without electrical auxiliary energy


Technical data

Type	271 B	272 B	291 B	292 B
Standard	DIN 16189 B, DIN 16190 S, S1 and DIN 16191 B, B1		DIN 16185 B and DIN 16186 S	
Version	Straight	Angle 90°	Straight	Angle 90°
Dimensions Housing	200 x 36 mm		150 x 36 mm	
Measuring range according to DIN	Between -30...250 °C			
Error limits according to DIN 16195	-30...100 °C = 2 °C 0...120 °C = 2 °C 0...200 °C = 4 °C		-30...120 °C = 2 °C 0...160 °C = 4 °C	
Medium / Application	Liquid and gaseous media			
Immersion tube length	Between 63...250 mm			
Immersion tube diameter	Ø 10 mm			
Process connection	Fixed male thread G½, G¾, M20 x 1.5, M27 x 2			
Pressure rating**				
→ Immersion tube brass, brazed	PN 16			
→ Immersion tube steel or stainless steel, welded	PN 35			
→ Immersion tube special brass or CuNi30Fe	PN 16			

* Except glass breakage and improper installation.

** Non-binding guideline - For higher pressure loads, additional protection tubes have to be used.

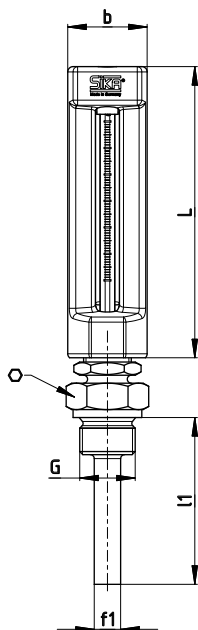
Technical data

Technical data	
Medium temperature	See selected measurement range
Ambient temperature	-20...60 °C
Storage temperature	-40...100 °C
Approvals	
	

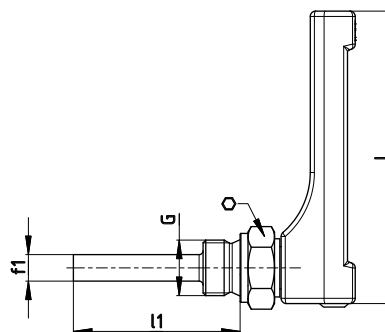
Options	
For type	See separate data sheet
271 / 272 B	Process connection with union nut, Types Da / Dc
291 / 292 B	Version for serial applications Types HBZ / WBZ

Technical drawings // Dimensions

Type 271 B / 291 B



Type 272 B / 292 B



Dimensions [mm]						
Type	L	f ₁	b	l ₁	G / ∅ Width across flats	
291 B / 292 B	150	∅ 10	36	63	G _{1/2} / SW27	
271 B / 272 B	200			100	G _{3/4} / SW32	
				160	M20 x 1.5 / SW27	
				250	M27 x 2 / SW32	

Materials

Material	
Not in contact with media	
Housing	Warm pressed aluminium part, gold anodized
Thermometer capillary	Prismatic capillary tube of solid glass, bar-shaped, diameter approx. Ø 6 mm, scale permanently burnt in
Thermometer filling → Blue	Petroleum
In contact with media	
Process connection	see immersion tube material
Immersion tube material → Standard → Optional	Brass, brazed Stainless steel, welded Special brass (sea water resistant) Copper nickel alloy CuNi30Fe (sea water resistant)

Article numbers

Order code								
Version	Nominal size							
Straight	200 mm	271						
Angle 90 °		272						
Straight	150 mm	291						
Angle 90 °		292						
Immersion tube type								
Type B - fixed male thread		2						
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					
0...250 °C			25					
Scale								
Celsius °C				1				
Celsius and Fahrenheit (°C + °F)				2				
Thermometer filling								
Blue					1			
Immersion tube length (l₁)								
63 mm						063		
100 mm						100		
160 mm						160		
250 mm						250		
Process connection								
G½ / SW27							2	
G¾ / SW32							3	
M20 x 1.5 / SW27							7	
M27 x 2 / SW32							9	
Immersion tube material								
Brass								1
Stainless steel								3
Special brass								4
Copper nickel alloy								5
Example order number	271	2	35	1	1	063	2	1

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

Type		Immersion tube length (l ₁)	Order number							
271 B	Straight type, nominal size 200 mm, 0...100 °C, with fixed male thread G½, Immersion tube brass	63 mm	271	2	10	1	1	063	2	1
271 B		100 mm	271	2	10	1	1	100	2	1
291 B	Straight type, nominal size 150 mm, 0...100 °C, with fixed male thread G½, Immersion tube brass	63 mm	291	2	10	1	1	063	2	1
291 B		100 mm	291	2	10	1	1	100	2	1
292 B	Angle type, nominal size 150 mm, 0...100 °C, with fixed male thread G½, Immersion tube brass	63 mm	292	2	10	1	1	063	2	1
292 B		100 mm	292	2	10	1	1	100	2	1

Accessories

Accessories	Article number
<p>Measuring point designation Laser-inscribed stainless steel plate with fixing wire for easy attachment to measuring points</p> <ul style="list-style-type: none"> → Scope of delivery: Designation plate inscribed according to specification and enclosed fixing wire (sealing wire) → Fastening: Wire (included in delivery), alternatively sealing, cable ties or similar (not included in delivery) → Materials: Plate stainless steel 1.4571, wire stainless steel → Dimensions: Plate 55 x 10 x 0.8 mm, wire length 180 mm → Inscription: one-sided, single-line, max. 11 characters, character height 5 mm, designation width max. 40 mm, letters, numbers, symbols, barcodes, QR codes → Transmission of designations: digital list, file formats Excel, Word or CSV 	<p>ONSITETAG</p>

