

Diesel engine dial thermometers

Local reading dial thermometers

This range of instruments includes special precision dial thermometers optimised for marine engines, based on the nitrogen gas expansion principle.

Typical applications

- Cooling water
- Turbo charged air
- Lubricating oil
- Exhaust gas

Diesel engine thermometers – Quality lasts longer

A problem to all Diesel engines is vibration, which reduces the life time of mechanical thermometers. SIKA has overcome this problem with their Diesel engine thermometer. This thermometer has a special mechanical sensor design, optimised for the use at marine engines. Furthermore, the case contains a shock absorbing liquid of high viscosity, which protects the internal meter movement against heavy vibration and at the same time lubricates internal parts and avoids corrosion. SIKA Diesel Engine Thermometers therefore last longer than many others.

Type 1312

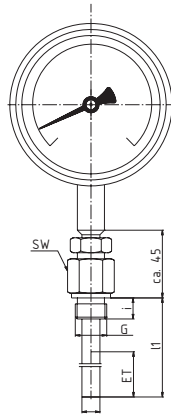
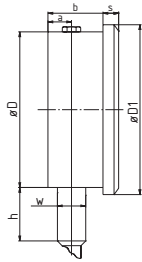


Technical data	
Display range*	0...100 °C 0...120 °C 0...160 °C 0...250 °C 50...650 °C
Nominal size, material	63, 80 or 100 mm, stainless steel 1.4301
Dial	White, black markings (up to 250 °C) Silver coloured, black markings (above 250 °C)
System	Nitrogen filled system
Immersion tube	Stainless steel
Standard immersion tube lengths (L ₁)	100, 135, 160, 200, 250, 300, 400 mm
Thread connection	Adjustable compression fitting
Thread size	G½, G¾
Accuracy (EN 13190)	Class 1.0
Approval	 Approved by Germanischer Lloyd, Certificate No. 12 026-98 HH

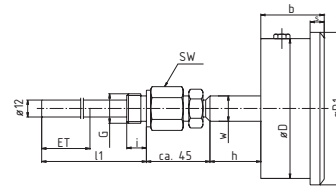
* Dual scale °C and °F available on request

Dimensions

Bottom connection
Type 1312 / type 8312 / type 6312



Central back connection
Type 1372 / type 8372 / type 6372



NS	a	b	D	D1	h	s	w
Type 6312							
63	12	39	62	67	60	8	12
Type 6372							
63	12	39	62	67	34	8	18
Type 8312, type 8372							
80	15	42	79	86	34	8	18
Type 1312, type 1372							
100	15	43	99	106	34	10	18

Order code

Order example		Z	63	12	A	10	1	100	0	0	3
Nominal size											
63 mm		63									
80 mm		83									
100 mm		13									
Type											
Bottom connection			12								
Central back connection			72								
Connection type											
Connection type A, plain immersion tube					A						
Connection type Ak, adjustable compression fitting					M						
Scale range											
0...100 °C						10					
0...120 °C						12					
0...160 °C						16					
0...250 °C						25					
50...650 °C						56					
Temperature unit											
°C*							1				
Immersion tube length l ₁ and L											
Immersion tube length l ₁	Immersion tube length L										
100 mm	145 mm							100			
135 mm	180 mm							135			
160 mm	205 mm							160			
200 mm	245 mm							200			
250 mm	295 mm							250			
300 mm	345 mm							300			
400 mm	445 mm							400			
Connection thread											
Without - plain immersion tube, type A								0			
G½								2			
G¾								3			
½ NPT								B			
¾ NPT								C			
M20 x 1,5								7			
Connection thread material											
Without - plain immersion tube, type A									0		
Steel									2		
Immersion tube diameter											
10 mm (for NS 63 and NS 80 mm only)											3
12 mm											4
13 mm											6

* Double scale °C and °F available on request.

Please use our order numbers for standard types or provide full technical specification in case of special non-standard thermometers

Remote reading dial thermometers

SIKA remote reading Diesel engine thermometers are based on the same system as our well-known direct mount thermometers. These instruments are available adapted to the customers present needs with any of the optional accessories: wall bracket, rear flange or U-clamp fixing for panel mounting.

Typical applications

- Cooling water
- Turbo charged air
- Lubricating oil
- Exhaust gas


Remote reading diesel engine thermometer

The remote reading versions are of the same mechanical sensor design as the local reading thermometers. The case is filled with a shock absorbing liquid of high viscosity.

Furthermore, the capillary line is protected by a stable stainless steel spiral protection. SIKA remote Diesel Engine Thermometers – vibration optimised quality for rough environments, ideal for the use at marine Diesel engines.

Type 321

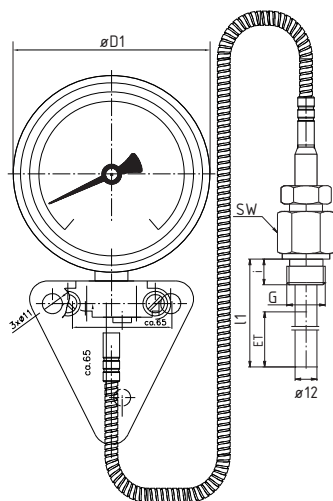


Technical data	
Display range*	0...100 °C 0...120 °C 0...160 °C 0...250 °C 50...650 °C
Nominal size, material	80 or 100 mm, stainless steel 1.4301
Dial	Silver coloured, black markings
System	Nitrogen filled system
Immersion tube	Stainless steel
Standard immersion tube length (l₁)	100, 135, 160, 200, 250, 300, 400 mm
Thread connection	Adjustable compression fitting
Thread size	G½, G¾
Accuracy (EN 13190)	Class 1.0, Limits of error acc. DIN EN 13190
Approval	 Approved by Germanischer Lloyd, Certificate No. 12 027-98 HH

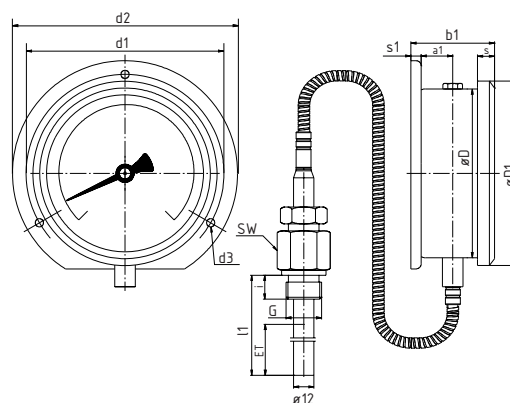
* Dual scale °C and °F available on request

Dimensions

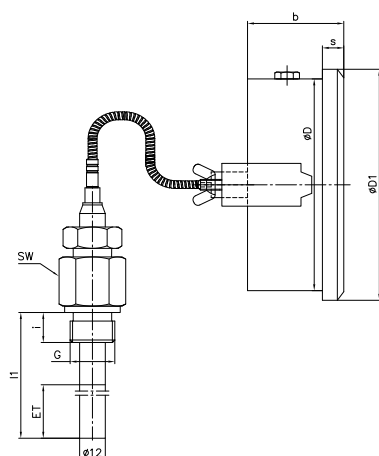
Type 311
with wall bracket



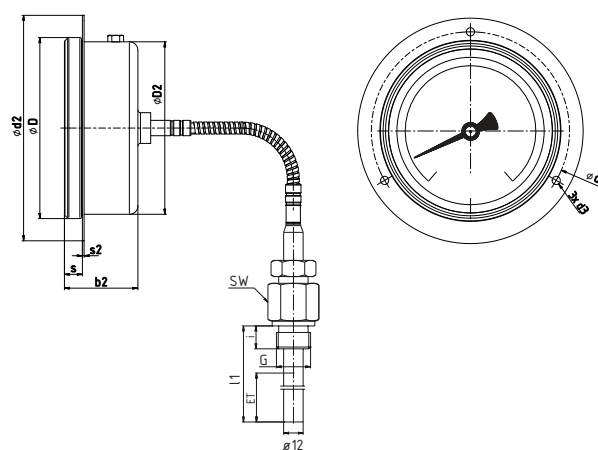
Type 321
with rear mounting flange



Type 331
U-clamp for panel mounting



Type 332
with front mounting flange



NS	a1	b1	b2	D	D1	d1	d2	d3	s	s1	s2
80	18	48	42	79	86	95	110	4,8	8	5	1
100	18.5	49	43	99	106	116	132	4,8	10	6	1

Order code

Order example		Z	311	B2	10	100	1	0	2	1	C
Type											
311 WH		311									
321 TA		321									
331 KL		331									
332 TE		332									
Nominal size											
80 mm				B2							
100 mm				C2							
Scale range											
0...100 °C					10						
0...120 °C					12						
0...160 °C					16						
0...250 °C					25						
50...650 °C					56						
Immersion tube length l ₁ and L											
Immersion tube length l ₁	Immersion tube length L										
100 mm	145 mm					100					
135 mm	180 mm					135					
160 mm	205 mm					160					
200 mm	245 mm					200					
250 mm	295 mm					250					
300 mm	345 mm					300					
400 mm	445 mm					400					
Connection type											
Connection type A, plain immersion tube							1				
Connection type Ak, adjustable compression fitting							9				
Connection thread											
Without - plain immersion tube								0			
G½								2			
G¾								3			
½ NPT								B			
¾ NPT								C			
M20 x 1.5								7			
Immersion tube diameter											
Ø 12 mm									2		
Capillary length											
1 m										1	
3 m										3	
5 m										5	
Length in meter										—	
Capillary material, protection											
Stainless steel, stainless steel spiral protection											C

* Double scale °C and °F available on request.

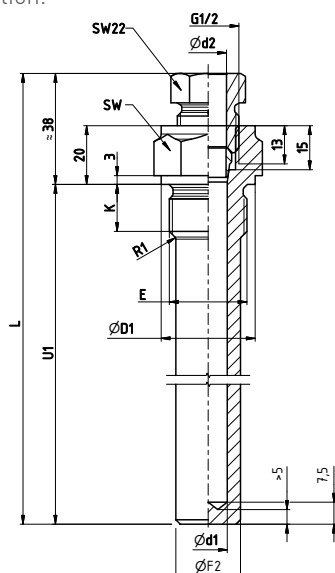
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Diesel engine protection tubes

As an accessory to the diesel engine thermometer

Protection tubes are applied to protect thermometer immersion tubes against difficult chemical and / or mechanical process conditions. Furthermore it is far easier to dismount a thermometer e.g. for repair or other reasons when a protection tube remains at the measuring point.

SIKA ZVFG protection tubes with integrated compression fitting have been developed as a solution for Diesel engine dial thermometers. They are machined from solid material; their integrated compression fitting minimises the risk of breakage during operation.



Type ZVFG



Order example	ZVFG	100	2	3	4	M
Order code starting with	ZVFG					
Protection tube length (U1)						
100 mm		100				
135 mm		135				
160 mm		160				
200 mm		200				
250 mm		250				
300 mm		300				
Connection thread						
G1/2			2			
G3/4			3			
Material						
Stainless steel 1.4571				3		
Thermometer immersion tube						
Ø 12 mm					4	
Ø 13 mm					6	
Male thread						M

Please ask for customised specifications