Dial thermometer // gas filled // version for diesel engines

Type 6312 // 8312 // 1312 // 6372 // 8372 // 1372



Type 1312

Highlights

- Vibration-resistant due to highly viscous silicone filling
- Suitable for outdoor use - closed system (IP65)
- Without electrical auxiliary power

Technical data						
Type	**6312**	**8312**	**1312**	**6372**	**8372**	**1372**
Version	Rigid connection with neck tube					
Nominal size	Ø 63 mm	Ø 80 mm	Ø 100 mm	Ø 63 mm	Ø 80 mm	Ø 100 mm
Display ranges according to EN 13190	0...100 °C 0...120 °C 0...160 °C 0...250 °C 50...650 °C					
Accuracy according to EN 13190	Class 1					
Medium / Application area	Liquid and gaseous media					
Immersion tube connection	Bottom			Central back		
Immersion tube length	Between 63...400 mm					
Immersion tube diameter	Ø 10 (not NS 100 mm), 12 or13 mm					
Process connection	Connection types: A, AK					
Nominal pressure	Max. 25 bar					
Measuring system	Nitrogen filled					
Degree of protection according to EN 60529	IP65					
Medium temperature	See selected display range					
Ambient temperature	-20...60 °C (only indoors)					
Storage temperature	-40...60 °C					
Nominal service temperature (EN 13190)	23 °C ±2 °C					
Approvals						

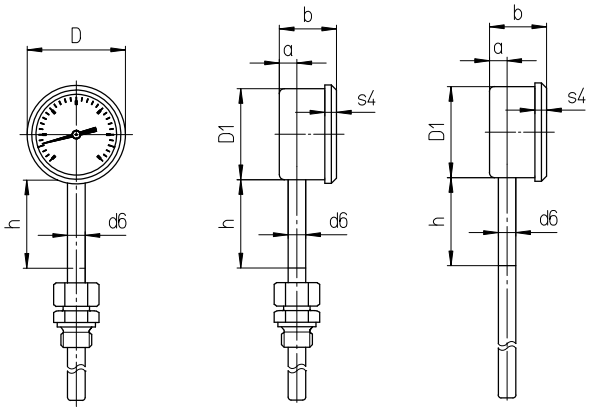
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Options

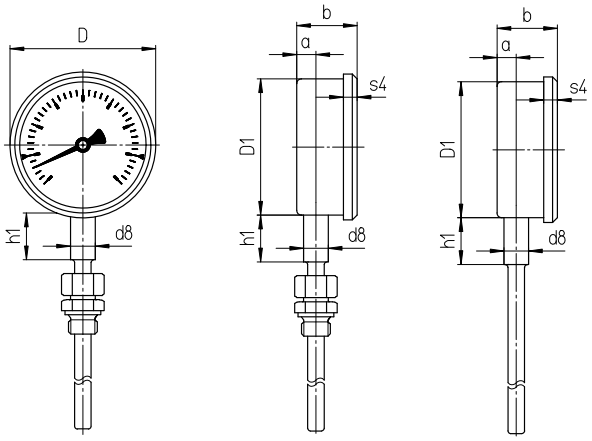
Options	
For Type	**On request**
6312 / 8312 / 1312 / 6372 / 8372 / 1372	Other display ranges and / or special scales, e.g. double scale °C / °F. Versions with union nut

Technical drawings // Dimensions

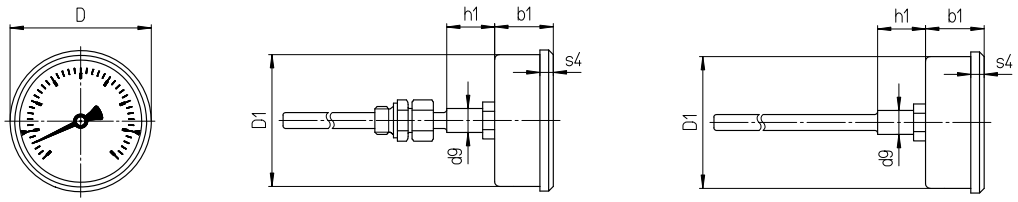
Type 6312



Type 8312 and 1312



Type 6372, 8372 and 1372



Dimensions [mm]											Weight [kg]
NS	**a**	**b**	**D**	**D1**	**d6**	**d8**	**d9**	**h**	**h1**	**s4**	
63	12	39	67	62	12	18	18	60	34	8	0.33
80	15	42	86	79	12	18	18	60	34	8	0.50
100	15	43	106	99	12	18	18	60	34	10	0.70

This information is provided as an example and relates to the version with connection type A Ø 10 mm and immersion tube length 200 mm.

Material

Material	
Housing	Crimped-on ring, Stainless steel 1.4301 filled with silicone oil (highly viscous)
Window	Instrument glass
Pointer movement	German silver / brass
Dial	Aluminium white with black scale markings
Pointer	Aluminium black
Material in contact with media	
Process connection	Steel
Immersion tube	Stainless steel 1.4571

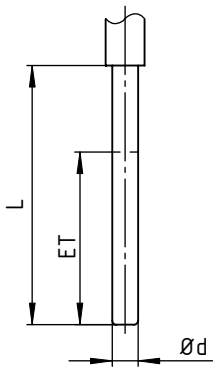
Standard connection types // Immersion tube // for type 6312 - 1372

Connection type A
Plain immersion tube, universally usable

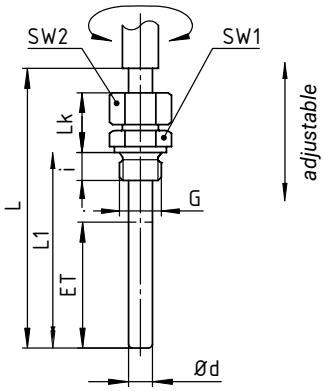
Connection type AK [mm]			
With adjustable compression fitting			
G	**SW1**	**i**	**Lk**
G½ B	27	14	35
G¾ B	32	16	37
M20 x 1.5	27	14	35
M27 x 2	32	16	37

Stem diameter [mm]	
Ø d	**SW2**
10	19
12	22
13	24

Connection type A



Connection type AK



Active length (ET) and minimum feasible immersion tube length		
Connection type	**Length [mm]**	
	ET	**Lmin**
A	80	150
AK	80	150

The minimum length Lmin / l1min of the immersion tube is the shortest possible immersion tube length for a given active length ET (bulb) and connection type. The active length ET of the immersion tube (bulb) must be fully immersed in the substance to be measured in order to obtain measurements corresponding to the stated accuracy class. The maximum realisable stem length is 2.5 m.

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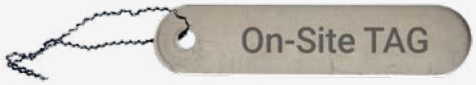
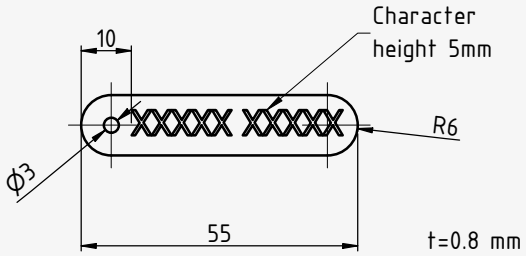
Article numbers

Order code									
Nominal size									
63 mm	Z	63							
80 mm	Z	83							
100 mm	Z	13							
Immersion tube connection									
Bottom			12						
Central back			72						
Connection type									
Connection type A, Plain immersion tube				A					
Connection type AK, adjustable compression fitting				M					
Display range									
0...100 °C					10				
0...120 °C					12				
0...160 °C					16				
0...250 °C					25				
50...650 °C					56				
Temperature unit									
Celsius °C*						1			
Immersion tube length l1	**Nominal length L = l1 + 45 mm**								
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		
Process connection									
Without - Plain immersion tube type A								02	
G½								22	
G¾								32	
½ NPT								B2	
¾ NPT								C2	
M20 x 1.5								72	
Immersion tube diameter									
10 mm (only for NS 63 and NS 80 mm)									3
12 mm									4
13 mm									6
Example order number		**Z**	**63**	**12**	**A**	**10**	**1**	**100**	**02**	**3**

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

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Accessories

Accessories	Article number
Measuring point designation Laser-inscribed stainless steel plate with fixing wire for easy attachment to measuring points → **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  	**ONSITETAG**