

Bimetal thermometer Heavy Duty

Accuracy class 1



Description

The measuring element of the bimetal thermometer is a quick reacting bimetal coil. It is manufactured from two cold-welded metal strips with different thermal expansion coefficients and rotates in proportion to temperature. The rotary movement is conveyed to the pointer with low friction.

A comprehensive range of standard versions enables a wide range of applications and uses. Special versions are also manufactured to customer specifications.

Features

- Short response time
- Wide selection of standard versions
- Special versions to customer specifications

Ranges

-30 ... +50 °C to 0 ... 500 °C

Applications

Heating and ventilation,
Air conditioning
container and pipe construction,
building services and
a wide range of applications in industry

**Model: T206, T207, T208, T209, T218, T219, T252, T253, T254,
T255, T256, T257, T258, T259, T268, T269, T276, T277, T278, T279**

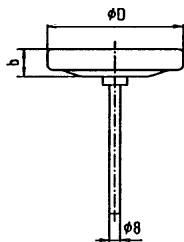
Technical data: thermometers for thermowells with locking screw

Models	T206	T207	T208	T209	T218	T219	Options
Symbol							
Nominal size	63	80	100	160	100	160	
Accuracy	Class 1 (DIN 16 203)						
Ranges and Resolutions					-30 ... 50 °C -20 ... 60 °C 0 ... 60 °C 0.5 °C 0 ... 80 °C		Scale °F Dual scale °C/°F
					0 ... 100 °C 0 ... 120 °C 1 °C 0 ... 160 °C		
					0 ... 200 °C 0 ... 250 °C 2 °C		
Overtemperature limits	Constant load: Measuring range (DIN 16 203) short-time (≤ 1h): 1.1 of measuring range (DIN 16 203)						
Measuring element	Bimetal coil						
Case/Bezel	Material SS 1.4301						
Connection	back			bottom			
	Plain stem, stem Ø 8 mm, with collar for thermowell						
Window	Glass lens						
Dial	Aluminium, matted, with fine grading, scale and lettering black						
Pointer	Aluminium black, adjustable pointer						
Protection	IP 43 (EN 60 529/IEC 529)						
Weight (kg)	0.10	0.12	0.15	0.30	0.38	0.75	

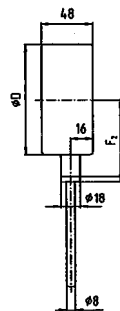
Technical data: thermowells locking screw

Models	T968	T988	T998	T969	T999	Options
Connection	Thermowell with fixed thread G 1/2 A			Weld-in thermowell		
Length	l ₁ : 45, 63, 100, 160, 200 mm max. 500 mm			l ₂ : 43, 80, 140, 180 mm max. 480 mm		
Material	St 35	Brass	SS 1.4571	St 35	SS 1.4571	
Max. pressure	25 bars	6 bars	25 bars	25 bars	25 bars	

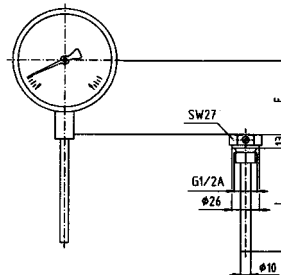
Dimensions (mm)



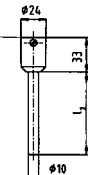
Model: T206, T207, T208, T209



Model: T218, T219



Model: T968, T988, T998



Model: T969, T999

Model	Dimensions (mm)	
	D (ND)	b
T206	63	16
T207	80	17
T208	100	21
T209	160	25

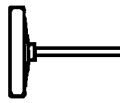
Model	Dimensions (mm)		
	D (ND)	F ₁	F ₂
T218	100	70	78
T219	160	100	108

Dimension l₁, l₂ see above table:
„Technical data: thermowells“

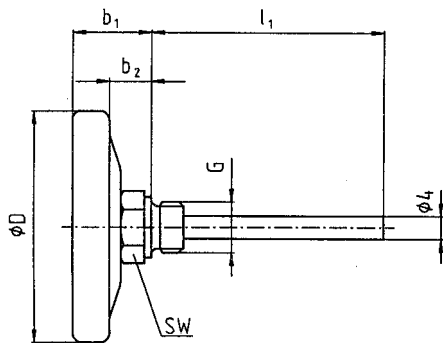
Order details

1. Model
2. Range
3. Thermowell type
4. Thermowell material
5. Thermowell length l₁, l₂
6. Options

Technical data: thermometers with fixed thread connection

Models	T252	T253	T254	T255	Options
Symbol					
Nominal size	25	33	40	50	
Accuracy	Class 2 (DIN 16 203)				
Ranges and Resolutions	-30 ... 50 °C -20 ... 60 °C 0 ... 60 °C 1 °C 0 ... 80 °C 0 ... 100 °C 0 ... 120 °C 2 °C 0 ... 160 °C 0 ... 200 °C 0 ... 250 °C 5 °C				Scale °F Dual scale °C/°F, only for T254 and T255
Overtemperature limits	Constant load:		Measuring range (DIN 16 203)		
	short-time (≤ 1h):		1.1 measuring range (DIN 16 203)		
Max. pressure	max. 6 bar (at stem)				
Measuring element	bimetal coil				
Case / Bezel	Material SS 1.4301				
Connection	Back, with fixed thread				
	M8		G 1/8 A	G 1/4 A	1/4 NPT
Plain stem length	l ₁ : 45, 63, 100, 160, 200, 250 mm				
Stem material	SS 1.4571				
Window	Glass lens	Acrylic glass	Glass lens		
Dial	Aluminium, matted, with fine grading, scale and imprint black				
Pointer	Aluminium black				
Protection	IP 54 (EN 60 529/IEC 529)				
Weight (kg)	0.04	0.04	0.05	0.06	

Dimensions (mm)



Model	Dimensions (mm)				
	D (ND)	b ₁	b ₂	G	SW
T252	25	15	6	M 8	12
T253	33	15	6	M 8	12
T254	40	21	9.5	G 1/8 A	17
T255	50	21	9.5	G 1/4 A	17

For dimension l₁ see „technical data“ table

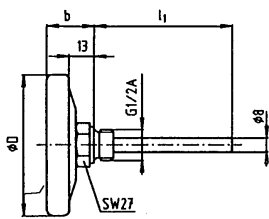
Order details

1. Model
2. Range
3. Stem length l₁
4. Options

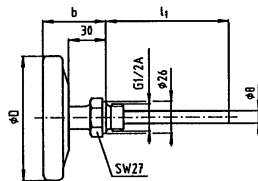
Technical data: thermometers with fixed thread connection for thermowells to DIN 16 179

Models	T256	T257	T258	T259	T276	T277	T278	T279	T268	T269	Options
Symbol											
Nominal size	63	80	100	160	63	80	100	160	100	160	
Accuracy	Class 1 (DIN 16 203)										
Ranges and Resolutions	-30 ... 50 °C -20 ... 60 °C 0 ... 60 °C 0.5 °C 0 ... 80 °C 0 ... 100 °C 0 ... 120 °C 1 °C 0 ... 160 °C 0 ... 200 °C 0 ... 250 °C 2 °C				-30 ... 50 °C -20 ... 60 °C 0 ... 60 °C 0.5 °C 0 ... 80 °C 0 ... 100 °C 0 ... 120 °C 1 °C 0 ... 160 °C 0 ... 200 °C 0 ... 250 °C 2 °C 0 ... 300 °C 0 ... 400 °C 0 ... 500 °C 5 °C				Scale °F Dual scale °C/°F other Ranges		
Overtemperature limits	Constant load: Measuring range (DIN 16 203) short-time (≤ 1h): 1.1 measuring range (DIN 16 203)										
Max. pressure	max. 25 bar (at stem)										
Measuring element	bimetal coil										
Case/ Bezel	Material SS 1.4301										
Connection	back				back with 30 mm extension				bottom		Union nut G 1/2, G 3/4
Stem length	Stem, Ø 8 mm, with fixed thread G 1/2 A l ₁ : 45, 63, 100, 160, 200, 250 mm Attention! l ₁ = 45 mm only for back versions For suitable thermowells acc to DIN 16 179, see DD 10 60										
Stem material	SS 1.4571										
Window	Glass lens										
Dial	Aluminium matted, with fine grading, scale and imprint black										
Pointer	Aluminium black, adjustable pointer										
Protection	IP 43 (EN 60 529/IEC 529)										
Weight (kg)	0.10	0.12	0.15	0.30	0.30	0.38			0.75		

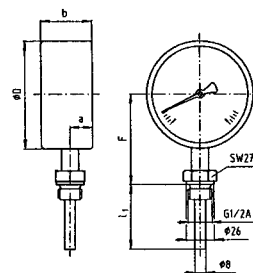
Dimensions (mm)



Models: T256, T257, T258, T259



Models: T276, T277, T278, T279



Models: T268, T269

Models	Dimensions (mm)	
	D (ND)	b
T256	63	29
T257	80	30
T258	100	35
T259	160	39

Models	Dimensions (mm)	
	D (ND)	b
T276	63	46
T277	80	47
T278	100	52
T279	160	57

Models	Dimensions (mm)			
	D (ND)	a	b	F
T268	100	17	44	83
T269	160	19	46	113

Order details

1. Model
2. Range
3. Stem length l₁
4. Options

For dimension l₁ see „technical data“ table

Modifications reserved