

Bimetal thermometer

Standard version



Description

The measuring element of the bimetal thermometer is a quick reacting bimetal coil.

Special designs are available for measuring waste gas, with display ranges of 0...400 °C and 0...500 °C, coloured control panels and drag pointers. A plain stem with magnet, tapered thread, or without thread, serves as a process connection.

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
- Special version: control thermometer for waste gas measurements

Ranges

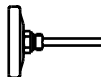


-30 ... 50 °C to 0 ... 200 °C
0 ... 400 °C
0 ... 500 °C

Applications

Heating systems,
general temperature measurements and
waste gas measurements

Models: TM176, TM177, TM186, TM187, TM188, TM189, TM198

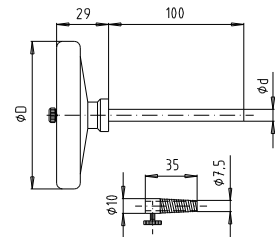
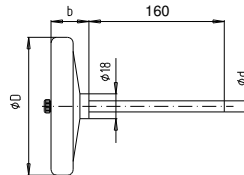
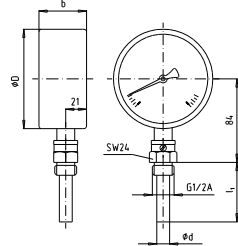
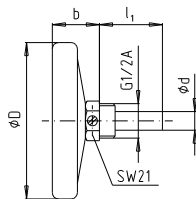
Technical data

Models	TM186	TM187	TM188	TM189	TM198	TM176			TM177
Nominal size	63	80	100	160	100	63			80
Symbol									
Display ranges and scale spacing ¹⁾	-30 ... 50 °C -20 ... 60 °C -10 ... 50 °C 0 ... 60 °C 0 ... 80 °C 1 °C					0 ... 400 °C 5 °C with coloured control panels and drag pointer	0 ... 500 °C 5 °C		
	0 ... 120 °C 2 °C 0 ... 160 °C								
	0 ... 200 °C 5 °C								
Accuracy class	2 (to DIN 16203)								
Scale angle	ca. 270 °								
Application	full scale value								
Permissible op. pressure	max. 6 bar					----			
Measuring element	Bimetal coil								
Display correction	at plain stem end				Adjusting pointer				
Case	Aluminium								
Connection	back, central				radial, bottom		Plain stem, back central		
-design	Thermowell G ½ A detachable, with locking screw					with tapered thread	with magnet	without thread	
-dimensions	l ₁ = 40, 60, 100, 160, 200 mm				l ₁ = 60, 100, 160, 200 mm		l ₁ = 100 mm		l ₁ = 160 mm
-material	Copper alloy					1.4571			steel
Window	Acrylic glass ²⁾				Glass lens				
Dial	Aluminium, white, scale and markings black								
Pointer	Aluminium black								
Weight (kg)	0.08	0.1	0.13	0.28	0.4	0.1			0.12

¹⁾ Other display ranges on request

²⁾ Display ranges ≥ 160 °C with glass lens

Dimensions (mm)



Model TM186 - TM189

Model TM198

Model TM176, TM177

Model TM176

Model	Dimensions (mm)			
	D (NG)	b	l ₁	d
TM176	63	22	----	6
TM177	80	24	----	6
TM186	63	23	see technical data table	12 ¹⁾
TM187	80	25		
TM188	100	30		
TM189	160	32		
TM198	100	48		13

¹⁾ l₁ = 100 mm

d = dia. 11 mm

Order details

1. Model
2. Display range
3. Length l₁
4. Options