

Bimetal thermometer

Chemical version With or without damping

Nominal size 3", 5"

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 version with liquid damping is available as an option for service at measuring points subject to strong vibration. The filling damps the measuring system when mechanical vibrations occur, thus producing a steady indication. At the same time, good lubrication of the moving parts is achieved.

A version with rotateable (360°) and turnable case (90°) allow the thermometer to be aligned as desired under all installation conditions.

In conjunction with a corresponding thermowell, these thermometers can also be used with aggressive media.

A comprehensive range of standard versions enables a wide range of applications and uses. The case sizes are available in 3inch and 5inch. Special versions are also manufactured to customer specifications.

Features

- Short response time
- Nominal sizes 3" and 5"
- Large selection of standard versions
- Customized versions available
- For aggressive media

Options

- Filled versions for measuring points with high vibrations
- Models with turnable and rotateable connection

Measuring ranges

-70 ... 30 °C up to 0 ... 600°C

Applications

Chemical and petrochemical industry
Process engineering
Food industry

Models: TM304, TM305, TM307, TM308

Design of connection

	Male thread	Plain stem	Male nut	Union nut	Compression fitting, sliding on stem										
Stem-length l_1	63 mm 2.5" 100 mm 4" 150 mm 6" 225 mm 9" 305 mm 12" 380 mm 15" 455 mm 18" 610 mm 24"	140 mm 200 mm 240 mm 290 mm	80 mm 140 mm 180 mm 230 mm	89 mm 126 mm 186 mm 226 mm 276 mm	variable minimum insertion length $l_{\min} = 60 \text{ mm}$ Length $l \geq l_1 + 35 \text{ mm}$										
Dimensions															
Stem diameter ϕd	Standard 6 mm Option: 8, 10mm														
Thread and dimensions [mm]		SW	d4	i			SW	i		SW	d4	i			
	G 1/2	27	26	14		G 1/2	27	20	G 1/2	27	26	14			
	G 1/4	22	18	12					G 3/4	32	32	16			
	1/2 NPT	22	-	19					M24x1,5	32	13,5	M18x1,5	24	23	12
	1/4 NPT	17	-	15								1/2 NPT	22	-	19
												3/4 NPT	30	-	20
	Not possible with connection turnable/rotateable														

Order details

1. Model
2. Range
3. Design of connection
4. Stem length l_1
5. Thread
6. Options

Subject to technical modifications