

# Bimetal thermometer For industrial heating Model 46

WIKA data sheet TM 46.02

## Applications

- Heating systems
- Hot water tanks
- Solar power systems
- Heat transfer stations

## Special features

- Reliable and cost-effective
- Nominal size 50, 63, 80 and 100
- Scale ranges from -30 ... +120 °C



Bimetal thermometer model A46.20.063



Bimetal thermometer model A46.11.063



Bimetal thermometer model A46.30.063

## Description

The bimetal thermometer model 46 is mainly used in the heating, air-conditioning and refrigeration equipment to monitor the process temperature.

The bimetal thermometers are screwed with thermowells in the respective application. On the one hand, this protects the instrument, on the other hand, the measuring instrument can be exchanged without prior emptying of the heating circuit.

## Standard version

### Measuring element

Bimetal coil

### Nominal size in mm

50, 63, 80, 100

### Working range

Full scale value

### Case

Models A46.10, A46.11: Aluminium

Model A46.20: Steel, galvanised

Model A46.30: Plastic, black

### Dial

Models A46.10, A46.11: Aluminium, white, black lettering

Models A46.20, A46.30: Plastic, white, black lettering

### Pointer

Models A46.10, A46.20, A46.30: Plastic, black

Model A46.11: Aluminium, black

### Window

Clear non-splintering plastic

### Connection location

Back mount

## Options

- Other measuring ranges
- Special scales
- Window: Instrument glass
- Designs for special applications on request

## Connection designs

### ■ With thermowell (models A46.10, A46.20, A46.30)

Thermowell is removable, friction fit

Copper alloy

Length  $l_1 = 40, 60, 100$  mm

Permissible working pressure at thermowell max. 6 bar

### Connection

thermowell G ½ B

### Zero adjustment

At bottom of stem

### Stem

Ø 9 mm

Models A46.10, A46.30: Aluminium

Model A46.20: Copper alloy

### ■ Clip-on design (model A46.11)

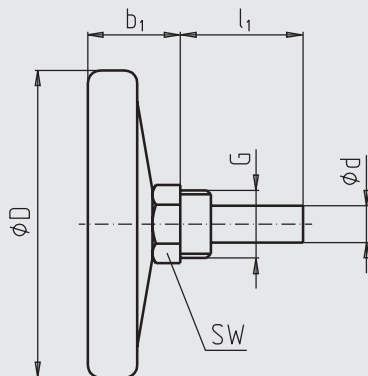
Clip-on plate with mounting clip

for pipe diameter of 1" ... 2"

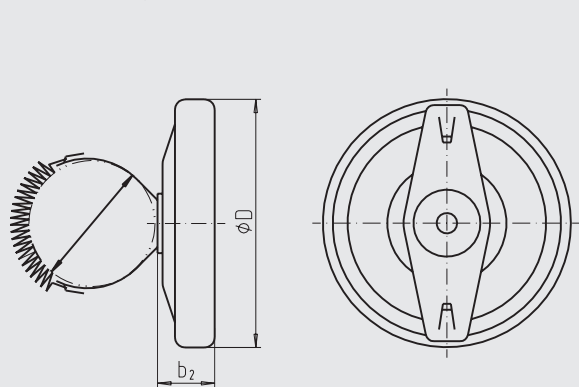
## Dimensions in mm

### Standard version

Model A46.10, with aluminium case  
Back mount (BM)



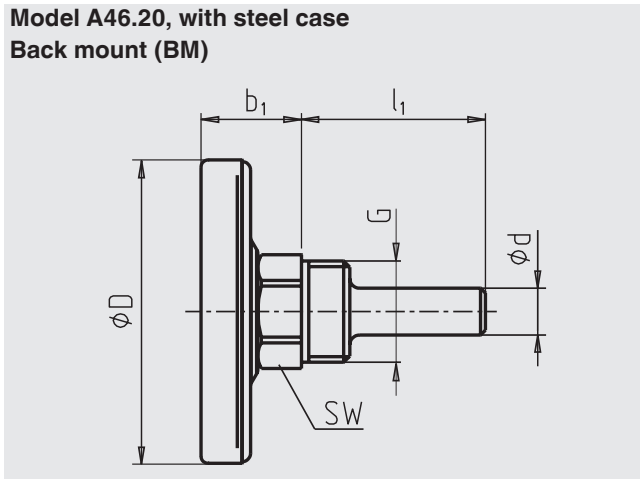
Model A46.11, surface thermometer



NS	Dimensions in mm					Weight in kg			
	b <sub>1</sub>	b <sub>2</sub>	Ø d	Ø D	G	l <sub>1</sub>	SW	Model A46.10	Model A46.11
63	23	21	12 <sup>1)</sup>	63	G ½ B	40, 60, 100	21	0.07	0.04
80	25	22	12 <sup>1)</sup>	80	G ½ B	40, 60, 100	21	0.08	0.06
100	30	-	12 <sup>1)</sup>	100	G ½ B	40, 60, 100	21	0.11	-

1) Ø d = 11 mm for thermowell length  $l_1 = 100$  mm

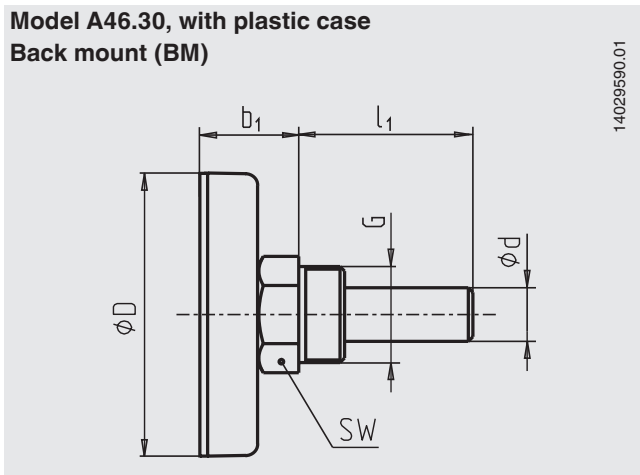
**Model A46.20, with steel case  
Back mount (BM)**



NS	Dimensions in mm						Weight in kg
	b <sub>1</sub>	Ø d	Ø D	G	l <sub>1</sub>	SW	
63	23	12 <sup>1)</sup>	63	G ½ B	40, 60, 100, 160	21	0.04
80	23	12 <sup>1)</sup>	80	G ½ B	40, 60, 100, 160	21	0.06
100	23	12 <sup>1)</sup>	100	G ½ B	40, 60, 100, 160	21	0.08

1) Ø d = 11 mm for thermowell length l<sub>1</sub> = 100 mm

**Model A46.30, with plastic case  
Back mount (BM)**



NS	Dimensions in mm						Weight in kg
	b <sub>1</sub>	Ø d	Ø D	G	l <sub>1</sub>	SW	
50	23	12 <sup>1)</sup>	50	G ½ B	40, 60, 100, 160 <sup>2)</sup>	21	0.06
63	23	12 <sup>1)</sup>	63	G ½ B	40, 60, 100, 160 <sup>2)</sup>	21	0.07
80	24.5	12 <sup>1)</sup>	80	G ½ B	40, 60, 100, 160 <sup>2)</sup>	21	0.08
100	24.5	12 <sup>1)</sup>	100	G ½ B	40, 60, 100, 160 <sup>2)</sup>	21	0.10

1) Ø d = 11 mm for thermowell length > 100 mm

2) l<sub>1</sub> = 160 mm only for thermowell with retainer screw

## Approvals (option)

- CRN, safety (e.g. electr. safety, overpressure, ...), Canada

## Certificates

- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website

## Ordering information

Model / Nominal size / Scale range / Connection / Length  $l_1$  / Options

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