

# Bimetal Thermometers

## Process Industry Series • Model 53 with Adjustable Stem and Dial

### Thermometers

#### Service intended

All stainless steel thermometer.  
Suitable for corrosive media and environments in chemical process, petroleum and food industry.

#### Nominal size

3 in. and 5 in.

#### Temperature element

Coiled bimetal

#### Accuracy

Class 1 per DIN EN 13 190

#### Working range

Permanent (1 year): measuring range per DIN EN 13 190  
Short time (24 h max.): scale range per DIN EN 13 190

#### Pressure rating of stem

25 bar maximum

#### Ingress protection

IP 56 / IP 65 per EN 60 529 / IEC 529

#### Standard features

##### Location of stem

Centre back

##### Case

Rotatable on stem 360°  
Stem adjustable every angle  
Material: stainless steel

##### Connection

½ NPT, stainless steel 1.4571

##### Stem

6 mm diameter, stainless steel 1.4571

##### Dial

White aluminium with black lettering and scale °C

##### Pointer

Black aluminium pointer

##### Zero adjustment

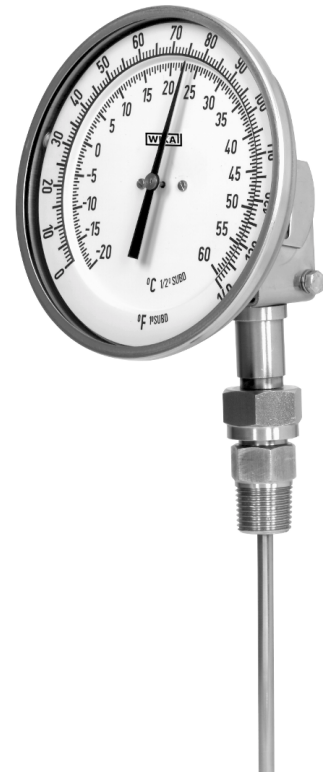
Externally at back of case

##### Window

Instrument glass

#### Optional extras

- Case and stem with liquid damping (250 °C max.)
- Ingress protection IP 66
- Scale °F; dual scale °C/°F
- Window of laminated safety glass or non-splintering plastic
- Stem 8 or 10 mm diameter
- Plain stem or thread other than ½ NPT
- Thermowells per DIN 43 772 or to user specifications



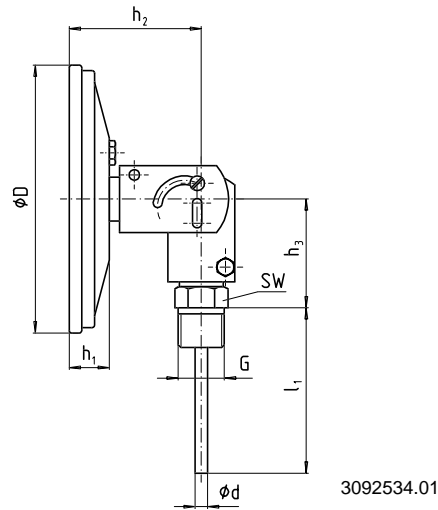
#### Scale ranges

Scale range °C (per DIN EN 13 190)	Scale spacing °C (per WIKA company standard 12.116)
- 70 ... + 30	1
- 50 ... + 50	
- 30 ... + 50	
- 20 ... + 60	0.5
0 ... 60	
0 ... 80	1
0 ... 100	
0 ... 120	
0 ... 160	
0 ... 200	2
0 ... 250	
0 ... 300	
0 ... 400	5
0 ... 500	
0 ... 600	

#### Models

Model	Nominal size	Location of stem / Case
S 5300	3"	Centre back / adjustable every angle
S 5301	5"	

## Dimensions



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Nominal size	Dimensions [mm]					Weight [kg]
	$\phi D$	$\phi d$	$h_1$	$h_2$	$h_3$	
3"	76	6	20	63	55	0.400
5"	127	6	20	63	55	0.500

### Design of connection

#### Standard connection

Male thread  $\frac{1}{4}$  NPT,  $\frac{1}{2}$  NPT, G  $\frac{1}{4}$  B or G  $\frac{1}{2}$  B

Length of stem

$l_1 = 2,5", 4", 6", 9", 12", 15", 18"$  or 24"

$l_1 = 63, 100, 150, 225, 305, 380, 455$  or 610 mm

Stainless steel 1.4571

#### Connection 1

Plain stem

Length of stem  $l = 140, 200, 240$  or 290 mm

Stainless steel 1.4571

To fit compression fitting of connection 4

#### Connection 2

Male nut G  $\frac{1}{2}$  B

Length of stem  $l_1 = 80, 140, 180$  or 230 mm

Stainless steel 1.4571

#### Connection 3

Union nut G  $\frac{1}{2}$ , G  $\frac{3}{4}$  or M 24 x 1.5

Length of stem  $l_1 = 89, 126, 186, 226$  or 276 mm

Stainless steel 1.4571

#### Connection 4

Compression fitting (sliding on stem)

G  $\frac{1}{2}$  B, G  $\frac{3}{4}$  B, M 18 x 1.5,  $\frac{1}{2}$  NPT or  $\frac{3}{4}$  NPT

Minimum insertion approx. 60 mm

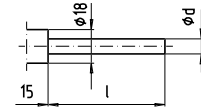
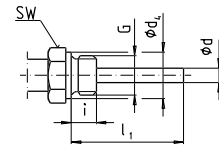
Length of stem  $l_1 =$  variable

Length  $L = l_1 + 40$  mm

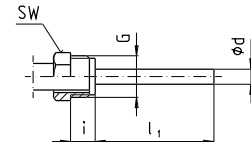
Stainless steel 1.4571

### Dimensions [mm]

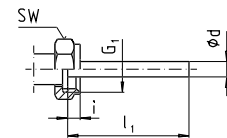
Male thread G	SW	$d_4$	i
$\frac{1}{4}$ NPT	17	-	15
$\frac{1}{2}$ NPT	22	-	19
G $\frac{1}{4}$ B	22	18	12
G $\frac{1}{2}$ B	27	26	14



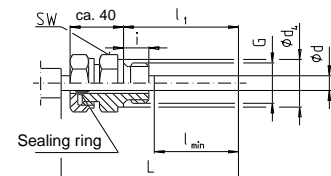
Male thread G	SW	i
G $\frac{1}{2}$ B	27	20



Female thread G1	SW	i
G $\frac{1}{2}$	27	8.5
G $\frac{3}{4}$	32	10.5
M 24 x 1.5	32	13.5



Male thread G	SW	$d_4$	i
G $\frac{1}{2}$ B	27	26	14
G $\frac{3}{4}$ B	32	32	16
M 18 x 1.5	24	23	12
$\frac{1}{2}$ NPT	22	-	19
$\frac{3}{4}$ NPT	30	-	20



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### Ordering information

Model / Nominal size / Scale range / No. and size of connection / Length of stem  $l, l_1$  / Optional extras required

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.



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