

Bimetal Thermometers

Process Industry Series with Adjustable Stem and Dial • Model 53

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 16 203

Working range

Permanent: measuring range per DIN 16 203
 Short time (≤ 1 h): 1.1 x measuring range per DIN 16 203

Pressure rating of stem

25 bar maximum (without thermowell)

Weather protection

IP 56 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 filling (250 °C max.)
- Other scale ranges
- Scale °F, K; double scale °F/°C, °C/°F or other
- Plain stem or thread other than ½ NPT
- Stem 8 or 10 mm diameter
- Window of safety glass or non-splintering plastic
- Thermowells per DIN (see data sheet TM 90.01) or to user specifications



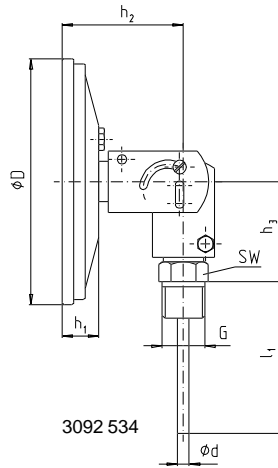
Scale ranges

Scale range °C	Scale spacing °C
- 70 ... + 30	2
- 50 ... + 50	
- 30 ... + 50	1
- 20 ... + 60	
0 ... 60	
0 ... 80	
0 ... 100	2
0 ... 120	
0 ... 160	
0 ... 200	5
0 ... 250	
0 ... 300	
0 ... 400	
0 ... 500	
0 ... 600	10

Models

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

Dimensions



Nominal size	Dimensions [mm]					Weight [kg]
	ϕD	ϕd	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 per DIN

Standard connection

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

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 no. 1

Plain stem

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

Stainless steel 1.4571

To fit compression fitting of connection no. 4

Connection no. 2

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

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

Stainless steel 1.4571

To fit DIN thermowells of form BD, BE, BS

Connection no. 3

Union nut G $\frac{1}{2}$ or G $\frac{3}{4}$

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

Stainless steel 1.4571

To fit DIN thermowells of form CD, CE, CS

Union nut M 24 x 1.5 suitable to DIN 43 763

Connection no. 4

Compression fitting (sliding on stem)

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

Minimum insertion ca. 60 mm

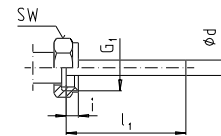
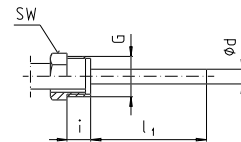
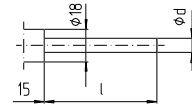
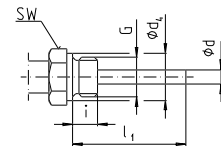
Length of stem $l_1 =$ variable

Length $L = l_1 + 40$ mm

Stainless steel 1.4571

Dimensions [mm]

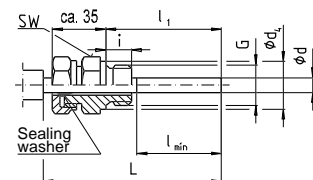
Male thread G	SW	d_4	i
$\frac{1}{4}$ NPT	17	-	15
$\frac{1}{2}$ NPT	22	-	19
G $\frac{1}{4}$ A	22	18	12
G $\frac{1}{2}$ A	27	26	14



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

Female thread G_1	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 $\frac{1}{2}$ A	27	26	14
G $\frac{3}{4}$ A	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

State: 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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