

# Bimetal stainless steel thermometers/ Bimetal thermometers for chemical applications



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## Bimetal stainless steel thermometers

**Application** For corrosive media. Suitable for a great variety of industrial applications.

### Technical specifications

**Type:** D3

**Nominal size:** 63 – 80 – 100

**Measuring element:** Bimetal helix

**Accuracy class:** 1 (EN 13190)

**Ranges °C**

-20/+60, 0/60, 0/120, 0/160

**Application area (EN 13190)**

Continuous load: Measuring range

Short-term: Range

**Operating pressure at thermowell**

Max. 6 bar

**Degree of protection:** IP 43 (EN 60529)

### Standard version

**Connection**

Stem stainless steel 316 L, Ø 8 mm, plain

**Adapter ring**

Plastic, for thermowells with connection collar Ø 14, 18 mm (only for axial mounting position up to max. 120 °C)

**Mounting position**

NG 63 – 80 – 100 centre back

NG 63 – 100 bottom

**Dial**

Aluminium, white – Dial marking black

**Pointer:** Aluminium, black

**Housing and push on bezel:** Stainless steel 304

**Window:** Instrument glass

### Options

- Thermowell G½B, stainless steel 316 Ti/316 L
- Other connection designs
- Other ranges
- Other stem lengths

## Bimetal thermometers for chemical applications

For corrosive media. Meets exacting measuring demands, e.g. in process engineering as well as chemical and food industry applications.

**Type:** D4

**Nominal size:** 63 – 100 – 160

**Measuring element:** Bimetal helix

**Accuracy class:** 1 (EN 13190)

**Ranges °C**

-20/+60, 0/60, 0/120, 0/160

**Application area**

Continuous: Full scale value

Short-term: 1.1 x full scale value

**Operating pressure at thermowell**

Max. 6 bar

**Degree of protection:** IP 65 (EN 60529)

**Connection**

Stem stainless steel 316 Ti, Ø 8 mm, plain, closed

**Mounting position**

NG 63 – 100 – 160 centre back

NG 63 – 100 – 160 bottom

**Dial**

Aluminium, white

Dial marking black

**Pointer:** Aluminium, black

**Housing:** Stainless steel 304

**Bayonet type bezel:** Stainless steel 304

**Window:** Instrument glass

- Thermowell G½B, stainless steel 316 Ti/316 L
- Grooved nut connection as per DIN 11851
- Other connection designs
- Other ranges
- Other stem lengths
- Laminated safety glass window
- Glycerine filling
- Every angle version
- 3-hole fixing, panel mounting bezel
- Back flange
- Special materials
- Electrical contacts

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See page 255 for prices.

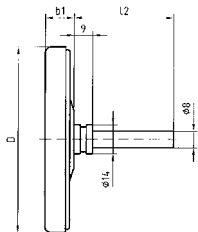
# Bimetal stainless steel thermometers/ Bimetal thermometers for chemical applications

## Housing types and dimensions (mm)

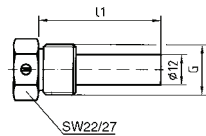
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Bimetal stainless steel thermometers – centre back connection

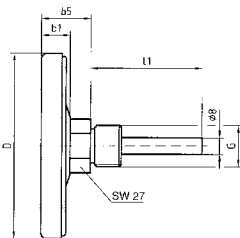
Plain stem (standard):



Separate thermowell (option):

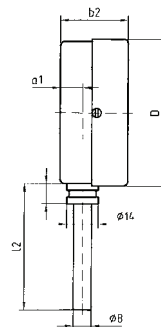


Fixed male connection (option):

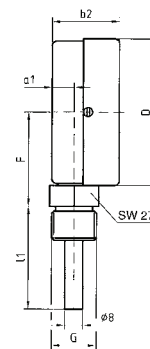


Bimetal stainless steel thermometers – bottom connection

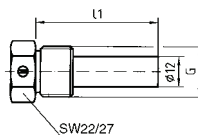
Plain stem (standard):



Fixed male connection (option):

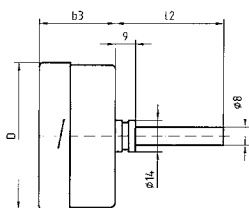


Separate thermowell (option):

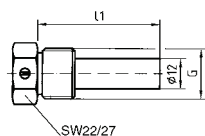


Bimetal thermometers for chemical applications – centre back connection

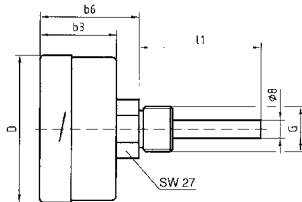
Plain stem (standard):



Separate weld-in thermowell (option):

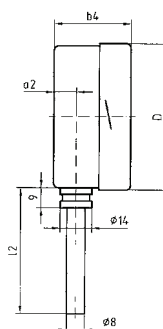


Fixed male connection (option):

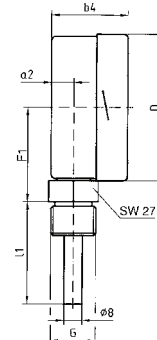


Bimetal thermometers for chemical applications – bottom connection

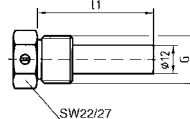
Plain stem (standard):



Fixed male connection (option):



Separate thermowell (option):

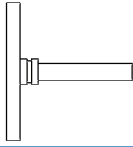
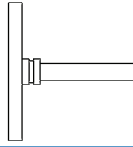
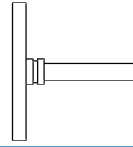
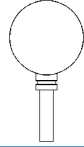
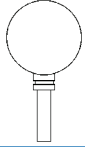


## Dimensions (mm)

Nominal size (NG)	D	a1	a2	b1	b2	b3	b4	b5	b6	F	F1	G	l1	l2
63	63	10	15.5	15	34	32	45	27	62	46.5	58.5	G½B	40	49
80	80	-	-	15	-	-	-	28	-	-	-	G½B	63	67
100	100	10	17.5	17	36	27.5	49.5	29	57.5	65	77.5	G½B	100	104
160	160	10	15.5	18	-	34	48	32	64	95	107.5	G½B	150	154
													200	204

# Bimetal stainless steel thermometers

DG: H, PG: 3

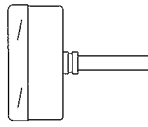
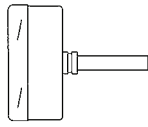
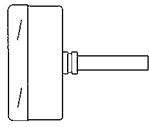
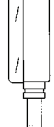
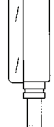
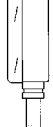
Type	BiTh 63 E D312	BiTh 80 E D312	BiTh 100 E D312	BiTh 63 E D302	BiTh 100 E D302
Version					
Housing Ø	63	80	100	63	100
Housing	Stainless steel 304 with push on bezel 304, instrument glass window				
Stem	Stainless steel 316, Ø 8 mm				
Connection	Plain stem (without thermowell)				
Accuracy class	Class 1 as per EN 13190				
Range	-20/+60 °C	-20/+60 °C	-20/+60 °C	-20/+60 °C	-20/+60 °C
For thermowell with stem length L1	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.
63 mm	66107312	66207312	<b>66307312</b>	66107302	66307302
100 mm	66108312	66208312	<b>66308312</b>	66108302	66308302
150 mm	66109312	66209312	<b>66309312</b>	66109302	66309302
200 mm	66110312	66210312	66310312	66110302	66310302
Range	0/60 °C	0/60 °C	0/60 °C	0/60 °C	0/60 °C
For thermowell with stem length L1	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.
63 mm	66132312	66232312	<b>66332312</b>	66132302	66332302
100 mm	66133312	66233312	<b>66333312</b>	66133302	66333302
150 mm	66134312	66234312	<b>66334312</b>	66134302	66334302
200 mm	66135312	66235312	66335312	66135302	66335302
Range	0/120 °C	0/120 °C	0/120 °C	0/120 °C	0/120 °C
For thermowell with stem length L1	Price € Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.
40 mm	<b>66146312</b>	<b>66246312</b>	<b>66346312</b>	---	---
63 mm	<b>66147312</b>	<b>66247312</b>	<b>66347312</b>	66147302	66347302
100 mm	<b>66148312</b>	<b>66248312</b>	<b>66348312</b>	66148302	66348302
150 mm	<b>66149312</b>	<b>66249312</b>	<b>66349312</b>	66149302	66349302
200 mm	66150312	66250312	<b>66350312</b>	66150302	66350302
Range	0/160 °C	0/160 °C	0/160 °C	0/160 °C	0/160 °C
For thermowell with stem length L1	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.
63 mm	66152312	66252312	66352312	66152302	66352302
100 mm	66153312	66253312	66353312	66153302	66353302
150 mm	66154312	66254312	66354312	66154302	66354302
200 mm	66155312	66255312	66355312	66155302	66355302



\* See page 262 for other connection types, options/extra charges.

# Bimetal thermometers for chemical applications

DG: H, PG: 3

Type	BiTh 63 Ch D412	BiTh 100 Ch D412	BiTh 160 Ch D412	BiTh 63 Ch D402	BiTh 100 Ch D402	BiTh 160 Ch D402
Version						
Housing Ø	63	100	160	63	100	160
Housing	Stainless steel 304 with bayonet bezel, instrument glass window					
Stem	Stainless steel 316, Ø 8 mm					
Connection	Plain stem (without thermowell)*					
Accuracy class	Class 1 as per EN 13190					
Range	-20/+60 °C	-20/+60 °C	-20/+60 °C	-20/+60 °C	-20/+60 °C	-20/+60 °C
For thermowell with stem length L1	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.
63 mm	66607412	66807412	66907412	66607402	66807402	66907402
100 mm	66608412	66808412	66908412	66608402	66808402	66908402
150 mm	66609412	66809412	66909412	66609402	66809402	66909402
200 mm	66610412	66810412	66910412	66610402	66810402	66910402
Range	0/60 °C	0/60 °C	0/60 °C	0/60 °C	0/60 °C	0/60 °C
For thermowell with stem length L1	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.
63 mm	66632412	66832412	66932412	66632402	66832402	66932402
100 mm	66633412	66833412	66933412	66633402	66833402	66933402
150 mm	66634412	66834412	66934412	66634402	66834402	66934402
200 mm	66635412	66835412	66935412	66635402	66835402	66935402
Range	0/120 °C	0/120 °C	0/120 °C	0/120 °C	0/120 °C	0/120 °C
For thermowell with stem length L1	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.
63 mm	66647412	66847412	66947412	66647402	66847402	66947402
100 mm	66648412	66848412	66948412	66648402	66848402	66948402
150 mm	66649412	66849412	66949412	66649402	66849402	66949402
200 mm	66650412	66850412	66950412	66650402	66850402	66950402
Range	0/160 °C	0/160 °C	0/160 °C	0/160 °C	0/160 °C	0/160 °C
For thermowell with stem length L1	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.	<b>Price €</b> Part no.
63 mm	66652412	66852412	66952412	66652402	66852402	66952402
100 mm	66653412	66853412	66953412	66653402	66853402	66953402
150 mm	66654412	66854412	66954412	66654402	66854402	66954402
200 mm	66655412	66855412	66955412	66655402	66855402	66955402

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\* See page 262 for other connection types, options/extra charges.