

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



See page 255 for prices.

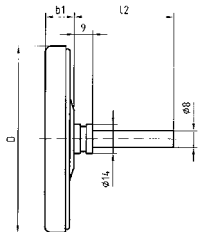
Bimetal stainless steel thermometers/ Bimetal thermometers for chemical applications

Housing types and dimensions (mm)

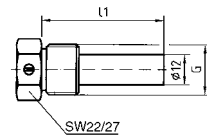
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Bimetal stainless steel thermometers – centre back connection

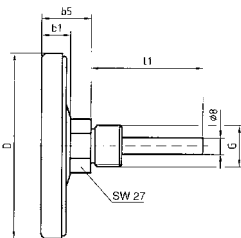
Plain stem (standard):



Separate thermowell (option):

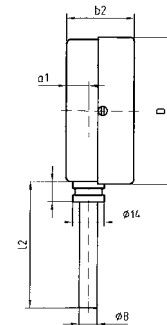


Fixed male connection (option):

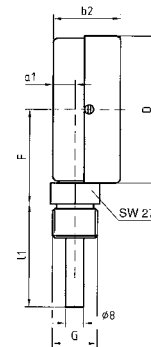


Bimetal stainless steel thermometers – bottom connection

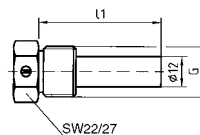
Plain stem (standard):



Fixed male connection (option):

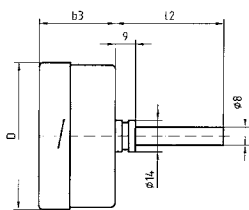


Separate thermowell (option):

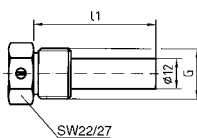


Bimetal thermometers for chemical applications – centre back connection

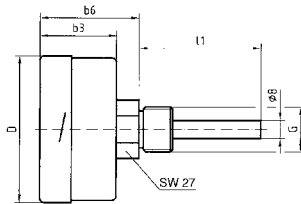
Plain stem (standard):



Separate weld-in thermowell (option):

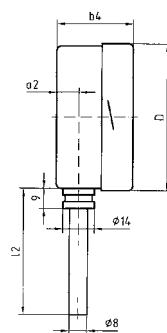


Fixed male connection (option):

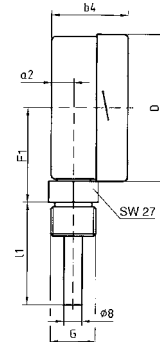


Bimetal thermometers for chemical applications – bottom connection

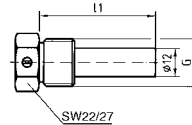
Plain stem (standard):



Fixed male connection (option):



Separate thermowell (option):

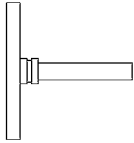
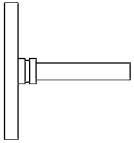
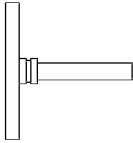
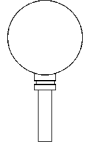
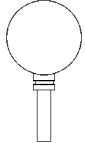


Dimensions (mm)

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	104
100	100	10	17.5	17	36	27.5	49.5	29	57.5	65	77.5	G½B	150	154
160	160	10	15.5	18	-	34	48	32	64	95	107.5	G½B	200	204

Bimetal stainless steel thermometers

DG: H, PG: 3

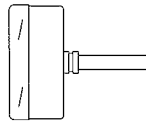
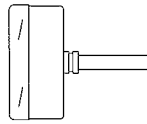
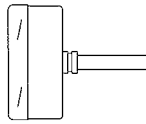

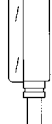

Type	BiTh 63 E D312	BiTh 80 E D312	BiTh 100 E D312	BiTh 63 E D302	BiTh 100 E D302
Version					
Housing Ø	63	80	100	63	100
Housing	Stainless steel 304 with push on bezel 304, instrument glass window				
Stem	Stainless steel 316, Ø 8 mm				
Connection	Plain stem (without thermowell)				
Accuracy class	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	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.
63 mm	66107312	66207312	66307312	66107302	66307302
100 mm	66108312	66208312	66308312	66108302	66308302
150 mm	66109312	66209312	66309312	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	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.
63 mm	66132312	66232312	66332312	66132302	66332302
100 mm	66133312	66233312	66333312	66133302	66333302
150 mm	66134312	66234312	66334312	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.	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.
40 mm	66146312	66246312	66346312	---	---
63 mm	66147312	66247312	66347312	66147302	66347302
100 mm	66148312	66248312	66348312	66148302	66348302
150 mm	66149312	66249312	66349312	66149302	66349302
200 mm	66150312	66250312	66350312	66150302	66350302
Range	0/160 °C	0/160 °C	0/160 °C	0/160 °C	0/160 °C
For thermowell with stem length L1	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € 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	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € 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	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € 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	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € 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	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.	Price € 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



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

Connection types for bimetal and gas filled thermometers (industrial, stainless steel and chemical versions)

