

Badotherm bimetal model BDTB18 series thermometer is available as 63/80/100/125/160 mm. These bimetal thermometers are suitable where ambient corrosion is a major concern and can be used in chemical process, petroleum, food industries etc.

The standard connection on these thermometers is an adjustable fitting in order to give more flexibility to stem length immersions.

## stainless steel bimetal thermometer bottom

### mounting variations

- type A bottom connection, direct mounting
- type C surface mounting, bottom connection
- type D back connection, direct mounting
- type E panel mounting, back connection
- type F panel mounting, bottom connection
- type BDTGE every angle connection, direct mounting

### technical specification model BDTB18-A

<b>diameter</b>	<b>dial</b>	<b>window</b>	<b>ranges</b>
63 to 160 mm	aluminium	glass	from -50/550 °C
<b>casing</b>	<b>stem</b>	<b>element</b>	<b>connection</b>
AISI304 bayonet	AISI316	coiled bimetal	1/2" bsp adjustable
<b>bezel</b>	<b>stem dia</b>	<b>pointer</b>	<b>accuracy</b>
AISI304 bayonet	6 mm	fixed	1.0% FSD

Note: zero correction is standard on the outside at the back of the casing  
63 mm zero correction only with adjustable pointer

### options and special executions at extra costs

casing	AISI316
bezel	AISI316
window	safety glass except 125 mm
dials	customized -i.e., non standard ranges or logos
certificates	calibration-; conformity-; material
manuals	installation and maintenance
pointer	adjustable slotted except 125 mm
connection	NPT, MM, BSPT, acc JIS in various sizes
connection type	fixed or without connection
connection position	top or side
drag-pointer system	for dia 100/160 mm (plastic window only, max 160 °C)
filling	glycerine, silicone, fluorolube up to 160 °C
stem diameters	1/4" / 3/8" / 1/2" / 8 mm / 10 mm / 12 mm
separate wells	see index 2.3.



**BDTB18-A**

## BDTB18-A - technical data sheet

### operating details

#### working range

limitations	
Permanent	measuring range per DIN 13 190
Short time ( $\leq 1$ h)	1,1 x measuring range

#### temperature limitations

	ambient	process
without filling	-40 °C to 60 °C	-50 °C to 550 °C
glycerine filling	-25 °C to 60 °C	15 °C to 80 °C
silicone filling	-40 °C to 60 °C	-45 °C to 250 °C

pressure rating of stem  
25 bar maximum

### design information

#### ingress protection

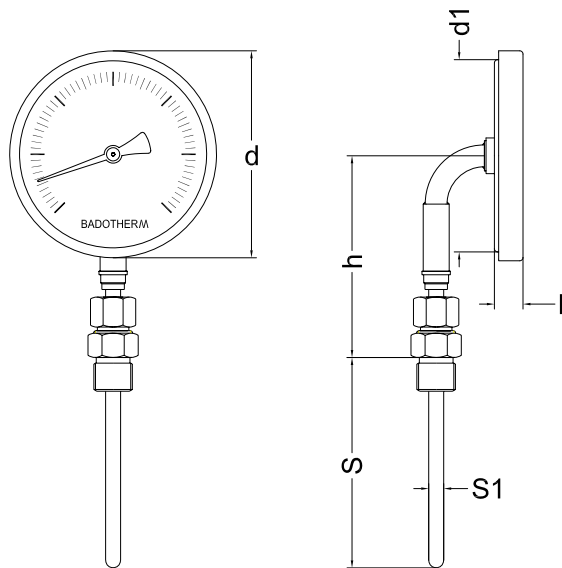
IP 54 per EN 60 529 / IEC 529

IP 65 per EN 60 529 / IEC 529 (liquid filling only)

#### design

DIN 13 190

### drawings



type A

### dimensions

ns	d	d1	L	h	S	S1	-
63	68	63	15,5	79	to specify	6	-
80	89	80	16	92	to specify	6	-
100	110,5	100,5	19	100	to specify	6	-
125	130	119	20	109	to specify	6	-
160	160	149	20	127	to specify	6	-

Note : dimensions are in mm

## stainless steel bimetal thermometer minimum immersion lengths

range °C	span °C	min. immersion length (mm)
-20 + 40	60	100
-20 + 50	70	80
-20 + 60	80	63
-20 + 80	100	63
-20 + 100	120	63
-20 + 110	130	63
-20 + 120	140	50
-20 + 140	160	63
-25 + 40	65	80
-30 + 50	80	63
-30 + 70	100	80
-30 + 100	130	63
-40 + 60	100	80
-40 + 120	160	63
-50 + 50	100	80
-50 + 550	600	100
0 + 60	60	80
0 + 80	80	100
0 + 100	100	63
0 + 120	120	50
0 + 150	150	50
0 + 160	160	50
0 + 200	200	50
0 + 250	250	100
0 + 300	300	100
0 + 350	350	100
0 + 400	400	100
0 + 450	450	100
0 + 500	500	100
0 + 550	550	100

