

BIMETAL-POINTER-THERMOMETER

bayonet case



DRUCK & TEMPERATUR

Chemical version according to EN 13 190 IP65 with or without liquid filling

Areas of application:

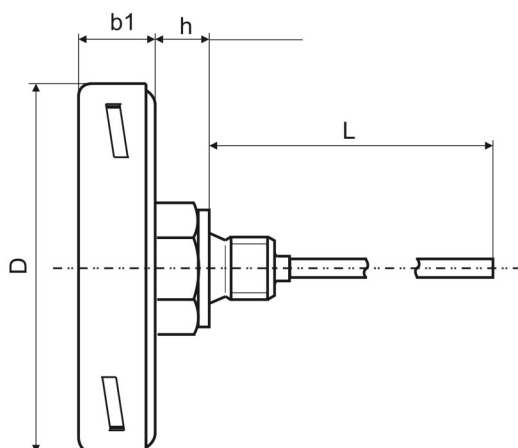
- Chemical and petrochemical industries
- Food industry
- Plastic and paper industry
- Machine and apparatus construction



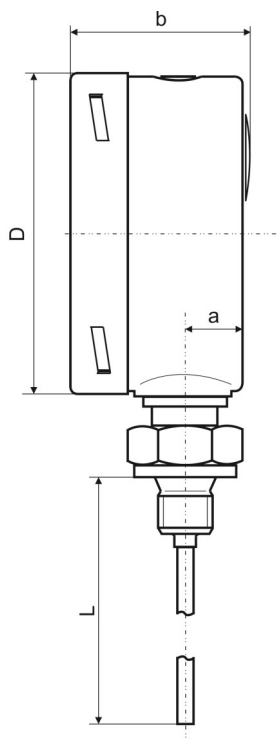
Type	B11			B12			B13			Options
Nominal size	63	100	160	63	100	160	63	100	160	
Form										Nominal size 80 mm, 125 mm
Connection position	back			bottom			angled			B11/B12 radial at 3, 9 or 12 o'clock
Accuracy	Kl. 1									
Display range °C	0...60, 0...80, 0...100, 0...120, 0...160, 0...200, 0...300, 0...400, 0...500, 0...600, -50/+50, -40/+40, -40/+60, -30/+50, -30/+70, -20/+40, -20/+60, -20/+80, 50...300									
Application	Constant load: measuring range short-term load (up to one hour): 1,1 x measuring range									
Maximum operating pressure	25 bar									
Case / ring	Bayonet case 1.4301									1.4404 (316L)
Measuring system	Bimetal coil									
Temperature sensor	1.4571 Sensor types B1, B3, B4, B4.1, B5, B6 Sensor diameter: 6 or 8 mm Sensor length: from Lmin / L1min up to 400 mm Please note the minimum sensor length depending on the active length (La) and sensor type									
Dial	Aluminium white, scale and lettering black									Special scale
Window	Instrument glass									Safety glass
Pointer	Adjustment pointer, Aluminium black									
Display correction (-/+4%)	by screw from the outside, centric back			by adjustment pointer			by screw from the outside			
Protection	IP65 acc. to DIN EN 60 529 / IEC 529									
Temperatures	Storage: -40°C up to +70°C Ambient: -40°C up to +60°C									Special equipment for environments from -60°C
Mounting	Rear fastening edge			without			without			

Type B11, B12, B13

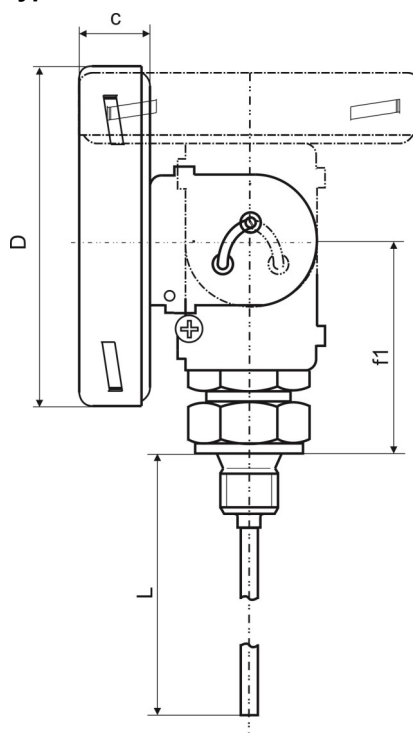
Type B11



Type B12



Type B13



Type	NS	D	b1	h ¹⁾	b	a	c	f1 ²⁾
B11	63	64	26	19	-	-	-	-
	100	101	28	19	-	-	-	-
	160	161	27	19	-	-	-	-
B12	63	64	-	-	47,5	12	-	-
	100	101	-	-	55	15	-	-
	160	161	-	-	55	15	-	-
B13	63	64	-	-	-	-	26	60
	100	101	-	-	-	-	28	60
	160	161	-	-	-	-	27	60

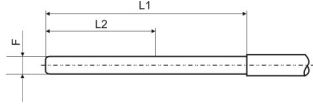
1) and 2) Different dimensions for other sensors and for neck tube insert, please inquire if required

Stem types Dimensions in mm

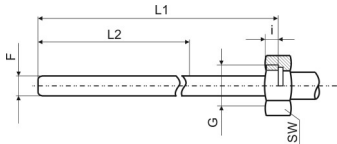
Type **Process connection** **Form acc. DIN 13190**

Thread - Dimensions

G1 Without screw fitting, plain stem Form 1



G3 Union nut Form 5

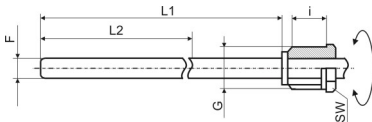


G	SW	i
G1/2	27	10
G3/4	32	12
M20 x1,5	27	10
M24 x1,5	32	12
M27 x 2	32	12

Suitable thermowell models

Form 4.1
Form 4.1F
Form 8
Form 9

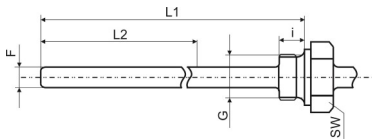
G4 Male thread turnable Form 4



G	SW	i
G1/2B	22	20
G3/4B	27	23
M18x1,5	22	14
M20x1,5	22	20

Form 4
Form 4F
Form 5
Form 6 und 7

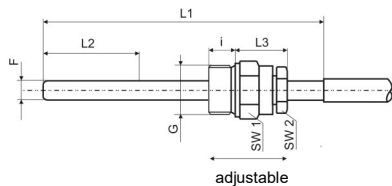
G4.1 Male thread rigid Form 6
Form 7



G	SW	i
G1/2B	27	14
G3/4B	32	16
1/2"NPT	27	19
3/4"NPT	27	19
M18x1,5	24	14
M20x1,5	27	14

Form 4
Form 4F
Form 5
Form 6 und 7

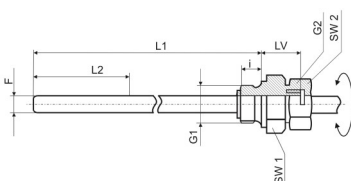
G5 Male thread Compression fitting Form 2
Form 3



G	SW1	SW2	i
G1/2B	27	22	14
G3/4B	32	22	16
1/2"NPT	27	22	19
3/4"NPT	27	22	19
M20x1,5	27	22	14

Form 4
Form 4F
Form 5
Form 6 und 7

G6 Male thread turnable / double male adapter -
Lv = 28 mm



G	G2	SW1	SW2	a
G1/2B	G1/2B	27	27	14
G3/4B	G1/2B	32	27	16
1/2"NPT	G1/2B	27	27	19
3/4"NPT	G1/2B	27	27	19
M20x1,5	M20x1,5	27	27	14
M24x1,5	M20x1,5	32	27	14
M27x1,5	M20x1,5	32	27	16

Form 4
Form 4F
Form 5
Form 6 und 7

Minimum stem length and active length (mm)

Sensor	Length	Thread	Sensor-Ø dF				
			6			8	
			Temperature difference $\Delta T^{1)}$				
			≥ 100 K	= 80 K	= 60 K	≥ 80 K	= 60 K
all types	La	all standard thread	40	60	70	40	60
B1 / B4	Lmin		45	65	75	45	65
B3			52	72	82	52	72
B4.1			60	80	90	60	80
B5			95	115	125	95	115
B6	L1min		60	80	90	60	80
other			on request				

The **minimum length Lmin / L1min** is the smallest realizable sensor length.

The **active sensor length La** is the temperature-sensitive part of the probe.

Display ranges / measuring ranges, scale divisions, error limits

Display ranges	Measuring ranges	Scale divisions in °C	Error limits acc. Cl. 1 +/-°C
0 - 60°C	10-50°C	1	1
0 - 80°C	10-70°C	1	1
0 - 100°C	10-90°C	1	1
0 - 120°C	10-110°C	2	2
0 - 160°C	20-140°C	2	2
0 - 200°C	20-180°C	2	2
0 - 250°C	30-220°C	5	2,5
0 - 300°C	30-270°C	5	5
0 - 400°C	50-350°C	10	5
0 - 500°C	50-450°C	10	5
0 - 600°C	100-500°C	10	10
-50 / +50°C	-40/+40°C	1	1
-40 / +40°C	-30/+30°C	1	1
-40 / +60°C	-30/+50°C	1	1
-30 / +50°C	-20/+40°C	1	1
-30 / +70°C	-20/+60°C	1	1
-20 / +40°C	-10/+30°C	1	1
-20 / +60°C	-10/+50°C	1	1
-20 / +80°C	-10/+70°C	1	1
50 / 300°C	80-270°C	5	2,5