



Main Features

- For corrosive gasses and liquids
- Class 1 and 2 according to EN 13190
- Wetted parts Stainless steel
- Option : case material 1.4404 (316L) for aggressive atmosphere

Applications

- Oil & Gas / Chemical
- Energy

Technical Data

Nominal size	80, 100, 130, 160 mm	Window	Instrument glass
Temperature ranges	-70 ... 600 °C / -100 ... 1100 °F	Window gasket	Elastomer
Accuracy	According to EN 13190 up to 250 °C: class 1 above 250 °C: class 2 (class 1 on request) According to ASME B40.200 Grade A (±1 %)	Dial	Aluminium, white
Protection rating	IP 67 (EN 60529)	Pointer	Aluminium, black, adjustable
Immersion tube	Stainless steel 1.4571 (AISI 316Ti)	Minimum immersion length	Immersion tube Ø 6 mm: L2 ≥ 65 mm Immersion tube Ø 8 mm: L2 ≥ 50 mm
Case	Stainless steel 1.4301 (AISI 304)	Temperature limit	ranges ≤ 400 °C: 135 % F.S. ranges > 400 °C: 100 % F.S.
Bezel ring	Stainless steel 1.4301 (AISI 304)	ATEX	Ex II2GDc (with option 0078)

Options

ATEX II2GDc (Only with window laminated safety glass)	Code 0078
Stainless steel housing 1.4404 (316L) ⁽¹⁾	Code 0110
Dampening grease	Code 0581
Zero adjustment by knob on the backside ⁽²⁾	Code 0727
Laminated safety glass	Code 0751
Acrylic glass (PMMA or Plexiglass) ⁽³⁾	Code 0752
Window polycarbonate ⁽⁴⁾	Code 0753
Customer specific immersion length ⁽⁵⁾	Code 9003_xxxx
Process connection 1/2 NPT with extension L2 = 50 mm	Code 9591
Process connection 1/2 NPT with extension L2 = 100 mm	Code 9592
Red mark	Code 9700
Specific temperature range	Code 9704
Customer logo on dial	Code 9710
Specific technical data on dial	Code 9711

To be ordered separately

Material certificate 3.1 EN 10204	Q003
Calibration certificate (3 points)	Q006

⁽¹⁾ Only NS 100 and NS 130.

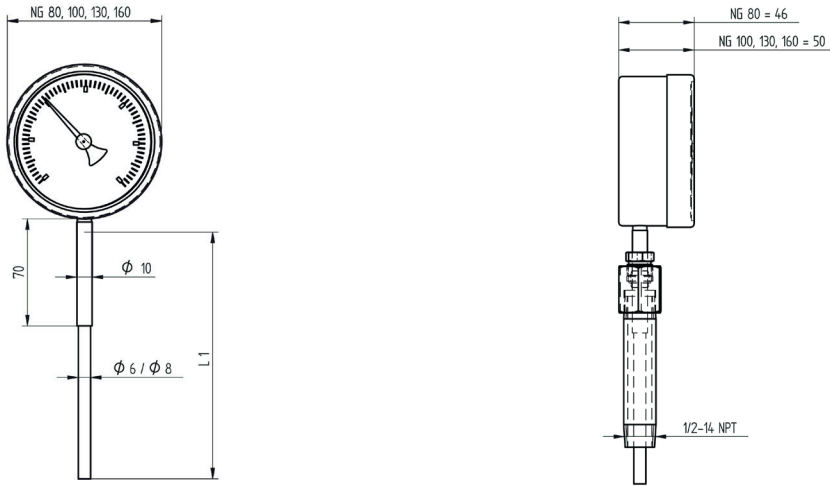
⁽²⁾ Only center back and every angle.

⁽³⁾ The case must not be constantly heated over 75 °C.

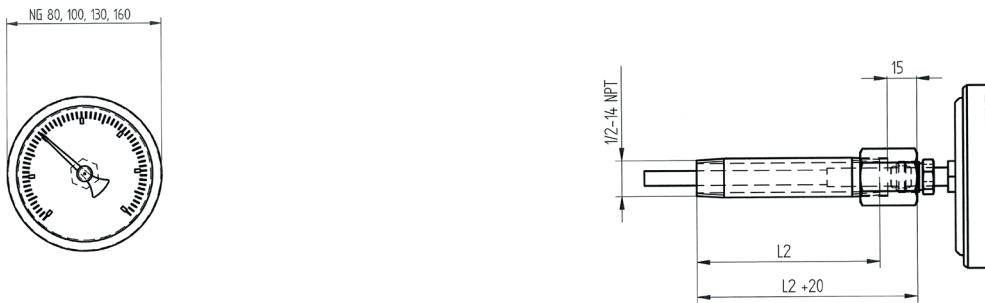
⁽⁴⁾ Only center back and every angle, not for NS 160.

⁽⁵⁾ xxxx = L1 in mm.

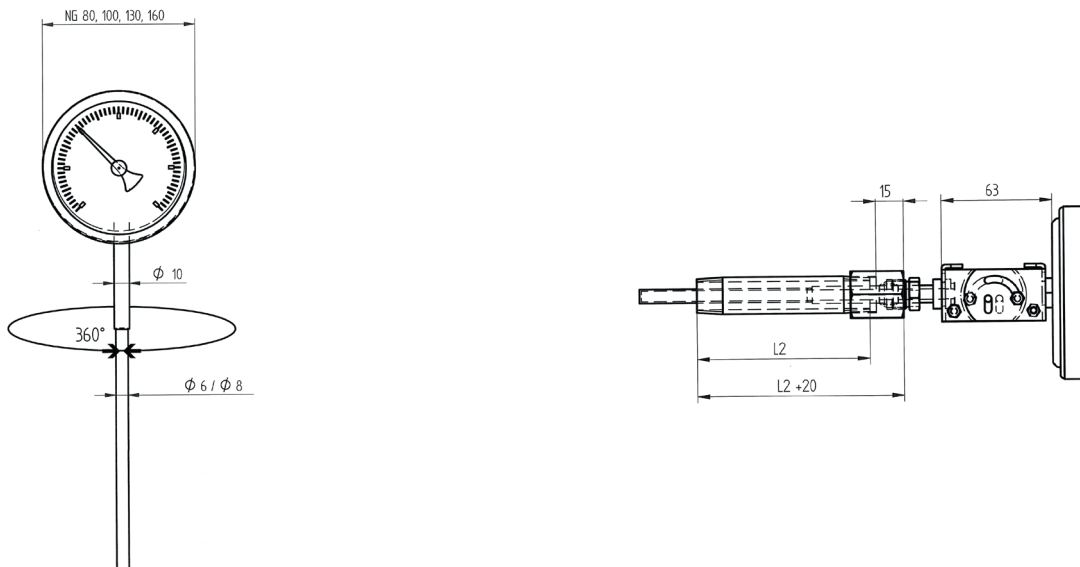
Drawing - Immersion tube bottom (dimensions in mm)



Drawing - Immersion tube center back (dimensions in mm)



Drawing - Immersion tube center back, every angle (dimensions in mm)



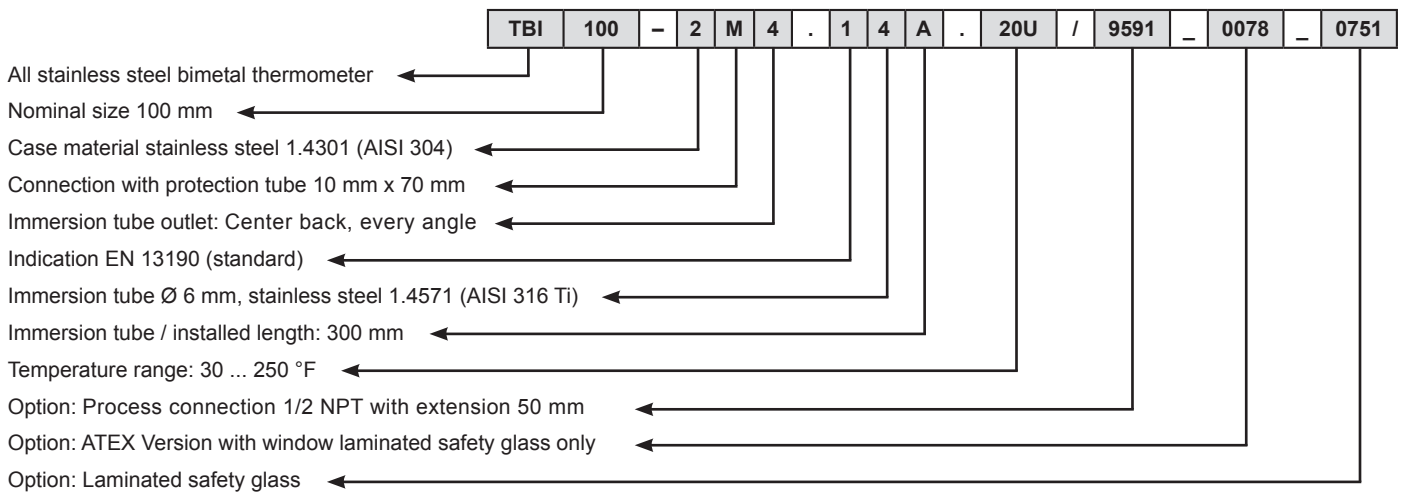
Temperature ranges

Code	Range °C
52T	-20 ... 40
54T	-20 ... 60
84T	-20 ... 100
55T	-30 ... 170
51T	-30 ... 70
68T	-70 ... 50
11T	0 ... 60
27T	0 ... 80
12T	0 ... 100
20T	0 ... 120
13T	0 ... 160
22T	0 ... 200
14T	0 ... 250
23T	0 ... 300
15T	0 ... 400
25T	0 ... 500
16T	0 ... 600
30T	100 ... 500

Code	Range °F
68U	-100 ... 120
09U	-50 ... 120
08U	-40 ... 160
54U	0 ... 140
02U	0 ... 200
03U	0 ... 250
04U	0 ... 300
05U	0 ... 400
06U	0 ... 500
11U	30 ... 140
20U	30 ... 250
13U	30 ... 320
22U	30 ... 400
23U	30 ... 580
15U	30 ... 750
28U	100 ... 800
29U	200 ... 1000

Code	Range (double scale) °C / °F
51V	-30 ... 70 / -40 ... 160
68V	-70 ... 50 / -100 ... 100
55V	-30 ... 170 / 0 ... 350
11V	0 ... 60 / 30 ... 140
20V	0 ... 120 / 30 ... 250
13V	0 ... 160 / 30 ... 320
14V	0 ... 250 / 30 ... 500
15V	0 ... 400 / 30 ... 750
16V	0 ... 600 / 100 ... 1100

Ordering example with options



Ordering details TBI

	TBI			-	2		.	1		.	xxx	/
Model	All stainless steel Industrial Bimetal Thermometer											
	TBI											
Nominal size												
80 mm		0	8	0								
100 mm		1	0	0								
130 mm		1	3	0								
160 mm		1	6	0								
Case												
Stainless steel 1.4301 (AISI 304)					2							
Connection												
with protection tube 10 mm x 70 mm						M						
Immersion tube outlet												
Bottom								1				
Center back								2				
Center back, every angle								4				
Indication												
EN 13190 (Standard)								1				
ASME B40.200								2				
Immersion tube / diameter / material												
Ø 6 mm, stainless steel 1.4571 (AISI 316 Ti)											4	
Ø 8 mm, stainless steel 1.4571 (AISI 316 Ti)											6	
Immersion tube / installed length L1												
300 mm												A
400 mm												B
500 mm												C
600 mm												D
Customer specific length (use option 9003_xxxx, xxxx = L1 in mm)												0
Unit of measurement / Temperature ranges ⁽¹⁾												
°C												xxT
°F												xxU
°C / °F (double scale)												xxV
Options to be added behind the / (see example page 3)												/

⁽¹⁾ Available standard temperature ranges, see tables on page 3. For ranges not listed, please contact Baumer.