



## 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

- Food & Beverage
- Oil & Gas / Chemical
- Water & Waste water
- Energy
- Machinery

## Technical Data

Nominal size	80, 100, 130, 160 mm
Temperature ranges	-70 ... 600 °C / -100 ... 1100 °F
Accuracy	According to EN 13190 up to 250 °C: class 1 above 250 °C: class 2 (class 1 on request)
Protection rating	IP 67 (EN 60529)
Immersion tube	Stainless steel 1.4571 (AISI 316Ti)
Case	Stainless steel 1.4301 (AISI 304)
Bezel ring	Stainless steel 1.4301 (AISI 304)
Window	Instrument glass
Window gasket	Elastomer

Dial	Aluminium, white
Pointer	Aluminium, black, adjustable
Minimum immersion length	Immersion tube Ø 6 mm: L2 ≥ 65 mm Immersion tube Ø 8 mm: L2 ≥ 50 mm
Temperature limit	ranges ≤ 400 °C: 135 % F.S. ranges > 400 °C: 100 % F.S.
ATEX	Ex II2GDc (with option 0078)

## Options

ATEX II2GDc (Only with window laminated safety glass)	Code 0078
Stainless steel housing 1.4404 (316L) <sup>(1)</sup>	Code 0110
Dampening grease	Code 0581
Zero adjustment by knob on the backside <sup>(2)</sup>	Code 0727
Laminated safety glass	Code 0751
Acrylic glass (PMMA or Plexiglass) <sup>(3)</sup>	Code 0752
Window polycarbonate <sup>(4)</sup>	Code 0753
Silicon free, label marking	Code 0793
Silicon free, marking on dial	Code 0794
Customer specific immersion length <sup>(5)</sup>	Code 9003_xxxx
Red mark	Code 9700
Specific temperature range	Code 9704
Customer logo on dial	Code 9710
Specific technical data on dial	Code 9711

<sup>(1)</sup> Only NS 100 and NS 130.

<sup>(2)</sup> Only center back and every angle.

<sup>(3)</sup> The case must not be constantly heated over 75 °C.

<sup>(4)</sup> Only center back and every angle, not for NS 160.

<sup>(5)</sup> xxxx = L1 in mm.

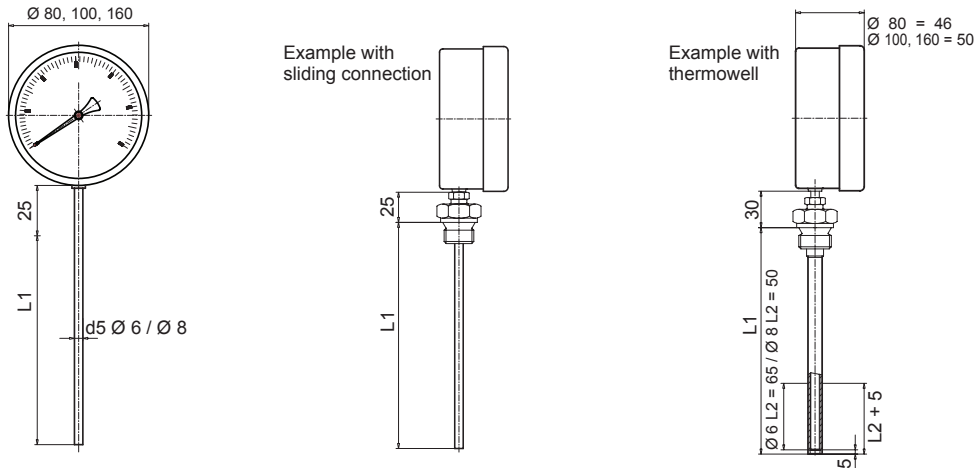
Additional ordering codes for specific process connections	Sliding	Fix
G¼" male	9550	9551
¼" - 18 NPT male	9560	9561
¾" - 14 NPT male	9562	9563
1" - 11.5 NPT male	9564	9565
M18 x 1.5 male	9574	9575
M27 x 2.0 male	9576	9577
M20 x 1.5 female	9584	-
M24 x 1.5 female	9586	-

To be used with ordering code = 0 for specific connection  
Example: TBI 100 204.162.12T / **9550**

## To be ordered separately

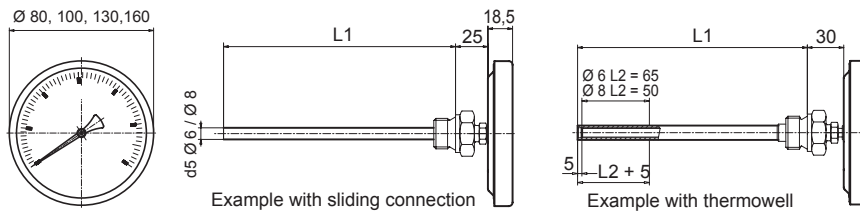
Material certificate 3.1 EN 10204	90001132
Calibration certificate (3 points)	90001188

**Drawing - Immersion tube bottom (dimensions in mm)**



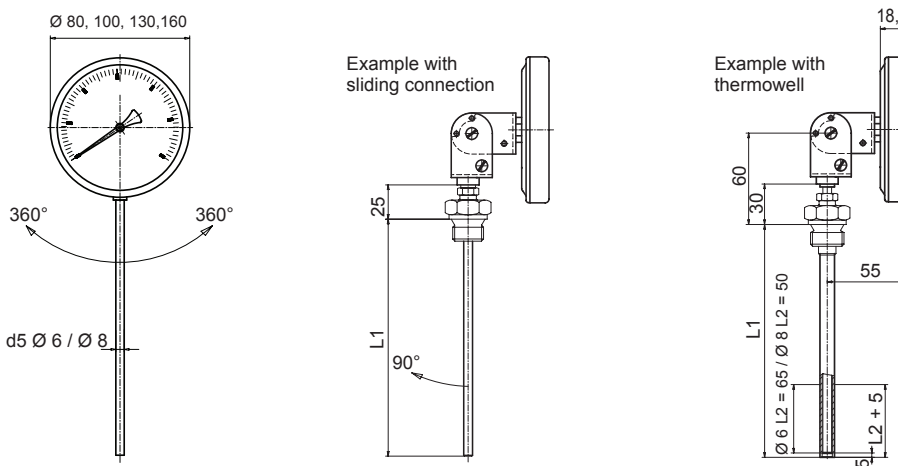
NS	Weight (kg)
80	0.250
100	0.300
160	0.700
Add per 100 mm	
$\varnothing 6$ mm	0.007
$\varnothing 8$ mm	0.017

**Drawing - Immersion tube center back (dimensions in mm)**



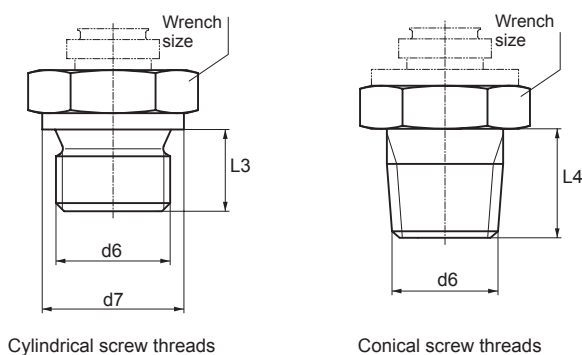
NS	Weight (kg)
80	0.110
100	0.160
130	0.300
160	0.450
Add per 100 mm	
$\varnothing 6$ mm	0.007
$\varnothing 8$ mm	0.017

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



NS	Weight (kg)
80	0.300
100	0.350
130	0.470
160	0.610
Add per 100 mm	
$\varnothing 6$ mm	0.007
$\varnothing 8$ mm	0.017

**Drawings - connections**



d6	d7	L3	L4	Wrench size	Weight (kg)	
					sliding	fix
G $\frac{1}{2}$ ", male	26	15	-	27	0.095	0.090
G $\frac{3}{4}$ ", male	32	16	-	32	0.150	0.140
G1", male	39	19	-	41	0.210	0.240
M20 x 1.5, male	27	14	-	27	0.090	0.090
M24 x 1.5, male	27	15	-	27	0.110	0.110
$\frac{1}{2}$ " - 14 NPT", male	-	-	20	27	0.095	0.100