



BT SERIES

Bimetal thermometers

- ◆ with rigid or every angle stem;
- ◆ watertight casing stainless steel execution;
- ◆ NS 80 - 100 - 125 -150;
- ◆ indication ranges included between -50 and +600 °C



made in
ITALY



ATEX 2014/34/EU



TECHNICAL FEATURES

- **Nominal sizes**
 - 80,100,125 and 150.
- **Casing**
 - case and ring in AISI 304 stainless steel (AISI 316 on request - option V61) with bayonet bezel.
- **Adjustment device**
 - of the calibration from outside (only case AISI 304).
- **Protection degree (according to EN 60529)**
 - IP 55 for dry execution;
 - IP 67 (option V66 and V72).
- **Window**
 - glass for dry execution;
 - laminated safety glass for liquid filled execution or on request (option V17).
- **Thermometric element**
 - bimetal spiral.
- **Ranges (according to EN 13190)**
 - o **Graduation:**
 - 0 ÷ 60; 0 ÷ 100; 0 ÷ 120; 0 ÷ 160; 0 ÷ 200; 0 ÷ 250; 0 ÷ 300; 0 ÷ 400; 0 ÷ 500; 0 ÷ 600; -50 ÷ +50; -40 ÷ +60; -20 ÷ +40; -20 ÷ +100;
 - (divisions as per table C2 at page P04)
 - other graduations not normalized for single or double range (on request).
 - o **Unit of temperature:**
 - °C (Celsius) and °F (Fahrenheit) for single or double range.
- o **Scale angle:**
 - 270 °.
- **Working temperature (referred to full scale value)**
 - from 1/10 to 9/10.
- **Over-temperature (occasionally allowed)**
 - 115% of full scale value.
- **Pointer**
 - aluminium with micrometer adjustment.
- **Dial**
 - white aluminium with black figures (for dial modifications see available options).
- **Accuracy (according to EN 13190)**
 - class 1.
- **Sensitive stem**
 - see page BT02 e BT03.
 - note:** instruments are manufactured with G8 (fixed) or G9 (sliding) connection also suitable for an eventual thermowell connection.
- **Thermowell (see page PZ01 and PZ02)**
 - built-up from pipe - P2 and P4 type;
 - drilled from solid bar stock - P3 and P5 type (dimensions and materials are decided by customer).

OPTIONS

- **Window**
 - different from standard:
 - laminated safety glass. **(identification V17)**
- **Changes to the dial**
 - serial number; **(identification V50)**
 - specific dial; **(identification V51)**
 - writings; **(identification V53)**
 - TAG number; **(identification V54)**
 - dial without logo; **(identification V56)**
 - double logo (Fantinelli + customer); **(identification V57)**
 - customer's logo. **(identification V58)**
- **AISI 316 stainless steel case and ring**
 - as alternative to AISI 304 stainless steel. **(identification V61)**



- **Liquid filling**
silicone fluid filled casing with laminated safety glass window for scale $\leq 120^{\circ}\text{C}$.
(identification V66)
- **IP 67 casing**
not fillable. **(identification V72)**

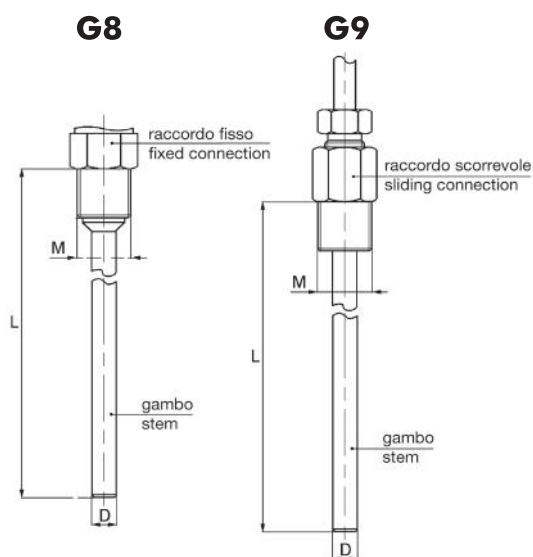
- **Sensitive stem diameter**
not standard.
(identification V75)
- **Metal tag plate**
AISI 316 stainless steel for tag number.
(identification V82)

DOCUMENTATION

- **Fantinelli calibration certificate class 1**
rising temperature.
(identification V92)
- **Documenti complementari**
o certificate of compliance with the order EN 10204-2.2.

- o technical documentation including:
 - drawings and technical informations;
 - installation and maintenance instructions.
- o inspection and test certificate EN 10204-3.1.
- o material certificates.
- o ATEX declaration (II 2 G/D).

SENSITIVE STEMS AND CONNECTIONS



Cilindric sensitive stem

- o AISI 316L stainless steel;
- o D diameter:
 - 6 and 8 mm;
- o length L:
 - standard 100, 150, 200, 250, 300 and 400 mm;
 - special length included between 100 and 700 mm;
- o AISI 316L st.st. male threaded process connection M:
 - fixed (G8) G 1/2 B (1/2 Gas or BSP) or 1/2-14 NPT EXT (1/2 NPT);
 - sliding (G9) G 1/2 B (1/2 Gas or BSP) or 1/2-14 NPT EXT (1/2 NPT);
 - 1/2-14 NPT EXT (1/2 NPT) connection to an eventual thermowell.

FOR THERMOWELLS SEE AT PAGES PZ01 E PZ02

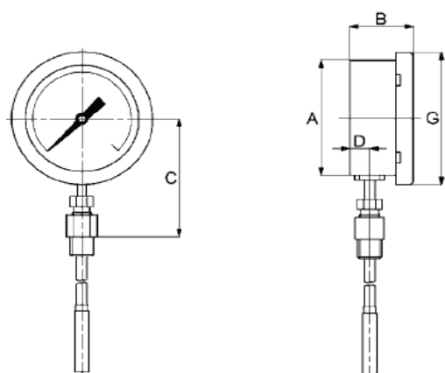


Table BT 385

DN	A	B	C	D	E	F	G	H	I	L	M	N	∅ fori 120°	PESO ~ kg
100	100	49	110	16,5			112							0,56
150	150	49	135	16,5			166							0,80

Thermometer for direct vertical mounting.

Table BT 387

DN	A	B	C	D	E	F	G	H	I	L	M	N	∅ fori 120°	PESO ~ kg
80	74	14	58				80							0,17
100	100	21	58				111							0,38
125	126	30	58				129							0,48
150	150	24	58				161							0,60

Thermometer for direct horizontal mounting.

note: informations shown in this series may be changed at any time without prior notice.

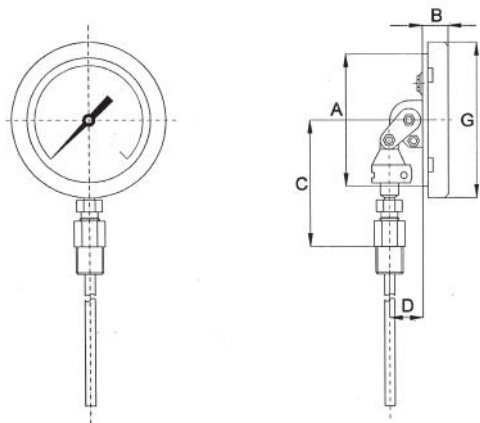


Table BT 392

DN	A	B	C	D	E	F	G	H	I	L	M	N	Ø fori 120°	PESO ~ kg
100	100	21	90	40			111							0,56
125	126	30	90	40			129							0,66
150	150	24	90	40			161							0,78

Every angle thermometer for direct mounting.

Table BT 1
Sensitive stems' and thermowells' length

Range °C	Length L sensitive stems (thread included)				Immersion U thermowell (thread escluded)			
	D 6 mm		D 8 mm		min	standard	max	special
	min	standard	min	standard	mm	mm	mm	mm
-50 ÷ +50	90	100 - 150 200 - 250 300 - 400	90	100 - 150 200 - 250 300 - 400	75	100 - 150 200 - 250 300 - 400	500	to be agreed
-40 ÷ +60	90	100 - 150 200 - 250 300 - 400	90	100 - 150 200 - 250 300 - 400	75	100 - 150 200 - 250 300 - 400	500	to be agreed
-20 ÷ +40	110	150 200 - 250 300 - 400	110	150 200 - 250 300 - 400	95	100 - 150 200 - 250 300 - 400	500	to be agreed
-20 ÷ +100	70	100 - 150 200 - 250 300 - 400	70	100 - 150 200 - 250 300 - 400	55	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 60	110	150 200 - 250 300 - 400	110	150 200 - 250 300 - 400	95	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 100	90	100 - 150 200 - 250 300 - 400	90	100 - 150 200 - 250 300 - 400	75	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 120	70	100 - 150 200 - 250 300 - 400	70	100 - 150 200 - 250 300 - 400	55	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 160	60	100 - 150 200 - 250 300 - 400	60	100 - 150 200 - 250 300 - 400	45	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 200	80	100 - 150 200 - 250 300 - 400	80	100 - 150 200 - 250 300 - 400	65	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 250	110	150 200 - 250 300 - 400	110	150 200 - 250 300 - 400	95	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 300	80	150 200 - 250 300 - 400	80	150 200 - 250 300 - 400	65	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 400	80	100 - 150 200 - 250 300 - 400	80	100 - 150 200 - 250 300 - 400	65	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 500	80	100 - 150 200 - 250 300 - 400	80	100 - 150 200 - 250 300 - 400	65	100 - 150 200 - 250 300 - 400	500	to be agreed
0 ÷ 600	60	150 200 - 250 300 - 400	60	150 200 - 250 300 - 400	45	100 - 150 200 - 250 300 - 400	500	to be agreed

note: on request, sensitive stems with diameters (6,4 - 9,6) and lengths different from those above indicate can be realized.