

Technical Datasheet



Bimetallic Thermometers GB Range

Key Features

- Nominal Diameter options of 100mm, 125mm and 150mm St. Steel case.
- With rigid or every angle stem.
- Watertight casing stainless steel execution
- Indication ranges included between -50 to +500 °C
- Execution B made with traditional criteria of quality and versatility able to satisfy the specific requirements of delivery and flexibility
- Execution S maintains a very good quality level and offers considerable economic advantages due to updated product modern technologies.



Series Overview

- The GB bimetallic thermometers offers customer a cost-effective and reliable solution to their arduous process control requirement.
- Available with a wide variety of casing options and size, the GB bimetallic thermometers can be used for a variety of applications when pressure measurements are needed.

Other products in the series include:

- Temperature Gauges:
Models GE and GI



Product applications

The Gb range is suitable for a wide range of applications in many Industry sectors where a safety barrier & blow out back are required to give added safety:

- Oil & Gas
- Chemical
- Petrochemical
- Refining
- Power
- Food Industry
- OEM

The choice of models available ensures suitability for use in:

- Corrosive atmospheres
- Resistant to chemical attack

How can we help you?

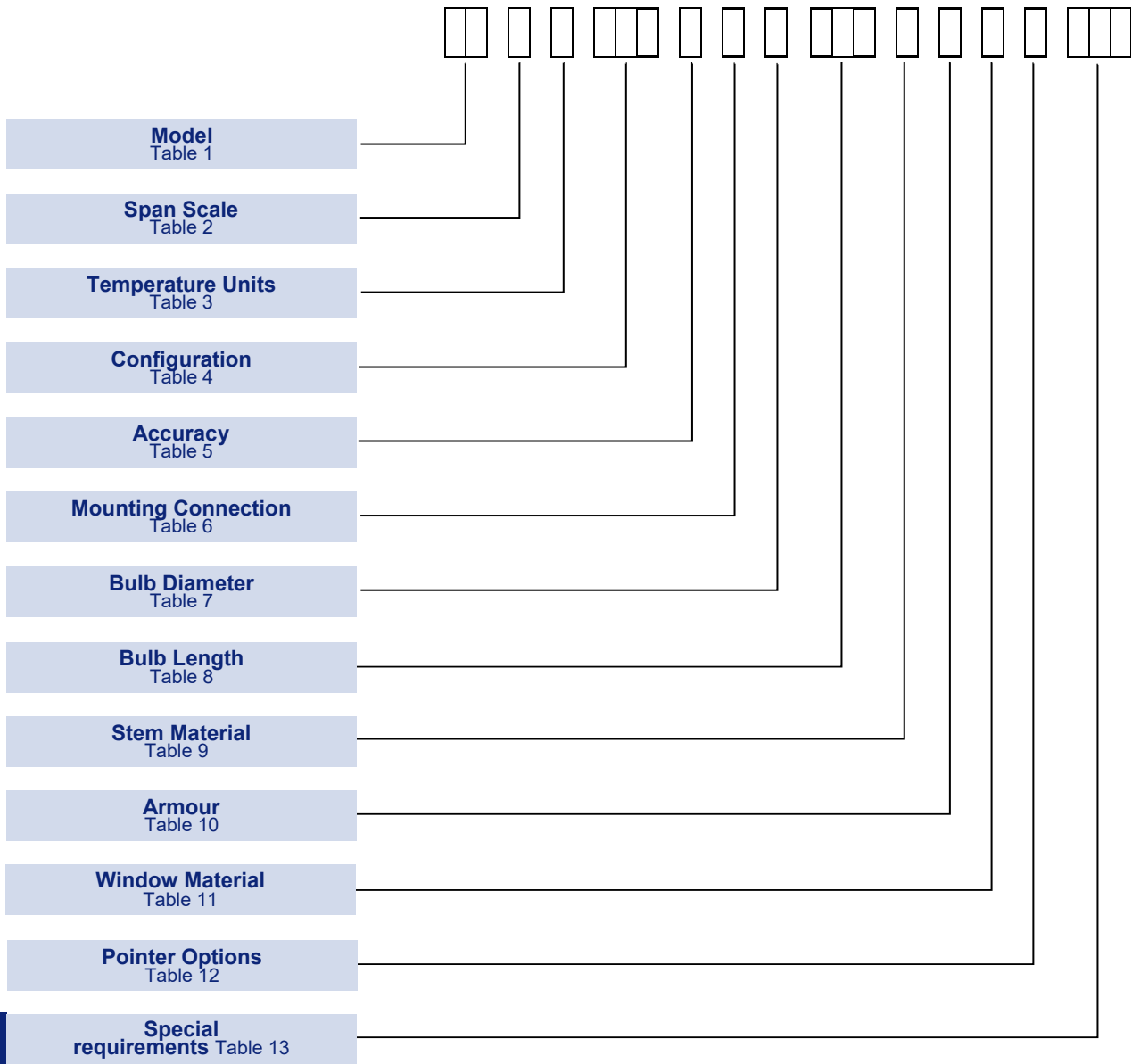
Delta Mobrey offers fast, efficient and knowledgeable support when and where you need it. Please visit our web site at www.delta-mobrey.com to find your local support centre or call us on:

+44 (0) 1252 729140

Bimetallic Thermometer
Model: GB

How to order

Gauges can be configured by selecting codes representing the desired features from the tables that follow. The chart below, describes how the model code is built up. For assistance in configuring a switch that best suits your needs, please contact your local sales office.



Bimetallic Thermometer
Model: GB

NOTE: Options shaded in the following tables are the most common options and are available on the quickest lead-times and at the lowest cost.

NOTE: Only the most common options are shown in this data sheet. Should you require a feature that is not shown, please contact your local sales office for further details.

Technical Specification

Execution:	B and S
Nominal sizes:	100 and 150 mm execution B 100 and 150 mm execution S
Casing:	Case and ring in AISI 304 stainless steel or AISI 316 with bayonet bezel
Protection degree:	IP 55 for dry execution, IP65 for liquid filled
Windows material:	Glass for dry execution, laminated safety glass for liquid filled execution
Thermometric element:	Bimetal spiral
Working temperature:	From 1/10 to 9/10 (referred to full scale value)
Over-temperature:	115% of full scale value (occasionally allowed)
Pointer:	Aluminium with micrometer adjustment
Dials:	White Aluminium with black graduation
Accuracy:	Class 1.0 per EN 13190
Sensitive stem:	instruments are manufactured with fixed or sliding connection also suitable for an eventual thermowell connection
Thermowell:	Built-up from pipe P2 and P4 type Drilled from solid bar stock, P3 and P5 type
Filled Case execution:	Filling fluid Silicon oil for range up to 100°C.

Model

TABLE 1 

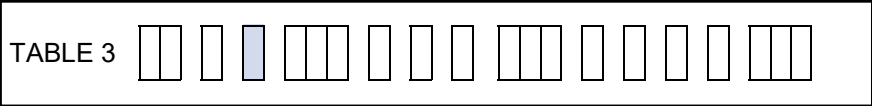
ENCLOSURE TYPES	Code
Bimetallic Thermometer	
100 mm and 150 mm	GB

Range

TABLE 2 

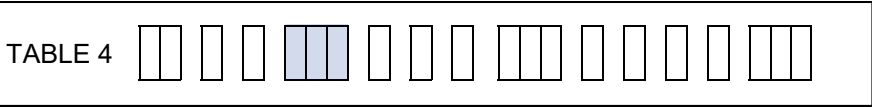
SPAN OF OUTER SCALE	Code
0 to 60	A
0 to 100	B
0 to 120	C
0 to 160	D
0 to 200	E
0 to 250	F
0 to 300	G
0 to 400	H
0 to 500	J
0 to 600	K
-50 to +50	L
-40 to +60	M
-20 to +40	N
-20 to +100	P
-30 to +70	Q
-80 to +120	R
-50 to +110	S
-40 to +120	T
-30 to +170	U
-50 to +220	V
-30 to +220	W
-20 to +140	Y

Temperature Units



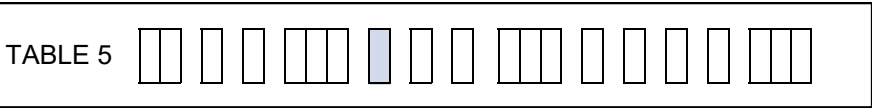
	Code
Degrees Celsius	C
Degrees Celsius and inner scale to suit in Degrees Fahrenheit	G

Configuration



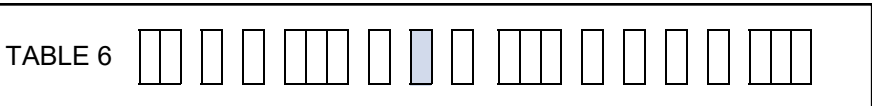
	Code
Gauge diameter, mounting, case features & safety fill. Various options available. Contact Delta Sales	XXX

Accuracy Class



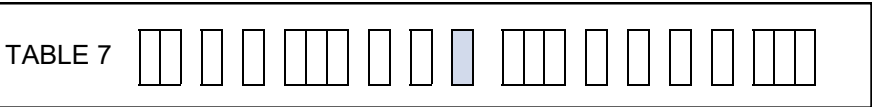
	Code
Class 1.0 (± 1 per cent of full scale deflection)	A
Class 1.6 (± 1.6 per cent of full scale deflection)	B

Mounting connection



	Code
R1/2 (1/2inch BSPT male), sliding and swivel	D
1/2-14 NPT External, fixed	J
G1/2B (1/2inch BSPP male), fixed	K
G1/2B (1/2inch BSPP male), sliding and swivel.	L
3/4-14 NPT External, sliding and swivel.	M
G3/4B (3/4inch BSPP male), sliding and swivel	O
1/2-14 NPT External, sliding and swivel	R
R1/2 (1/2inch BSPT male), fixed	W
G3/8B (3/8inch BSPP male), sliding and swivel	Z

Bulb diameter



	Code
Bulb 6mm diameter	A
Bulb 8mm diameter	B
Bulb 10mm diameter	C

Bulb Length



	Code
Various options available. Contact Delta Sales	XXX

Stem Materials



	Code
Direct mount stem 316 stainless steel	R

Armour



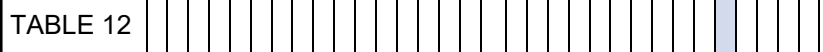
	Code
No armoured capillary	0

Window Material



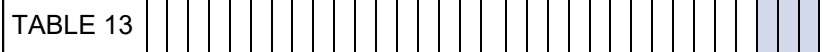
	Code
Laminated Safety Glass window for nominal gauge diameter 100mm and crimped retaining bezel.	D
Laminated Safety Glass window for nominal gauge diameter 100mm and bayonet retaining bezel.	F
Glass window	G
Laminated Safety Glass window for nominal gauge diameter 125mm and crimped retaining bezel.	K
Laminated Safety Glass window for nominal gauge diameter 150mm and crimped retaining bezel.	M
Laminated Safety Glass window for nominal gauge diameter 150mm and bayonet retaining bezel.	P

Pointer Option



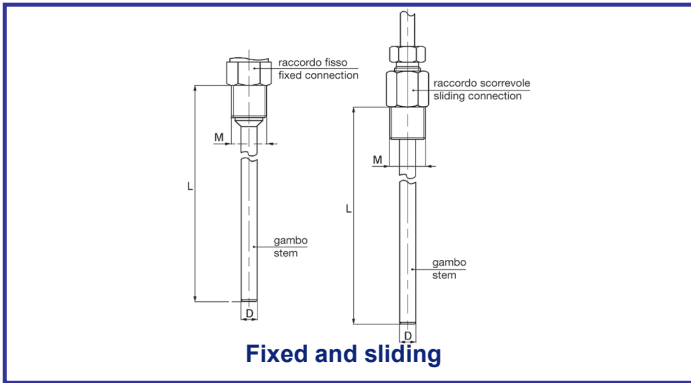
	Code
Standard assembly only	0

Special Requirements



	Code
Special requirements	XXX

Sensitive stems and connections

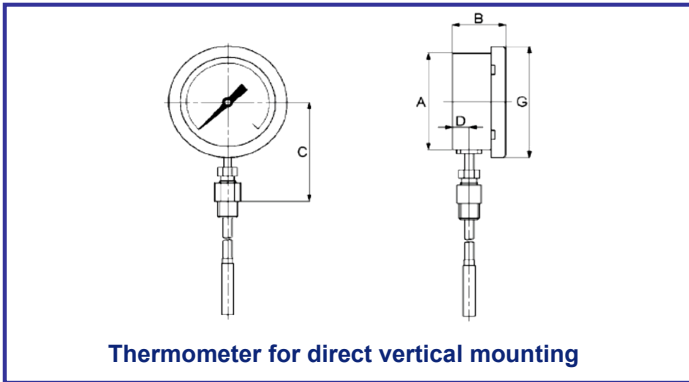


SIZE AVAILBALE
1/2" NPT
G1/2B (1/2"BSPP)
R1/2 (1/2"BSPT)
R1/2 (1/2"BSPT)
G1/2B (1/2"BSPP)
3/4"NPT
1/2"NPT
G3/8B (3/8"BSPP)

Range °C	Immersion U thermowell (thread escluded)			
	min	standard	max	special
	mm	mm	mm	mm
-50 to + 50	65	100 - 150 200 - 250 300 - 400	500	To be agreed
-40 to +60	65	100 - 150 200 - 250 300 - 400	500	To be agreed
-20 to +40	115	150 200 - 250 300 - 400	500	To be agreed
-20 to +100	55	100 - 150 200 - 250 300 - 400	500	To be agreed
0 to 60	115	150 200 - 250 300 - 400	500	To be agreed
0 to 100	65	100 - 150 200 - 250 300 - 400	500	To be agreed
0 to 120	55	100 - 150 200 - 250 300 - 400	500	To be agreed
0 to 160	45	100 - 150 200 - 250 300 - 400	500	To be agreed
0 to 200	45	100 - 150 200 - 250 300 - 400	500	To be agreed
0 to 250	105	150 200 - 250 300 - 400	500	To be agreed
0 to 300	95	100 - 150 200 - 250 300 - 400	500	To be agreed
0 to 400	65	100 - 150 200 - 250 300 - 400	500	To be agreed
0 to 500	65	100 - 150 200 - 250 300 - 400	500	To be agreed

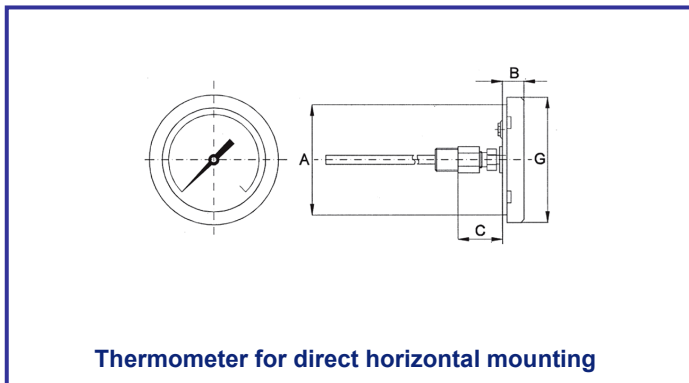
Bimetallic Thermometer
Model: GB

Sensitive stems and connections



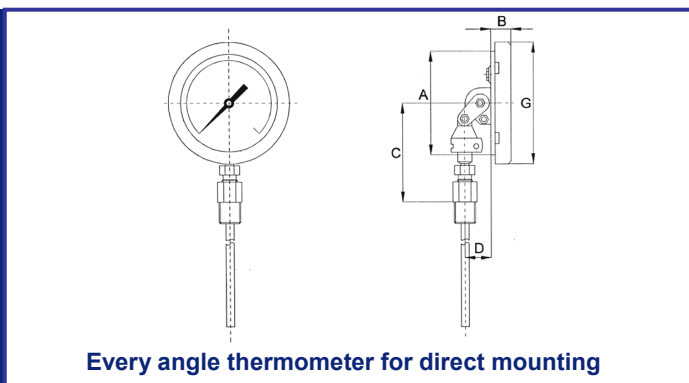
Thermometer for direct vertical mounting

DN	A	B	C	D	G	Weight
100	103	23	108	35	118	0.48
125	119	22	108	35	130	0.60
150	150	23	108	35	166	0.71



Thermometer for direct horizontal mounting

DN	A	B	C	G	Weight
100	103	22	58	111	0.38
125	119	22	58	130	0.44
150	150	22	58	161	0.50



Every angle thermometer for direct mounting

DN	A	B	C	D	G	Weight
100	100	22	80	40	111	0.48
125	119	22	80	40	130	0.54
150	150	22	80	40	161	0.60

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