

Bimetal Thermometers, every angle

Crimped-on ring case stainless steel, turnable and adjustable

TBiGelChg 5"

TBiGelChgG 5"

Standard Versions

These thermometers are manufactured according to ASME B40.200, especially concerning the accuracy and the temperature ranges. Further information on selection and metrological features (e.g. temperature resistance) can be found in model overview 8000.

Measuring Unit

Helical bimetallic element

Accuracy (ASME B40.200)

Grade A $\pm 1\%$ of the measuring range

Case

With polished crimped-on ring, 304 stainless steel

Case Protection Type (EN 60 529 / IEC 529)

IP 65

Case Filling

For model TBiGelChgG

Temperature ranges 0 °F up to +210 °F:

Glycerine

Temperature ranges -40 °F and +210 °F and above up to 480 °F:

Silicone oil

Nominal Case Size

5"

Case Configuration

Connection stem: adjustable angle

Position: centre back position, compared to the case adjustable by 135°, turnable by 360°

Mounting device : without

Temperature Ranges (ASME B40.200)

Spans from 110 °F to 900 °F

Measuring range = indication range

Temperature Stem

316 Ti stainless steel,

max. static operating pressure: 25 bar

Stem models: B1 or B4.1

Stem- Ø dF: 1/4" (6.35 mm), 5/16" (8 mm) or 3/8" (9.52 mm)

Stem length L: Lmin up to 16" (400 mm)

Please regard the minimum stem length depending on the active length (La) and stem model, see below



Window

Instrument glass

Dial

Aluminium, black figures, white background

Pointer

Aluminium, black

Indication Adjustment ($\pm 4\%$)

Externally by a screw

Ordering Information, Standard Temperature Ranges, Options

See page 2

Special Versions and further Options among others

- Other stem models, connection threads and materials upon request
- Other temperature ranges and/or special scales, e.g. dual scales °C/°F, coloured fields or areas, dial inscriptions, etc.
- Case parts 1.4404 (316 L stainless steel) upon request
- TBiGelChg, TBiGelChgG: for ambient temperatures up to -76 °F

Minimum Stem Length, Active Length and maximum realisable Stem Length

		Stem-Ø dF:						
		1/4" (6.35 mm)		5/16" (7.94 mm)		3/8" (9.52 mm)		
		Span (temperature difference) ΔT^1						
Stem model:	Length:	Thread:	$\geq 180^\circ\text{F}$	$= 150^\circ\text{F}$	$= 110^\circ\text{F}$	$\geq 150^\circ\text{F}$	$= 110^\circ\text{F}$	all
all models	La	–	1.6"	2.4"	2.8"	1.6"	2.4"	2.2"
B1	Lmin	–	1.8"	2.6"	3.0"	1.8"	2.6"	2.4"
B4.1	Lmin	1/2" NPT; 3/4" NPT	2.35"	3.15"	3.55"	2.35"	3.15"	3.0"
others			upon request					

The minimum length Lmin of the stem is the smallest possible stem length depending on the active length La (sensitive portion) and the stem model.

The active length La of the stem has to immerse completely into the medium, to grant a measuring result which corresponds to the accuracy class.

¹⁾ The temperature difference $\Delta T = 150^\circ\text{F}$ corresponds to e.g. the temperature range 0/150 °F but also -30/120 °F



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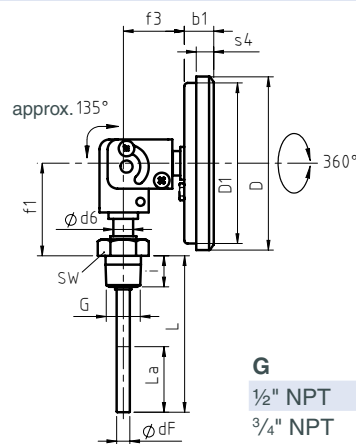
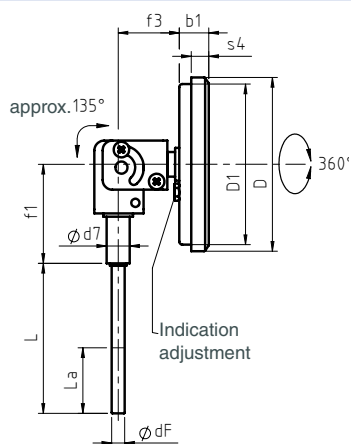
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Stem Models, Dimensional Data and Weights, Ordering Information with Temperature Ranges, Options

Stem Models

	B1	B4.1
Process connection	without screw fitting, plain stem	Male thread, rigid



G	SW	i
1/2" NPT	1.07"	0.75"
3/4" NPT	1.07"	0.75"

Dimensional Data (inches) and Weights (lb)

NCS	b1	D	D1	d6	d7	f1	f3	s4	approx. weight ¹⁾	
									TBiGelChg 5"	TBiGelChgG 5"
5"	0.8"	5.35"	4.92"	0.47"	0.55"	2.36"	1.46"	0.32"	1.08	1.43

¹⁾ The information is an example and relates to version with stem B1, Ø dF 5/16", L= 3.94".

Basic Version:	Bimetal thermometers with adjustable angle		TBiGelChg
Case filling:	according to version glycerine or silicone oil		G
Nominal case size:	5"		5"
Stem position / case configuration:	centre back position, adjustable angle		without code letters
Temperature ranges:	ΔT (°F):		
	0 — 150 °F	150	
	0 — 200 °F	200	
	0 — 250 °F	250	e. g. 0-250 °F
	0 — 300 °F	300	
	-50 / +130 °F	180	
	-40 / +160 °F	200	
	-30 / +120 °F	150	e. g. -30 /+120 °F
	-10 / +100 °F	110	
	+20 / +240 °F	220	
	+30 / +140 °F	110	
	+40 / +400 °F	360	
	+50 / +300 °F	250	
	+50 / +500 °F	450	
	+100 / +800 °F	700	
	+100 / +1000 °F	900	
	+150 / +700 °F	550	
Stem:	without screw fitting, plain stem		B1
	male thread, rigid		B4.1
Stem-Ø dF:	1/4", 5/16" or 3/8"		e. g. dF 1/4"
Stem length:	L		e. g. L = 10"
Process connection:	1/2" NPT or 3/4" NPT		e. g. 1/2" NPT
Options:	red mark on the dial plastic clip red or green external at crimped-on ring window tempered safety glass case polished case filling temperature ranges 0 °F to +210 °F: Silicone oil stem length > 16" (400 mm), max. 32" (800 mm) measuring point with stainless steel-plate 12mm x 55mm (0.47" x 2.17"), wire mounting or marking sticker on case coverage		(Order at the moment still as cleartext)

Example: TBiGelChg 5", -30/+140 °F, B4.1, dF 3/8", L = 10", 1/2" NPT

Special Versions: Please describe your requirements clearly