



Features

- C & Atex approved electrical contacts.
- Inert gas filled expansion system.
- Stainless steel case & stem
- With or without thermowell
- Silicon oil filled (optional)
- Standard followed EN 13190.

Applications

- All stainless steel inert gas filled thermometers are suitable for corrosive media / environments in process industry
- chemical
- Food
- Pharmaceutical
- Pulp
- Paper
- Refinery
- Cement & many more.

Specifications

Standard Version: 100 mm, 125 mm, 150 mm, 200 mm & 250 mm

Accuracy	:	Class 1 as per EN 13190
Case & bezel	:	AISI 304 SS (Bayonet Type)
Stem & connection	:	AISI 316 SS
Joints	:	Tig Argon arc welding
Ambient temperature	:	-25°C C to 65°C
Operating pressure	:	15 kg/cm ² (without thermowell)
Over range limit	:	120 % of Full Scale
Stem diameter	:	8 mm
Process connection	:	½" BSP (M) Adjustable
Protection	:	IP 65
Dial	:	Aluminium, black graduation on white background
Pointer	:	Aluminium, black Coloured Micrometer Zero adjustable
Window	:	Sheet Glass
Gasket & Filling Plug	:	Neoprene

Electrical contacts Version

Accuracy	:	Class 1 as per EN 13190
Ambient Temperature	:	Maximum 65°C
Window	:	Polycarbonate Dome
Dampening Liquids	:	Dielectric Oil (Optional)
Other Features	:	Refer Specification of Standard Version

Silicon oil filled Version

Accuracy	:	Class 1 as per EN 13190
Ambient Temperature	:	Maximum 65°C
Window	:	Plexi Glass
Dampening Liquids	:	Silicon Oil (Option DS)
Gasket & filling Plug*	:	Viton
Other Features	:	Refer Specification of Standard Version

*Gasket & Filling plug of Viton.

Note : The addition of mechanical electric contacts affects the accuracy of instruments such that 1% becomes 1.5%, 1.6% becomes 2.4% etc. (Add the 50% of accuracy; If the contact is of the magnetically assisted type, this value can't be added within the ±5% of setting point.)

Note: Design and Specifications subject to change without prior notice.

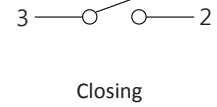
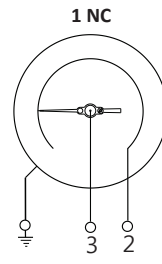
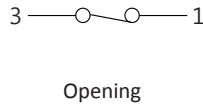
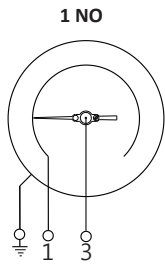
Nominal range, measuring ranges & limits of error as per EN 13190

Nominal Range (°C)	Measuring Range (°C)	Limits of Error (± °C)
-20 to +40	-10 to +30	1
-20 to +60	-10 to +50	1
-20 to +120	-10 to +110	2
-30 to +30	-20 to +20	1
-30 to +50	-20 to +40	1
-30 to +70	-20 to +60	1
-40 to +40	-30 to +30	1
-40 to +60	-30 to +50	1
-100 to +60	-80 to +40	2
0 to 60	10 to 50	1
0 to 80	10 to 70	1
0 to 100	10 to 90	1
0 to 120	10 to 110	2
0 to 160	20 to 140	2
0 to 200	20 to 180	2
0 to 250	30 to 220	2.5
0 to 300	30 to 270	5
0 to 400	50 to 350	5
0 to 500	50 to 450	5
0 to 600	100 to 500	10

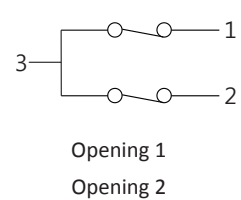
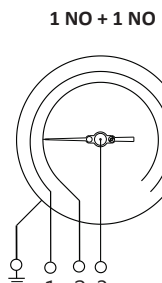
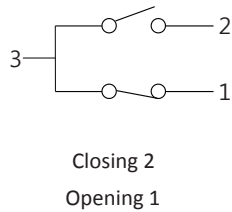
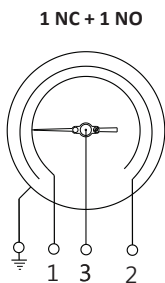
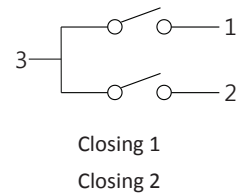
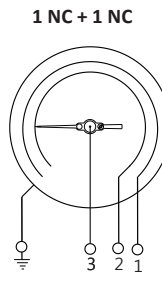
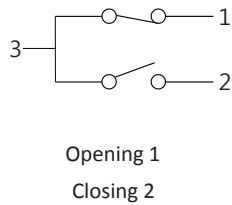
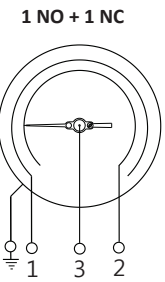
Wiring diagrams

Wiring diagrams for electric contacts

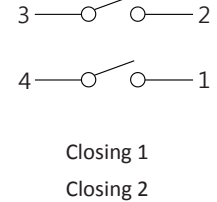
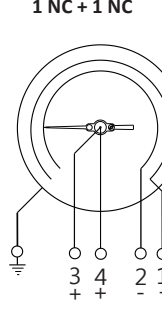
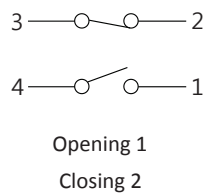
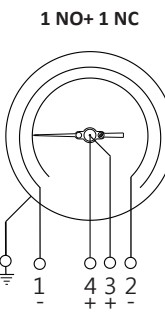
Single Contact



Double contact

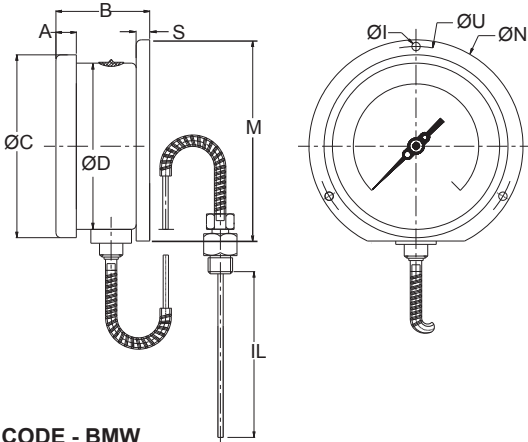


Independent double contact



Dimensions - Standard Version

Diagram and Code indicates Type of Mounting

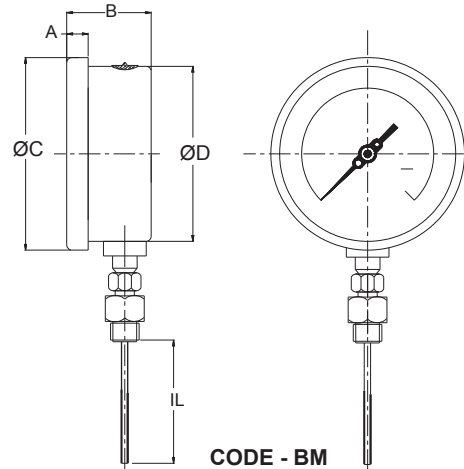


CODE - BMW

NS	A	B	ØC	ØD	S	M	IL	ØU	ØN	ØI	Approx. Wt.#
100	12.5	45	111	100	6	128	*	118	134	6	1000.0
125	15	46	129	119	4	143	*	137	150	6	1250.0
150	15	46.5	161	149	6	174.5	*	168	186	6	1550.0
200	18	49	216.5	201.5	1.5	229	*	230	245	7	2000.0
250	18	52	263	250	1.5	286.5	*	276	290	7	2250.0

(* As per customer requirement.)

(# Weight in grams with box for 300 mm stem length & 3 meter capillary)

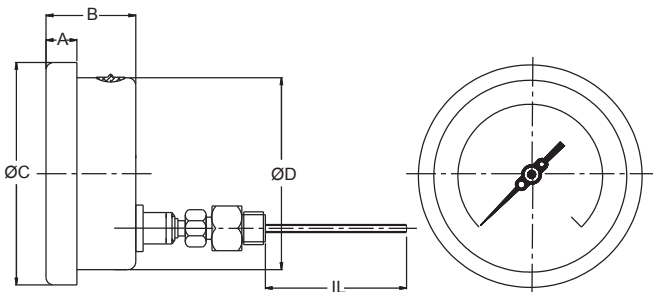


CODE - BM

NS	A	B	ØC	ØD	IL	Approx. Wt.#
100	12.5	47	111	100	*	750.0
125	15	48	129	119	*	1000.0
150	15	49	161	149	*	1250.0
200	18	49	216.5	201.5	*	1500.0
250	18	52	263	250	*	2000.0

(* As per customer requirement.)

(# Weight in grams with box for 300 mm stem length.)

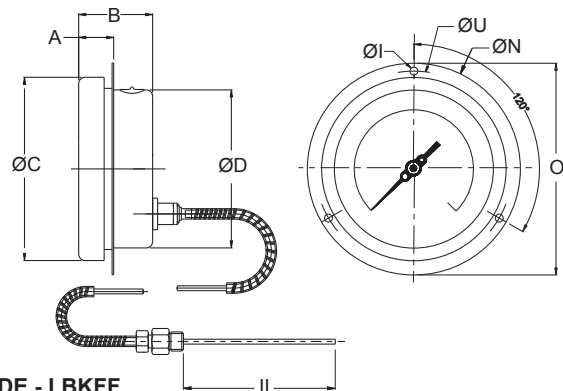


CODE - LBK

NS	A	B	ØC	ØD	IL	Approx. Wt.#
100	12.5	47	111	100	*	750.0
125	15	49	129	119	*	1000.0
150	15	49	161	149	*	1250.0
200	18	49	216.5	201.5	*	1500.0
250	18	52	263	250	*	2000.0

(* As per customer requirement.)

(# Weight in grams with box for 300 mm stem length.)

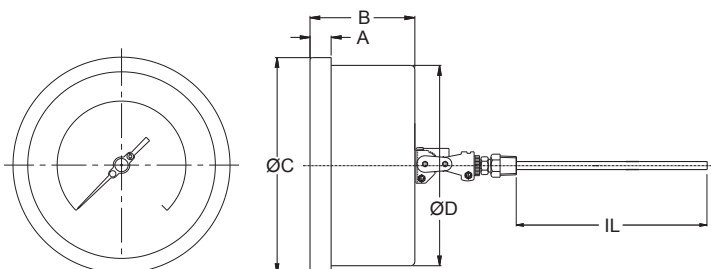


CODE - LBKFF

NS	A	B	ØC	ØD	S	IL	ØU	ØN	ØI	Approx. Wt.#
100	12.5	47	111	100	1	*	118	134	6	1000.0
125	15	49	129	119	4	*	137	150	6	1250.0
150	15	49	161	149	1	*	168	186	6	1550.0
200	18	49	216.5	201.5	1.5	*	230	245	7	2000.0
250	18	52	263	250	1.5	*	276	290	7	2250.0

(* As per customer requirement.)

(# Weight in grams with box for 300 mm stem length & 3 meter capillary)

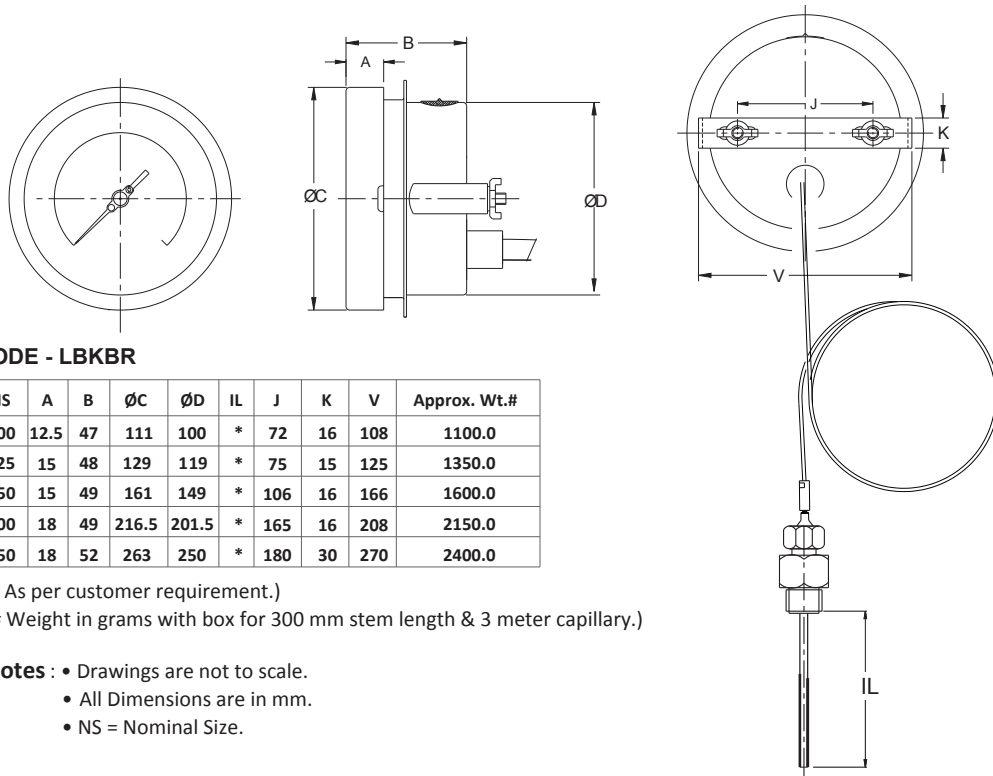


CODE - EA

NS	A	B	ØC	ØD	IL	Approx. Wt.#
100	12.5	48	111	100	*	750.0
125	15	49	129	119	*	1000.0
150	15	49	161	149	*	1250.0
200	18	49	216.5	201.5	*	1500.0
250	18	49.5	263	250	*	2000.0

(* As per customer requirement.)

(# Weight in grams with box for 300 mm stem length.)



CODE - LBKBR

NS	A	B	ØC	ØD	IL	J	K	V	Approx. Wt.#
100	12.5	47	111	100	*	72	16	108	1100.0
125	15	48	129	119	*	75	15	125	1350.0
150	15	49	161	149	*	106	16	166	1600.0
200	18	49	216.5	201.5	*	165	16	208	2150.0
250	18	52	263	250	*	180	30	270	2400.0

(* As per customer requirement.)

(# Weight in grams with box for 300 mm stem length & 3 meter capillary.)

- Notes :**
- Drawings are not to scale.
 - All Dimensions are in mm.
 - NS = Nominal Size.

Range Table

Note : We Offer National / International Scales like °C, °F & Dual scale in °C, °F & scales as per the requirement can be provided on request. Following are the example tables for °C

Standard Ranges

Positive range single scale in °C			
Range	Range	Range	Range
0 to 60	0 to 120	0 to 250	0 to 500
0 to 80	0 to 160	0 to 300	0 to 600
0 to 100	0 to 200	0 to 400	50 to 650

Compound range single scale in °C*			
Range	Range	Range	Range
-80 to 60	-20 to 60	-40 to 60	-20 to 180
-60 to 40	-20 to 80	-30 to 50	-20 to 100

Note: *Compound ranges are not recommended for electrical contact option. Refer table for limits of error as per EN13190

Accessories (*Refer Datasheet For Thermowells)

* Thermowell

How To Order - Ordering Example: 2511TG : GF.150. EA. 2NPM. ADJ. 2C. 100mm. 0 to 60°C. SS

Basic Model	2511TG : GF				
Code	100	125	150	200	250
Nominal Size	100 mm	125 mm	150 mm	200 mm	250 mm
Code	Type of Mounting	Code	Type of Mounting		
BMW	Wall / surface / projection mounting With bottom entry	LBKFF	Lower back entry with front flange		
BM	Direct bottom entry*	EA	Every angle back entry*		
LBK	Direct lower back entry*	LBKBR	Lower back entry with mounting bracket (*without Capillary option)		

Note: Design and Specifications subject to change without prior notice.

Code	Process Connection	Code	Process Connection	Code	Process Connection
38BSM	3/8" BSP (M)*	2BSM	½" BSP (M) (Standard)*	34BSM	3/4" BSP (M)
38NPM	3/8" NPT (M)*#	2NPM	½" NPT (M)*#	2M20	M20 x 1.5 (M)*
38BSTM	3/8" BSPT (M)*#	2BSTM	½" BSPT (M)*#	(# Not recommended for Revolving/ Swivel connections.)	

* Suitable for stem diameter 6 to 10 mm, Note : Connections like Metric/ PT/ PF/ Flaired/ UNF/ G/ R etc can be provided on request.

Code	Process Connection Type	Code	Process Connection Type	Code	Process Connection Type
ADJ	Adjustable (Standard)	FXD	Fixed	ROV	Revolving / Swivel

Code	Stem Diameter	Code	Stem Diameter	Code	Stem Diameter	Code	Stem Diameter	Code	Stem Diameter		
1U	6 mm	2M	6.35 mm	2C	8 mm (Standard)	2I	9.5 mm	2J	10 mm	2K	12 mm

Stem Length (Below thread Max. 600 mm)							
Please specify in mm		Minimum stem Length (Below Thread)	130 mm	120 mm	120 mm	120 mm	110 mm
		Stem OD	6 / 6.35mm	8 mm	9.5 mm	10 mm	12 mm

Range Refer range table

Code	Type	Code	Type
A1	With rigid stem	A2	With capillary

Capillary length (Max up to 15 Mtrs.) In meters (e.g. 1.5 = 1.5 meters 2.0 = 2 meters)

Code	Capillary	Code	Capillary
SS3	AISI 304 SS	SS	AISI 316 SS

Capillary covered with armour (Applicable with Capillary if selected)					
SS3	AISI 304 SS	SS	AISI 316 SS	PVC	PVC (Ambient Temp. Max. 60°C)

Electric Contacts (FOR NS 100 mm & 150 mm Only) (C & Atex approved)			
(With IP protection up to IP 65 & window polycarbonate dome type)			
A) Single insulated magnetic snap action type*# (230 V AC, 1 Amp.)(48 V DC, 0.5 Amp.) B) Inductive type (220 V AC, 0.4 Amp.)#			
RJ	Single; normally closed (1 NC)	YW	Single; normally open (1 NO)
RK	Double; normally closed + normally open (1 NC +1 NO)	YV	Single; normally closed (1 NC)
RL	Single; normally open (1 NO)	YX	Double; normally closed + normally open (1 NC +1 NO)
RM	Double; normally open + normally closed (1 NO + 1 NC)	YY	Double; normally open (both NO)
RN	Double; normally closed (both NC)	YZ	Double; normally closed (both NC)
RO	Double; normally open (both NO)	ZA	Double; normally open + normally closed (1 NO + 1 NC)
RU	Booster with relay for current upto 5 Amp.		

* For double insulated electrical contacts, consult factory for price & delivery. # compound ranges are not recommended.

Code	Options	Code	Options
SS	AISI 316 SS case & bezel**	CD	Custom designed dial
DG	Dampening liquid glycerin filled (ambient temp. Max. 65°C)*	SG	Shatterproof/safety glass
C5	Five point calibration certificate (for measuring range)	TG	Toughened glass
DS	Dampening liquid silicon oil (ambient temp. Above 65°C)*	TM	Dial tag marking
PP	Maximum reading pointer with plexi glass (for dry version)**	ST	SS tag plate
MTC	Material test certificates#	ZZ	Dielectric oil filled***

* Dry version & except electrical contacts. ** Available for NS 100 mm to 150 mm. Consult factory for minimum order quantity & delivery.

*** Gasket & Filling plug of Viton. # Material test certificates will be provided for wetted parts only with chemical composition testing. For others, please consult factory.