

KTG-100L



KTG-100B



KTG-100E

Application

- ✓ Outdoor application in oil & gas industry
- ✓ Harsh environments demanding greater ingress protection
- ✓ Chemical & Petrochemical plants

Description

- ✓ Measuring the wide ranges between -40 to + 600 °C
- ✓ Flexible choice of stem length and connection designs
- ✓ Ingress Protection: IP65
- ✓ Rigid Construction to endure harsh environments

Special Features

The model KTG bi-metal thermometers are specifically made for temperature measurement in harsh environments. It is available in horizontal, vertical and every angle designs. The insertion lengths have standard values but also they can be made according to customer requirements for their very specific needs. The Ingress protection of IP65 allows them to be suitable for many industrial applications. In addition, they have the option of filled version for places with extensive vibration cycles.

Kanagawa model KTG has a fast reaction to temperature increase thanks to its high quality bimetal sensor and due to its case design, the option of external adjusting screw is available. The tempered glass used in Kanagawa KTG thermometers ends worrisome about instrument window.

Default Specification

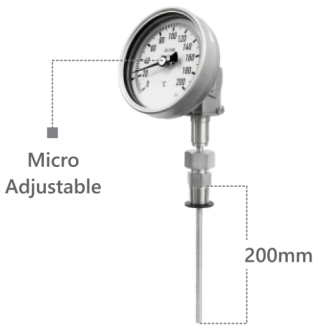
Design	Nominal Sizes in mm
EN 13190	63, 80, 100, 160
Scale Ranges in °C	**Standard Insertion Lengths in mm**
-40...+40, -30...+50, -30...+60, -30...+70, -20...+120, 0...60, 0...80, 0...100, 0...120, 0...160 0...200, 0...250, 0...300, 0...400, 0...500, 0...600	50, 100, 150, 200, 300, 400 500, 600, 700, 800, 900, 1000[1]

Mounting		
Lower Mount: L	Back Mount: B	Every Angle: E

Working Range	Stem
According to measuring range per EN 13190	Material: SS316 Diameter: 6 mm[2]
Case	**Ingress Protection**
Stainless Steel	IP65
Pointer	**Accuracy**
Aluminum, Adjustable Pointer	Class 1
Window	**Dial**
Tempered Glass	Aluminum
Temperature Element	**Pressure Limitation at Stem**
Bi-metal sensor	Max. 20 bar
Storage & Transport Temperature	**Temperature Units**
-20...+60 °C	°C (centigrade)

1. Insertion length includes the threads.

2. Stem diameter 8mm available as option.





Options

- ✓ External adjusting screw on case
- ✓ Supplying suitable thermowell per customer request
- ✓ Other wetted parts (SS304, SS316L)
- ✓ Other temperature units (F) or dual scale (C/F) and other scale ranges
- ✓ Fillable version (with silicon oil)

Measuring Range & Maximum Permissible Erors

The model KTG bi-metal thermometers Model KTG follow Class 1 accuracy according to EN 13190 standard.

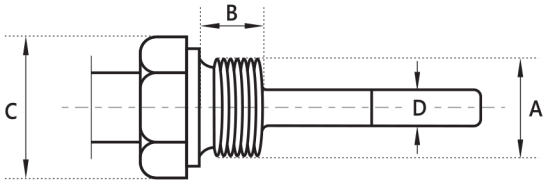
Temperature Range °C	Measuring Range °C	Limits of Error ±°C
-40...+40	-30...+30	1
-30...+50	-20...+40	1
-30...+60	-20...+50	1
-30...+70	-20...+60	1
-20...+120	-10...+110	2
0...60	+10...+50	1
0...80	+10...+70	1
0...100	+10...+90	1
0...120	+10...+110	2
0...160	+20...+140	2
0...200	+20...+180	2
0...250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

* All Kanagawa KTG thermometers perform equal to or better than the limits of error presented in above table.
* The measuring range limit is indicated on dial by the use of two triangular marks.

Connection Desings

1. Fixed male thread connection

Minimum insertion length: 63mm for bottom connection
50mm for back connection

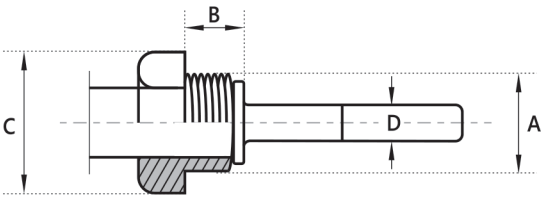


A: Male thread
B: Thread length
C: Spanner width
D: Stem diameter

Nominal Size	Process connection		Dimensions (in mm)		Connection Code
	A	B	C	D	
63, 100,160	G ¼ B	12	19	6 or 8	1B4
	G ½ B	14	27	6 or 8	1B2
	M18 x 1.5	12	24	6 or 8	1-M18 x 1.5
	½ NPT	19	24	6 or 8	1N2

2. Male Nut (turning connection)

Minimum insertion length: 80mm

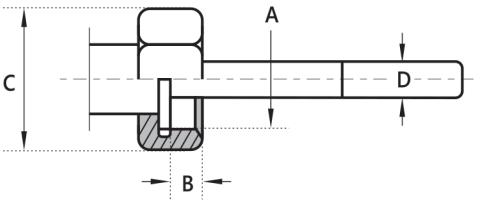


A: Male thread
B: Thread length incl. collar
C: Spanner width
D: Stem diameter

Nominal Size	Process connection		Dimensions (in mm)		Connection Code
	A	B	C	D	
63, 100,160	G ½ B	20	27	6 or 8	2B2
	M18 x 1.5	17	22	6 or 8	2-M18 x 1.5

3. Union Nut (female connection)

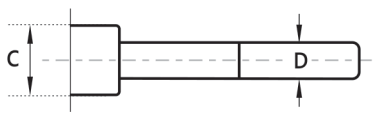
Minimum insertion length: 89mm



A: Female thread
B: Thread length
C: Spanner width
D: Stem diameter

Nominal Size	Process connection		Dimensions (in mm)		Connection Code
	A	B	C	D	
63, 100,160	G ½	8.5	27	6 or 8	3B2
	G ¾	9.5	32	6 or 8	3B3

4. Stem without thread

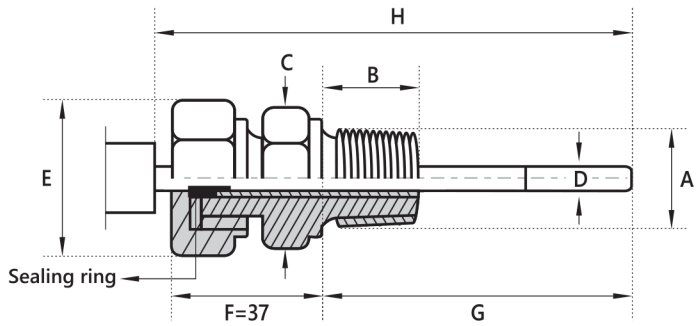


C: Plain diameter
D: Stem diameter

Nominal Size	Dimensions (in mm)		Connection Code
	C	D	
63, 100,160	18	6 or 8	000

5. Compression Fitting (Sliding Connection)

Insertion length G = variable
Length H = G + 37 mm

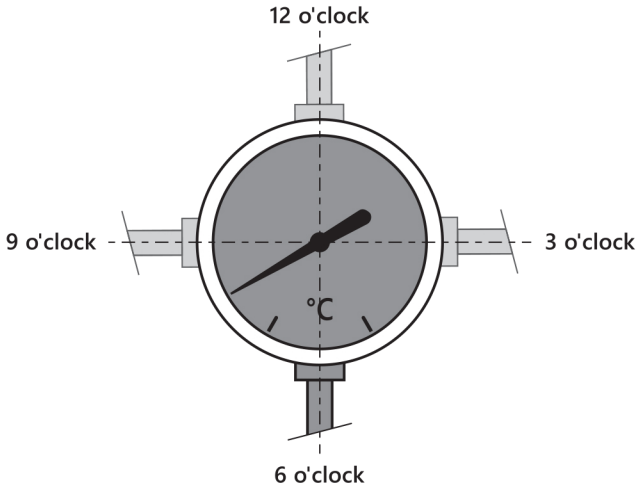


A: Male thread
B: Thread length
C: Spanner width
D: Stem diameter

Nominal Size	Process connection		Dimensions (in mm)			Connection Code
	A	B	C	D	E	
63, 100,160	G ¼ B	8	22	6 or 8	27	5B4
	G ½ B	14	27	6 or 8	27	5B2
	M18 x 1.5	12	24	6 or 8	27	5-M18 x 1.5
	½ NPT	19	22	6 or 8	27	5N2
	G ¾ B	16	32	6 or 8	27	5B3
	¾ NPT	20	30	6 or 8	27	5N3

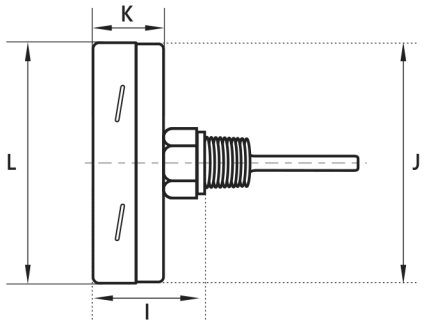
Special dial positions relation with stem (only for bottom connection)

Dial positioning can be chosen as required by the customer. In standard version 6 o'clock position is shipped.
For special positions please specify 3, 9, or 12 o'clock for example.



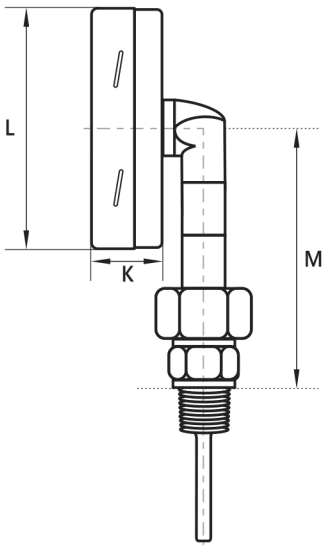
Dimensions (in mm)

Center Back connection



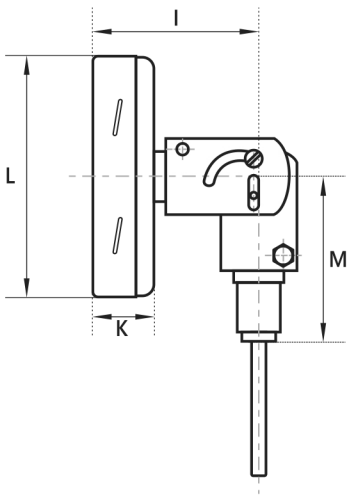
Nominal Size	I	J	K	L
63	35	62	23	63.5
80	38	78	26	80
100	40	99	28	100
160	42	146	30	160

Bottom connection



Nominal Size	K	L	M
63	23	64	62
80	26	80	62
100	28	100	83
160	30	160	109

Every Angel



Nominal Size	I	K	L	M
100	76	28	100	62
160	78	30	160	62

How To Order

Product Group Name	Model		Nominal Size	Mounting	Insertion length		Connection Code	Range
Thermometers for process industry	414	-	100	L	100	-	5N2	0...160 °C

Or simply order by item number on the basis of your previous purchases.

KANAGAWA INSTRUMENTS
Kanagawa Instruments Ltd. Şti
www.kanagawa.com.tr sales@kanagawa.com.tr

05/2021 (Kanagawa mission is continuous improvement. Always download the latest datasheet from website).