

TPS - Bi-Metal Thermometers

Unlike most dial indicating instruments, the Bi-Metal thermometer has no pinion and segment movement and the pointer is directly driven by the coiled bimetallic strip. This simple, yet rugged construction ensures long, trouble free service with enduring accuracy.

Bi-Metal thermometers are typically used in heating, ventilation and air conditioning (HVAC), chemical and petroleum plants, pulp and paper industries, food and beverage industries.

Features

Hermetically sealed. Sturdy all stainless steel construction. Crimped on bezel. No geared movement. The pointer is directly driven by the Bi-metallic coil. This sturdy assembly renders the few moving components virtually impervious to shock and the effects of vibration.

Housing

Grade 304 SS

Stem and Fitting

Grade 316 SS, zero externally adjustable

Dial

Aluminium, white with printing in black

Pointer

Matt black anodised aluminium

Environmental Protection

IP65

Temperature Ranges

Between 40° C and 500° C

Accuracy

1 % FSD

Stem Lengths

From 63 mm up to 600 mm

Stem Diameter

Standard 6 mm (other sizes on application)

Thread Sizes

1/4", 3/8", and 1/2" (sliding union as an option)



Stem Configurations

Bottom, back, every angle

External Zero Adjustment

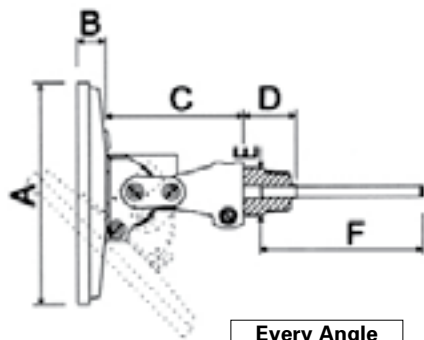
Standard on all options

Dial Sizes

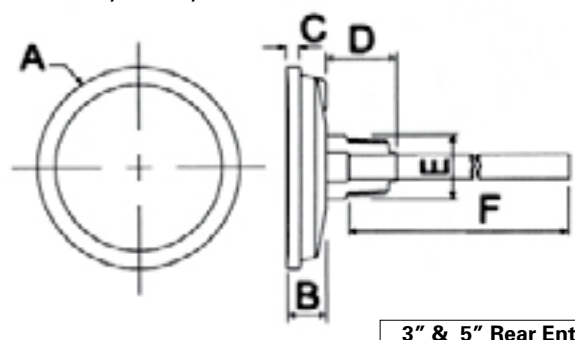
63 mm (2.5"), 76 mm (3"), 100 mm (4"), 125 mm (5"), 150 mm (5")

Options

Options	Description	Case Size
Rear entry		63, 76, 100, 125 & 150 mm
Every angle		76, 100, 125 & 150 mm
Bottom entry	Bayonet bezel	100 & 150 mm



Every Angle



3" & 5" Rear Entry

Every Angle

Specs	A	B	C	D	E	F
3"	80,0	13,8	65,0	23,7	22 HEX	63 - 600
5"	127,8	15,6	65,0	23,7	22 HEX	63 - 600

Dimensions in mm

Rear Entry

Specs	A	B	C	D	E	F
3"	80,0	13,8	5,2	23,7	22 HEX	63 - 600
5"	127,8	14,2	6,4	23,7	22 HEX	63 - 600

Dimensions in mm

See page 31 for Ordering code

All stem lengths are including the thread

Bi-Metal Thermometer Ordering code

TPS RS 30 SS 025 x 6 04F 0/100

PROCESS CONNECTION

Code		Process Connection	
BSP	NPT	BSPT	(Thread)
12F	02F	22F	1/4" 6,0 mm OD only
13F	03F	23F	3/8" up to 6,35 mm (1/4") OD only
14F	04F	24F	1/2" up to 9,52 mm (3/8") OD only
15F	05F		3/4"

Adjustable Union

12U	02U	1/4" up to 6,0 mm OD only
13U	03U	3/8" up to 6,35 mm (1/4") OD only
14U	04U	1/2" up to 9,52 mm (3/8") OD only

SYSTEM MATERIALS

Code	System Material
SS	316 Stainless Steel Probe, Capillary & Armouring

PROBE DIAMETER

Code	Length	X	Code	Diameter
025	63 mm		6	6,0 mm OD
040	100 mm		8	8,0 mm OD
060	150 mm		9,52	3/8"
090	228 mm			
120	304 mm			
150	381 mm			
180	457 mm			
240	610 mm			

DIAL SIZE

Code	Dial Size
20	63 mm diameter
30	76 mm diameter
40	100 mm diameter
50	125 mm diameter
60	150 mm diameter

MOUNTING

Code	Mounting
RS	Rigid back connection
ES	Every angle rigid back connection
AS	Bottom entry

RANGE

Code	Range
-10/50	-10/0/50° C
-20/120	-20/0/120° C
-40/160	-40/0/160° C
-50/50	-50/0/50° C
0/50	0/50° C
0/60	0/60° C
0/100	0/100° C
0/120	0/120° C
0/150	0/150° C
10/150	10/0/150° C
0/200	0/200° C
0/300	0/300° C
10/450	10/450° C
100/500	100/500° C

TYPE

Denotes Nitrogen

Nitrogen Thermometer Ordering code

TPB AS 10 SS 015 150x12 04F 0/100

PROCESS CONNECTION

Code		Process Connection	
BSP	NPT	BSPT	(Thread)
12F	02F	22F	1/4" 6,0 mm OD only
13F	03F	23F	3/8" up to 6,35 mm (1/4") OD only
14F	04F	24F	1/2" up to 9,52 mm (3/8") OD only
15F	05F		3/4"

Adjustable Union

12U	02U	1/4" up to 6,0 mm OD only
13U	03U	3/8" up to 6,35 mm (1/4") OD only
14U	04U	1/2" up to 9,52 mm (3/8") OD only

SYSTEM MATERIALS

Code	System Material
SS	316 Stainless Steel Probe, Capillary & Armouring

PROBE DIAMETER

Code	Length	X	Code	Diameter
100	100 mm		6	6,0 mm OD
150	150 mm		8	8,0 mm OD
200	200 mm		9,52	3/8"
250	250 mm		10	10,0 mm OD
300	300 mm		12	12,0 mm OD
350	350 mm			
400	400 mm			
450	450 mm			

longer lengths available

CAPILLARY LENGTH

Code	Capillary Length
015	1,5 metre
020	2,0 metre
030	3,0 metre
050	5,0 metre

DIAL SIZE

Code	Dial Size
10	100 mm diameter
15	150 mm diameter

MOUNTING

Code	Mounting
AS	Rigid lower connection
DS	Rigid back connection
ES	Rigid back connection with back flange
BC	Remote mounted lower connection with back flange
CC	Remote mounted lower connection with front flange
EC	Remote mounted back connection with back flange
FC	Remote mounted back connection with front flange

RANGE

Code	Range
-10/50	-10/0/50° C
-10/110	-10/0/110° C
-20/120	-20/0/120° C
-20/160	-20/0/160° C
-20/200	-20/0/200° C
-30/50	-30/0/50° C
-40/40	-40/0/40° C
-50/50	-50/0/50° C
0/60	0/60° C
0/100	0/100° C
0/120	0/120° C
0/160	0/160° C
0/200	0/200° C
0/250	0/250° C
0/300	0/300° C
0/400	0/400° C
0/500	0/500° C
0/600	0/600° C
50/600	50/600° C

TYPE

Denotes Nitrogen