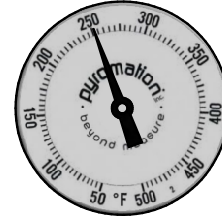
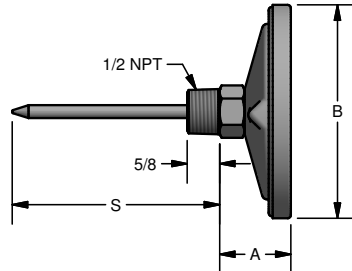


BI-METAL THERMOMETERS

Configuration Code BM01
Back-Connected

Back-connected, general-purpose Bi-Metal Thermometers can be directly immersed into a process, or can be installed in a variety of thermowells. These thermometers are available in various dial sizes, temperature ranges, sheath diameters, sheath lengths and mounting options. A conical tip is standard for 1/4" diameter stems in 2.5", 4", 6" and 9" lengths. All other sheath diameters and sheath lengths will be supplied with a rounded tip. Standard external component material consists of 304 stainless steel while 316 stainless steel wetted parts are available as an optional selection. The accuracy is ±1% full span per ASME B40.3 Grade A. These Bi-Metal Thermometer (BMI) series units come with a calibration feature, and each is easily calibrated by inserting an allen wrench into the reset opening.



ORDER CODES

Example Order Number: 1-0 BMI3B 1-1 49 - 2-0 004(1/2) - 3-0 9HN - 4-0 PC 4-1 I,M2 - 5-0 0800

1-0 Back-Connected Type and Size

CODE	DIAL SIZE	"A" DIM	"B" DIM
BMI3B	3 Inch	1.375 Inch	3.187 Inch
BMI4B	4 Inch	1.375 Inch	4.115 Inch
BMI5B	5 Inch	1.718 Inch	5.040 Inch

1-1 Sheath

CODE	DIAMETER (INCHES)	MATERIAL
49	0.25	304 SS (42 Inch max length)
69	0.375	304 SS

2-0 Sheath Length

Specify 3 digit length in inches
2(1/2) Inch minimum length required
120 Inch maximum length

3-0 Process Connection (304 SS)

CODE	DIAMETER (INCHES)
9HP	No process connection
9HN	1/2 Inch NPT process connection
9PU	1/2 Inch NPT Union
9RH	R 1/2 Inch BSPT

4-0 Window Options

CODE	DESCRIPTION
G	Glass (Standard)
PC	Polycarbonate (up to 135 °C [300 °F])
AC	Acrylic
SG	Safety Glass
TG ^[1]	Tempered Glass

[1] Not available in 4 inch dial

4-1 Additional Options

CODE	DESCRIPTION
P	Plain Dial (No company name)
I	Stainless Steel Tag
M1 ^[1]	Minimum indicator or maximum indicator
M2 ^[1]	Both minimum and maximum indicator
SF ^[2]	Silicon-filled

[1] Only available in a 3 inch or 5 inch dial size with glass or acrylic lens
[2] Only available with Safety Glass or Polycarbonate lens. Silicon filled thermometers are limited for use in process temperatures ranging from (-45 to 260) °C

5-0 Temperature Range

CODE	RANGE	CODE	RANGE
0020	-75 to 175 °C	0500	-100 to 100 °F
0100	-50 to 100 °C	0740	0 to 200 °F
0240	-20 to 120 °C	0750	0 to 220 °F
0330	0 to 100 °C	0760	0 to 250 °F
0350	0 to 150 °C	0770	0 to 300 °F
0370	0 to 200 °C	0800	0 to 500 °F
0380	0 to 250 °C	0840	20 to 240 °F
0390	0 to 300 °C	0920	50 to 250 °F
0410	0 to 450 °C	1030	200 to 1000 °F

Dual Temperature Range

1100	-40 to 160 °F	-40 to 70 °C
1170	0 to 220 °F	-10 to 100 °C
1180	0 to 250 °F	-20 to 120 °C
1270	50 to 500 °F	0 to 250 °C
1310	200 to 1000 °F	100 to 550 °C

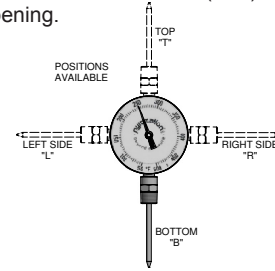
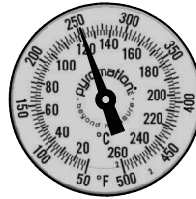
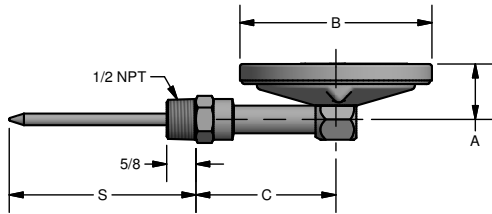
See page BM-7 for complete range list



BI-METAL THERMOMETERS

Configuration Code BM01
Side-Connected

Side-connected, general purpose Bi-Metal Thermometers can be directly immersed into a process, or can be used with various thermowell types. These thermometers are available in various dial sizes, temperature ranges, sheath diameters, and sheath lengths. They are available with several process mounting options, window options and dial features. A conical tip is standard for 1/4" diameter stems in 2.5", 4", 6" and 9" lengths. All other sheath diameters and sheath lengths will be supplied with a rounded tip. Standard external component material consists of 304 stainless steel while 316 stainless steel wetted parts are available as an optional selection. The stem position can be provided at 90° angles to accommodate various mounting conditions. The accuracy is ±1% full span per ASME B40.3 Grade A. These Bi-Metal Thermometer (BMI) series units come with a calibration feature, and each is easily calibrated by inserting an allen wrench into the reset opening.



ORDER CODES

Example Order Number: **BMI3S** **49** - **B** - **007(1/2)** - **9PU** - **G,SF** - **0410**

1-0 Side-Connected Type and Size

CODE	DIAL SIZE	"A" DIM	"B" DIM	"C" DIM
BMI3S	3 Inch	1.187 Inch	3.187 Inch	2.3 Inch
BMI4S	4 Inch	1.187 Inch	4.115 Inch	3.0 Inch
BMI5S	5 Inch	1.625 Inch	5.040 Inch	3.0 Inch

1-1 Sheath

CODE	DIAMETER (INCHES)	MATERIAL
49	0.25	304 SS (42 Inch max length)
69	0.375	304 SS

2-0 Dial Location

CODE	DESCRIPTION
B	Bottom (Standard)
R	90 degree Right
L	90 degree Left
T	Top

3-0 Sheath Length

Specify 3 digit length in inches
2(1/2) Inch minimum length required
120 Inch maximum length

4-0 Process Connection (304 SS)

CODE	DIAMETER (INCHES)
9HP	No process connection
9HN	1/2 Inch NPT process connection
9PU	1/2 Inch NPT Union
9RH	R 1/2 Inch BSPT

5-0 Window Options

CODE	DESCRIPTION
G	Glass (Standard)
PC	Polycarbonate (up to 135 °C [300 °F])
AC	Acrylic
SG	Safety Glass
TG ^[1]	Tempered Glass

[1] Not available in 4 inch dial

5-1 Additional Options

CODE	DESCRIPTION
P	Plain Dial (No company name)
I	Stainless Steel Tag
SF ^[1]	Silicon-filled

[1] Only available with Safety Glass or Polycarbonate lens. Silicon filled thermometers are limited for use in process temperatures ranging from (-45 to 260) °C

6-0 Temperature Range

CODE	RANGE	CODE	RANGE
0020	-75 to 175 °C	0500	-100 to 100 °F
0100	-50 to 100 °C	0740	0 to 200 °F
0240	-20 to 120 °C	0750	0 to 220 °F
0330	0 to 100 °C	0760	0 to 250 °F
0350	0 to 150 °C	0770	0 to 300 °F
0370	0 to 200 °C	0800	0 to 500 °F
0380	0 to 250 °C	0840	20 to 240 °F
0390	0 to 300 °C	0920	50 to 250 °F
0410	0 to 450 °C	1030	200 to 1000 °F

Dual Temperature Range

1100	-40 to 160 °F	-40 to 70 °C
1170	0 to 220 °F	-10 to 100 °C
1180	0 to 250 °F	-20 to 120 °C
1270	50 to 500 °F	0 to 250 °C
1310	200 to 1000 °F	100 to 550 °C

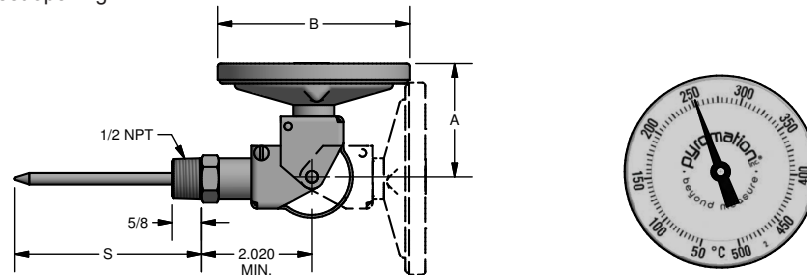
See page BM-7 for complete range list



BI-METAL THERMOMETERS

Configuration Code BM01
Adjustable-Angle

Adjustable-Angle, general-purpose Bi-Metal Thermometers can be directly immersed into a process, or can be used with various thermowell types. These thermometers are available in various dial sizes, temperature ranges, sheath diameters, and sheath lengths. They are available with several process mounting options, window options and dial features. A conical tip is standard for 1/4" diameter stems in 2.5", 4", 6" and 9" lengths. All other sheath diameters and sheath lengths will be supplied with a rounded tip. Standard external component material consists of 304 stainless steel while 316 stainless steel wetted parts are available as an optional selection. The adjustable harness consists of stainless steel brackets with screws that loosen to allow 360° rotation of the head and 180° adjustment of stem position. The accuracy is ±1% full span per ASME B40.3 Grade A. These Bi-Metal Thermometer (BMI) series units come with a calibration feature, and each is easily calibrated by inserting an allen wrench into the reset opening.



ORDER CODES

Example Order Number:

1-0 1-1 2-0 3-0 4-0 4-1 5-0
BMI3A 49 - 006 - 9HN - PC,P - 0350

1-0 Adjustable-Angle Type and Size

CODE	DIAL SIZE	"A" DIM	"B" DIM
BMI3A	3 Inch	2.43 Inch	3.187 Inch
BMI4A	4 Inch	2.43 Inch	4.115 Inch
BMI5A	5 Inch	2.66 Inch	5.040 Inch

1-1 Sheath

CODE	DIAMETER (INCHES)	MATERIAL
49	0.25	304 SS (42 Inch max length)
69	0.375	304 SS

2-0 Sheath Length

Specify 3 digit length in inches
 2(1/2) Inch minimum length required
 120 Inch maximum length

3-0 Process Connection (304 SS)

CODE	DIAMETER (INCHES)
9HP	No process connection
9HN	1/2 Inch NPT process connection
9PU	1/2 Inch NPT Union
9RH	R 1/2 Inch BSPT

4-0 Window Options

CODE	DESCRIPTION
G	Glass (Standard)
PC	Polycarbonate (up to 135 °C [300 °F])
AC	Acrylic
SG	Safety Glass
TG ^[1]	Tempered Glass

[1] Not available in 4 inch dial

4-1 Additional Options

CODE	DESCRIPTION
P	Plain Dial (No company name)
I	Stainless Steel Tag
SF ^[1]	Silicon-filled

[1] Only available with Safety Glass or Polycarbonate lens. Silicon filled thermometers are limited for use in process temperatures ranging from (-45 to 260) °C

5-0 Temperature Range

CODE	RANGE	CODE	RANGE
0020	-75 to 175 °C	0500	-100 to 100 °F
0100	-50 to 100 °C	0740	0 to 200 °F
0240	-20 to 120 °C	0750	0 to 220 °F
0330	0 to 100 °C	0760	0 to 250 °F
0350	0 to 150 °C	0770	0 to 300 °F
0370	0 to 200 °C	0800	0 to 500 °F
0380	0 to 250 °C	0840	20 to 240 °F
0390	0 to 300 °C	0920	50 to 250 °F
0410	0 to 450 °C	1030	200 to 1000 °F

Dual Temperature Range

1100	-40 to 160 °F	-40 to 70 °C
1170	0 to 220 °F	-10 to 100 °C
1180	0 to 250 °F	-20 to 120 °C
1270	50 to 500 °F	0 to 250 °C
1310	200 to 1000 °F	100 to 550 °C

See page BM-7 for complete range list



BI-METAL THERMOMETERS

Range Table

Temperature Range - Degrees F

CODE	RANGE	°/DIV
0500	-100 to 100 °F	2°
0560	-50 to 120 °F	2°
0610	-40 to 160 °F	2°
0700	0 to 140 °F	2°
0730	0 to 180 °F	2°
0740	0 to 200 °F	2°
0750	0 to 220 °F	2°
0760	0 to 250 °F	2°
0770	0 to 300 °F	5°
0800	0 to 500 °F	10°
0840	20 to 240 °F	2°
0850	25 to 125 °F	1°
0920	50 to 250 °F	2°
0930	50 to 300 °F	2°
0940	50 to 400 °F	5°
0950	50 to 500 °F	5°
0960	50 to 550 °F	5°
1000	100 to 800 °F	10°
1010	150 to 750 °F	10°
1030	200 to 1000 °F	10°
Internal Ranges		
0480	-150 to 150 °F	2°
0490	-125 to 350 °F	5°
0510	-100 to 150 °F	2°
0520	-100 to 350 °F	5°
0530	-100 to 600 °F	5°
0540	-80 to 120 °F	2°
0550	-60 to 210 °F	2°
0570	-50 to 300 °F	5°
0580	-50 to 400 °F	5°
0590	-40 to 60 °F	1°
0600	-40 to 120 °F	2°
0620	-25 to 75 °F	1°
0630	-20 to 120 °F	1°
0640	-20 to 200 °F	2°
0650	-20 to 340 °F	5°
0660	-20 to 675 °F	10°
0670	-10 to 220 °F	2°
0680	0 to 60 °F	1°
0690	0 to 100 °F	1°
0710	0 to 150 °F	1°
0720	0 to 160 °F	1°
0780	0 to 350 °F	5°
0790	0 to 400 °F	5°
0810	0 to 550 °F	5°
0820	0 to 600 °F	10°
0830	0 to 800 °F	10°
0860	30 to 120 °F	1°
0870	30 to 130 °F	1°
0880	30 to 300 °F	2°
0890	32 to 212 °F	2°
0900	40 to 240 °F	2°
0910	50 to 150 °F	1°
0970	100 to 200 °F	1°
0980	100 to 600 °F	5°
0990	100 to 700 °F	10°
1020	200 to 700 °F	10°

Temperature Range - Degrees C

CODE	RANGE	°/DIV
0020	-75 to 175 °C	5°
0040	-70 to 70 °C	1°
0080	-50 to 25 °C	1°
0090	-50 to 50 °C	1°
0100	-50 to 100 °C	1°
0140	-40 to 70 °C	1°
0240	-20 to 120 °C	1°
0270	-10 to 110 °C	1°
0300	0 to 50 °C	1/2°
0310	0 to 60 °C	1°
0320	0 to 80 °C	1/2°
0330	0 to 100 °C	1°
0350	0 to 150 °C	1°
0370	0 to 200 °C	2°
0380	0 to 250 °C	2°
0390	0 to 300 °C	5°
0400	0 to 400 °C	5°
0410	0 to 450 °C	5°
0460	100 to 400 °C	5°
0470	100 to 550 °C	5°
Internal Ranges		
0010	-100 to 50 °C	2°
0030	-70 to 50 °C	1°
0050	-70 to 100 °C	2°
0060	-70 to 160 °C	2°
0070	-60 to 160 °C	2°
0110	-50 to 200 °C	5°
0120	-50 to 250 °C	5°
0130	-50 to 300 °C	5°
0150	-40 to 200 °C	2°
0160	-30 to 40 °C	1/2°
0170	-30 to 50 °C	1°
0180	-30 to 60 °C	1°
0190	-30 to 70 °C	1°
0200	-30 to 170 °C	2°
0210	-25 to 25 °C	1°
0220	-20 to 50 °C	1°
0230	-20 to 70 °C	1°
0250	-20 to 200 °C	2°
0260	-10 to 50 °C	1/2°
0280	-10 to 135 °C	2°
0290	-10 to 260 °C	2°
0340	0 to 120 °C	1°
0360	0 to 160 °C	2°
0420	0 to 500 °C	5°
0430	50 to 400 °C	5°
0440	50 to 450 °C	5°
0450	50 to 500 °C	5°

Dual Temperature Range - Degrees F & C

CODE	DUAL RANGE		°/DIV
1040	-100 to 100 °F	-75 to 40 °C	2,2°
1100	-40 to 160 °F	-40 to 70 °C	2,1°
1130	0 to 140 °F	-18 to 60 °C	2,1°
1150	0 to 180 °F	-18 to 82 °C	2,1°
1170	0 to 220 °F	-10 to 100 °C	2,1°
1180	0 to 250 °F	-20 to 120 °C	2,1°
1200	20 to 240 °F	-10 to 110 °C	2,1°
1210	25 to 125 °F	0 to 50 °C	1,(1/2)°
1250	50 to 300 °F	10 to 150 °C	2,2°
1260	50 to 400 °F	0 to 200 °C	5,2°
1270	50 to 500 °F	0 to 250 °C	5,2°
1300	150 to 750 °F	50 to 400 °C	10,5°
1310	200 to 1000 °F	100 to 550 °C	10,5°
Internal Ranges			
1050	-100 to 350 °F	-75 to 175 °C	5,5°
1060	-100 to 600 °F	-75 to 300 °C	5,5°
1070	-60 to 210 °F	-50 to 100 °C	2,1°
1080	-50 to 120 °F	-45 to 50 °C	2,1°
1090	-40 to 120 °F	-40 to 50 °C	2,1°
1110	-20 to 120 °F	-30 to 50 °C	1,1°
1120	0 to 100 °F	-18 to 38 °C	1,(1/2)°
1140	0 to 150 °F	-17 to 65 °C	1,1°
1160	0 to 200 °F	-10 to 90 °C	2,5°
1190	0 to 800 °F	-15 to 425 °C	10,5°
1220	30 to 130 °F	0 to 55 °C	1,(1/2)°
1230	30 to 300 °F	0 to 150 °C	1,1°
1240	32 to 212 °F	0 to 100 °C	2,1°
1280	50 to 550 °F	15 to 285 °C	5,5°
1290	100 to 600 °F	40 to 310 °C	5,5°

