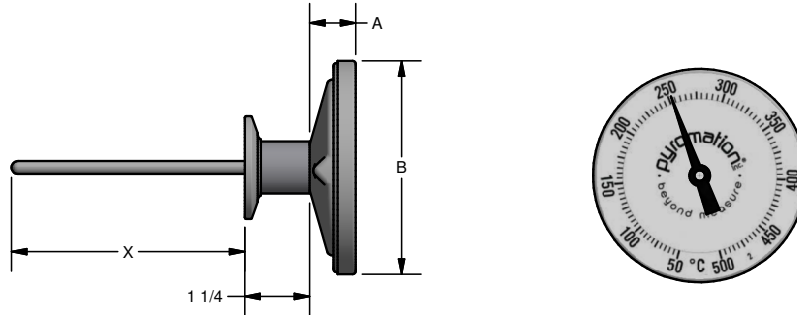


BI-METAL THERMOMETERS

Configuration Code BM02 Sanitary Back-Connected

General-purpose, CIP sanitary, Back-Connected Bi-Metal thermometers are used in food, dairy, beverage, pharmaceutical, and chemical processing applications where corrosion and product contamination are critical factors. The sanitary Tri-Clamp® connections listed below are the most common types used in such processes and meet 3A Standard Number 74-. All wetted parts are 316 stainless steel, and the non-contact parts are supplied standard as 304 stainless steel. They are produced with a minimum surface finish of 32 µin Ra. Surface finishes of 15 µin Ra are available upon request. The accuracy is ±1% full span per ASME B40.3 Grade AA. These Sanitary Bi-Metal Thermometer (BMS) 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: **BMS3B 68** - **002(1/2)** - **2-5** - **TG ,I** - **1180**

1-0 Back-Connected Type and Size

CODE	DIAL SIZE	"A" DIM	"B" DIM
BMS3B	3 Inch	0.89 Inch	3.187 Inch
BMS4B	4 Inch	0.89 Inch	4.115 Inch
BMS5B	5 Inch	1.328 Inch	5.040 Inch

1-1 Sheath

CODE	DIAMETER (INCHES)	MATERIAL
48	0.25	316 SS (42 Inch max length)
68	0.375	316 SS

2-0 Sheath Length

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

3-0 Cap Size and Style

CODE	DIAMETER (INCHES)
075-5 ^[1]	1/2 and 3/4 Inch Tri-Clamp®
1-5	1 and 1(1/2) Inch Tri-Clamp®
2-5	2 Inch Tri-Clamp®
3-5	2 1/2 Inch Tri-Clamp®
4-5	3 Inch Tri-Clamp®
5-5	4 Inch Tri-Clamp®

[1] Only available with 1/4 Inch sheath
Other cap styles available - consult factory

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
0100	-50 to 100 °C	0610	-40 to 160 °F
0140	-40 to 70 °C	0700	0 to 140 °F
0240	-20 to 120 °C	0740	0 to 200 °F
0270	-10 to 110 °C	0750	0 to 220 °F
0300	0 to 50 °C	0760	0 to 250 °F
0320	0 to 80 °C	0770	0 to 300 °F
0330	0 to 100 °C	0840	20 to 240 °F
0350	0 to 150 °C	0920	50 to 250 °F
0370	0 to 200 °C	0930	50 to 300 °F

Dual Temperature Range

1130	0 to 140 °F	-18 to 60 °C
1170	0 to 220 °F	-10 to 100 °C
1180	0 to 250 °F	-20 to 120 °C
1200	20 to 240 °F	-10 to 110 °C
1250	50 to 300 °F	10 to 150 °C

See page BM-7 for complete range list

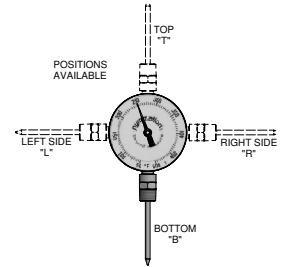
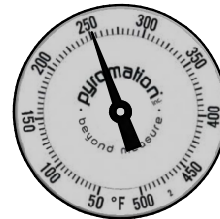
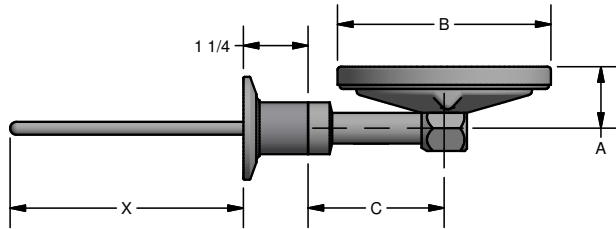
Tri-Clamp® is a registered trademark of Alfa Laval, Inc.



BI-METAL THERMOMETERS

Configuration Code BM02 Sanitary Side-Connected

General-purpose, CIP sanitary, Side-Connected Bi-Metal thermometers are used in food, dairy, beverage, pharmaceutical, and chemical processing applications where corrosion and product contamination are critical factors. The sanitary Tri-Clamp® connections listed below are the most common types used in such processes and meet 3A Standard Number 74-. All wetted parts are 316 stainless steel, and the non-contact parts are supplied standard as 304 stainless steel. They are produced with a minimum surface finish of 32 µin Ra. Surface finishes of 15 µin Ra are available upon request. 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 AA. The Sanitary Bi-Metal Thermometer (BMS) series units come standard 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 5-0 5-1 6-0
BMS4S 48 - B - 004 - 075-5 - SG,P - 0770

1-0 Side-Connected Type and Size

CODE	DIAL SIZE	"A" DIM	"B" DIM	"C" DIM
BMS3S	3 Inch	1.187 Inch	3.187 Inch	1.875 Inch
BMS4S	4 Inch	1.187 Inch	4.115 Inch	2.625 Inch
BMS5S	5 Inch	1.625 Inch	5.040 Inch	2.625 Inch

1-1 Sheath

CODE	DIAMETER (INCHES)	MATERIAL
48	0.25	316 SS (42 Inch max length)
68	0.375	316 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 Cap Size and Style

CODE	DIAMETER (INCHES)
075-5 ^[1]	1/2 and 3/4 Inch Tri-Clamp®
1-5	1 and 1(1/2) Inch Tri-Clamp®
2-5	2 Inch Tri-Clamp®
3-5	2 1/2 Inch Tri-Clamp®
4-5	3 Inch Tri-Clamp®
5-5	4 Inch Tri-Clamp®

[1] Only available with 1/4 Inch sheath
 Other cap styles available - consult factory

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]	Silicone-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
0100	-50 to 100 °C	0610	-40 to 160 °F
0140	-40 to 70 °C	0700	0 to 140 °F
0240	-20 to 120 °C	0740	0 to 200 °F
0270	-10 to 110 °C	0750	0 to 220 °F
0300	0 to 50 °C	0760	0 to 250 °F
0320	0 to 80 °C	0770	0 to 300 °F
0330	0 to 100 °C	0840	20 to 240 °F
0350	0 to 150 °C	0920	50 to 250 °F
0370	0 to 200 °C	0930	50 to 300 °F

Dual Temperature Range

1130	0 to 140 °F	-18 to 60 °C
1170	0 to 220 °F	-10 to 100 °C
1180	0 to 250 °F	-20 to 120 °C
1200	20 to 240 °F	-10 to 110 °C
1250	50 to 300 °F	10 to 150 °C

See page BM-7 for complete range list

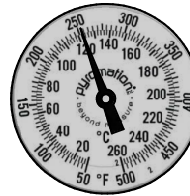
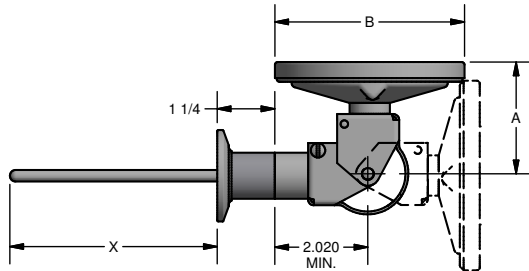
Tri-Clamp® is a registered trademark of Alfa Laval, Inc.



BI-METAL THERMOMETERS

Configuration Code BM02
Sanitary Adjustable-Angle

General-purpose, CIP sanitary, Adjustable-Angle Bi-Metal thermometers are used in food, dairy, beverage, pharmaceutical, and chemical processing applications where corrosion and product contamination are critical factors. The sanitary Tri-Clamp® connections listed below are the most common types used in such processes and meet 3A Standard Number 74-. All wetted parts are 316 stainless steel, and the non-contact parts are supplied standard as 304 stainless steel. They are produced with a minimum surface finish of 32 µin Ra. Surface finishes of 15 µin R_a are available upon request. 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 AA. These Sanitary Bi-Metal Thermometer (BMS) 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 BMS5A 1-1 68 - 2-0 006 - 3-0 3-5 - 4-0 4-1 TG,I - 5-0 1250

1-0 Adjustable-Angle Type and Size

CODE	DIAL SIZE	"A" DIM	"B" DIM
BMS3A	3 Inch	2.43 Inch	3.187 Inch
BMS4A	4 Inch	2.43 Inch	4.115 Inch
BMS5A	5 Inch	2.66 Inch	5.040 Inch

1-1 Sheath

CODE	DIAMETER (INCHES)	MATERIAL
48	0.25	316 SS (42 Inch max length)
68	0.375	316 SS

2-0 Sheath Length

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

3-0 Cap Size and Style

CODE	DIAMETER (INCHES)
075-5 ^[1]	1/2 and 3/4 Inch Tri-Clamp®
1-5	1 and 1(1/2) Inch Tri-Clamp®
2-5	2 Inch Tri-Clamp®
3-5	2 1/2 Inch Tri-Clamp®
4-5	3 Inch Tri-Clamp®
5-5	4 Inch Tri-Clamp®

[1] Only available with 1/4 Inch sheath
Other cap styles available - consult factory

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
0100	-50 to 100 °C	0610	-40 to 160 °F
0140	-40 to 70 °C	0700	0 to 140 °F
0240	-20 to 120 °C	0740	0 to 200 °F
0270	-10 to 110 °C	0750	0 to 220 °F
0300	0 to 50 °C	0760	0 to 250 °F
0320	0 to 80 °C	0770	0 to 300 °F
0330	0 to 100 °C	0840	20 to 240 °F
0350	0 to 150 °C	0920	50 to 250 °F
0370	0 to 200 °C	0930	50 to 300 °F

Dual Temperature Range

1130	0 to 140 °F	-18 to 60 °C
1170	0 to 220 °F	-10 to 100 °C
1180	0 to 250 °F	-20 to 120 °C
1200	20 to 240 °F	-10 to 110 °C
1250	50 to 300 °F	10 to 150 °C

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°

