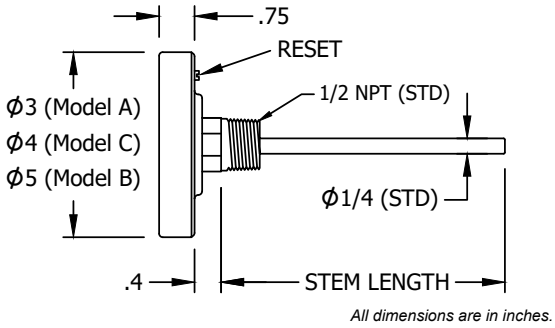
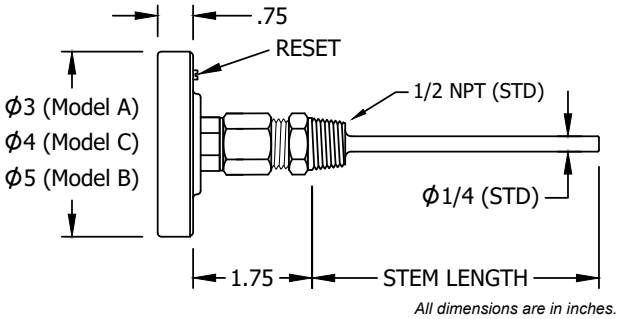
BACK CONNECT BIMETAL THERMOMETER

REOTEMP's Bimetal Thermometers are reliable and accurate temperature sensors requiring no electricity or wiring. Back Connect Thermometers are ideal for local, eye-level temperature readings in most process applications. They can be recalibrated with a turn of the calibration screw on the back of the dial. A variety of options are available for your specific process needs.

Fillable | Dials | Accuracy | Custom Logo | ASME B40.3



Standard Dimensions



Fixed Union

FEATURES / BENEFITS

- Heavy-Duty Process Grade Design
- Five Year Warranty
- Made in the USA
- Accuracy ± 1% Full Scale (ASME B40.3 Grade A)
- Hermetically Sealed (ASME B40.3)
- Standard External Reset for Calibration
- Silicone Fillable for Vibration

SPECIFICATIONS

Accuracy	± 1% Full Scale (ASME B40.3)
Dial Size	3", 4" or 5"
Dial Material	Black marks on satin matte aluminum finish, Hi-Vis™, or white dial
Stem Length	2" to 80"
Stem Diameter	1/4" (Standard), 3/8" or 5/16"
Head, Bezel, Mounting Bushing, Stems	300 Series SS, 316SS (Optional)
Operating Conditions	Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F (550°F if silicone filled).
Environmental Protection	IP67, NEMA 6 Rated (Hermetically sealed per ASME B40.3)
Lens	Glass (Standard), Acrylic, Polycarbonate, Laminated Safety Glass or Tempered Glass
Immersion	Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquids & 5" in gas.
Mounting Connection	1/2" NPT (Standard), 1/4" NPT, 3/4" NPT, Plain Hex Bushing, or 1/2" BSPT
Temperature Sensing Area	Last 2" to 4" of the stem

BACK CONNECT BIMETAL THERMOMETER

Visit reotemp.com

- ✓ Check Stock
- ✓ Configure Part #
- ✓ Get Price
- ✓ Generate a Custom Engineering Drawing

HOW TO ORDER: Choose options to build a part number. For example: AA0251F23-SF

AA	025	1	F23	-SF
DIAL SIZE	**STEM LENGTH**	**CONNECTION**	**TEMPERATURE RANGE**	**OPTIONS**

Standard Model
AA = 3” Dial w/ Reset
CC = 4” Dial w/ Reset
BB = 5” Dial w/ Reset

Non-Reset Model
RR = 3” Dial w/o Reset
CN = 4” Dial w/o Reset
SS = 5” Dial w/o Reset

025 = 2.5”
040 = 4”
060 = 6”
090 = 9”
120 = 12”
150 = 15”
180 = 18”
240 = 24”
300 = 30”
360 = 36”

Note: Intermediate stem lengths available up to 80”.

Millimeter Stem Lengths
M???? = Use a code beginning in M to specify a mm stem length ex: 100mm = M0100

1 = 1/2” NPT
4 = 1/4” NPT
5 = 3/4” NPT Adapter
X = Plain Unthreaded Hex Bushing
B = 1/2” BSPT
U = 1/2” NPT Union

Fahrenheit Ranges
F23 = -40°F to 160°F
***F55** = 25°F to 125°F
F43 = 0°F to 200°F
F47 = 0°F to 250°F
F63 = 50°F to 300°F
F67 = 50°F to 500°F
F69 = 50°F to 550°F
F81 = 150°F to 750°F
F85 = 200°F to 1000°F

Celsius Ranges
C23 = -40°C to 70°C
C55 = 0°C to 50°C*
C43 = 0°C to 100°C
C47 = -20°C to 120°C
C59 = 0°C to 150°C
C67 = 0°C to 250°C
C69 = 0°C to 300°C
C73 = 0°C to 400°C
C85 = 100°C to 500°C

Dual Scale Ranges
D23 = -40°F to 160°F & -40°C to 70°C
***D55** = 25°F to 125°F & -5°C to 50°C
D43 = 0°F to 200°F & -10°C to 90°C
D47 = 0°F to 250°F & -20°C to 120°C
D63 = 50°F to 300°F & 10°C to 150°C
D67 = 50°F to 500°F & 10°C to 260°C
D69 = 50°F to 550°F & 10°C to 290°C
D81 = 150°F to 750°F & 70°C to 400°C
D85 = 200°F to 1000°F & 100°C to 500°C

*Not available in 2.5” stem.

For Additional Ranges See Master Range Code Sheet on Page 141

General Options
-3H = 316 SS Head and Bezel
-PS = Pointed Stem
-S3 = 3/8” diameter Stem
-F5 = 5/16” diameter Stem (Not Available with 316SS Stem)
-SF = Silicone Filled
-SS = 316 Stainless Stem
-WD = White Dial
-HV = Hi-Vis™ Dial
-NL = No Logo Dial
-CB = Color Bands
-PI = Color Pie
-CL = Custom Logo Dial

Window Options (Standard is Glass)
-MM = Min-Max Pointer (Plastic Lens)
-PC = Acrylic Window
-PY = Polycarbonate Window
-TG = Tempered Glass Window
-SG = Laminated Safety Glass

Calibration Cert. Options
-R1 = One Point Calibration Cert (REOTEMP Chooses Points)
-R3 = Three Point Calibration Cert (REOTEMP Chooses Points)
-C1 = One Point Calibration Cert (Customer Chooses Points)
-C3 = Three Point Calibration Cert (Customer Chooses Points)

Tags and Accessories
-TS = Tag, Stainless
-TP = Tag, Paper
-AS = Adapts Bimet to 1-1/4-18 industrial socket
-HT = Heat Transfer Compound

For Additional Options See Page 139

For Thermowells See Pages 160-166

Note: Thermowells should be used whenever the stem or bulb would be exposed to pressure, corrosion, velocity, abrasion or shear forces. Thermowells also make it possible to remove the thermometer without losing pressure or the contents of the process.

BIMETAL TEMPERATURE RANGE CODE MASTER LIST

FAHRENHEIT RANGES		
Code	°F Range	Div.
F03	-100/100	2
F05	-100/200	2
F07	-80/120	2
F11	-70/150	2
F19	-50/300	5
F21†	-40/120	2
F23	-40/160	2
F25	-40/180	2
F26	-40/200	2
F27‡	-40/70	1
F31†	-20/120	2
F33	-20/425	5
F35‡	0/100	1
F37†	0/140	2
F39†	0/150	1
F43	0/200	2
F45	0/220	2
F47	0/250	2
F49	0/300	2
F50	0/500	5
F51	0/600	10
F53	20/240	2
F55‡	25/125	1
F57‡	30/130	1
F63	50/300	2
F65	50/400	5
F67	50/500	5
F69	50/550	5
F71	50/650	10
F73	50/750	10
F78	100/600	5
F79	100/800	10
F81	150/750	10
F82	200/700	20
F83	200/300	2
F84	100/900	5
F85	200/1000	10
F89	250/600	5
F91	300/400	2
F92	0/1200	2

CELSIUS RANGES		
Code	°C Range	Div.
C01	-80/220	2
C03	-70/70	2
C06	-70/30	1
C07	-50/50	1
C08	-60/120	2
C09‡	-50/0	1
C15	-50/100	2
C17	-50/200	2
C19	-40/160	2
C20	-60/300	5
C23	-40/70	1
C24	-40/350	5
C27‡	-30/30	1
C31‡	-20/40	1
C32	-20/60	
C33	-20/220	2
C34	-20/320	5
C35‡	0/30	.5
C37‡	0/60	1
C38†	0/80	
C43	0/100	1
C47	-20/120	2
C53	-10/110	1
C55‡	0/50	.5
C56	0/120	1
C59	0/150	1
C60	50/150	
C61	0/160	2
C63	10/150	2
C65	0/200	2
C67	0/250	2
C69	0/300	2
C71	0/300	5
C73	0/400	5
C74	0/450	5
C75	0/500	5
C79	50/450	5
C81	50/400	5
C85	100/500	5
C87	100/550	5

DUAL RANGES	
Code	°F & °C Range
D01	-150/400 & 100/200
D03	-100/100 & -70/40
D07	-80/120 & -60/50
D15	-50/210 & -50/100
D19	-50/300 & -40/160
D23	-40/160 & -40/70
D37†	0/140 & -15/60
D39†	0/150 & -20/65
D41†	0/160 & -15/70
D43	0/200 & -10/90
D45	0/220 & -10/100
D47	0/250 & -20/120
D49	0/300 & -10/150
D53	20/240 & -10/115
D55‡	25/125 & -5/50
D63	50/300 & 10/150
D65	50/400 & 10/200
D67	50/500 & 10/260
D69	50/550 & 10/290
D77	100/450 & 40/230
D79	100/800 & 40/400
D81	150/750 & 70/400
D85	200/1000 & 100/500
D87	200/1000 & 100/550

‡ Minimum stem length is 4”.
† For 2.5” stem, all bottom connect and all-angle models require adapter P/N AD22S.

DIAL INDICATING THERMOMETER OPTIONS

		Industrial	Small Dial OEM	Digital	Dual Mode Thermometer
Part #	Description	AA, RR, CC, CN, BB, SS, XR, XX, YY, YN, VR, VV, LL, MM, JJ	QQ, GG, HH	DT, DTR, BT	DMT
CASE FILL OPTIONS					
-SF	Silicone Filled Case	✓	N/A	N/A	✓
LENS OPTIONS					
-PC	Acrylic Window	✓	✓	N/A	✓
-PY	Polycarbonate Window	✓	✓	STD	✓
-TG	Tempered Safety Glass Lens	✓	N/A	N/A	✓
-SG	Laminated Safety Glass Lens	✓	N/A	N/A	✓
-GL	Plain Glass	STD	STD	✓	STD
STEM OPTIONS					
-PS	Pointed Tip	✓	✓	✓	N/A
-SS	316 Stainless Steel Stem	✓	✓	✓	✓
-F5	5/16" Diameter Stem (Not Available with 316SS Stem)	✓	✓	✓	N/A
-S3	3/8" Diameter Stem	✓	✓	✓	✓
-TF	Teflon Coating (Stem Only)	✓	✓	✓	✓
DIAL OPTIONS					
-CL	Custom Logo Dial	✓	✓	✓	✓
-HV	Hi-Vis Dial	✓	MQ	N/A	✓
-CB	Color Band	✓	MQ	N/A	✓
-PI	Color Pie	✓	MQ	N/A	✓
-WD	White Dial (Standard Ranges Only)	✓	✓	✓	✓
-MM	Min/Max Pointer	✓	N/A	N/A	✓
NL	No Logo	✓	✓	✓	✓
TAG OPTION					
-TS	Stainless Steel Tag (1-10 Characters)	✓	✓	✓	✓
-TP	Paper Tag	✓	✓	✓	✓
CERTIFICATION OPTIONS					
-R1	1pt. Calibration Certification (REOTEMP Chooses the Point)	✓	✓	✓	✓
-R3	3 pt. Calibration Certification (REOTEMP Chooses the Points)	✓	✓	✓	✓
-C1	1 pt. Calibration Certification (Customer Chooses the Point)	✓	✓	✓	✓
-C3	3 pt. Calibration Certification (Customer Chooses the Points)	✓	✓	✓	✓
-CS	NIST Calibration Sticker (No Logged Points)	✓	✓	✓	✓
-CC	Certificate of Conformance	✓	✓	✓	✓
OTHER					
-3H	316 Stainless Steel Head & Bezel	✓	N/A	STD	✓
-HT	Heat Transfer Compound	✓	✓	✓	✓
-CH	Spring Handle (T-27)	✓	✓	✓	N/A
-AS	Allows Bimet to Fit 1-1/4-18 Industrial Thermowell	✓	✓	✓	✓

✓	Indicates that the option is available with the model.	N/A	Indicates the option is not available with this model.
STD	Indicates standard options with no additional cost.	MQ	Minimum order quantity applies.