Data Sheet



CI Bimetal Thermometer

FEATURES

- Hermetically sealed case to prevent entry of moisture, interior corrosion and coil freeze up
- Maxivision® dial for precise readings (minimize parallax reading errors)
- Silicone dampened coil for reduction of pointer flutter on high vibration applications and provides improved response times
- Customized dial printing

TYPICAL USES

- General Industrial
- HVAC
- **Equipment Skids**
- Pharmaceutical / Biotech
- Food and Beverages



CI Bimetal 2", 3", 5" dial sizes





SPECIFICATIONS

Accuracy: ±1% of span ASME B40.200 (B40.3 Grade A)

2½" to 24" Stem Length: Dial Sizes: 2". 3". 5"

Dial Style: Maxivision®, black figures on white background

Overtemperature Limits:

Top of Range °F Max. Over Temperature up to 250 100% of span 251-550 50% of span 551-1,000 800°F(1)

⁽¹⁾ Satisfactory for continuous service up to 800°F (425°C). Can be used for intermittent service from 800 to 1,000°F (425 to 500°C). Use Ashcroft Duratemp® thermometers for ranges above and below those listed above.

Process Connection:

Plain, Pointed Stem, 1/4 NPT, 1/2 NPT

Stem diameter: 0.250", .375"

Case & Stem: 304 SS, Hermetically sealed

Process Connection 2": Rear

Location: 3", 5": Lower, rear

Pointer: Black

Glass, Acrylic, Safety Glass Window:

Approvals: **RoHS**

CAUTION

Thermowells should be used on all pressurized applications over 15 psi, to protect the thermometer from corrosion or physical damage, and to facilitate removal of the thermometer without disturbing the process.

KEY BENEFITS

- Tamper resistant case
- NEMA 4X/IP66 protection
- 5-year limited warranty
- All welded stainless steel construction

MIN/MAX TEMPERATURE LIMITS						
Version	Ambient					
Dry	-40°F to 200°F (-40°C to 93°C)					

Data Sheet

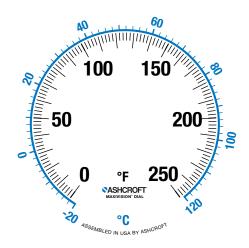


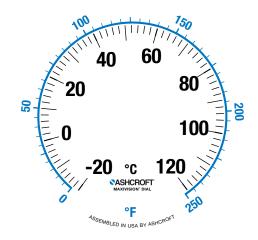
CI Bimetal Thermometer

Dial Size and Model 2001 - 2" Tamper resistant bimetal 3001 3001 - 3" Tamper resistant bimetal 3001 - 3" Tamper resistant bimetal 3001 - 5" Tamper sistant bimetal 3001 - 5" Tamper sistant bimetal 3001 - 5" Tamper sistant 3001 - 5" Tamper sistant	ORDERING CODE	Example:	30	OCI 60	R	060	XSG	0/200F
30Cl - 3" Tamper resistant bimetal 30Cl	Dial Size and Model							
50CI - 5" Tamper resistant bimetal Stem and Connection 40 - Plain - no connection 50 - Pointed stem - no connection (2" case only) 60 - ½ Fixed NPT for 3" & 5" but ½ fixed NPT for 2" 60 Connection Location R - Rear connection (Not available on 2" case) Stem Length (Consult factory for custom or longer stem length) 055 - 2½" 040 - 4" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") X CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification S1 - Silicone free 38 - ¾" stem claimeter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	20Cl - 2" Tamper resistant bimetal							
Stem and Connection 40 - Plain - no connection (2" case only) 50 - Pointed stem - no connection (2" case only) 60 - % Fixed NPT for 3" & 5" but ¼ fixed NPT for 2" 60 Connection Location R - Rear connection R L - Lower connection (Not available on 2" case) Stem Length (Consult factory for custom or longer stem length) 025 - 2½" 040 - 4" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 15" 180 - 16" 240 - 24" Options - (if choosing an option(s) must include an "X") X _ CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification ST - Silicone free 38 - ¾" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	30Cl - 3" Tamper resistant bimetal		30	OCI				
40 - Plain - no connection 50 - Pointed stem - no connection (2" case only) 60 - ½ Fixed NPT for 3" & 5" but ¼ fixed NPT for 2" 60 Connection Location R - Rear connection (Not available on 2" case) Stem Length (Consult factory for custom or longer stem length) 025 - 2½" 040 - 4" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") X	50Cl - 5" Tamper resistant bimetal							
50 - Pointed stem - no connection (2' case only) 60 - ½ Fixed NPT for 3' & 5' but ½ fixed NPT for 2' 60 Connection Location R - Rear connection (Not available on 2' case) Stem Length (Consult factory for custom or longer stem length) 025 - 2½ 040 - 4' 060 - 6' 060 090 - 9' 120 - 12' 150 - 15' 180 - 18' 240 - 24' Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PP - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification S1 - Silicone free 3B - ¾' stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	Stem and Connection							
60 - ½ Fixed NPT for 3° & 5° but ¼ fixed NPT for 2° Connection Location R - Rear connection R L - Lower connection (Not available on 2° case) Stem Length (Consult factory for custom or longer stem length) 025 - 2½* 040 - 4* 060 - 6° 060 090 - 9° 120 - 12° 150 - 15° 180 - 18° 240 - 24* Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PP - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification S1 - Silicone free 3B - ¾ stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	40 - Plain - no connection							
Connection Location R - Rear connection (Not available on 2' case) Stem Length (Consult factory for custom or longer stem length) 025 - 2½'' 040 - 4" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") X CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification S1 - Silicone free 38 - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	50 - Pointed stem - no connection (2" case only)							
R - Rear connection R L - Lower connection (Not available on 2' case) Stem Length (Consult factory for custom or longer stem length) 025 - 2½ 040 - 4" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification \$1 - Silicone free 3B - ¾" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	60 - ½ Fixed NPT for 3" & 5" but ¼ fixed NPT for 2"			60				
L - Lower connection (Not available on 2' case) Stem Length (Consult factory for custom or longer stem length) 025 - 21/7 040 - 4" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification \$1 - Silicone free 38 - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	Connection Location							
Stem Length (Consult factory for custom or longer stem length) 025 - 2½ 040 - 4" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") X CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification S1 - Silicone free 3B - ¾ stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	R - Rear connection				R			
025 - 2½ 040 - 4" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") X CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification \$1 - Silicone free 38 - ¾ stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	L - Lower connection (Not available on 2" case)							
040 - 4" 060 - 6" 060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification \$1 - Silicone free 3B - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	Stem Length (Consult factory for custom or longer stem length)							
060 - 6" 060 090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification S1 - Silicone free 3B - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	025 - 21/2"							
090 - 9" 120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") X CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification \$1 - Silicone free 3B - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	040 - 4"							
120 - 12" 150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification S1 - Silicone free 3B - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	060 - 6″					060		
150 - 15" 180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass C4 - Individual calibration certification S1 - Silicone free 3B - 3" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	090 - 9″							
180 - 18" 240 - 24" Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass C4 - Individual calibration certification S1 - Silicone free 3B - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	120 - 12″							
240 - 24" Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass C4 - Individual calibration certification S1 - Silicone free 38 - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	150 - 15"							
Options - (if choosing an option(s) must include an "X") CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass C4 - Individual calibration certification S1 - Silicone free 3B - ¾ stem diameter with ½ NPT 02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	180 - 18″							
CS - Dual scale DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass SG C4 - Individual calibration certification S1 - Silicone free 3B - ¾ stem diameter with ½ NPT 02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	240 - 24"							
DM - Dial marking NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass C4 - Individual calibration certification S1 - Silicone free 3B - %" stem diameter with ½ NPT 02 - ½ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	Options - (if choosing an option(s) must include an "X")						X	
NH - Stainless steel tag PD - Plastic window SG - Shatterproof glass C4 - Individual calibration certification S1 - Silicone free 3B - ¾" stem diameter with ½ NPT 02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	CS - Dual scale							
PD - Plastic window SG - Shatterproof glass C4 - Individual calibration certification S1 - Silicone free 3B - ¾" stem diameter with ½ NPT 02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	DM - Dial marking							
SG - Shatterproof glass C4 - Individual calibration certification S1 - Silicone free 3B - ¾" stem diameter with ½ NPT 02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	NH - Stainless steel tag							
C4 - Individual calibration certification S1 - Silicone free 3B - ¾" stem diameter with ½ NPT 02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	PD - Plastic window							
S1 - Silicone free 3B - ¾ stem diameter with ½ NPT 02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	SG - Shatterproof glass						SG	
3B - %" stem diameter with ½ NPT 02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	C4 - Individual calibration certification							
02 - ¼ NPT (only available on rear connection) Temperature Ranges (see table on page 3)	S1 - Silicone free							
Temperature Ranges (see table on page 3)	3B - ¾" stem diameter with ½ NPT							
	02 - 1/4 NPT (only available on rear connection)							
0/200°F 0/200°F	Temperature Ranges (see table on page 3)							
	0/200°F							0/200°F



CI Bimetal Thermometer





Fahrenheit Inner Range								
	Inner °F	Outer °C	Restrictions					
	-100/100	-70/40						
	-80/120	-60/50						
	-50/200	-40/93						
	-50/250	-40/120						
	-40/120	-40/50						
	-40/160	-40/70						
	-20/120	-30/50						
	0/100	-20/40						
	0/150	-20/65						
_	0/200	-20/93						
Elled	0/250	-20/120						
<u>B</u>	0/300	-20/150						
Can be liquid filled	0/350	-20/170						
Can	0/500	-20/260						
	20/120	-5/50	4" Min for Everyangle™ and Lowers only					
	30/130	0/55	4" Min for Everyangle™ and Lowers only					
	30/240	0/115						
	50/300	10/150						
	50/400	10/200						
	50/550	10/290						
	0/700	-20/370	4" minimum					
	100/800	50/430	4" minimum					
	150/750	65/395	4" minimum					
	200/700	100/370	4" minimum					
	200/1000	100/550	4" minimum Satisfactory continuous service from 800° F or 426° C Intermittent service from 800° to 1000° F or 425° C to 500° C					

		Celsius	Inner Range
	Inner °C	Outer °F	Restrictions
	-50/50	-50/120	
	-50/180	-50/350	
	-40/100	-40/210	
	-40/160	-40/320	
	-30/70	-20/160	
	-20/180	0/350	
	-20/120	0/250	
<u>e</u>	-10/50	20/120	
Can be Liquid filled	-10/110	20/230	
Liqu	0/60	30/140	
e L	0/100	30/210	
Cal	0/120	30/250	
	0/150	30/300	
	0/200	30/400	
	0/250	30/480	
	0/300	30/570	
	10/150	50/300	
	0/400	30/750	4" minimum
	0/500	30/390	4" minimum
	50/450	120/840	4" minimum Satisfactory continuous service from 800° F or 426° C Intermittent service from 800° to 1000° F or 425° C to 500° C
	100/500	220/930	4" minimum Satisfactory continuous service from 800° F or 426° C Intermittent service from 800° to 1000° F or 425° C to 500° C



CI Bimetal Thermometer

DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

Dial Size (Inches)	Process Connection Locations	Α	В	С	D	E	s	NPT	Hex.	Weight (oz) ⁽¹⁾ S - 2½″
2	Rear (Plain)	23/32 [53]	3/8 [10]	³⁄8 [10]			(2)		11/16	41/2
2	Rear (Plain, pointed stem)	23/32 [53]	3/8 [10]	³/ ₈ [10]			(2)		11/16	41/2
2	Rear (Threaded)	23/32 [53]	3/8 [10]	³⁄8 [10]			(2)	1/4	11/16	41/2
3	Rear	35/32 [80]	¹⁹ ⁄ ₃₂ [15]	¾ [10]			(2)	1/2	7/8	7
3	Lower	35/32 [80]	1 ²⁷ / ₃₂ [47]		25/8 [67]	½ [6]	(2)	1/2	7/8	11
5	Rear	5½ [128]	²³ / ₃₂ [18]	¾ [10]			(2)	1/2	7/8	16
5	Lower	5½ [128]	1 ¹⁵ ⁄16 [49]		35/8 [92]	½ [6]	(2)	1/2	7/8	26

NOTES:

- 1. Add 1 oz. for every 2" inches of stem length
- 2. "S" dimensions are $2\frac{1}{2}$, 4, 6, 9, 12, 15, 18 and 24" (STD.). Stem diameter is $\frac{1}{4}$ " (STD.)

