

## 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)	
Stem Length:	2½" to 24"	
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 <sup>(1)</sup>

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

Process Connection:	Plain, Pointed Stem, ¼ NPT, ½ NPT
Stem diameter:	0.250", 0.375"
Case & Stem:	304 Stainless steel, Hermetically sealed
Process Connection Location:	2": Rear 3", 5": lower, rear
Pointer:	Black
Window:	Glass, Acrylic, Safety Glass
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)

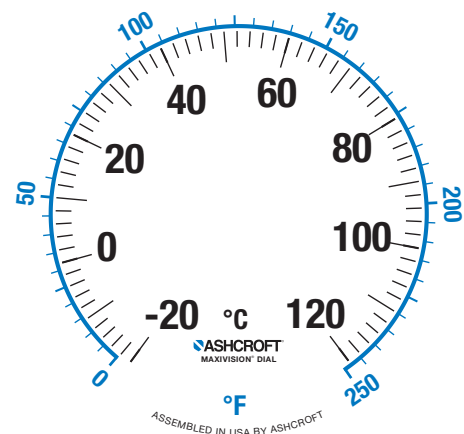
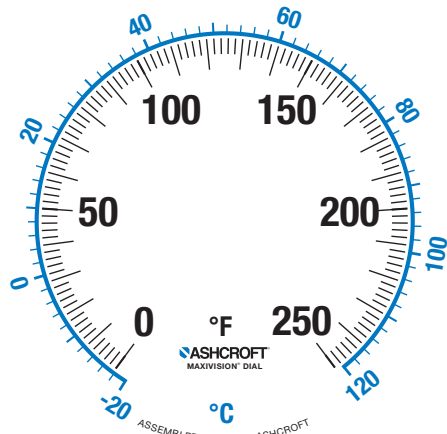
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ORDERING CODE	Example:	30CI	60	R	060	XSG	0/200F
<b>Dial Size and Model</b>							
20CI - 2" Tamper resistant bimetal							
30CI - 3" Tamper resistant bimetal		30CI					
50CI - 5" Tamper resistant bimetal							
<b>Stem and Connection</b>							
40 - Plain - no connection (not available on lower connection)							
50 - Pointed stem - no connection (2" case only)							
60 - ½ Fixed NPT for 3" & 5" but ¼ fixed NPT for 2"			60				
<b>Connection Location</b>							
R - Rear connection				R			
L - Lower connection (Not available on 2" case)							
<b>Stem Length (Consult factory for custom or longer stem length)</b>							
025 - 2½"							
040 - 4"							
060 - 6"					060		
090 - 9"							
120 - 12"							
150 - 15"							
180 - 18"							
240 - 24"							
<b>Options - (if choosing an option(s) must include an "X")</b>						X_ _	
CS - Dual scale							
DM - Dial marking							
NH - Stainless steel tag							
PD - Plastic window							
SG - Shatterproof glass						SG	
C4 - <a href="#">Traceable calibration certificate</a>							
S1 - Silicone free							
3B - ¾" stem diameter with ½ NPT							
02 - ¼ NPT (only available on rear connection)							
<b>Temperature Ranges (see table on page 3)</b>							
0/200 °F							0/200 °F

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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	4" minimum for lower
0/150	-20/65	4" minimum for lower
0/160	-20/70	4" minimum for lower
0/200	-20/93	
0/250	-20/120	
0/300	-20/150	
0/350	-20/170	
0/400	-20/200	
0/500	-20/260	
20/120	-5/50	
30/130	0/55	
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 °F 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	
-10/50	20/120	
-10/110	20/230	
0/60	30/140	4" minimum
0/100	30/210	
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 °F 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 °F to 1000 °F or 425 °C to 500 °C

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Single Scale Ranges				
Restrictions		°F	°C	Restrictions
Can be Liquid filled	4" minimum for lowers only	-100/100		
		-80/120		
		-50/200	-50/50	
		-50/250	-50/180	
		-40/120	-40/100	
		-40/160	-40/160	
		-20/120	-30/70	
		0/100	-20/180	
		0/150	-10/50	
		0/160	—	4" minimum for lower
		0/200	-10/110	
		0/250	0/50	
		0/300	0/60	4" minimum
		0/400	—	
		0/500	0/100	
	4" minimum for lowers only	20/120	0/120	
	4" minimum for lowers only	30/130	0/150	
		30/240	0/200	
		50/300	0/250	
		50/400	0/300	
		50/550	10/150	
	4" minimum	0/700	0/400	4" minimum
	4" minimum	100/800	0/500	4" minimum
	4" minimum	150/750	50/450	4" minimum Satisfactory continuous service from 800 °F or 426 °C. Intermittent service from 800 °F to 1,000 °F or 425 °C to 500 °C
	4" minimum	200/700	100/500	4" minimum Satisfactory continuous service from 800 °F or 426 °C. Intermittent service from 800 °F to 1,000 °F or 425 °C to 500 °C
	4" minimum Satisfactory continuous service from 800 °F or 426 °C. Intermittent service from 800 °F to 1,000 °F or 425 °C to 500 °C	200/1000		

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#### DIMENSIONS in [ ] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

Dial Size (Inches)	Process Connection Locations	A	B	C	D	E	S	NPT	Hex.	Weight (oz) <sup>(1)</sup> S - 2 1/2"
2	Rear (Plain)	2 3/32 [53]	3/8 [10]	3/8 [10]			(2)		1 1/16	4 1/2
2	Rear (Plain, pointed stem)	2 3/32 [53]	3/8 [10]	3/8 [10]			(2)		1 1/16	4 1/2
2	Rear (Threaded)	2 3/32 [53]	3/8 [10]	3/8 [10]			(2)	1/4	1 1/16	4 1/2
3	Rear	3 5/32 [80]	1 9/32 [15]	3/8 [10]			(2)	1/2	7/8	7
3	Lower	3 5/32 [80]	1 27/32 [47]		2 5/8 [67]	1/4 [6]	(2)	1/2	7/8	11
5	Rear	5 1/32 [128]	2 3/32 [18]	3/8 [10]			(2)	1/2	7/8	16
5	Lower	5 1/32 [128]	1 15/16 [49]		3 5/8 [92]	1/4 [6]	(2)	1/2	7/8	26

#### NOTES:

1. Add 1 oz. for every 2" inches of stem length
2. "S" dimensions are 2 1/2, 4, 6, 9, 12, 15, 18 and 24" (STD.). Stem diameter is 1/4" (STD.)
3. Stem tolerance is  $\pm 0.250$ "

