

Data Sheet

EL 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 filled for reduction of pointer flutter on high vibration application and provides improved response times
- Custom dials
- Everyangle™ connection dial can be rotated 360°

TYPICAL USES

- Offshore oil rigs
- Chemical and petrochemical plants
- Water and wastewater pressure control
- Pulp and paper
- Refineries
- Power
- General industrial
- HVAC
- Equipment skids
- Pharmaceutical / Biotech
- Food and beverages



EL Bimetal
3", 5" dial sizes



SPECIFICATIONS

Accuracy:	±1% of span ASME B40.200 (B40.3 Grade A)	
Stem Length:	2½" to 24"	
Dial Sizes:	3", 5"	
Dial Style:	Maxivision®, black figures on white background	
Overtemperature Limits:	Top of Range °F up to 250 251-550	Max. Over Temperature 100% of span 50% of span
Process Connection:	½ NPT and ½ NPT union and ½ NPT adjustable union	
Stem diameter:	0.250", 0.375"	

Case & Stem:	304 Stainless steel, 316 Stainless steel
Process Connection Location:	3", 5" Everyangle™, Rear
Pointer:	Black
Window:	Polycarbonate
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

- External adjustment
- NEMA 4X/IP66 protection
- Able to perform quick and limited span adjustments
- 5-year limited warranty
- All welded stainless steel construction

MIN/MAX TEMPERATURE LIMITS

Ambient

–40 °F to 150 °F (–40 °C to 65 °C)

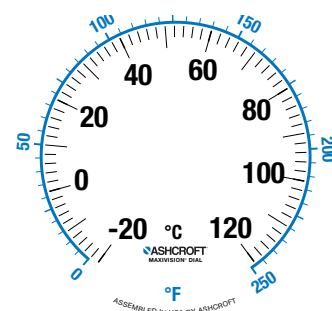
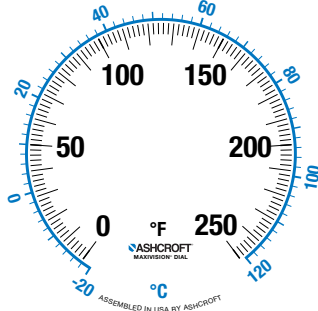
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ORDERING CODE	Example:	30EL	60	R	060	XC4	0/200°F
Dial Size and Model							
30EL - 3" External adjust liquid filled bimetal		30EL					
50EL - 5" External adjust liquid filled bimetal							
Stem and Connection							
42 - ½ NPT Union (Everyangle™ only) (Allows thermometer to be rotated to desired orientation)							
60 - ½ Fixed NPT			60				
70 - ½ NPT Adjustable Union (Everyangle™ only) (Allows thermometer to be rotated to desired orientation)							
Connection Location							
R - Rear connection				R			
E - Everyangle™ connection							
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"							
360 - 36"							
Options - (if choosing an option(s) must include an "X")						X_ _	
CS - Dual scale							
DM - Dial marking							
NH - SS tag							
YW - 316 SS construction (5" Everyangle™ connection)							
C4 - Traceable calibration certificate						C4	
3B - ⅜" stem diameter with ½ NPT							
Temperature Ranges (see table on page 3)							
0/200 °F							0/200 °F

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Fahrenheit Inner Range		
Inner °F	Outer °C	Restrictions
-40/120	-40/50	
-40/160	-40/70	
-20/120	-30/50	
0/100	-20/40	4" min. for Everyangle™
0/160	-20/70	4" min. for Everyangle™
0/150	-20/65	4" min. for Everyangle™
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	4" min. for Everyangle™
30/130	0/55	4" min. for Everyangle™
30/240	0/115	
50/300	10/150	
50/400	10/200	
50/550	10/290	

Single Scale Ranges			
Restrictions	°F	°C	Restrictions
	-50/250	—	
	-40/100	-40/100	
	-40/160	-40/160	
	-20/120	-30/70	
4" min. for Everyangle™	0/100	-20/180	
4" min. for Everyangle™	0/150	-10/50	
	0/160	—	4" min. for Everyangle™
	0/200	-10/110	
	0/250	0/50	4" minimum
	0/300	0/60	4" minimum
	0/400	—	
	0/500	0/100	
4" min. for Everyangle™	20/120	0/120	
4" min. for Everyangle™	30/130	0/150	
	30/240	0/200	
	50/300	0/250	
	50/400	0/300	
	50/550	10/150	

Celsius Inner Range		
Inner °C	Outer °F	Restrictions
-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	

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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	G	H	S	NPT	Hex.	Weight (oz) ⁽¹⁾ S - 2 1/2"
3	Rear	2 3/32 [53]	1/2	3/8 [10]			(2)	1/2	7/8	7
3	Everyangle™	2 3/32 [53]	1/2	3/8 [10]			(2)	1/2	7/8	7
5	Rear	5 1/32 [128]	1 9/32	3/8 [10]			(2)	1/2	7/8	16
5	Everyangle™	5 1/32 [128]	1 9/32		1 7/8 [48]	3 21/32 [93]	(2)	1/2	7/8	25

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 ± 0.025"

