

# Bimetal, Industrial Type

## 100 SERIES



- Heavy-duty, industrial thermometer featuring a weather-resistant, tamper-proof case
- Single °F, single °C, and dual scale options available
- Accuracy: ±1% full scale, Grade A, ASME B40.3
- 1-3/4", 2", 3" and 5" sizes - center back connection only
- 304 Stainless Steel case and bezel
- Standard stem lengths 2-1/2" through 42"
- Highly sensitive bimetallic helix coil is heat-treated for stress relief, and silicone-coated to minimize pointer vibration and maximize heat transfer and response time
- 360° groove around stem is a visual reference to show minimum immersion point
- Made in the U.S.A.

### APPLICATIONS

Used in almost every area of manufacturing, especially suited for applications in the following areas:

- Industrial process
- Petrochemical
- Food & beverage processing
- Commercial
- Wastewater

	SERIES	SPECIFICATIONS
<b>Case &amp; bezel</b>	All 100 Series	304 Stainless Steel; 316 Stainless Steel optional
<b>Lens</b>	All 100 Series	Instrument glass
<b>Pointer</b>	All 100 Series	Aluminum, black finish
<b>Stem diameter</b>	18-110 20-110, 30-110, 50-110	.150" (3.81 mm) .250" (6.35 mm)
<b>Accuracy</b>	All 100 Series	±1% full scale, Grade A, ASME B40.3
<b>Dial</b>	All 100 Series	Anodized Aluminum with large black numbers and graduations
<b>Process connection</b>	18-110 20-110 30-110, 50-110	1/4" NPT, 1/8" and 3/8" NPT optional 1/4" NPT 1/2" NPT
<b>Wetted parts</b>	All 100 Series	304 Stainless Steel; 316 Stainless Steel optional
<b>Hermetic seal</b>	All 100 Series	Per ASME B40.3 dustproof and leakproof
<b>Bimetal coil</b>	All 100 Series	Silicone coated helix coil on ranges below 500 °F for vibration dampening, maximum heat transfer and response time
<b>Over temperature limits</b>	All 100 Series	Up to 250 °F 100%; 250 °F to 550 °F 50%; 550 °F to 1,000 °F continuous use up to 800 °F; intermittent use over 800 °F

Thermowells are recommended for pressure, corrosive fluids and high velocity applications, see pages 48-50.

**WARNING:** This product can expose you to chemicals including Lead and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

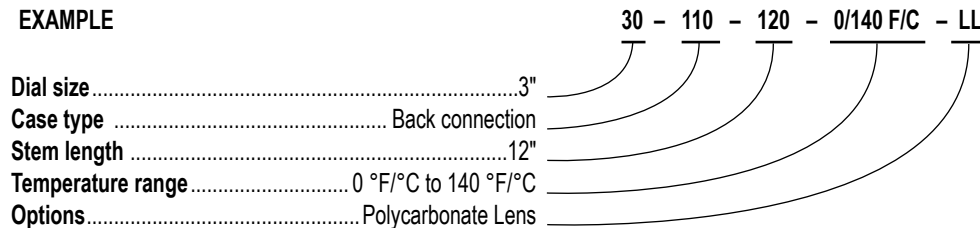
ORDERING INFORMATION					
<b>DIAL SIZES</b>	18	1-3/4" ††	30	3"	
	20	2"	50	5"	
<b>CASE TYPES</b>	110	Back connection			
<b>STEM LENGTHS</b>	025	2-1/2"	090	9"	240 24"
Available up to 120"	040	4"	120	12"	300 30"
	060	6"	150	15"	360 36"
	080	8" †	180	18"	420 42"
<b>TEMPERATURE RANGES</b>	-100/100 F/C	-100 °F/°C to 100 °F/°C	0/250 F/C	0 °F/°C to 250 °F/°C	50/500 F/C 50 °F/°C to 500 °F/°C
<i>Dual Scale °F/°C</i>	-40/160 F/C	-40 °F/°C to 160 °F/°C	20/240 F/C	20 °F/°C to 240 °F/°C	150/750 F/C 150 °F/°C to 750 °F/°C
	0/140 F/C	0 °F/°C to 140 °F/°C	25/125 F/C	25 °F/°C to 125 °F/°C	200/1000 F/C 200 °F/°C to 1,000 °F/°C*
	0/180 F/C	0 °F/°C to 180 °F/°C	50/300 F/C	50 °F/°C to 300 °F/°C	
	0/220 F/C	0 °F/°C to 220 °F/°C	50/400 F/C	50 °F/°C to 400 °F/°C	
<i>Single Scale °F</i>	-100/100 F	-100 °F to 100 °F	0/300 F	0 °F to 300 °F**	50/550 F 50 °F to 550 °F
	-50/120 F	-50 °F to 120 °F	0/500 F	0 °F to 500 °F**	100/800 F 100 °F to 800 °F**
	-40/160 F	-40 °F to 160 °F	20/240 F	20 °F to 240 °F	150/750 F 150 °F to 750 °F
	0/140 F	0 °F to 140 °F	25/125 F	25 °F to 125 °F	200/1000 F 200 °F to 1,000 °F*
	0/180 F	0 °F to 180 °F	50/250 F	50 °F to 250 °F	
	0/200 F	0 °F to 200 °F	50/300 F	50 °F to 300 °F	
	0/220 F	0 °F to 220 °F	50/400 F	50 °F to 400 °F	
	0/250 F	0 °F to 250 °F	50/500 F	50 °F to 500 °F	
<i>Single Scale °C</i>	-75/175 C	-75 °C to 175 °C	0/50 C	0 °C to 50 °C	0/300 C 0 °C to 300 °C
	-70/70 C	-70 °C to 70 °C**	0/60 C	0 °C to 60 °C**	0/400 C 0 °C to 400 °C
	-50/100 C	-50 °C to 100 °C**	0/80 C	0 °C to 80 °C**	0/450 C 0 °C to 450 °C
	-50/50 C	-50 °C to 50 °C	0/100 C	0 °C to 100 °C	100/400 C 100 °C to 400 °C
	-40/70 C	-40 °C to 70 °C	0/150 C	0 °C to 150 °C	100/550 C 100 °C to 550 °C*
	-20/120 C	-20 °C to 120 °C**	0/200 C	0 °C to 200 °C	
	-10/110 C	-10 °C to 110 °C**	0/250 C	0 °C to 250 °C	
	Consult factory for additional temperature ranges				
<b>OPTIONS</b>	1/8	1/8" NPT †	AU	1/2" NPT Adjustable Union **	SL Silicone Filled ***
	3/8	3/8" NPT †	HD	Heavy-Duty Stem (0.375" Dia.) **	ST Stainless Steel Tagging
	6	6 mm stem diameter **	LL	Polycarbonate Lens	TG Tempered Glass Lens †††
	8	8 mm stem diameter **	PL	Acrylic Lens	
	316	316 SS Wetted Parts **	SG	Safety Glass Lens **	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

Note: All 316 Stainless Steel construction (case, bezel, wetted parts) is available. Please consult factory.

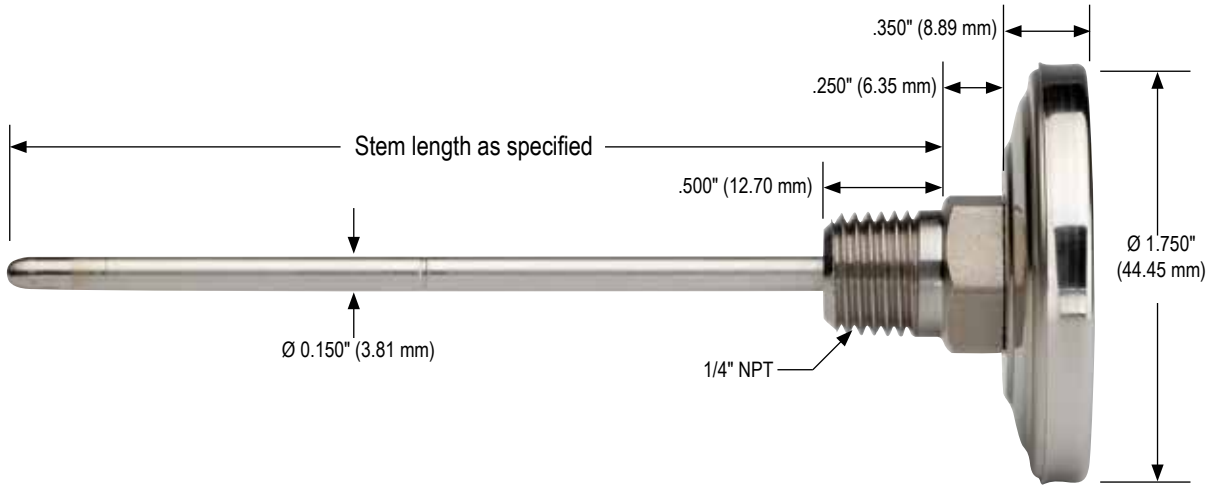
- \* Thermometers with temperature ranges 200/1,000 °F and 100/500 °C are not recommended for continuous use above 800 °F/425 °C. For intermittent use only.
- \*\* Available for 30-110 and 50-110 models only.
- \*\*\* Available for 20-110, 30-110 and 50-110 models only. Available only for ranges from -50 °F (-45 °C) to 500 °F (260 °C). Polycarbonate lens is standard with Silicone Fill.
- † Available for 18-110 model only.
- †† 18-110 model is only available in 2-1/2", 4", 6", 8", 12", 15" and 18" stem lengths.
- ††† Not available with Silicone Filled (SL) option.

**EXAMPLE**

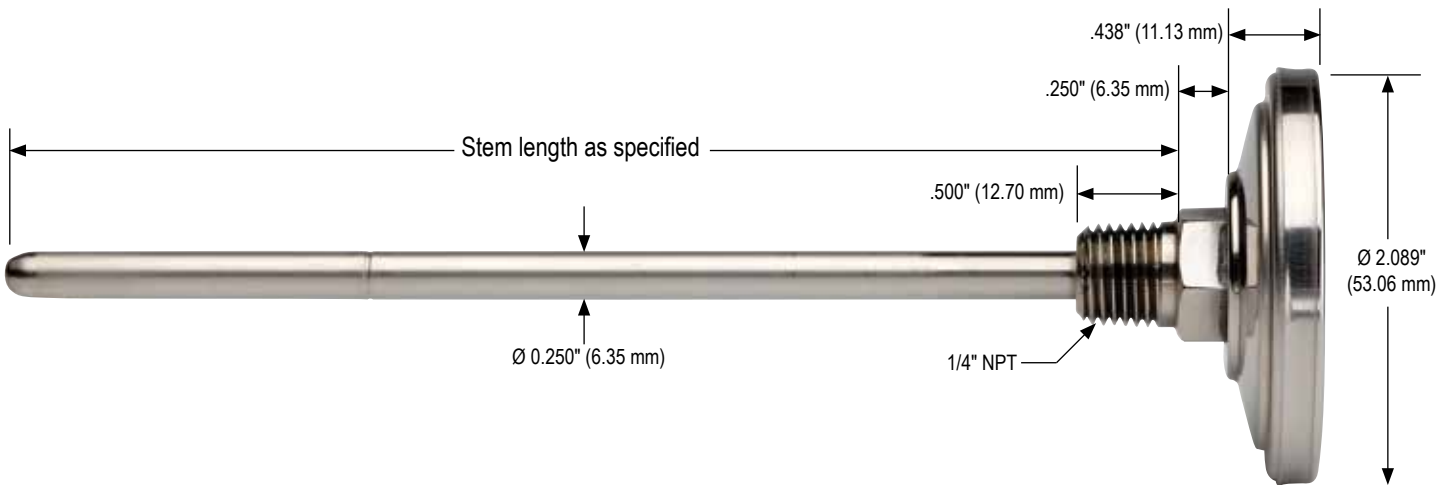


# Dimensions

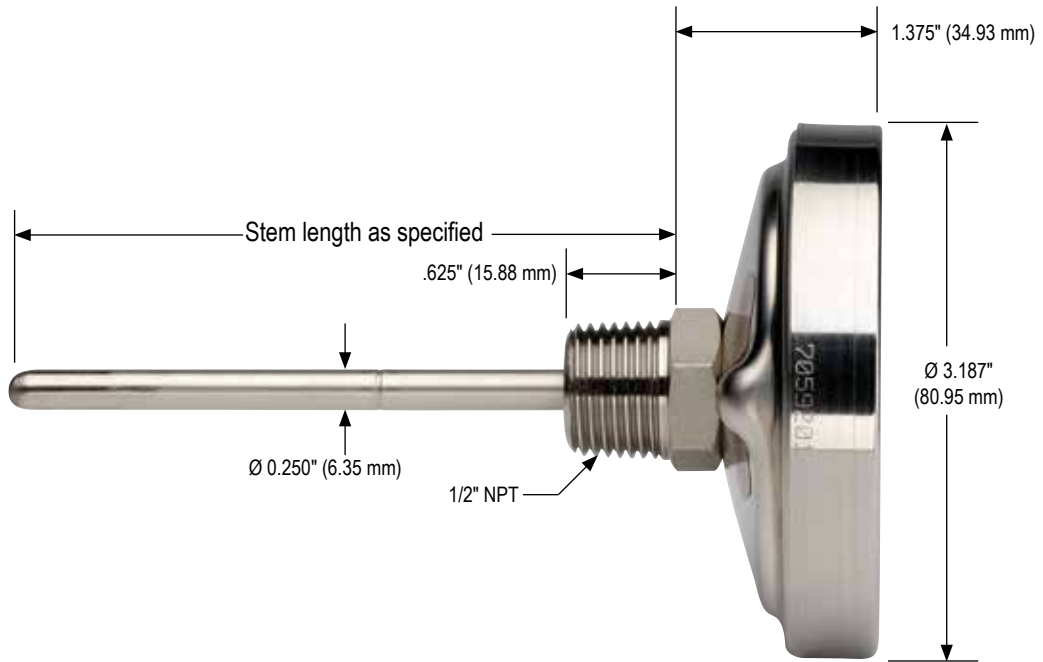
## 18-110



## 20-110



**30-110**



**50-110**

