

Bimetal, Industrial Type with External Reset

300 SERIES



- Highest quality thermometers available on the market
- Easy to calibrate with 1/16" Allen key
- Corrosion-resistant 304 stainless steel case and bezel provide a hermetic seal to prevent lens fogging and moisture damage
- Single °F, single °C, and dual scale options available
- Accuracy: ±1% full scale, Grade A, ASME B40.3
- 2", 3" and 5" sizes - center back and bottom connections
- 2" Dial Size - 1/4" NPT; 3" & 5" Dial Sizes - 1/2" NPT
- Standard stem lengths 2-1/2" through 42"
- Minimum or maximum indicating pointers are available in 3" and 5" sizes
- 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

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

	SERIES	SPECIFICATIONS
Case & bezel	All 300 Series	304 stainless steel; 316 stainless steel optional
Lens	All 300 Series	Instrument glass
Pointer	All 300 Series	Aluminum, black finish
Stem diameter	All 300 Series	.250" (6.35 mm)
Accuracy	All 300 Series	±1% full scale, Grade A, ASME B40.3
Dial	All 300 Series	Anodized aluminum with large black numbers and graduations
Process connection	2" Dial Size 3" & 5" Dial Size	1/4" NPT 1/2" NPT
Wetted parts	All 300 Series	304 stainless steel; 316 stainless steel optional
Hermetic seal	All 300 Series	Per ASME B40.3 dustproof and leakproof
Bimetal coil	All 300 Series	Silicone coated helix coil on ranges below 500 °F for vibration dampening, maximum heat transfer and response time
Over temperature limits	All 300 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
Recalibrator	All 300 Series	External reset
Adjustable angle form	320 Series	All stainless steel brackets with screws that loosen to allow 360° rotation of head and 180° adjustment of stem position

Thermowells are recommended for pressure, corrosive fluids and high velocity applications, see pages 46-48.

ORDERING INFORMATION						
DIAL SIZES	20	2" (Back connected only)	30	3"	50	5"
CASE TYPES	300	Bottom connection	310	Back connection	320	Adjustable angle connection**
STEM LENGTHS	025	2-1/2"	120	12"	300	30"
	040	4"	150	15"	360	36"
	060	6"	180	18"	420	42"
	090	9"	240	24"	Available up to 120"	
TEMPERATURE RANGES	-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					
OPTIONS	6	6 mm stem diameter **	HD	Heavy-Duty Stem (0.375" Dia.)**	SG	Safety Glass Lens **
	8	8 mm stem diameter **	LL	Polycarbonate Lens	SL	Silicone Filled (500 °F Max)
	316	316 SS Connection & Stem **	MIP	Min or Max Indicating Pointer***	SST	Stainless Steel Tagging
	AU	1/2" NPT Adjustable Union**	MIP2	Min and Max Indicating Pointers***	TG	Tempered Glass Lens
	GD	Glow Dial †	PL	Acrylic 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.

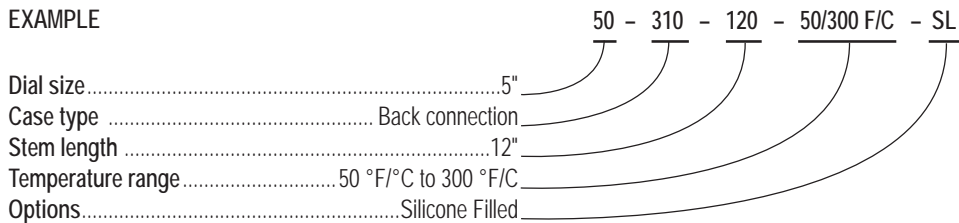
* Thermometers with temperature ranges 200/1000 °F and 100/500 °C are not recommended for continuous use above 800 °F/425 °C. For intermittent use only.

** Available for 3" and 5" dial sizes only.

*** Available only on 30-310 and 50-310 models.

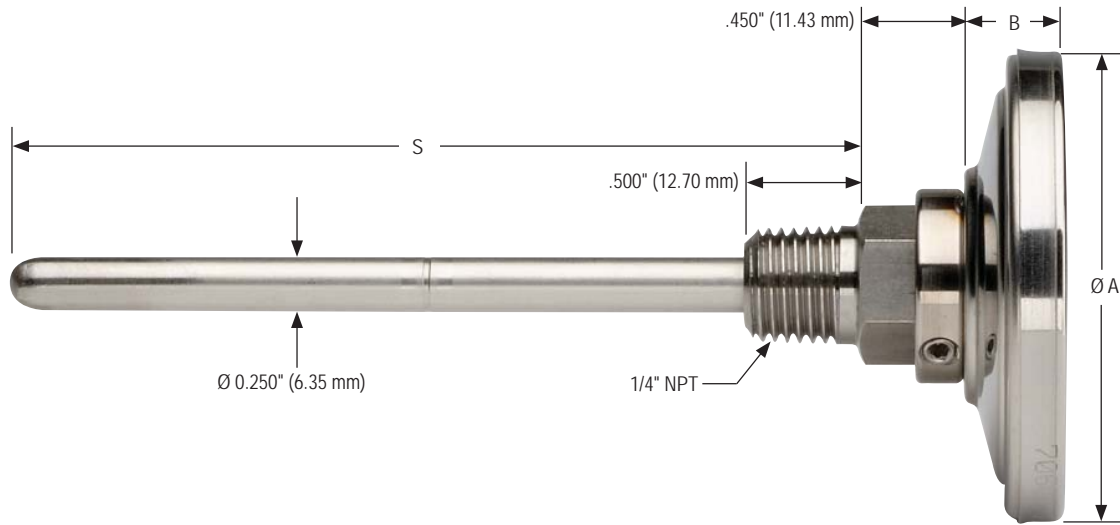
† Available only on 50-310 and 50-320 model. Includes reflective pointer and two reflective clips.

EXAMPLE



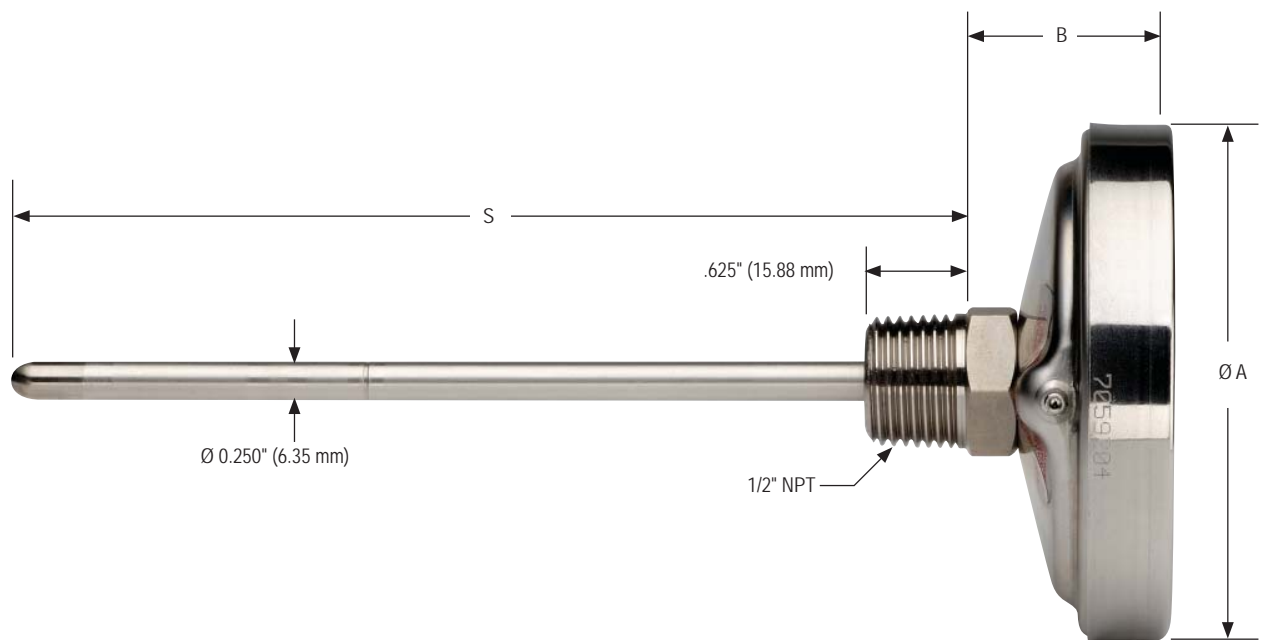
Dimensions

20-310



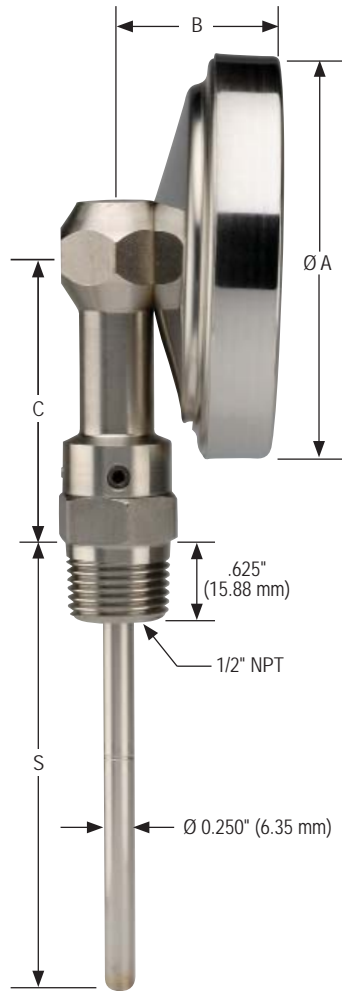
See page 15 for dimension chart.

30-310/50-310

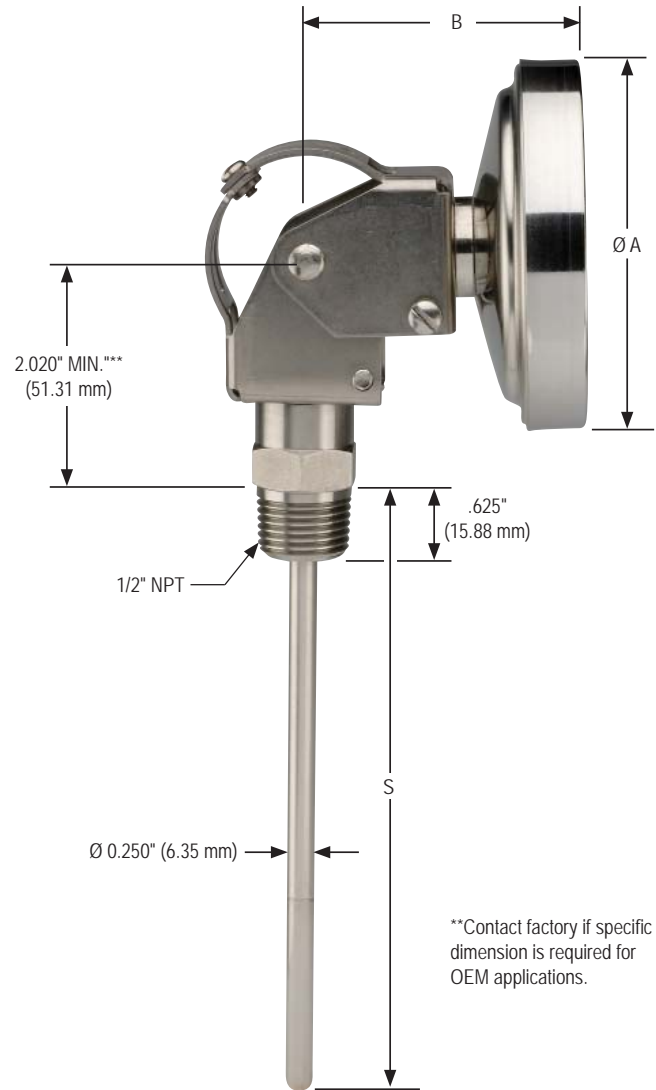


See page 15 for dimension chart.

30-300/50-300



30-320/50-320



**Contact factory if specific dimension is required for OEM applications.

Series	Ø A	B	C	S (Stem Length)
20-310	2.089" 53.06 mm	.438" 11.13 mm	—	As specified
30-310	3.187" 80.95 mm	1.375" 34.93 mm	—	As specified
50-310	5.040" 128.02 mm	1.718" 43.63 mm	—	As specified
30-300	3.187" 80.95 mm	1.187" 30.15 mm	2.300" (58.42 mm)	As specified
50-300	5.040" 128.02 mm	1.625" 41.28 mm	3.000" (76.20 mm)	As specified
30-320	3.187" 80.95 mm	2.430" 61.72 mm	—	As specified
50-320	5.040" 128.02 mm	2.660" 67.56 mm	—	As specified