

# Adjustable Angle Bi-metal Thermometers



## ► Overview

Gaugetech® Bi-metal Thermometers are manufactured according to ASME B.40.3 under strict compliance with ISO 9000. The high polished 304 stainless steel case is corrosion resistant. Bi-metal coils are stress relieved and heat treated for maximum accuracy and fast response. Dial faces are concave assuring close proximity of the pointer to the figure intervals.

Silicone oil filling is highly recommended on applications where excess vibration may be present.

These instruments are used in pulp and paper, oil and gas, petrochemical, industrial and food processing industries.

**For applications where the process media may be corrosive or contained under pressure, the use of a Thermowell is required to prevent damage to the thermometer and facilitate its removal from the process. Thermowells are available in various lengths, connections, sizes and materials. Please consult the Thermowell section of this catalog.**



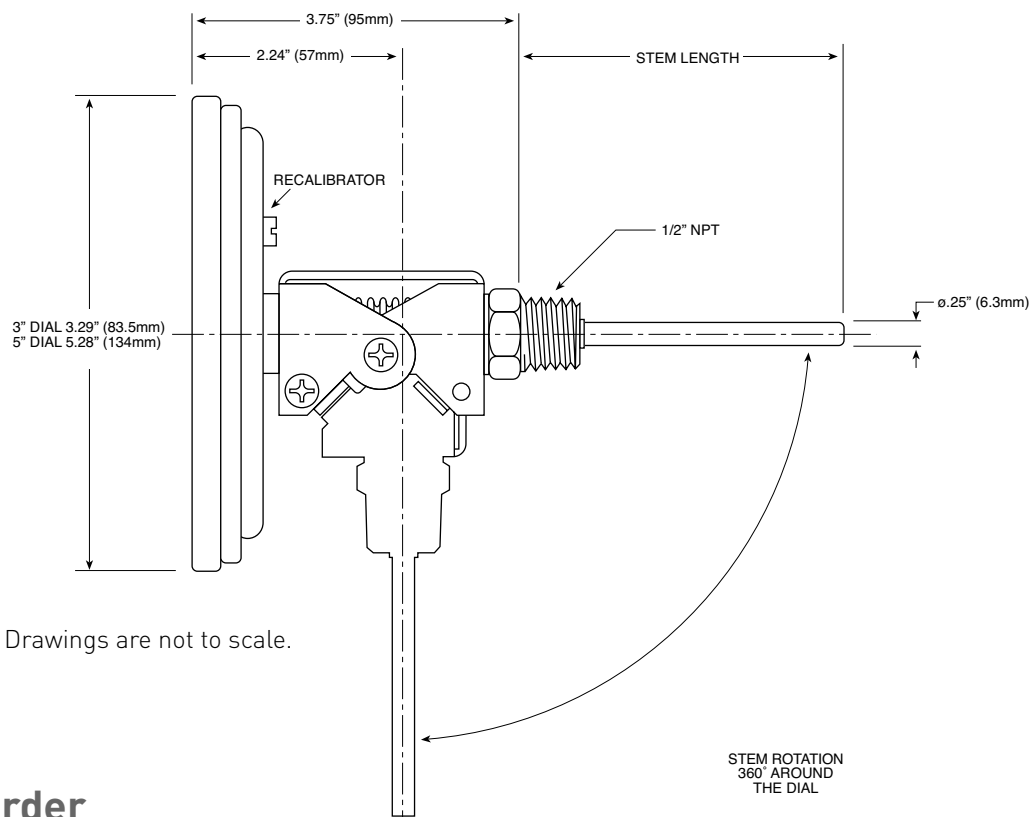
## ► Specifications

Case and ring	304 SS, high polish, hermetically sealed to prevent fogging and exclusion of moisture, ensuring long life of internal components.
Gasket	Natural white rubber compatible with silicone filling.
Stem	304 SS, high polish, welded at tip and case, 1/4" (63mm) diameter for lengths to 24". Other dimensions and stem lengths available.
Coil	Bi-metallic, dampened with 100,000 c.s. silicone grease on ranges to 500°F. Heat treated and stress relieved to maintain a constant expansion ratio and specified accuracy.
Connection	304SS, adjustable angle, 1/2" NPT
Window	Food grade shatter proof glass, 0.16"(4mm) thick
Pointer	Balanced, black aluminum. Pointer flutter eliminated by application of 100,000 c.s. silicone grease to bimetal coil on ranges up to and including 500°F.
Dial	Aluminum, baked enamel finish, white background with black markings. Concave design with celcius on lower plane and fahrenheit on the upper. This allows close proximity of pointer to divisions on scale for accurate readings.
Recalibration	Hex head adjustment screw with screw driver slot allows the operator to re-zero the pointer for maximum accuracy in selected area of the 270° degree dial. Thermometer must be inserted at least 2.5" (63.5mm) into agitated bath with a certified thermometer as a test comparison.
Over range	Bi-metal maybe be over or under ranged temporarily to 50% of full scale value.
Silicone filling	May be filled with silicone for severe vibration applications.
Accuracy	±1.0% Full Scale ASME B40.3 Grade A
Options	Other threaded connections, stem diameters and lengths, silicone filling and special dials.
Shipping weight	GTA-32: 1.1 lbs (0.5kg) GTA-52: 1.5 lbs (0.68kg)

# Adjustable Angle Bi-metal Thermometers



## ► Dimensions (Drawings are not to scale. Dimensions in millimeters.)



Drawings are not to scale.

## ► How to order

**Models and Range codes shown in bold are typically stocked in our warehouse.**

Max temperature for 2.5" stem is 500°F.

\* Not recommended for continuous service over 800°F (425°C)

\*\* Specify length in inches (72" maximum)

BASE PRODUCT			RANGE OPTIONS						FAHRENHEIT		CELSIUS			
DIAL SIZE	STEM LENGTH**	PRODUCT CODE	DUAL SCALE			FAHRENHEIT ONLY (SPECIAL ORDER)		CELSIUS ONLY (SPECIAL ORDER)		Figure Intervals	Minor Divisions	Figure Intervals	Minor Divisions	
			RANGE CODE	°F OUTER SCALE	°C INNER SCALE	RANGE CODE		RANGE CODE						
3"	2.5" (63.5mm)	<b>GTA-32</b>	<b>01</b>	100°F to 100°F	-75°C to 40°C	<b>01F</b>	100°F to 100°F	<b>01C</b>	-75°C to 40°C	20°	2°	10°	1°	
	4" (101.6mm)	<b>GTA-34</b>	<b>02</b>	-40°F to 160°F	-40°C to 70°C	<b>02F</b>	-40°F to 160°F	<b>02C</b>	-40°C to 70°C	20°	2°	10°	1°	
	6" (152.4mm)	<b>GTA-36</b>	<b>03*</b>	25°F to 125°F	-5°C to 50°C	<b>03F*</b>	25°F to 125°F	<b>03C*</b>	-5°C to 50°C	10°	1°	5°	1/2°	
	9" (228.6mm)	<b>GTA-39</b>	<b>04</b>	0°F to 200°F	-20°C to 95°C	<b>04F</b>	0°F to 200°F	<b>04C</b>	-20°C to 95°C	20°	2°	10°	1°	
	12" (304.8mm)	<b>GTA-312</b>	<b>05</b>	20°F to 240°F	-10°C to 115°C	<b>05F</b>	20°F to 240°F	<b>05C</b>	-10°C to 115°C	20°	2°	10°	1°	
	15" (381.0mm)	<b>GTA-315</b>	<b>27</b>	0°F to 250°F	-20°C to 120°C	<b>27F</b>	0°F to 250°F	<b>27C</b>	-20°C to 120°C	50°	2°	20°	2°	
	18" (457.2mm)	<b>GTA-318</b>	<b>06</b>	50°F to 300°F	10°C to 150°C	<b>06F</b>	50°F to 300°F	<b>06C</b>	10°C to 150°C	50°	2°	20°	2°	
	24" (609.6mm)	<b>GTA-324</b>	<b>07</b>	50°F to 400°F	10°C to 205°C	<b>07F</b>	50°F to 400°F	<b>07C</b>	10°C to 205°C	50°	5°	50°	2°	
5"	2.5" (63.5mm)	<b>GTA-52</b>	<b>08</b>	50°F to 500°F	10°C to 260°C	<b>08F</b>	50°F to 500°F	<b>08C</b>	10°C to 260°C	50°	5°	50°	2°	
	4" (101.6mm)	<b>GTA-54</b>	<b>09</b>	150°F to 750°F	50°C to 400°C	<b>09F*</b>	150°F to 750°F	<b>09C*</b>	50°C to 400°C	100°	10°	50°	5°	
	6" (152.4mm)	<b>GTA-56</b>	<b>10*</b>	200°F to 1000°F	100°C to 550°C	<b>10F*</b>	200°F to 1000°F	<b>10C*</b>	100°C to 550°C	100°	10°	100°	5°	
	9" (228.6mm)	<b>GTA-59</b>	<b>HOW TO ORDER</b>						<b>ADDITIONAL OPTIONS</b>					
	12" (304.8mm)	<b>GTA-512</b>	Specify base product code. Add range code required.						<b>CODE</b>	<b>OPTION</b>	<b>CODE</b>	<b>OPTION</b>		
	15" (381.0mm)	<b>GTA-515</b>	Add option code required.						F	Silicone Filled	M	Maximum Registering Pointer		
	18" (457.2mm)	<b>GTA-518</b>	Example: GTA-32-02-F											
	24" (609.6mm)	<b>GTA-524</b>	[Adjustable Angle, 3" dial, 2.5" stem, range code 02, filled]											