# Bimetal Thermometer - Process Grade - All Stainless Steel Construction Type TI.32, 3" Dial Size - Ajustable Angle Connection

Datasheet Tl.32

## **Applications**

- General process instrumentation in the chemical, petro chemical, oil and gas, energy and water/wastewater industries
- Temperature measurement in harsh and aggressive environments
- With liquid dampening suitable for applications with high vibrations

#### **Product features**

- Process grade design
- Adjustable angle connection with external reset
- All stainless steel case construction
- Hermetically sealed per ASME B40.3
- Accurate to 1% of full scale value
- Available with silicone case filling for vibration

## **Specifications**

#### Size

3" (76.2 mm) Type TI.32

#### Accuracy

± 1.0% full scale value per ASME B40.3, Grade 1A

#### Ranges

From -100°F (-70°C) to +1000°F (+540°C) From -50°C to +550°C (as single scale) Reference table on page 2

## **Working Range**

Steady: full scale value
Short time: 110% of full scale value

## **Over/Under Range Protection**

≤ +500°F (+260°C): Temporary up to 50% of full scale > +500°F (+260°C): Continuous to 800°F (+427°C)

Intermittant up to 1000°F (+538°C)

## Connection

Material: 304 stainless steel Lower mount (LM), 1/2" NPT

#### Stem

Material: 304 stainless steel Diameter: 1/4" (6.35 mm)

Length: 21/2" to 72" (63.5 mm to 1,828.8 mm)

## **Measuring Element**

Bi-metal helix

#### Case

Material: 304 stainless steel

Hermetically sealed per ASME B40.3 standard

Weather protection NEMA 4X (IP 66)

External reset slotted hex head on back of case



#### Thermometer TI.32

#### Dial

White aluminum, dished, with black markings

## Case

Material: 304 stainless steel

Hermetically sealed per ASME B40.3 standard

Ingress protection IP 65

External reset slotted hex head on back of case

#### **Pointer**

Black aluminum

## **Standard Scales**

Single: Fahrenheit or Celsius

Dual: Fahrenheit (outer) and Celsius (inner)

#### **Window Gasket**

Neoprene

Silicone for ranges -100°F (-70°C) and ranges > +550°F (+260°C)

## **Dampening**

Inert gel to minimize pointer oscillation

#### Window

Flat instrument glass

## Weight

10 oz. (280 g) - 3" dial (76.2 mm)

Add 1 oz (28 g) for every 2" (50 mm)of stem length

## Warranty

7- Year Warranty

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# **Optional Extras**

Thermowells

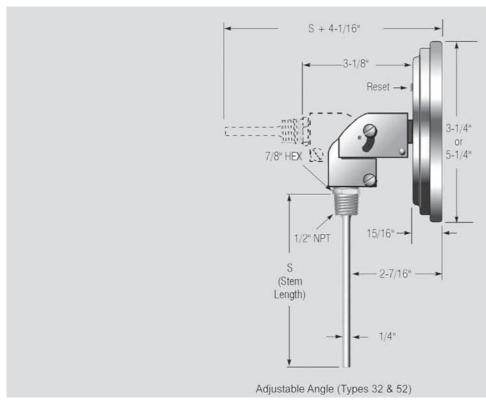
**Dimensions** 

- Silicone fill
- Dampened Movement
- Special scales and dial markings
- Acrylic and safety glass windows
- Calibration certification traceable to NIST

STANDARD RANGES				
Fahrenheit Single Scale	Dual Scale F & C F Outer, C Inner	Celsius Single Scale		
-100/150 F	-100/150 F & -70/70 C	-50/50 C		
-40/120 F	40/120 F & -40/50 C	-20/120 C		
0/140 F	0/140 F & -20/60 C	0/50 C <sup>1</sup>		
0/200 F	0/200 F & -15/90 C	0/100 C		
0/250 F	0/250 F & -20/120 C	0/150 C		
20/240 F	20/240 F & -5/115 C	0/200 C		
25/125 F <sup>1</sup>	25/125 F & -5/50 C <sup>1</sup>	0/250 C		
50/300 F	50/300 F & 10/150 C	0/300 C		
50/400 F	50/400 F & 10/200 C	0/450 C <sup>2</sup>		
50/550 F	50/500 F & 10/260 C	100/550 C <sup>2</sup>		
150/750 F	150/750 F & 65/400 C			
200/1000 F <sup>2</sup>	200/1000 F & 100/540 C <sup>2</sup>			

Minimum length 4" for Type 32

<sup>&</sup>lt;sup>2</sup>Not recommended for continous service over 800°F (425°C)



WIKA Typ	e DIAL SIZE	Α	В	S (Stem Length)
32	3" (76.2 mm)	3-1/4" (82.6 mm)	15/16" (23.8 mm)	As Specified

Note: Thermowells for temperature instruments are recommended for all process systems where pressure, velocity, or viscous, abrasive and corrosive materials are present individually or in combination. A properly selected thermowell protects the temperature instrument from possible damage resulting from these process variables. Furthermore, a thermowell permits removal of the temperature instrument for replacement, repair or testing without effecting the process media or the system.

## Ordering information

State computer part number (if available) /type number/size/range/connection size and locations/options required. WIKA reserves the right to make changes without prior notice.

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