

Temperature Measurement Digest



WIKAI[®]

Part of your business

Process Grade Bimetal Thermometers

TI.30, TI.50, TI.31, TI.51, TI.32, TI.52

WIKA process grade bimetal thermometers are suitable for nearly every direct-reading thermometer application. Their durable construction and finish ensure reliable readings and long-lasting service. The superior quality of the WIKA Type 30, 31, 32, 50, 51, and 52 is reflected in the 7-year warranty.

Size: 3", 5"
 Case & stem: 304SS standard, 316SS wetted parts (stem) optional
 Stem lengths: 2½" to 72" (consult factory for longer stems)
 Accuracy: +/-1.0% of span ASME B40.3 Grade A
 Scale: dual °F/°C; single °F or °C
 Ranges: -100°F(-70°C) to 1000°F(500°C), in dual scale F&C, Fahrenheit only or Celsius only

See Data Sheets **TI.30, TI.50, TI.32, TI.51, TI.32, TI.52** for options



TI.30



TI.50



TI.31



TI.51



TI.32



TI.52

Twin-Temp™ Thermometers

TT.30, TT.32, TT.50, TT.52, TT.80, TT.82

WIKA's unique Twin-Temp™ thermometers combine the accuracy, reliability and easy-to-read dial of a bimetal thermometer with the precision readout and data acquisition of a thermocouple or RTD sensor. The Twin-Temp™ provides two temperatures from one insertion point.

Size: 3", 5" (5" not available on solar digital)
 Case and stem: 304SS standard, 316SS wetted parts (stem) optional
 Stem lengths: 2-1/2" to 48" configurable with thermocouple, 4" to 48" configurable with RTD, and 2-1/2" to 24" configurable, solar digital.
 Accuracy: +/- 1.0% of span for each sensor
 Scale: dual °F/°C; single °F or °C
 Ranges: -100°F (-70°C) to 550°F (260°C)
 Thermocouple: type K grounded thermocouple standard types J, E and T available.
 RTD: 100 Ohm thin film platinum DIN curve .00385 Ohm/Ohm/C)
 Options: Dampened Movement, 4-20 mA transmitter, and Terminal block.



TT.82



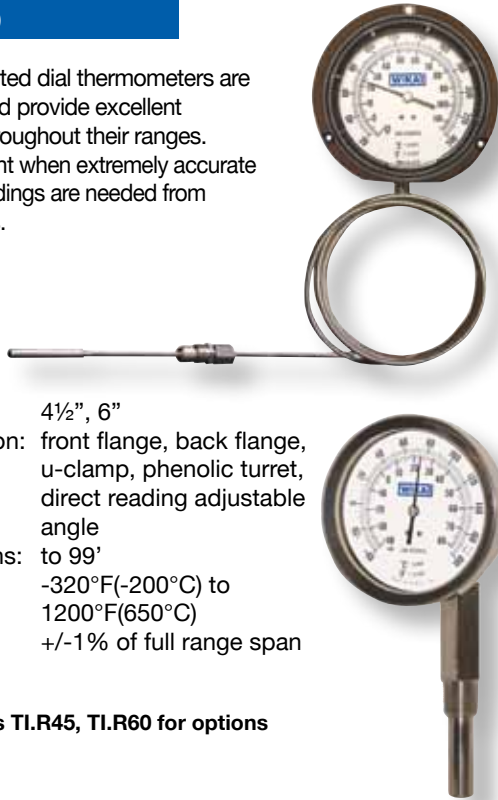
TT.52

See Data Sheets **TT.30, TT.50, TT.32, TT.51, TT.32, TT.52** for options

Gas Actuated Thermometers

TI.R45, TI.R60

WIKA gas actuated dial thermometers are easy-to-read and provide excellent performance throughout their ranges. They are excellent when extremely accurate temperature readings are needed from remote locations.



Size: 4½", 6"
 Case connection: front flange, back flange, u-clamp, phenolic turret, direct reading adjustable angle
 Capillary lengths: to 99'
 Ranges: -320°F(-200°C) to 1200°F(650°C)
 Accuracy: +/-1% of full range span

See Data Sheets TI.R45, TI.R60 for options

Solar Industrial Thermometer

TI.D01

WIKA's solar industrial thermometer is an excellent alternative to industrial-glass thermometers. It offers fast, accurate, easy-to-read temperature indications. Retro-fit design is a drop-in replacement for glass thermometers.



Range: -50/300°F (-50/150°C)
 Accuracy: 1% of reading 1°
 Sensor: glass passivated thermistor
 Lux Rating: 10 Lux (one foot candle)

See Data Sheet TI.D01 for options

Vapor Actuated Thermometers

TI.V20, TI.V25, TI.V35, TI.V45

Where critical measurement is within a limited range, a WIKA vapor actuated thermometer is ideal. Rugged and reliable, these instruments are well-suited for refrigeration, drying ovens, and plating applications.



Size: 2", 2½", 3½", 4½"
 Connection: plain, threaded union, thermowell
 Capillary lengths: up to 99'
 Ranges: -40°F(-40°C) to 350°F(176°C)
 Accuracy: +/-1% scale division, full scale
 Options: copper bulb, capillary & braided armor; or stainless steel bulb, capillary stainless steel interlocking armor available

See Data Sheets TI.V20, TI.V25, TI.V35, TI.V45 for options

Industrial Glass Thermometer

TI.701, TI.901, TI.61102, TI.61104, TI.62102, TI.62104

WIKA's industrial glass thermometers offer easy-to-read temperature measurement in tough applications. Their molded housings offer excellent rigidity and impact resistance, and the glass tube is mounted to resist shock. The blue spirit fill provides mercury-free temperature measurement.



Scale: 7", 9"
 adjustable locking case and stem
 Ranges: -40°F to 550°F
 Accuracy: +/-1% of full range span
 Fill: blue spirit fill (non-mercury)

TI.61102

See Data Sheet TI.701/TI.901, TI.61/TI.62 for options.

Industrial Grade Bimetal Thermometers

TI.20, TI.33, TI.34, TI.53, TI.54

WIKA's industrial grade bimetal thermometers are ideal for a weather resistant application or where tamper-proof thermometers are recommended. The WIKA Type 20, 33, 34, 53, 54 are warranted for one year.

Size: 2", 3", 5"
 Case & stem: 304 stainless steel
 Stem lengths: 2½" to 24"
 Accuracy: (+/-) 1.0% of span
 ASME B40.3 Grade A
 Scale: dual °F/°C; single °F or °C
 Ranges: -100°F(-70°C) to 1000°F(500°C)

See Data Sheets **TI.20, TI.33, TI.34, TI.53, TI.54** for options



TI.20



TI.34

Industrial Thin Stem Thermometers

TI.T17, TI.T20

WIKA laboratory/thin stem thermometers deliver fast, extremely accurate readings. These thermometers are designed for laboratory and OEM applications.

Size: 1¼", 2"
 Case & stem: 304 stainless steel
 Stem lengths: 5", 8", 12", 18"
 Window: flat instrument glass
 Accuracy: +/- 1.0% full scale value
 Scale: dual °F/°C; single °F or °C
 Ranges: -100°F (-70°C) to 750°F (300°C), in dual scale F&C, Fahrenheit only or Celsius only
 External reset: externally adjustable on plain connection
 Options: stem lengths, threaded connections, scales and dial markings, Lexan® window, beaker clip, stem tip

See Data Sheets **TI.T17, TI.T20** for options



TI.T20

Thermowells

TW.TH, TW.SW, TW.FL, TW.VS, TW.SC

Thermowells for temperature instruments are recommended for all processes where measurement of a corrosive medium or media is under pressure or velocity. WIKA thermowells are available from a complete selection of base materials, as well as shields and coatings, and in threaded, flanged, welded, and sanitary connections. WIKA thermowells are offered in .260" and .385" bores. WIKA sanitary thermowells meet the criteria for 3A sanitary standard 74-03 requirements. WIKA also manufactures thermowell conversion kits to adapt different thermowells to new types of thermometers.

Process connections: threaded, flanged, welded, sanitary
 Instrument connection: ½" NPSM standard
 Shank configurations: stepped, straight, tapered
 Bore diameter: .260", .385"
 Materials: brass, AISI 304, AISI 316 (other materials available)
 Surface finish: brass: 60-100Ra; AISI 304 & AISI 316: 16-32Ra; sanitary AISI 304 & 316: 16-32Ra

See Data Sheets **TW.TH, TW.SW, TW.FL, TW.VS, TW.SC** for options



Solar Powered Digital Thermometer

TI.80, TI.82

WIKA's solar powered digital thermometers are ideal for pilot plants, R & D and industrial applications.

Type: TI.80 - back connected; TI.82- adjustable angle
 Size: 3"
 Case & stem: 304 stainless steel
 Stem lengths: 1" to 36"
 Window: glass, acrylic
 Accuracy: (+/-) 1% of scale
 Range: -50/300°F or -50/100°C
 Sensor: ceramic thermister requiring 35 lux to operate the 3-volt solar cell

See Data Sheets **TI.80, TI.82** for options.



TI.80

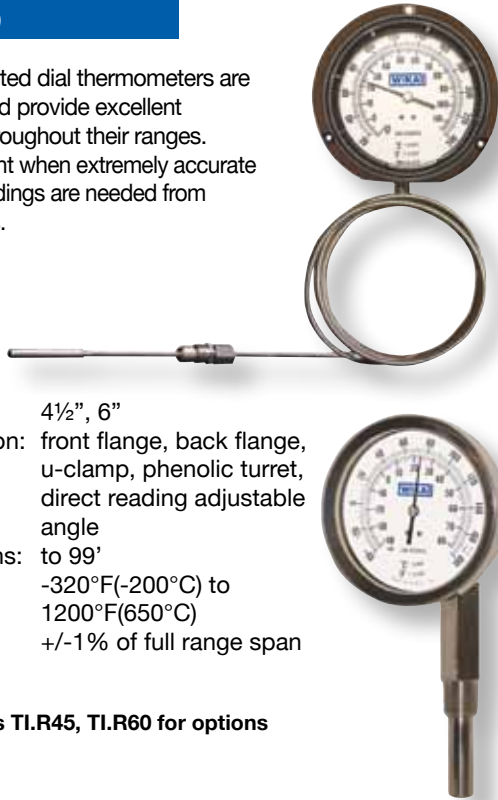


TI.82

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 Accuracy: +/-1% of full range span
 Fill: blue spirit fill (non-mercury)



TI.61102

See Data Sheet TI.701/TI.901, TI.61/TI.62 for options.



ISO 9001
Certified

For over 60 years, WIKAI Instrument Corporation (WIKAI) has continued to globally advance pressure gauge, sensor and temperature instrumentation technology and applications. In the United States, WIKAI's operation utilizes state-of-the-art manufacturing technology and highly automated proprietary production equipment in its nearly quarter-million-square-foot facility in the metro Atlanta suburb of Lawrenceville, Georgia.



TI.32



Thermowells

As the industry leader in lean manufacturing, WIKAI offers a wide variety of stock and customized instrumentation solutions for critical applications that often are distributed within days. The WIKAI customer service department recently earned the Operational Excellence Award for Leadership from one of North America's leading distributors of industrial maintenance, repair and operation replacement parts. Producing over 30 million gauges, diaphragm seals, transmitters, and thermometers worldwide annually, WIKAI has the most extensive product line in the industry.

WIKAI Instrument Corporation

1000 Wiegand Boulevard
Lawrenceville, GA 30043
Toll Free 1-888-WIKAI-USA (945-2872)
Tel (770) 513-8200 Fax (770) 338-5118
info@wika.com • www.wika.com

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