

INSTRUMENTS • CONTROLS • VALVES

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# Product Digest

## WIKA's Featured Products

Leading the World in Pressure,  
Temperature & Level Measurement



# Why WIKA?

## WIKA Measures Up!

For over 60 years, WIKA Instrument Corporation has continued to globally advance pressure gauge, sensor and temperature instrumentation technology and applications. As the industry leader in lean manufacturing, WIKA offers a wide variety of stock and customized instrumentation solutions for critical applications that often are distributed within days. Producing over 43 million gauges, diaphragm seals, transmitters and thermometers worldwide annually, WIKA has the most extensive product line in the industry to provide pressure and temperature measurement solutions.

Our staff is ready to share their extensive product and industry knowledge, making your business experience with WIKA more than just buying a commodity. WIKA's commitment to providing customer service at the highest level recently earned the WIKA customer service department the Operational Excellence Award for Leadership from one of North America's leading distributors of industrial maintenance, repair and operation replacement parts.

WIKA's exceptional service to our customers includes:

- U.S.-based manufacturing, sales, customer service and technical support
- Certified technical specialists who perform Best Practice Instrument Reviews for customers and provide performance improvement findings
- An in-house engineering team for product customization and innovation to meet your most challenging application solutions
- Proven capabilities to connect with customers' business processes for ordering and inventory management (supply chain optimization)
- Web-based customer service features (including online quote request, online literature request, competitor product cross reference)
- WIKA online customer center for checking orders, shipping, product availability and lead times



**Michael Gerster, President**  
WIKA Instrument Corporation



USA Manufacturing Facility - Lawrenceville, Georgia

A handwritten signature in black ink, reading "M. Gerster".

Michael Gerster  
President

The WIKA Product Digest features a broad overview of the WIKA product line. In addition to the products highlighted within, WIKA offers thousands of different product configurations delivered with the industry's shortest lead times. Please visit [www.wika.com](http://www.wika.com) for complete product information and datasheets.



## Product Digest Highlights

### Mechanical Pressure Measurement

Page 3

WIKA Mechanical Pressure Gauges represent the industry standard and are designed to provide lasting service in extreme operating conditions when properly applied. WIKA has pioneered many innovations over the years, resulting in a gauge for almost every application.

### Differential Pressure Measurement

Page 8

WIKA Differential Gauges are offered in a wide variety of configurations and operating ranges. Features include rugged machine finished construction, NEMA 4X (standard) and a 7-year warranty.

### Pressure Accessories

Page 9

WIKA's accessories complete the offering for almost every existing installation requirement. Options include needle valves, gauge cocks, block and bleed valves, snubbers, overpressure protectors, adaptors and couplings.

### Electronic Pressure Measurement

Page 10

WIKA's Electronic Pressure Measurement line offers a full array of general industrial and specifically-designed pressure transmitters and transducers to meet the emerging demands of design-in applications and integrated electronic systems.

### Diaphragm Seals

Page 13

WIKA has many innovative and patented Diaphragm Seal designs for aggressive, clogging and high temperature media applications. WIKA has the right combination of materials and technology to provide lasting instrumentation operating life.

### Sanitary Assemblies

Page 14

WIKA Sanitary Seals are designed to meet 3A criteria for pharmaceutical, food and dairy, and biotechnology applications.

### Mechanical Temperature Measurement

Page 15

WIKA has a full line of Mechanical Thermometers for process and general industrial temperature measurement, including the industry's only "patented" dampened movement bimetal thermometer. All WIKA thermometers are designed to provide lasting value, accuracy and operating life.

### High Precision & Calibration

Page 18

WIKA offers High Precision Monitors and Calibration Test Equipment for the most demanding accuracy and calibration requirements. Available products include laboratory and point-of-use systems for maintenance, testing, measurement and calibration.

# WIK A Instrument Corporation

## WIK A's LeanSigma® Methodology

WIK A understands that customers in today's business environment demand high-quality products and services at competitive prices, customized to individual requirements and with quick deliveries. To better serve our customers' needs, WIK A has embraced a new manufacturing philosophy named LeanSigma®.

Lean manufacturing and business processes utilize a systematic approach to identifying waste through continuous improvement. Lean manufacturing retains only those activities that transform materials and information into the products and services that customers need.

### The benefits are:

- Over 50,000 different product configurations with lead times of only a few days
- An industry-leading 1,400 stock items that are readily available to our customers for same day shipping
- Elimination of large inventories to overcome out-of-stock situations

The result is WIK A having the industry's **shortest** lead times. You will get **exactly** what you want when you need it!

## WIK A's OEM Product Offering

WIK A manufactures a complete line of OEM instrumentation to support multiple industries including, but not limited to, medical devices, pumps, compressors, beverage dispensing, HVAC, and hydraulic/pneumatic applications. Additionally, WIK A can fabricate unique product configurations to meet design-in applications including dial artwork, which can be customized with any logo, special scales and critical ranges. All artwork generation and dial printing is made-to-order in our Lawrenceville, GA facility.

WIK A OEM customers do not have to order large quantities to receive customized products delivered quickly. WIK A offers flexible stocking options including Kanban, JIT or scheduled deliveries. Special box labeling and bar-coding options are also offered to meet OEM requirements. Please contact us to learn more about our customized instrument and packaging capabilities.

## WIK A's Customized Dial Printing Capabilities

WIK A's customized printing capabilities are among the best in the industry. WIK A utilizes a wide variety of printing methods to meet any unique requirement, match any PMS color and create custom logo designs for dial artwork. WIK A utilizes proprietary digital printing technology which drastically reduces lead times from days to minutes.

## WIK A's NIST Traceable Calibration Lab



WIK A's in-house and traceable NIST Laboratory offers customers maximum precision and quality, certified in accordance with NIST calibration standards. If required, instrumentation products will receive a NIST Certificate of Calibration to verify that a product is within its stated tolerance of accuracy.

Mechanical and electronic pressure measuring instruments, deadweight testers as well as temperature sensors and temperature measuring instruments, resistance thermometers or dry well calibrators can all be calibrated and certified by WIK A.

## WIK A's World-Class Customer Care Service

WIK A's dedication to providing responsive customer care is unparalleled. WIK A's in-house technical team and engineers are available to develop customer-specific solutions. Each employee receives in-depth training on our extensive product lines along with the principles of customer service. Combining engineering innovation, courteous service, quality and timeliness, we have mastered these elements to meet your individual requirements.



**Your Customer Care Team**

## WIK A's Distribution Network

In combination with WIK A's extensive product line is a vast domestic network of one that is fully-authorized WIK A distributors. Please visit the WIK A website at [www.wika.com](http://www.wika.com) to locate a distributor nearest to you or who are specialized to your particular industry.

# Mechanical Pressure Measurement

WIKA type 111.10, 111.12, 212.54 and 111.25CT gauges are designed for applications where the measured media does not corrode copper alloy, and where long, reliable service under rugged conditions is required. Typical applications for these gauges are pumps, hydraulic and pneumatic systems, and compressors.

## General Purpose Gauge, Dry

### 111.10, 111.12

**Size**

1½", 2", 2½", 4"

**Case**

Black ABS plastic

**Wetted parts**

Copper alloy

**Window**

Clear plastic

**Liquid fill**

Not applicable

**Accuracy**

±3/2/3% of span



## Stainless Steel Case, Brass Internals, Field Repairable, Field Liquid-fill

### 212.54, 213.54

**Size**

2½", 4"

**Case**

304 SS

**Ring**

Stainless steel bayonet, twist-on

**Wetted parts**

Copper alloy

**Window**

Safety glass

**Liquid fill**

Dry (212.54); glycerine (213.54)

**Accuracy**

±2/1/2% of span (2½"); ±1.0% of span (4")



## Contractors Gauge, Dry

### 111.25CT

**Size**

4½"

**Case**

Stainless steel

**Wetted parts**

Copper alloy

**Window**

Snap-in-polycarbonate

**Liquid fill**

Not applicable

**Accuracy**

±1.0% of span



Type 212.53, 213.53, 213.40 and 212.20 (dry only) are ideal choices for OEM and general industrial applications requiring an economical dry or liquid-filled pressure gauge. When vibration and/or pulsation are present, the glycerine fill dampens the Bourdon tube and minimizes pointer oscillation, which reduces wear on the gauge movement. Typical applications include hydraulic and pneumatic systems.

## Stainless Steel Case, Brass Internals, Field Liquid-fillable

### 212.53, 213.53

**Size**

2", 2½", 4"

**Case**

304 SS

**Ring**

Polished stainless steel, crimped-on

**Wetted parts**

Copper alloy

**Window**

Polycarbonate

**Liquid fill**

Dry (212.53); glycerine (213.53)

**Accuracy**

±2/1/2% of span (2", 2½"); ±1.0% of span (4")



## Hydraulic Gauge, Factory-filled Case

### 213.40

**Size**

2½", 4"

**Case**

Forged brass

**Ring**

Gold-plated ABS (2½"); chrome-plated brass (4")

**Wetted parts**

Copper alloy

**Window**

Acrylic

**Liquid fill**

Glycerine

**Accuracy**

±2/1/2% of span (2½"); ±1.0% of span (4")



## Stainless Steel Case, Brass Internals, Dry

### 212.20

**Size**

6"

**Case**

304 SS

**Ring**

Stainless steel bayonet, twist-on

**Wetted parts**

Copper alloy

**Window**

Flat instrument glass

**Liquid fill**

Not applicable

**Accuracy**

±1.0% of span



# Mechanical Pressure Measurement

Featuring all stainless steel construction, these industrial and process grade gauges ensure long service life in the harshest, most demanding environments. Typical applications include process and chemical industries that require high quality precision instruments.

WIKA stainless steel liquid-filled gauges are recognized world-wide as the standard of accuracy and durability for use in fluid power and hydraulic systems. These gauges are ideal for skid systems, panels, compressors and pumps which may produce excessive vibration and pulsation.

## All Stainless Steel, Small Diameter

**131.11**

**Size**  
1½", 2", 2½"  
**Case**  
304 SS  
**Bayonet ring**  
None  
**Wetted parts**  
316 SS  
**Window**  
Snap-in-acrylic  
**Liquid fill**  
Not applicable  
**Accuracy**  
±2.5% of span



## All Stainless Steel, Field Repairable, Field Liquid-fillable

**232.54, 233.54**

**Size**  
2½", 4"  
**Case**  
Stainless steel  
**Ring**  
Stainless steel bayonet, twist-on  
**Wetted parts**  
316 SS  
**Window**  
Safety glass  
**Liquid fill**  
Dry (232.54); glycerine (233.54)  
**Accuracy**  
±2/1/2% of span (2½"); ±1.0% of span (4")



## All Stainless Steel, Safety Case Design, Field Repairable, Field Liquid-fillable

**232.30, 233.30\***

**Size**  
2½", 4", 4½", 6"  
**Ring**  
Stainless steel bayonet, twist-on  
**Wetted parts**  
316 SS  
**Window**  
Safety glass\*\*  
**Liquid fill**  
Dry (232.30); glycerine (233.30)\*  
**Accuracy**  
±2/1/2% of span (2½"); ±1.0% of span (4", 4½", 6")



\* Note: Case-filled 233.30 available in lower mount connection only

\*\* Note: 2½" case size supplied with polycarbonate window

## Panel Builder Gauge, Factory-filled Case

**233.55 LBM**

**Size**  
2½"  
**Case**  
304 SS  
**Ring**  
Crimped tamper-proof bezel  
**Wetted parts**  
316 SS  
**Window**  
Safety glass  
**Liquid fill**  
Glycerine  
**Accuracy**  
±2/1/2% of span



## All Stainless Steel, Field Liquid-fillable

**232.53, 233.53**

**Size**  
2", 2½", 4"  
**Case**  
304 SS  
**Ring**  
Polished stainless steel, crimped-on  
**Wetted parts**  
316 SS  
**Window**  
Polycarbonate  
**Liquid fill**  
Dry (232.53); glycerine (233.53)  
**Accuracy**  
±2/1/2% of span (2 and 2½"); ±1.0% of span (4")



## All Stainless Steel, General Service, Field Liquid-fillable

**132.53, 133.53**

**Size**  
4"  
**Case**  
304 SS  
**Ring**  
Polished stainless steel, crimped-on  
**Wetted parts**  
316 SS  
**Window**  
Polycarbonate  
**Liquid fill**  
Dry (132.53); glycerine (133.53)  
**Accuracy**  
±3/2/3% of span



# Mechanical Pressure Measurement

The large 6" diameter of the type 232.50/233.50 gauge makes it ideal for critical applications that require dial reading from a distance. The type 232.34DD Direct Drive Process Gauge features an external re-zero adjustment screw and movementless helical tube design engineered to withstand shock and vibration. Direct Drive gauges are excellent for power-generation industry applications and is ideal for steam service when properly equipped with a siphon.

## All Stainless Steel, Field Repairable, Field Liquid-fillable

### 232.50, 233.50

**Size**

2½", 4", 4½", 6"

**Case**

304 SS

**Ring**

Stainless steel bayonet, twist-on

**Wetted parts**

316 SS

**Window**

Safety glass

**Liquid fill**

Dry (232.50); glycerine (233.50)

**Accuracy**

±2/1/2% of span ( 2½")

±1.0% of span ( 4", 4½" & 6")

Note: 2½" case size supplied with polycarbonate window



## Direct Drive Process Gauge

### 232.34DD\*

**Size**

4½"

**Case**

Yellow fiberglass reinforced thermoplastic

**Wetted parts**

316L SS and Inconel® X-750

**Window**

Acrylic

**Liquid fill**

Not applicable

**Accuracy**

±0.5% of span

\*Note: External zero-reset standard



WIKA XSEL™ process gauges and hinged ring gauges are specifically designed for the petrochemical and processing industries. These durable gauges are engineered to provide reliable service in harsh and rugged environments.

## XSEL™ Process Gauge, Field Liquid-fillable

### 2XX.34

**Size**

4½", 6"

**Case**

Black fiberglass reinforced thermoplastic

**Ring**

Threaded thermoplastic

**Wetted parts**

21X.34 - brass; 23X.34 - 316 SS; 26X.34 - Monel®

**Window**

Acrylic

**Liquid fill**

Dry (2X2.34); glycerine (2X3.34)

**Accuracy**

±0.5% of span



## Hinged Ring Process Gauge

### 2X2.25

**Size**

4½", 6"

**Case**

Black aluminum

**Ring**

Black steel, removable

**Wetted parts**

212.25HR - copper alloy; 232.25HR - 316 SS; 262.25HR - Monel®

**Window**

Flat instrument glass

**Liquid fill**

Not applicable

**Accuracy**

±0.5% of span



## Low Pressure Process Gauge

### 6XX.34

**Size**

4½"

**Case**

Black fiberglass reinforced thermoplastic

**Wetted parts**

612.34 - copper alloy; 632.34 - 316 SS; 662.34 - Monel®

**Window**

Acrylic

**Liquid fill**

Available: 40" H<sub>2</sub>O and up

**Accuracy**

±2/1/2% of span



# Mechanical Pressure Measurement

Extremely sensitive and highly accurate, the type 611.10 and type 632.50 capsule gauges are designed to measure very low pressure. They are especially well suited for systems where air or other gases are the measured media, as well as other applications requiring exceptional sensitivity, precision and reliability.

## Low Pressure Commercial Capsule Gauge

### 611.10

#### Size

2", 2½"

#### Case

Black painted steel

#### Wetted parts

Copper alloy

#### Window

Snap-in-acrylic/zero adjustment screw on dial

#### Accuracy

±1.5% of span



## Low Pressure Industrial All Stainless Steel

### 632.50

#### Size

2½", 4", 6"

#### Case

Stainless steel

#### Ring

Stainless steel bayonet, twist-on

#### Wetted parts

316 SS

#### Window

Laminated safety glass/zero adjustment screw on dial

#### Accuracy

±1.5% of span



## Low Pressure Process Gauge

### 6X2.34

#### Size

4½"

#### Case

Black plastic reinforced thermoplastic

#### Ring

Threaded thermoplastic

#### Wetted parts

612.34 - brass  
632.34 - 316 SS

#### Window

Acrylic

#### Liquid fill

Silicone (633.34) for ranges 40" WC and up

#### Accuracy

± 2/12% of full span per ASME B40.1 Grade A



The WIKA Sealgauge is a reliable alternative to the conventional system of a diaphragm seal and pressure gauge. It uses a mechanical linkage, which eliminates the need for a system fill fluid. The Sealgauge is built to withstand the corrosive, highly viscous and crystallizing media (gaseous or liquid) typical of the process industry. It is ideal for petrochemical, pulp and paper, wastewater treatment and power plants. The Sealgauge comes standard with 5X overpressure protection and can also measure pressure as low as 5 InWC.

## Sealgauge

### 4XX.50, 4XX.12

#### Size

4", 6"

#### Case/upper housing

304 SS (43X.50);  
Cast iron (422.12, 432.12)

#### Bayonet ring

304 SS,  
polished (43X.50);  
Black painted steel  
(422.12, 432.12)

#### Diaphragm

Carbon steel or  
316 SS  
(422.12, 432.12);  
316 SS or  
Durathem PTFE-lined  
(432.50, 452.50);

#### Lower housing

316 SS,  
PTFE lined (452.50);  
316 SS  
(43X.50, 432.12);  
Carbon steel (422.12)

#### Window

Laminated safety glass  
(432.50, 452.50)  
Instrument glass  
(422.12, 432.12)

#### Liquid fill

Glycerine (optional)

#### Accuracy

±1.5% of span



452.50  
1" ASME 150# RF  
Flanged Connection



432.50, 433.50  
Stainless Steel



422.12, 432.12  
Cast Iron Case

# Mechanical Pressure Measurement

## DP Gauge, Low Pressure, air2guide™ P

The air2guide™ P differential pressure gauges are ideally suited to measure very low positive, negative or differential pressure. The unique two-part construction of this gauge allows it to be easily installed and serviced without the need of tools. This gauge is perfect for air handlers, gas scrubbers, containment systems and commercial HVAC systems.

### A2G-10

**Nominal size**

4½"

**Case material**

Black thermoplastic

**Sensor housing**

Black thermoplastic

**Membrane**

Silicone rubber

**Window material**

Clear polycarbonate

**Connection**

2 x G1/8 female

**Ranges**

0/0.25"WC up to 0/50"WC

**Compound ranges**

-0.1/+0.1"WC up to -6/+6"WC

**Accuracy**

± 3.0% of full span

**Standard accessories**

Straight or angled 1/8", 3/16" hose barb adaptors,  
3 self-tapping case mounting screws



Panel Mount



Surface Mount

## DP Gauge, Low Pressure, air2guide™ P+E

This air2guide™ P+E differential pressure gauge combines the mechanical reading with an electronic output signal in a design that is identical to the A2G-10. The very unique two-part construction of this gauge allows it to be easily installed and serviced without the need of tools. This gauge is perfect for air handlers, gas scrubbers, containment systems and commercial HVAC systems.

### A2G-15

**Nominal size**

4½"

**Case material**

Black thermoplastic

**Output signal**

4...20 mA, 2-wire system  
or 0...10 V, 3-wire system

**Sensor housing**

Black thermoplastic

**Membrane**

Silicone rubber

**Window material**

Clear polycarbonate

**Connection**

2 x G1/8 female

**Ranges**

0 ... 0.25" WC up to 0 ... 50" WC

**Compound ranges**

-0.1/+0.1" WC up to -2/+2" WC

**Accuracy**

± 3.0% of full span

**Standard accessories**

Straight or angled 1/8", 3/16" hose barb adaptors,  
3 self-tapping case mounting screws



Surface Mount Shown

## intelliGAUGE Series – Gauges with Analog Output Signal

The WIKA intelliGAUGES combine reliable mechanical indication with an analog output signal for remote reading and data collection. The intelliGAUGE technology is available from commercial type gauges to process grade gauges, Sealgauges and differential pressure gauges. They are equipped with a non-contact, wear-free sensor.

### PGT23.063

**Size**

2½"

**Case**

304 SS,  
Solid front safety design  
with blow-out back

**Connection**

1/4" NPT LM

**Wetted parts**

316L SS

**Window**

Safety glass

**Ranges**

0 ... 15 psi to 0 ... 15,000 psi

**Output signal**

4 ... 20 mA, 2-wire

**Accuracy**

+/- 2/1/2% of full scale per  
ASME B40.1, Grade A



## switchGAUGE Series – Gauges with Analog Output Signal

The WIKA switchGAUGES are based on WIKA's high quality pressure gauges equipped with an integrated alarm contact. Depending on the application and the type of gauge, the customer can choose between magnetic, inductive or electronic (SPS) contacts, Reed Switches or contacts with transistor output (NPN or PNP). All gauges equipped with an inductive contact come standard with ATEX approval Ex II 2 GD c.

### PGS21

**Size**

1½", 2"

**Case**

304 SS case and  
crimped-on ring

**Connection**

LM (2" only) or CBM

**Wetted parts**

Copper alloy

**Window**

Clear plastic

**Ranges**

1-1/2" - 0 ... 60 psi to 0 ... 6,000 psi

2" - 0 ... 15 psi to 0 ... 6,000 psi

**Contact type**

Magnetic contact, N/O or N/C factory set  
(fixed contact set point)

**Accuracy**

+/- 3/2/3% of full scale per  
ASME B40.1 Grade B



2" shown

# Differential Pressure Measurement

## Differential Pressure Gauge, Piston Style

These piston-style differential pressure gauges are suited for use in applications requiring low/medium differential pressure ranges in combination with high working pressures. The 700.04/05 series is intended for measuring pressure drops across filters, strainers, separators, heat exchangers and gas recovery systems.

### 700.04 / 700.05

#### Size

2½", 4½"

#### Case & bezel

Reinforced plastic

#### Sensor housing

316L SS or black anodized aluminum

#### Wetted parts

Aluminum or 316 SS sensor housing  
316 SS spring, ceramic magnet,  
Buna-N separation diaphragm (700.05)  
Viton® sealing rings (700.04)

#### Window

Acrylic or shatter-resistant safety glass

#### DP ranges

0...5 psid thru 0...100 psid (700.04)  
0...50" H<sub>2</sub>O thru 0...100 psid (700.05)

#### Max. working pressure

6,000 psig (700.04)  
3,000 psig (700.05)

#### Accuracy (applied to ascending pressure only)

700.04: ± 2% of full span  
700.05: ± 3% of full span (ranges 0...15 psid and up)  
± 5% of full span (ranges below 0...15 psid)  
± 5% of span (increasing), ranges 50" H<sub>2</sub>O thru 300" H<sub>2</sub>O

700.05  
2½"



700.04  
4½"

## Differential Pressure Gauge, Dual Diaphragm Style

This dual diaphragm / liquid filled sensor element type gauge is designed for applications requiring low / medium differential pressure ranges in combination with high working pressures. The 732.25 is used in a variety of industrial applications, including rotating equipment systems (turbines), flow measurement and for applications in a corrosive environment with liquid or gaseous media. The 732.26 is standard suitable for O<sub>2</sub> service and is ideally for cryogenic applications, such as liquid level measurement.

### 732.25 / 732.26

#### Size

4½", 6"

#### Case

Black powder-coated aluminum or  
304 SS (optional)

#### Bezel

Stainless steel polished

#### Sensor housing

316L SS

#### Wetted parts

Monel® diaphragm (732.25), 316 SS diaphragm (732.26)

#### Window

Acrylic or shatter-resistant safety glass

#### DP ranges

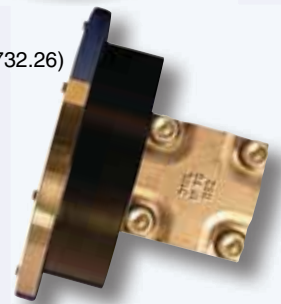
0...100" H<sub>2</sub>O thru 0...600 psid

#### Max. working pressure

3,000 psig (732.25), 600 psig (732.26)

#### Accuracy

±1% of span



## Differential Pressure Gauge "Cryo Gauge"

Differential Pressure gauge for liquid level measurement in enclosed tanks, in particular for the cryogenic industry.

### 712.15

#### Size

6"

#### Case

304 SS with front flange  
SS polished

#### Connection

1/4" NPT female bottom mount

#### Wetted parts

Copper alloy measuring cell with  
316L compression springs and  
NBR separating diaphragm

#### Window

Clear polycarbonate

#### Ranges

0 ... 30" WC to 0 ... 900" WC

#### Maximum working pressure

750 psig

#### Accuracy

+/- 2.5% of full scale

#### Available accessories

3-way manifold with integrated working pressure gauge;  
single and dual Reed Switches; variety of mounting devices



## Differential / Duplex Gauge

### 712.25DP / DX

#### Size

4½", 6"

#### Case

Black aluminum

#### Ring

Black aluminum, bayonet ring

#### Wetted parts

Copper alloy

#### Pointer

One black (differential); one black,  
one red (duplex)

#### Window

Flat instrument glass

#### DP range

0 ... 15 psid thru 0 ... 1,000 psid

#### Working pressure

1½ times of full scale

#### Accuracy

±2/1/2% of span  
(ASME B40.1 Grade A)



## Pressure Snubbers

Pressure snubbers dampen pressure oscillations, allowing easy reading of the “average” pressure. They also protect the gauge from damaging pulsation and spikes. Available in brass and 316 SS with porous, piston and throttling types.

**910.12.100, 910.12.200, 910.12.300**



910.12.100  
Porous



910.12.200  
Piston



910.12.300  
Throttling

## Needle Valves

Needle valves isolate the pressure gauge from the pressure medium and act as a throttling device. They can also effectively dampen pulsation. WIKA's needle valves are available in standard, mini, block & bleed and multi-port designs.

**910.11, 910.11.100,  
910.11.200, 910.11.300**



910.11  
Standard



910.11.100  
Mini



910.11.200  
Block & Bleed



910.11.300  
Multi-port

## Siphons

Siphons protect instruments from high temperature mediums such as saturated steam. The high temperature steam condenses in the siphon, preventing it from damaging the gauge internals. Available in brass, steel or 316 SS. For horizontal (coil) or vertical (pigtail) installations.

**910.15.100, 910.15.200**



910.15.200  
Coil



910.15.100  
Pigtail

## Gauge Cocks

WIKA gauge cocks provide an economical method for isolating the instrument from the process. They also provide an adjustable flow orifice and are rated at 200 psi.

**910.10**



## Mini-siphon

The WIKA type 910.24 mini-siphon is specifically designed to replace the old pigtail and coil siphon. The mini-siphon has a thermal barrier which protects the pressure gauge from harmful steam, hot vapors and liquids, and contains a unique inner chamber that reduces pressure surges and “water hammer”. By mounting the gauge closer to the process, the mini-siphon is designed to eliminate gauge whip and vibration that is typically found on traditional siphons.

**910.24**



## Adjustable Over-pressure Protector

Over-pressure protectors protect the pressure gauge from damaging spikes and surges that exceed the rated capacity of the instrument. WIKA over-pressure protectors come in seven selectable ranges from 6 psi to 8,700 psi. Available in 316 SS.

**910.13**



# Electronic Pressure Measurement

## General Purpose Pressure Transmitter

These rugged pressure transmitters are designed for use in harsh environments where accuracy, reliability and repeatability are critical. Applications include hydraulics and pneumatics, and numerous other processing operations.

### S-10

#### Ranges

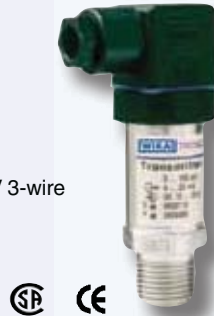
50 InWC to 15,000 psi, vacuum, compound, absolute

#### Output

4-20 mA 2-wire, 0-5 V 3-wire, 0-10 V 3-wire

#### Accuracy

≤0.25% B.F.S.L.



## Flush Diaphragm Transmitter

The S-11 non-clogging flat diaphragm pressure transmitter is designed for applications measuring sludge, slurry or high viscosity media.

### S-11

#### Ranges

50 InWC to 8,000 psi, vacuum, compound, absolute

#### Output

4-20 mA, 0-5 V, 0-10 V

#### Accuracy

≤0.25% B.F.S.L.



## High Pressure Transmitter

The HP-2 is designed for ultra-high pressure monitoring and control applications up to 225,000 psi. It provides accurate, reliable and safe performance when exposed to rapid pressure changes.

### HP-2

#### Ranges

40,000 psi to 225,000 psi

#### Output

4-20 mA, 0-5 V, 0-10 V

#### Accuracy

≤0.25% B.F.S.L.



## Precision Pressure Transmitters

The P-30 provides non-linearity of up to 0.04% of span (B.F.S.L.) for precise measurement in critical applications. Each instrument is provided with a test report at no additional cost. Other test certificates are available.

### P-30, P-31

#### Ranges

30"-0 HgVac to 15,000 psi

#### Output

4-20 mA

#### Accuracy

Up to 0.05% (B.F.S.L.) (terminal based)



P-30



## Field Case Transmitters

Types F-20 and F-21 pressure transmitters feature an integral stainless steel junction box for installation in harsh environments. The F-21 non-clogging flush diaphragm version is designed to measure media containing sludge, slurry or particulates.

### F-20, F-21

#### Ranges

30"-0 HgVac to 15,000 psi

#### Output

4-20 mA, 0-5 V, 0-10 V

#### Accuracy

≤0.25% B.F.S.L.



## Pressure Transmitter with Integral LED Display and Switch Options

The PSD-30 features an integral red LED display that provides three-way adjustability for a wide variety of installation requirements. It is available with PNP or NPN solid state switches for intelligent control applications and meets VDMA standards for ease of programming.

### PSD-30

#### Ranges

Vacuum, compound and gauge ranges up to 8,000 psi

#### Display

Red 4-digit LED, .35" high, 14 segments

#### Switch points

Solid state user programmable, NPN or PNP, single or dual



## UniTrans®

The UniTrans® has a turndown capability of up to 1:20, a 0.15% accuracy and an integral temperature sensor. An intrinsically safe version is also available with a HART communications interface (IUT version only).

### UT-10, UT-11

#### Ranges

5 psi to 15,000 psi

#### Output

4-20 mA

#### Accuracy

≤0.15% B.F.S.L. (pre-turndown)

IUT-10 intrinsically safe version available



# Electronic Pressure Measurement

## Hazardous Area Pressure Transmitters

The E series transmitters are CSA, FM-approved explosion-proof for Class I, Division I hazardous environment.

### E-10, E-11

#### Ranges

5 psi to 15,000 psi,  
vacuum, compound, absolute

#### Output

4-20 mA or 1-5V low power

#### Accuracy

≤0.25% B.F.S.L.



E-10

E-11



## Non-incendive Transmitters

The N series pressure transmitters are specifically designed for gas compressor systems. These transmitters are engineered to meet Class I, Division 2 non-incendive protection in hazardous environments.

### N-10, N-11

#### Ranges

50 InWC to 15,000 psi,  
vacuum, compound, absolute

#### Output

4-20 mA or 1-5V low power

#### Accuracy

≤0.25% B.F.S.L.



N-10

N-11



## Intrinsically Safe Transmitters

WIKA's intrinsically safe transmitters are FM, ATEX and CSA-approved. They are designed for installation in Class I, Division 1 hazardous locations. The IS-21 features a flat, non-clogging diaphragm designed to measure media containing sludge, slurry or particulates. The IS-20-F has an all stainless steel integral junction box for installation in harsh environments.

### IS-20-S, IS-21-S, IS-20-F

#### Ranges

50 InWC to 60,000 psi,  
vacuum, compound,  
absolute

#### Output

4-20 mA

#### Accuracy

≤0.25% B.F.S.L.

IS-20-F

IS-20-S

IS-21-S



## Submersible Liquid Level Transmitters

Submersible liquid level transmitters have a watertight package suitable for applications in tank level measurement, water/wastewater treatment, and reservoir or well depth measurement. They are submersible up to 1,000 feet.

### LH-10, LS-10, IL-10\*

#### Ranges

50 InWC to 400 psi

#### Output

4-20 mA

#### Accuracy

0.25% - 0.125% B.F.S.L.

LH-10

LS-10

IL-10



\*Note: Hazardous area approvals only available on Type IL-10.

## LevelGuard Anti-clog Attachment for Liquid Level Transmitters

The LevelGuard is compatible with the LS-10, LH-10 and IL-10 submersible liquid level transmitters. It is designed for use in wet wells, lift stations and other applications where sludge, slurry or turbulence may be present.

### LevelGuard



## Attachable Loop Powered Local Indicator

The A-AI-1 is designed for use with the 4-pin DIN 43650 "L" plug supplied with Electronic Pressure Measurement Industrial and A-10 4-20 mA output pressure transmitters. User-adjustable digital filtering stabilizes the display during rapid pressure changes.

### A-AI-1

#### Display

-1,999 to +9,999 user-programmable

#### Output

4-20 mA

#### Power

Loop powered with 3 VDC drop

#### Application

For use with Electronic Pressure Measurement industrial (S-10, S-11) and A-10 pressure transmitters (with DIN plug)



Attachable Loop Powered Local Indicator



# Electronic Pressure Measurement

## General Purpose Transmitter

The WIKA A-10 pressure transmitter is precision engineered and manufactured to fit many industrial and OEM applications. The rugged design provides resistance to vibration, shock, wide temperature variations, RFI and other extreme environmental conditions that are typical of industrial and OEM applications.

### A-10

#### Ranges

15 psi to 10,000 psi,  
Vacuum, compound, absolute

#### Output

4-20 mA, 0 - 10 V, 0 - 5 V, others

#### Accuracy

≤ (+/-) 0.5% B.F.S.L.



## General Purpose Transmitter

Featuring a highly stable, temperature compensated and conditioned output signal, the WIKA C-10 is specifically designed to meet OEM requirements. Applications include hydraulics, pneumatics, compressor control, off-road equipment and industrial engine control.

### C-10

#### Ranges

100 InWC to 15,000 psi,  
absolute

#### Output

4-20 mA, 0-5 V, 0-10 V

#### Accuracy

≤0.5% B.F.S.L.



## Refrigeration and Air Conditioning

The R-1 and AC-1 pressure transmitters are specifically designed for refrigeration and air conditioning pressure monitoring applications. The R-1 features stainless steel construction and a completely welded measuring cell. The economical AC-1 features a brass case and ceramic sensing element. Both provide condensation proof construction for long service life. Minimum order quantities may apply.

### R-1, AC-1

#### Ranges

100 psi - 850 psi, compound

#### Outputs

4-20 mA, 0-10 V,  
0.5 - 4.5 V ratiometric

#### Accuracy

<1% B.F.S.L.



## MH-2 Mobile Hydraulic Transmitter OT-1 General Purpose Transmitter

The MH-2 and OT-1 OEM pressure transmitters incorporate WIKA proprietary thin film sensors for exceptional performance, reliability and extended operating life. They offer an excellent price and performance ratio for OEM applications requiring a large production quantity of transmitters. Custom designs are available for specific OEM requirements. Minimum order quantities may apply.

### MH-2, OT-1

#### Ranges

100 psi to 8,000 psi

#### Outputs

4-20 mA, 1-5 V, 0-10 V,  
0.5-4.5 ratiometric @ 5 V

#### Accuracy

≤0.5% B.F.S.L.



## PROFIBUS-DP Interface Transmitter

The D-10-7 and D-11-7 transmitters with accuracies of 0.1 % (or 0.05%) have been designed to enable direct communication to a PC, which is required in the field of test, calibration and service technology.

### D-10-7, D-11-7

#### Ranges

5 psi to 15,000 psi

#### Output

PROFIBUS-DP (EN 50170)

#### Accuracy

Up to 0.05% B.F.S.L.



## CANopen Transmitter

The D-20-9 is a precision transmitter with CANopen interface. Due to shock and vibration resistance values which comply with industrial standards, it is ideal for fieldbus applications in mechanical engineering, automation and test benches.

### D-20-9, D-21-9

#### Ranges

5 psi to 22,000 psi

#### Output

CAN (DIN / ISO 11898)

#### Accuracy

+≤0.25% B.F.S.L.



WIKA Diaphragm Seal Systems enable pressure gauges, transmitters, transducers, and switches to be adapted for installation into adverse applications. Diaphragm seals are excellent for applications involving high temperature, corrosive, toxic, abrasive and highly viscous media, and offer a wide variety of exotic materials to ensure complete compatibility with most processes.

Diaphragm seals can be assembled to the pressure measuring instrument directly or remotely through the use of a capillary. Seals are used extensively in industries such as petrochemical, chemical, gas facilities, oil refineries, and pulp and paper mills. They are also widely used in food and dairy processing, water and sewage treatment, and pharmaceutical facilities.

## Saddle Seal

### L910.ZA

**Instrument connection**  
¼" or ½" NPT female, capillary

**Process connection**  
3" pipe and up

**Pressure rating**  
1,500 psi

**Suitable pressure**  
15 psi to 1,500 psi

**Wetted parts**  
SST, other consult factory



## Standard Version, Threaded / Flanged

### L990.10/12

**Instrument connection**  
¼" or ½" NPT female, capillary

**Process threaded connection**  
¼" to 1" flanged:  
½" to 2" RF

**Pressure rating**  
Threaded: up to 3,675 psi;  
Flanged: 150# to 1500# per ASME B16.5

**Suitable pressure**  
15 psi to 3,675 psi

**Wetted parts**  
CS, SST, Monel®, Hastelloy®, Tantalum,  
Teflon® lining, other-consult factory



## All-welded System (AWS)

### M93X.D1

**Size**  
4½"

**Case**  
Fiberglass reinforced thermoplastic

**Wetted parts**  
316L SS, Monel®, Hastelloy® C-276

**Window**  
Acrylic

**Process**  
½" NPT male connection

**Liquid fill**  
Silicone, DC200-10

**Accuracy**  
±0.5% of span

**Options**  
Consult factory



## Flange-type Flush

### L990.27

**Instrument connection**  
¼" or ½" NPT female, capillary

**Process connection**  
Flanged: 2" to 4" RF

**Pressure rating**  
Flanged: 150# to 2500#  
per ASME B16.5

**Suitable pressure**  
10" in H<sub>2</sub>O to 2500#  
per ASME B16.5

**Wetted parts**  
SST, Monel®, Hastelloy®, Teflon® lining,  
Tantalum, other-consult factory



## Wafer InLine SEAL

### L981.10

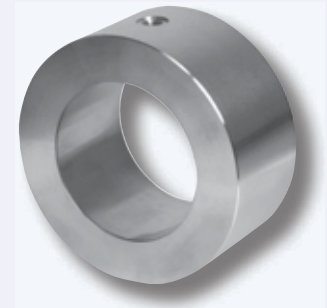
**Instrument connection**  
¼" or ½" NPT female, capillary

**Process connection**  
Flanged: 1" to 6" RF; wafer

**Pressure rating**  
Flanged: 150# to 2500# per ASME B16.5

**Suitable pressure**  
10 psi to 6,000 psi

**Wetted parts**  
SST, Monel®, Hastelloy®, Teflon® coated,  
Tantalum, other-consult factory



# Sanitary Assemblies

Sanitary seals are designed for applications in the pharmaceutical, biotechnology, and food and beverage industries and to facilitate ease of assembly and disassembly from its mating fitting while minimizing crevices to avoid bacteria growth. The most common sanitary seal and mating fitting are held together via a clamp or union nut. The sanitary seal Tri-Clamp® design meets the criteria set by "3A".

## Standard Version, Sanitary Tri-Clamp®

**L990.22**

**Instrument connection**  
1/4" or 1/2" NPT female, capillary

**Process connection**  
1 1/2" to 4" Tri-Clamp®

**Pressure rating**  
Up to 1,500 psi

**Suitable pressure**  
5 psi to 1,500 psi

**Wetted parts**  
SST, other-consult factory



## Sanitary InLine SEAL

**L981.22**

**Instrument connection**  
1/4" or 1/2" NPT female, capillary

**Process connection**  
3/4" to 4" Tri-Clamp®

**Pressure rating**  
Up to 1,500 psi

**Suitable pressure**  
5 psi to 1,500 psi

**Wetted parts**  
SST, other-consult factory



## 3A Sanitary Pressure Transmitters

**S-10-3A**

**Ranges**  
5 psi to 1,000 psi  
vacuum, compound

**Output**  
4-20 mA, 0-5V, 0-10V

**Accuracy**  
≤ 0.25% B.F.S.L.

**SA-11**

**Ranges**  
100 InWC to 400 psi,  
vacuum, compound

**Output**  
4-20 mA

**Accuracy**  
≤ 0.25% B.F.S.L.



S-10-3A

SA-11



## Sanitary System, Field Liquid-fillable Case

**M93X.25**

**Size**  
2 1/2"

**Case**  
Polished stainless steel

**Ring**  
Polished stainless steel, crimped

**Wetted parts**  
316L SS

**Window**  
Polycarbonate

**Process connection**  
3/4" Tri-Clamp®

**Accuracy**  
+2/1/2% of span



## Sanitary System, Field Liquid-fillable Case

**M93X.3A**

**Size**  
2 1/2", 4"

**Case**  
Stainless steel,  
electropolished

**Ring**  
Polished stainless steel

**Wetted parts**  
316L SS electropolished

**Window**  
Polycarbonate

**Process connection**  
1 1/2", 2" Tri-Clamp®, lower or back mount

**Accuracy**  
±2/1/2% of span (2 1/2"), ±1.0% of span (4")



## Sanitary Transmitter Assembly

**F-20-3A**

**Ranges**  
5 psi to 1,500 psi  
vacuum, compound

**Output**  
4-20 mA

**Wetted parts**  
316L SS,  
electropolished

**Process connection**  
3/4", 1 1/2" up to 4" Tri-Clamp®

**Accuracy**  
≤ 0.25% B.F.S.L.



1 1/2" Connection

3/4" Connection



# Mechanical Temperature Measurement

## Process Grade Bimetal Thermometers

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

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

#### Size

3", 5"

#### Case & stem

304 SS

#### Stem lengths

2½" to 72" (call factory for lengths over 72")

#### Case configuration

Back-connected, bottom-connected, adjustable angle

#### Connection

½" NPT on 3" and 5" dials (std.)

#### Window

Flat instrument glass

#### Dial

White aluminum; anti -parallax

#### Pointer

Black aluminum

#### Accuracy

±1.0% of span ASME B40.3 Grade A

#### Scale

Single °F or °C or dual scale

#### Ranges

-100°F (-70°C) to 1000°F (500°C), available in dual scale F&C, Fahrenheit only or Celsius only

#### External reset

A slotted hex adjustment head offers screwdriver or wrench use to field calibrate the thermometer

#### Fill policy

WIKA does not recommend continued use of filled instruments at operating temperatures above 400°F (204°C) or below -100°F (-70°C)

#### Hermetic seal

Hermetically sealed per ASME B40.3.; ingress protection IP 65; NEMA 4X; guaranteed not to fog

#### Immersion

For accurate temperature readings, immerse stem a minimum of 2" in agitated liquid or 4" in moving air or gas

#### Options

Dampened movement; min-max pointer; 3/8" stem; 316 SS wetted parts; safety glass; Lexan® and acrylic windows; silicone fill



TI.32



Shown with Dampened Movement (DM) option

## Industrial Grade Bimetal Thermometers

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

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

#### Size

2", 3" or 5"

#### Case & stem

304 SS

#### Stem lengths

2½" to 24"

#### Case configuration

Back-connected, bottom-connected

#### Connection

¼" NPT on 2" dials, ½" NPT on 3" and 5" dials; standard; others available

#### Window

Flat instrument glass

#### Dial

White aluminum; anti -parallax

#### Pointer

Black aluminum

#### Accuracy

±1.0% of span ASME B40.3 Grade A

#### Scale

Single °F or °C or dual scale

#### Ranges

-100°F (-70°C) to 1000°F (500°C); available in dual scale F & C, Fahrenheit only or Celsius only

#### Hermetic seal

Hermetically sealed per ASME B40.3.; ingress protection IP 65; NEMA 4X; guaranteed not to fog

#### Immersion

For accurate temperature readings, immerse stem a minimum of 2" in agitated liquid or 4" in moving air or gas



TI.20



TI.54

## Laboratory Thin Stem Thermometers

WIKA laboratory thin stem thermometers deliver fast, extremely accurate readings. They are high-quality, economical thermometers designed for laboratory and OEM applications.

### TI.T17, TI.T20

#### Size

1¾", 2"

#### Case & stem

304 SS

#### Stem lengths

5", 8", 12", 15", 18"

#### Connection

Plain, 7/16" hex hub with no threads

#### Window

Flat instrument glass

#### Dial

White aluminum

#### Pointer

Black aluminum

#### Accuracy

1.0% full scale value

#### Scale

Single °F or °C or dual scale

#### Ranges

-100°F (-70°C) to 1000°F (500°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



TI.T17

# Mechanical Temperature Measurement

## Industrial Glass Thermometers

WIKA's industrial glass thermometers offer easy-to-read temperature measurement in tough applications. Their molded housings offer excellent rigidity and impact resistance. The glass tube is also shock resistant.

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

### Features

Blue spirit fill (non-mercury); guaranteed accuracy to within  $\pm 1\%$  of scale; spring-mounted glass window to reduce rattles

### 7" & 9"

Completely adjustable locking case & stem; ranges to 550°F (288°C) in Fahrenheit, Celsius, and dual scale; available with or without thermowell

### 6"

Available with brass dual-threaded thermowell socket that fits both  $\frac{1}{2}$ " and  $\frac{3}{4}$ " NPT; ranges 40°F (-40°C) to 400°F (200°C) in Fahrenheit, Celsius, and dual scale



TI.61102

## Gas Actuated Thermometers

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

**TI.R45, TI.R60**

### Dial

4 $\frac{1}{2}$ ", 6"

### Case connection

Front flange, back flange, u-clamp, phenolic turret, direct reading adjustable angle

### Connection

Variety of connection systems

### Capillary lengths

Up to 99'

TI.R45

### Ranges

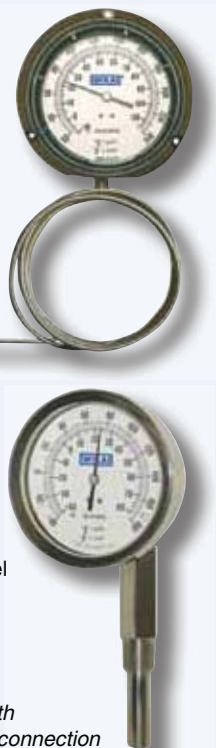
-320°F (-200°C) to 1200°F (650°C)

### Options

Dampened movement; bendable extensions up to 18" with sliding union; copper bulb, capillary & braided armor; stainless steel bulb; capillary & spring armor; stainless steel interlocking armor; acrylic or shatterproof glass window

Note: Thermometer pictured with optional thermowell installed.

TI.R45 with  
Just-Rite connection



## Solar Powered Digital Thermometers

WIKA's solar powered digital thermometer is the ideal instrument where exact readings are required, such as a pilot plant or research & development and industrial applications.

**TI.80, TI.82**

### Type

TI.80 - center back mount; TI.82 - adjustable angle

### Range

-50/300°F (-50/150°C)

### Case & stem

304 SS

### Lens

Glass-standard

### Connection

$\frac{1}{2}$ " NPT

### Sensor

Ceramic thermistor requiring 35 lux to operate the 3-volt solar cell



TI.80

## Solar Industrial Digital Thermometer

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

**TI.D01**

### Case

High-impact ABS

### Range

-50/300°F (-50/150°C)

### Accuracy

$\pm 1\%$  of reading or 1° (whichever is greater)

### Sensor

Glass passivated thermistor

### Lux rating

10 lux (one foot candle)



## Vapor Actuated Thermometers

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.

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

### Dial

2", 2 $\frac{1}{2}$ ", 3 $\frac{1}{2}$ ", 4 $\frac{1}{2}$ "

### Case style

Front flange, back flange, u-clamp

### Process Connection

Plain, threaded union, thermowell

### Capillary lengths

Up to 99'

### Ranges

-40°F (-40°C) to 350°F (176°C)

### Options

Copper bulb, capillary & braided armor; or stainless steel bulb, capillary stainless steel interlocking armor available



TI.V35

# Mechanical Temperature Measurement

## Twin-Temp Thermometers

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

### TT.30, TT.32, TT.50, TT.52

**Size**

3", 5"

**Case**

Adjustable angle case or back-connected case

**Stem**

1/4" diameter

**Length**

T/C 2 1/2" to 48"; RTD 4" to 48"

**Connection**

1/2" NPT

**Range**

-100°F (-70°) to 550°F (260°C) in Fahrenheit, Celsius and dual scale. Type K thermocouple or 100 Ohm RTD is standard. Types J, E and T are optional

**Options**

1/4" NPT, explosion-proof housing, straight barrel explosion-proof housing



TT.30  
Shown with  
female plug-in  
option



## Pocket Test Thermometer

Type TI.1005 is a bimetal dial thermometer requiring no power to deliver its quick, accurate readings. The 1" dial is easy-to-read. Stem length is 5". Thermometer includes pocket case which can be used to hold the stem.

### TI.1005

**Accuracy**

±1% of full scale

**Case**

Stainless steel

**Stem**

.142" diameter

**Length**

5"

**Range**

-40/160°F; 0/220°F;  
50/550°F

**Pointer**

Aluminum with matte red finish



## Thermowells

Thermowells for temperature instruments are recommended for all processes where measurement is of a corrosive medium, high pressure or high flow application. 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 09-09 requirements. WIKA also manufactures thermowell conversion kits to adapt different thermowells to new types of thermometers.

### TW.FL / TW10, TW.TH / TW15, TW.SW / TW20, TW.WI / TW25, TW.SC / TW30

**Process connections**

Threaded, flanged, welded, sanitary

**Instrument connection**

1/2" 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; sanitary:  
(AISI 304 & 316): 16-32Ra



# High Precision & Calibration

WIKA high precision and test gauges are extremely sensitive and highly accurate. They are ideal for instrument shops, gauge repair, calibration labs, testing laboratories and other applications demanding high precision and consistent results. These gauges feature a mirrored band on the dial and a knife-edge pointer to eliminate parallax reading errors.

## High Accuracy Test Gauge, Grade 3A

**312.20, 332.30**

**Size**  
6"

**Case**  
304 SS

**Ring**  
Stainless steel bayonet, twist-on

**Wetted parts**  
312.20 - copper alloy;  
332.30 - 316 SS

**Window**  
Laminated safety glass

**Ranges**  
Vacuum / compound to 200 psi; pressure from 15 psi to 10,000 psi or other equivalent units of pressure or vacuum

**Accuracy**  
±0.25% of span



## High Precision Test Gauge, Grade 4A

**342.11**

**Size**  
10"

**Case**  
Cast aluminum, dark grey

**Connection**  
316 SS

**Bourdon tube**  
Ni-span®

**Window**  
Green tinted acrylic, non-reflecting

**Ranges**  
Vacuum / compound to 30"Hg / 0 / 200 psi; pressure from 10 psi to 20,000 psi or other equivalent units of pressure or vacuum

**Accuracy**  
±0.1% of span



## High Accuracy Test Gauge, Grade 3A

**332.54**

**Size**  
4"

**Case**  
304 SS

**Ring**  
Polished stainless steel bayonet, twist-on

**Wetted parts**  
316 SS

**Window**  
Laminated safety glass

**Ranges**  
Vacuum 30" Hg / 0 / 200 psi; pressure from 15 psi to 10,000 psi or other equivalent units of pressure or vacuum

**Accuracy**  
±0.25% of span



**Size**  
4½"

**Case**  
Black fiberglass reinforced thermoplastic

**Ring**  
Black fiberglass reinforced thermoplastic

**Wetted parts**  
316 SS

**Window**  
Acrylic

**Ranges**  
Vacuum 30" Hg; pressure from 15 psi to 20,000 psi or other equivalent units of pressure or vacuum

**Accuracy**  
±0.25% of span



## Direct Drive Solid-front Test Gauge

**332.34DD**

**Size**  
4½"

**Case**  
Red fiberglass reinforced thermoplastic (PBTP)

**Window**  
Clear acrylic with Buna-N gasket

**Ranges**  
Vacuum / compound to 300 psi  
Pressure from 30 psi to 10,000 psi or other equivalent units of pressure or vacuum

**Accuracy**  
±0.25% of span (ASME B40.100 Grade 3A)



## Hinged Ring Test Gauges, Grade 3A

**332.25, 312.25**

**Size**  
4½"

**Case**  
Black painted aluminum with hinged ring cover

**Wetted parts**  
316 SS - 332.25,  
Copper alloy - 312.25

**Window**  
Safety glass

**Ranges**  
Vacuum 30" Hg / 0 / 200 psi; pressure from 15 psi to 10,000 psi or other equivalent units of pressure or vacuum

**Accuracy**  
±0.25% of span



# High Precision & Calibration

WIKA has calibration test equipment available for temperature or pressure, mechanical or electronic, field use, or use in labs. With EN and N.I.S.T. traceable products, WIKA can provide the required equipment to maintain metrology and calibration laboratories.

## Hand-held Pressure Calibrator

### CPH 6600

#### Ranges

-28" Hg to 30 psi

#### Display

Pressure, temperature and mA output simultaneously

#### Pump

Integrated hand pump (300 psi)  
Integrated electric pump  
(ranges 30 psi and 150 psi)

#### Accuracy

Certified to NIST 0.025%

#### Features

Source/measure 4 ... 20 mA and  
24 V loop power to power device under test  
Pt100 RTD input for temperature measurement,  
accurate to 0.2 °F (measurement only)



## Pressure Monitor

### CPH 6200

#### Ranges

0...100 mbar to 1...1,000 bar  
via plug and play transmitters

#### Accuracy

0.2% of full scale (optional 0.1%  
increased accuracy upon request)

#### Display

7 selectable display units with  
current shown simultaneously  
with mA or volts

#### Modes

Available gauge pressure and differential pressure;  
can also be supplied with ATEX certification  
Ex ib 11c T4



## Pressure Controller

### CPH 6000

#### Ranges

-30 inHg - 15,000 psi via plug  
and play transmitters

#### Accuracy

.025% of full scale

#### Display

15 selectable display units with  
current shown simultaneously  
with mA or volts

#### Modes

Unit is capable of both calibration and switch test



## Digital Test Gauge

### CPG 1000

#### Pressure units

Displays in 18 standard pressure  
units with 1 custom unit

#### Features

MIN/MAX, TARE, dampening

#### Approvals

CSA/US intrinsically safe, Class 1, Div. 2 Groups  
A, B, C, & D; CE approved

#### Accuracy

±0.05% full scale



## Digital Pneumatic Calibrator

### 65-2000 Professional

#### Range

-10...100 psi (-0.7...7 bar)

#### Pressure units

psi, mbar, bar, kPa, mHg, mH<sub>2</sub>O (4°C),  
in. H<sub>2</sub>O (20°), in. Hg

#### Accuracy

0.02% of reading ± 3 digits (including  
linearity, hysteresis and temperature  
error)



## Digital Pneumatic Calibrator

### 65-2000 II Professional Plus

#### Range

-10...0...100 psi~ (-0.7...7 bar)

#### Sensor type

Differential pressure  
(max. 100 psi static)

#### Units

mbar, bar, kPa, mmHg,  
psi, in. H<sub>2</sub>O (20°)

#### Voltage measurement

0...± 32 V DC

#### Current measurement

0...± 32 mA DC

#### Transmitter supply

24 V DC + 5%; max. 30 mA (galv. isolated max. 500 VDC)

#### Pneumatic

Precision pressure regulator (for external pressure supply);  
pressure hand pump with volume controller for standalone  
pressure supply

#### Accuracy

0.02% of reading ± 3 digits (including linearity, hysteresis and  
temperature error)





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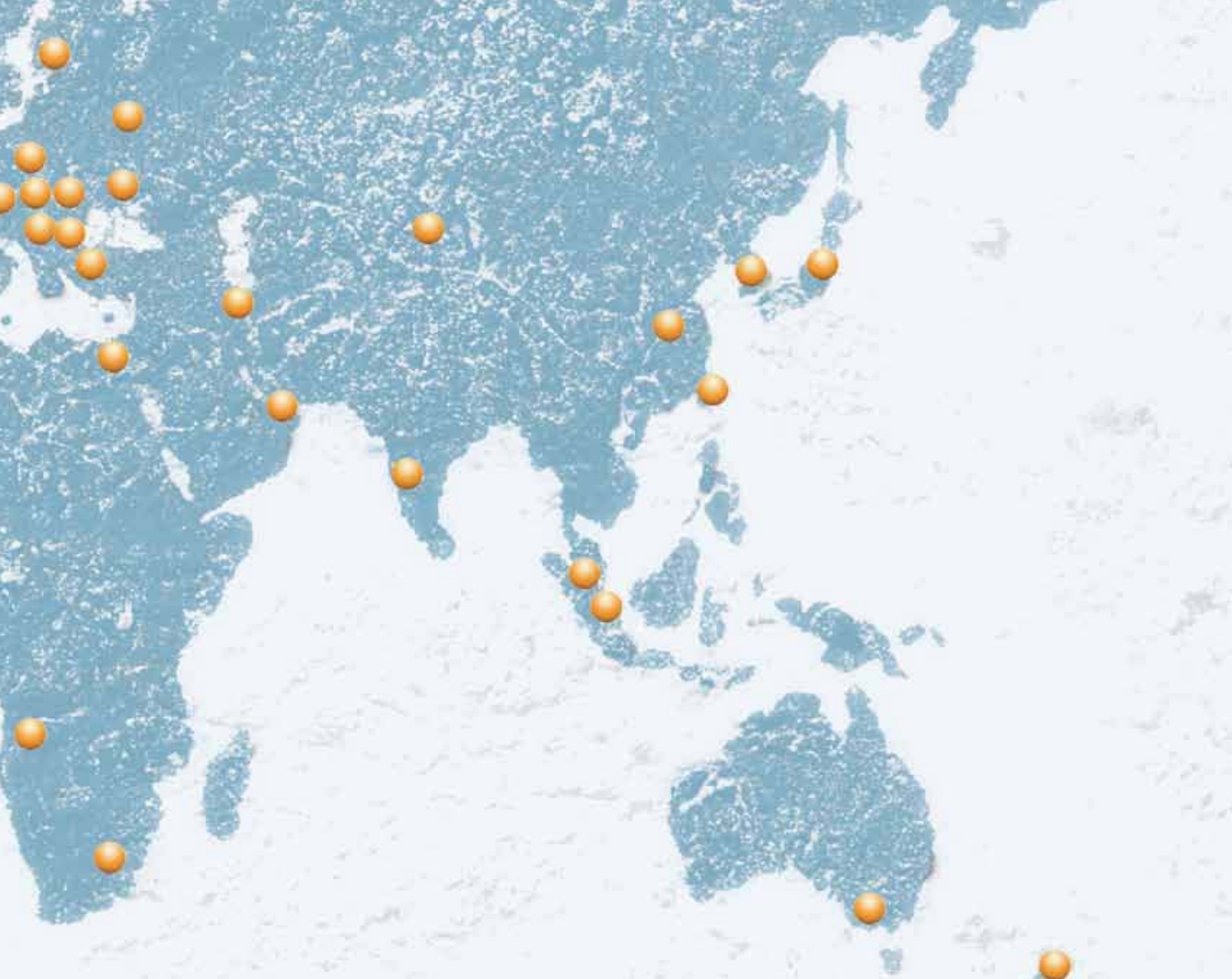
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**ISO 9001  
Certified**

For over 60 years, WIKA Instrument Corporation has continuously advanced pressure gauge, transmitter and temperature measurement instrumentation. As the global leader in lean manufacturing, WIKA offers a broad selection of stock and custom instrumentation solutions, which are often available for distribution within days. Producing over 43 million gauges, diaphragm seals, transmitters and thermometers worldwide annually, WIKA's extensive product line provides measurement solutions for any application. The WIKA sales team, along with its customer service and technical staff members, are ready to share their extensive product and industry knowledge to make your business experience with WIKA productive and progressive.



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**S-10**

WIKA provides distinctive service and support to our channel partners and customers:

- Award winning U.S.-based manufacturing, sales and ordering customer service and technical support
- Certified technical specialists who conduct Best Practice Instrument Reviews with performance improvement reports
- An in-house engineering team for product customization and innovation
- Proven capabilities to connect with customer business processes for ordering and inventory management
- Web-based customer service features, including RFQs, literature request and competitor product cross reference

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