Instrumentation for Water Applications
Pressure and Temperature Measurement
**General Purpose Gauge, Dry**

233.55

This gauge is designed for applications where the measured media does not corrode copper alloy. Typical applications are pumps, hydraulic and pneumatic systems and compressors.

Models 111.10DW and 111.12DW are NSF 61-G certified with lead-free wetted parts and are suitable for all drinking water applications.

Size: 1½”, 2”, 2½”, 4” (111.10/12)
2”, 2½”, 4” (111.10DW)
1½”, 2”, 2½”, (111.12DW)

Connection: LM (111.10 & 111.10DW)
CBM (111.12 & 111.12DW)

Case: Black ABS plastic
Wetted parts: Copper alloy
Window: Snap-in-acrylic
Accuracy: ±3/2/3% of span

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**Contractor’s Gauge**

111.25CT & 111.25DW

This contractor’s gauge is well suited for static applications. The dial-face provides ease of reading from a distance.

Model 111.25DW is NSF 61-G certified with lead-free wetted parts and suitable for all drinking water applications.

Size: 4½”

Case: Stainless steel
Wetted parts: Copper alloy
Window: Snap-in-acrylic
Accuracy: ±1.0% of span

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**Stainless Steel Case with Brass Wetted Parts, Field Liquid Fillable**

21X.53 & 21X.53DW

Type 212.53/213.53 are ideal choices for OEM and general industrial applications requiring an economical dry or liquid filled pressure gauge. Typical applications include pumps, control systems, hydraulic and pneumatic equipment.

Models 212.53DW and 213.53DW are NSF 61-G certified with lead-free wetted parts and suitable for all drinking water applications.

Size: 2”, 2½”, 4” (21X.53)
2½” only (21X.53DW)

Case: Stainless steel
Ring: Polished stainless steel crimped-on
Wetted parts: Copper alloy
Window: Polycarbonate
Liquid filling: None (212.53); glycerine (213.53)
Accuracy: ±2/1/2% of span (2”, 2½”); ±1.0% of span (4”)

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**Panel Builder Gauge**

233.55

The type 233.55 LBM is specifically designed and manufactured to exact panel builder requirements. With exclusive features, it is ideal when used for panel mount applications in the water industry on pumps, controls and skid systems.

Size: 2½”

Case: Stainless steel
Wetted parts: 316 SS
Window: Laminated safety glass
Accuracy: ±2/1/2% of span
### Sealgauge, Cast Iron

**4XX.12**

The WIKA Sealgauge utilizes a mechanical linkage, which eliminates the need for a system fill fluid. Sealgauges are capable of up to 10 times overpressure and low pressure applications to inches of water column. Sealgauges are built to withstand the corrosive, highly viscous and clogging media (gaseous or liquid) typical of water and wastewater treatment plants.

- **Size:** 4", 6"
- **Case:** Cast iron, black finish
- **Ring:** Black painted steel
- **Diaphragm:** Stainless steel
- **Lower housing:** Carbon steel (422.12); 316 SS (432.12)
- **Window:** Instrument glass
- **Accuracy:** ±1.5% of span

### Optional Alarm Contact

The WIKA indicating pressure switch combines local pressure indication with alarm and control capabilities into a single, economical and compact system.

### Sealgauge, All Stainless Steel

**43X.50**

Size: 4", 6"

- **Case:** 304 SS
- **Ring:** 304 SS, polished
- **Diaphragm:** Inconel®, PTFE-lined
- **Lower housing:** 316 SS
- **Window:** Laminated safety glass
- **Liquid filling:** None (432.50); glycerine (433.50)
- **Accuracy:** ±1.5% of span

### Differential Gauges, Dry or Liquid Filled

**700.04**

This piston-style differential pressure gauge is designed for use with clean liquid or gaseous media where high differential pressure/static process pressures are required. The 700.04 is suitable for measuring pressure drops across a variety of devices, including filters, strainers, separators and heat exchangers.

- **Size:** 2½", 4½"
- **Case & bezel:** Reinforced plastic
- **Sensor housing:** 316L SS or black anodized aluminum
- **Wetted parts:** Aluminum or 316 SS and ceramic magnet
- **Window:** Acrylic or shatter-resistant glass
- **DP range:** 0-5 psid thru 0-100 psid
- **Working pressure:** Up to 6,000 psig
- **Accuracy:** ±2% of span (increasing)

**700.05**

This piston-style differential pressure gauge with separating diaphragm, is suited for use in applications requiring low/medium differential and medium/high process pressure media. The 700.05 is intended for measuring pressure drops across filters, strainers, separators, heat exchangers and gas recovery systems.

- **Size:** 2½", 4½"
- **Case & bezel:** Reinforced plastic
- **Sensor housing:** 316L SS or black anodized aluminum
- **Wetted parts:** Aluminum or 316 SS and ceramic magnet
- **Window:** Acrylic or shatter-resistant glass
- **DP range:** 0-50" H2O thru 0-100 psid
- **Working pressure:** Up to 3,000 psig
- **Accuracy:** ±2% of span (increasing), ranges 15 psi thru 100 psi; ±5% of span (increasing), ranges 50" H2O thru 300" H2O
Plastic Threaded Diaphragm Seal

**L990.31**

Type L990.31 provides instrument isolation for chemical applications not compatible with metal alloys and can be mounted with a gauge (as shown), transmitters or switches.

- **Upper housing:** Universal upper housing with polypropylene glass fiber reinforced
- **Lower housing:** PVC-U, PP and PVDF
- **Process connection:** Reinforced NPT
- **Diaphragm:** EPDM, teflon-coated on the medium side
- **Working pressure:** 60* psi - 200 psi

*with a 2½” gauge only*
## Programmable Solid State Pressure Switch

**PSD-30**

The PSD-30 is designed for pumps and compressors, machine tools, machine building, hydraulics and pneumatics and many other industrial applications. It is available with single or dual NPN or PNP solid state switches.

- **Ranges:** 15 psi to 8,000 psi
- **Display:** High visibility, 14 segment red LED display
- **Switch points:** User programmable

## Submersible Level Transmitters

**LS-10/LH-10**

Submersible level transmitters have a watertight construction suitable for applications in tank level measurement, water/wastewater treatment and reservoir or well depth measurement. They are submersible up to 1,000 feet and the integrated cable can withstand up to 220 lbs of strain.

- **Ranges:** 50 inWC to 400 psi
- **Output:** 4-20 mA, 2-wire
- **Accuracy:** \( \leq 0.125\% \text{ B.F.S.L.} \)

## Anti-Clog Attachment for Level Transmitters

**LevelGuard**

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.

## Universal Process Transmitter

**UPT-20**

The UPT-20 has a turndown capability of up to 20:1 and is available with the HART ® communications protocol. The high readability LCD display rotates 330° to optimize the viewing angle after installation. The intuitive programming menu is user-friendly for easy setup.

- **Ranges:** 0…10 psi to 0…10,000 psi
- **Output:** 4-20 mA 2-wire
- **Accuracy:** up to 0.10% of span

## Intrinsically Safe Transmitters

**IS-20**

The IS-20 series of intrinsically safe pressure transmitters are designed for industrial pressure measurement applications in hazardous areas where intrinsically safe ratings are required. Multiple intrinsically safe approvals including FM, ATEX and CSA ensure compliance.

- **Ranges:** 50 inWC to 60,000 psi, vacuum, compound, absolute
- **Output:** 4-20 mA
- **Accuracy:** \( \leq 0.25\% \text{ B.F.S.L.} \)

**IS-20-F**

Type IS-20-F features an integral stainless steel junction box with internal terminal block for use in extremely harsh environments. A ¼” NPT female conduit connection is standard on all models and a cable compression electrical connection is available as an option.

- **Ranges:** 50 inWC to 60,000 psi, vacuum, compound, absolute
- **Output:** 4-20 mA
- **Accuracy:** \( \leq 0.25\% \text{ B.F.S.L.} \)

**IL-10**

WIKA IL-10 intrinsically safe submersible liquid level transmitters are engineered for a wide variety of industrial and municipal liquid level measurement applications installed in hazardous areas. Each transmitter undergoes extensive quality control testing and calibration to achieve high accuracy and reliability.

- **Ranges:** 50 inWC to 400 psi
- **Output:** 4-20 mA, 2-wire
- **Accuracy:** \( \leq 0.125\% \text{ B.F.S.L.} \) may be present

## Twin-Temp Thermometer

**TT.52**

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 puts two temperature sensors to work from one insertion point.

- **Ranges:** -100°F (-70°C) to 550°F (260°C)
- **Accuracy:** +/- 1.0% of span for each sensor
WIKA Instrument, LP manufactures a complete line of pressure and temperature instrumentation engineered for the water industry. This diagram illustrates how WIKA’s proven products and technology can help ensure reliability at every stage of the water purification and wastewater treatment process.
The color coded selection guide provides easy product identification for the most common pressure measurement requirements in the water industry. Featured products have been selected for their design, durability and tested performance in critical water applications.
With almost 70 years of experience, WIKA Instrument, LP is the leading global manufacturer of pressure and temperature measurement instrumentation, producing more than 43 million pressure gauges, diaphragm seals, pressure transmitters, thermometers and other instruments annually. WIKA’s extensive product line, including mechanical and electronic instruments, provides measurement solutions for any application in a large variety of industries. A global leader in lean manufacturing and instrumentation experience, WIKA also offers a broad selection of stock and custom instrumentation as well as dedicated services to provide customers with the right solutions, at the right time, wherever they need us.

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