

Instrumentation for Water Applications

Pressure and Temperature Measurement



Part of your business

Mechanical Pressure Measurement



XSEL™ Process Gauge

2XX.34

WIKA XSEL™ process gauges are specifically designed and engineered to provide reliable service in harsh and rugged environments.

Size: 4½", 6"
 Case: black fiberglass reinforced thermoplastic
 Wetted parts: 21X.34 - brass; 22X.34 - steel; 23X.34 - 316 ss; 26X.34 - Monel®
 Ring: threaded thermoplastic
 Window: acrylic
 Accuracy: ±0.5% of span



Process Gauge w/alarm contact

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, 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 crystallizing media (gaseous or liquid) typical of water and wastewater treatment plants.



Size: 4", 6"
 Case: cast iron
 Ring: black painted steel
 Diaphragm: 422.12- <30 psi 316 stainless steel; >30 psi Duratherm (Nicro-Alloy) 432.12- 316 stainless steel
 Lower housing: carbon steel (422.12); 316 stainless steel (432.12)
 Window: instrument glass
 Accuracy: ±1.5% of span



Sealgauge, All Stainless Steel

43X.50

Size: 4", 6"
 Case: 304 stainless steel
 Ring: 304 stainless steel, polished
 Diaphragm: 316 stainless steel, PTFE-lined
 Lower housing: 316 stainless steel
 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 or aluminum
 Sensor housing: 316L stainless steel or black anodized aluminum
 Wetted parts: aluminum or 316 stainless steel and ceramic magnet
 Window: acrylic or shatter-resistant glass
 DP range: 0-5 psid thru 0-100 psid
 Working pressure: up to 6000 psig
 Accuracy: ±2% of span (increasing)



4½"



Differential Gauges, Dry or Liquid Filled

700.05

This diaphragm-style differential pressure gauge, which eliminates "blow-by", 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 or aluminum
 Sensor housing: 316L stainless steel or black anodized aluminum
 Wetted parts: aluminum or 316 stainless steel and ceramic magnet Buna N diaphragm
 Window: acrylic or shatter-resistant glass
 DP range: 0-50" H₂O thru 0-100 psid
 Working pressure: up to 3000 psig
 Accuracy: ±2% of span (increasing), ranges 15 psi thru 100 psi; +5% of span (increasing), ranges 50" H₂O thru 300" H₂O



2½"



4½"

Mechanical Pressure Measurement

General Purpose Gauge, Dry

111.10

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.

Size: 1½", 2", 2½", 4"
 Case: black ABS plastic
 Wetted parts: copper alloy
 Window: snap-in-acrylic
 Accuracy: ±3/2/3% of span



NSF
Available

Contractor's Gauge

111.25CT

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

Size: 4½"
 Case: stainless steel
 Wetted parts: copper alloy
 Window: snap-in-acrylic
 Accuracy: ±1.0% of span



Stainless Steel Case with Brass Wetted Parts, Field Liquid Fillable

212.53/213.53

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.

Size: 2", 2½", 4"
 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")



NSF
Available

Heavy Duty Service, Field Liquid Fillable

212.54/213.54

This gauge offers long and reliable service under rugged conditions and is required for heavy-duty service in industrial environments.

Size: 2½", 4"
 Case: stainless steel
 Bayonet ring: stainless steel twist-on
 Wetted parts: copper alloy
 Window: laminated safety glass
 Liquid filling: none (212.54); glycerine (213.54)
 Accuracy: ±1.5% of span (2½"); ±1.0% of span (4")



Large Diameter, All Stainless Steel Gauge

232.50/233.50

The 50 series features construction for protection from harsh environments and corrosive process fluids. The large 6" diameter of the type 232.50/233.50 gauge makes it ideal for applications that require dial reading from a distance.

Size: 2½", 4", 4½", 6"
 Case: stainless steel
 Bayonet ring: stainless steel twist-on
 Wetted parts: 316 stainless steel
 Window: laminated safety glass
 Liquid filling: none (232.50); glycerine (233.50)
 Accuracy: ±2/1/2% of span (2½"); ±1.0% of span (4", 4½", 6")



All Stainless Steel Gauge, Field Liquid Fillable

232.54/233.54

With all stainless steel construction, these industrial gauges ensure long service life in the harshest, most demanding environments. Typical applications include process, chemical, water/wastewater and pollution control equipment requiring high quality, long lasting pressure measurement instrumentation.

Size: 2½", 4"
 Case: stainless steel
 Bayonet ring: stainless steel twist-on
 Wetted parts: 316 stainless steel
 Window: laminated safety glass
 Liquid filling: none (232.54); glycerine (233.54)
 Accuracy: ±2/1/2% of span (2½"); ±1.0% of span (4")



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 stainless steel
 Window: laminated safety glass
 Accuracy: ±2/1/2% of span



Diaphragm Seals / Electronic Pressure Measurement

All Welded System (AWS)

M93X.D1

The all-welded, tamper-resistant construction is ideal for tightly controlled environmental emissions and safety applications requiring gauge isolation from aggressive or clogging media.

Gauge: Refer to 2XX.34

Seal

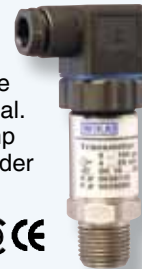
Type: L990.TA
 Process connection: 1/2" NPT- male
 Diaphragm: 316L stainless steel
 Body material: 316L stainless steel
 System fill fluid: silicone oil, DC200-10, KN68



Standard Industrial Transmitters

S-10

The rugged S-10 pressure transmitters are designed for use in harsh environments where accuracy, reliability and repeatability are critical. Applications include: discharge controls, pump stations, booster pumps, dewatering and grinder systems, blowers and numerous other water operations.



Ranges: 50 inWC to 40,000 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.

Standard Industrial with Flush Diaphragm Transmitters

S-11

The S-11 flat diaphragm pressure transmitter is designed for applications with sludge, slurry or high viscosity media which may otherwise clog the process connection.

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.



Direct Drive System (DDS)

M932.DD

The WIKA M932.DD DDS combines the features of a direct drive process gauge with the benefits of a mini-seal. The DDS is the ideal solution for tightly controlled environmental emissions and safety applications.

Gauge

Type: 232.34DD
 Size & case: 4 1/2" fiberglass thermoplastic
 Connection: lower mount
 Socket & tube: stainless steel, Inconel X-750, micro-braze
 Window: acrylic
 Accuracy: ±0.5% of span



Seal

Type: L990.TA
 Process connection: 1/2" NPT - male
 Diaphragm: 316L stainless steel
 Body material: 316L stainless steel
 System fill fluid: silicone oil, DC200-10, KN68

OEM Transmitters

A-10

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.

Ranges: 15 psi to 15,000 psi
 Output: 4-20 mA, 0 - 10 V, 0 - 5 V, others
 Accuracy: ≤ (+/-) 0.5% B.F.S.L.



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

Maximum working pressure: 160 psi



Explosion Proof Transmitters

E-10/E-11

The E series transmitters are FM-approved explosion proof for Class I, Division I locations. Utilizing the same thin film technology as the industrial series of transmitters, the E-10 and E-11 are well suited for pump and control systems in enclosed environments where volatile or explosive conditions may exist.

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.



E-10 E-11



Electronic Pressure Measurement / Mechanical Temperature

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

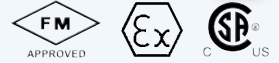


Intrinsically Safe Transmitters

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: $\leq 0.25\%$ B.F.S.L.

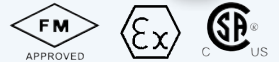


Intrinsically Safe Transmitters

IS-20-F

Model IS-20-F features an integral stainless steel junction box with internal terminal block for use in extremely harsh environments. A 1/2" 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: $< 0.25\%$ B.F.S.L.



Intrinsically Safe Transmitters

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: $\leq 0.125\%$ B.F.S.L. may be present



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: $\leq 0.25\%$ - 0.125% 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.



UniTrans® Transmitters

UT-10/IUT-10

The UniTrans® has a turndown capability of up to 20:1, is tank scalable and includes an integral temperature sensor. An intrinsically safe version is also available with a HART® communications interface. The UniTrans™ provides an excellent alternative to expensive smart transmitters when local and remote indication from a transmitter is required.

Ranges: 5 psi to 15,000 psi
 Output: 4-20 mA
 Accuracy: $\leq 0.15\%$ B.F.S.L. (pre-turndown)



Twin-Temp Thermometer

TT.52

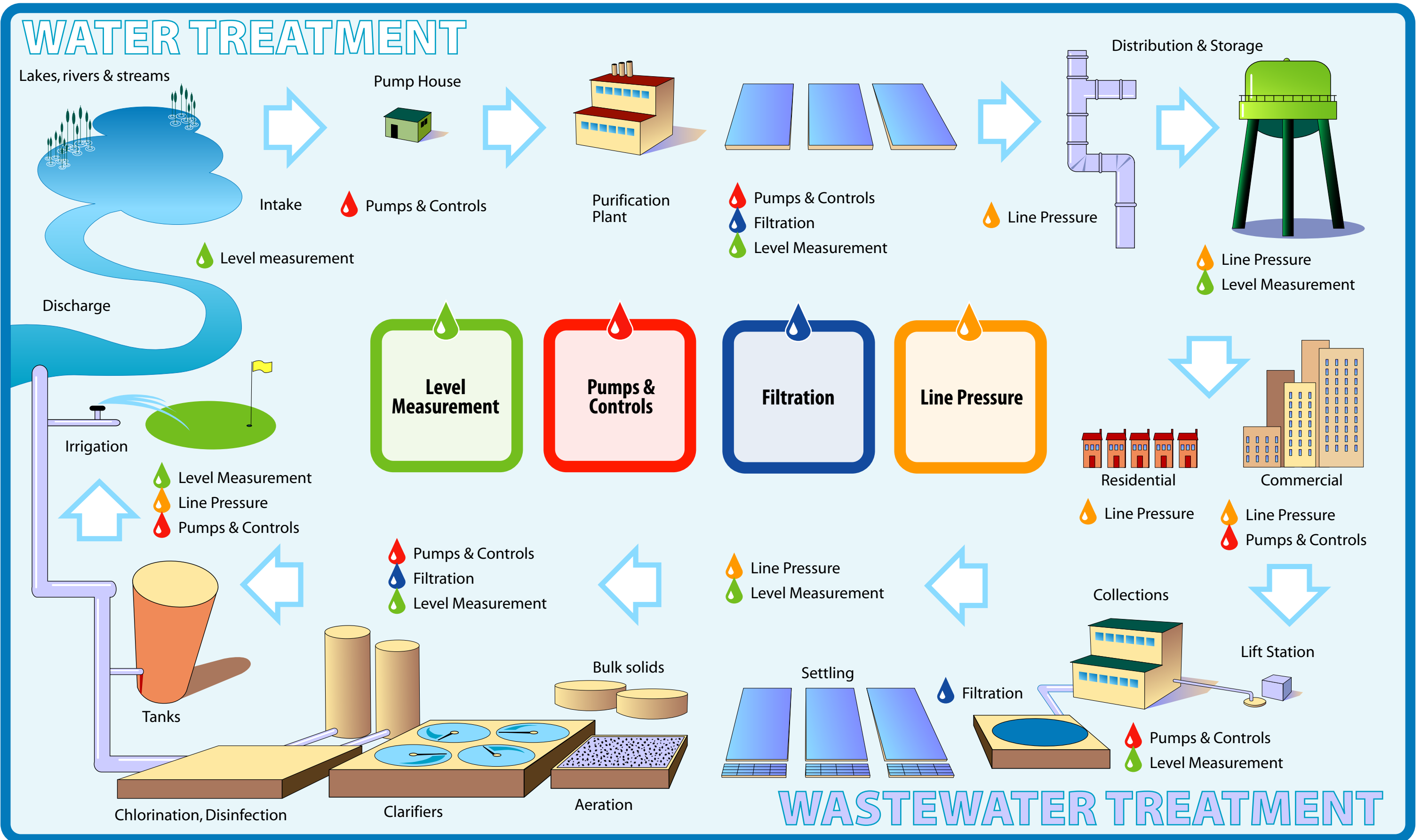
WIKA's unique Twin-Temp thermometers combine the accuracy, reliability and easy-to-read dial of a bimetal thermometer with the precision readout and data acquisition of a thermocouple or RTD sensor. The Twin-Temp puts two temperature sensors to work from one insertion point.

Ranges: -100°F (-70°C) to 550°F (260°C)
 Accuracy: $\pm 1.0\%$ of span for each sensor



WIKA Instrument Corporation 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 insure 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.





**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 40 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.



M93X.D1 (AWS)



LevelGuard

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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