<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solutions and Services</td>
<td>3</td>
</tr>
<tr>
<td>Your Reliable Partner</td>
<td>4</td>
</tr>
<tr>
<td>Mechanical Pressure Measurement</td>
<td>5</td>
</tr>
<tr>
<td>Test Gauges</td>
<td>18</td>
</tr>
<tr>
<td>Calibration Equipment</td>
<td>19</td>
</tr>
<tr>
<td>Valves &amp; Manifolds</td>
<td>20</td>
</tr>
<tr>
<td>Pressure Gauge Options</td>
<td>22</td>
</tr>
<tr>
<td>Pressure Gauge Accessories</td>
<td>24</td>
</tr>
<tr>
<td>Mechatronic Pressure Measurement</td>
<td>26</td>
</tr>
<tr>
<td>Electronic Pressure Measurement</td>
<td>31</td>
</tr>
<tr>
<td>Diaphragm Seals</td>
<td>38</td>
</tr>
<tr>
<td>Sanitary Solutions</td>
<td>41</td>
</tr>
<tr>
<td>Mechanical Temperature Measurement</td>
<td>44</td>
</tr>
<tr>
<td>Electrical Temperature Measurement</td>
<td>46</td>
</tr>
<tr>
<td>Tubeskins &amp; Multipoints</td>
<td>48</td>
</tr>
<tr>
<td>Thermowells</td>
<td>50</td>
</tr>
<tr>
<td>Level Measurement</td>
<td>52</td>
</tr>
<tr>
<td>Flow Measurement</td>
<td>54</td>
</tr>
<tr>
<td>Force Measurement</td>
<td>56</td>
</tr>
<tr>
<td>Services</td>
<td>58</td>
</tr>
</tbody>
</table>
Solutions and Services for Pressure, Temperature, Level, Flow, and Force Measurement

At WIKA USA, we go to great lengths to ensure the quality of our measurement technology. From standard products to engineered solutions, quality control starts with our production systems, which are based on Kaizen, Lean Manufacturing and Six Sigma principles.

This focus on quality is consistent throughout the WIKA group of companies around the globe, which offer an extensive portfolio of pressure, temperature, level, flow, and force measurement solutions and services.

Wherever you are in the world, you can rely on WIKA quality.
WIKA USA: Your Reliable Partner for Measurement Technology

WIKA USA’s LeanSigma® Methodology
WIKA USA 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, WIKA USA has developed a 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 a few days.
- 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 WIKA USA having the industry’s shortest lead times. You will get exactly what you want, when you need it!

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

WIKA USA’s NIST Traceable Calibration Lab
WIKA USA’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.

A variety of instruments, including mechanical and electronic pressure measuring instruments, deadweight testers, temperature sensors, resistance thermometers, and dry well calibrators can all be calibrated and certified by WIKA USA.
Mechanical Pressure Measurement

WIKI USA offers pressure measurement technologies to help you monitor the absolute, gauge, vacuum, and differential pressure of your operations. Our solutions are designed to ensure durability and reliability even in the most aggressive conditions.

We maintain consistent quality across product offerings to guarantee you have trusted data to keep running efficiently and safely.
Mechanical Pressure Measurement
Utility Gauges - Dry

**111.10**
Utility Gauge, Lower Mount

- **Case size:** 1.5", 2", 2.5" & 4"
- **Pressure Ranges:** -30...0"Hg up to 0...5000 psi
- **Wetted Parts:** Copper alloy
- **Case:** Black plastic
- **Accuracy:** ± 3/2/3% of full span
- **Unique Features:** Special case materials (optional)
- **Data Sheet:** 111.10

**111.12**
Utility Gauge, Back Mount

- **Case size:** 1.5", 2", 2.5" & 4"
- **Pressure Ranges:** -30...0"Hg up to 0...5000 psi
- **Wetted Parts:** Copper alloy
- **Case:** Black plastic
- **Accuracy:** ± 3/2/3% of full span
- **Unique Features:** Special case materials (optional), Panel mount w/u-clamp (optional)
- **Data Sheet:** 111.12

**111.11**
Regulator Gauge

- **Case size:** 1.5", 2" & 2.5"
- **Pressure Ranges:** -30...0"Hg up to 0...5000 psi
- **Wetted Parts:** Copper alloy
- **Case:** Steel gold plated
- **Accuracy:** ± 3/2/3% of full span
- **Unique Features:** UL 252 & UL 404 approvals, Free of oil and grease, Other case materials (optional)
- **Data Sheet:** 111.11
Mechanical Pressure Measurement
Factory Liquid Filled

Utility Gauge, Liquid Filled

Case size: ■ 1.5", 2" & 2.5"
Pressure Ranges: ■ -30…0"Hg up to 0…5000 psi
Wetted Parts: ■ Copper alloy
Case: ■ 304 stainless steel
Accuracy: ■ ± 1.0 % of full span
Unique Features: ■ Factory glycerin filled
Data Sheet: ■ 113.13

Hydraulic Gauge, Economy Style

Case size: ■ 2", 2.5" & 4"
Pressure Ranges: ■ -30…0"Hg up to 0…15000 psi
Wetted Parts: ■ Brass
Case: ■ 304 stainless steel
Ingress Protection: ■ IP 65
Accuracy: ■ ± 2/1/2 % of full span
Unique Features: ■ Factory glycerin filled
Data Sheet: ■ 213.53

Hydraulic Gauge
Liquid Filled

Case Size
2½” & 4”
Pressure Ranges
-30…0"Hg up to 0…15000 psi
Wetted parts
Copper alloy
Case
Cast brass
Ingress Protection
IP 65
Accuracy
± 2/1/2 % of full span
Unique Features
Factory glycerin filled
ABS gold colored cover ring
Data Sheet
213.40

■ Best Hydraulic Gauge in the industry
■ Serves the US market for 50 years
■ One-piece cast brass case & socket
■ Extremely shock and vibration resistant design
■ Bourdon tube soldered into the case
■ Factory liquid filled with 99.7% Glycerin
■ Comes standard with ABS Gold colored cover ring
■ Several mounting options (surface/panel) available
## Mechanical Pressure Measurement

**NSF-61-G Approved Drinking Water Gauges**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Case size</th>
<th>Pressure Ranges</th>
<th>Wetted Parts</th>
<th>Case</th>
<th>Accuracy</th>
<th>Unique Features</th>
<th>Data Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>111.25DW</td>
<td>Drinking Water Gauge, Contractor Style</td>
<td>4.5&quot;</td>
<td>-30...0&quot;Hg up to 0...600 psi</td>
<td>Lead free brass (≤ 0.25%)</td>
<td>304 Stainless steel</td>
<td>± 3/2/3% of full span</td>
<td>NSF 61 G approved, Meets &quot;Safe drinking water act&quot; of 2015</td>
<td>111.25DW</td>
</tr>
<tr>
<td>111.10DW, 111.12DW</td>
<td>Drinking Water Gauge, Lower Mount, Back Mount</td>
<td>1.5&quot;, 2&quot;, 2.5&quot;, 4&quot;</td>
<td>-30...0&quot;Hg up to 0...600 psi</td>
<td>Lead free brass (≤ 0.25%)</td>
<td>Black plastic (standard)</td>
<td>± 3/2/3% of full span</td>
<td>NSF 61 G approved, Meets &quot;Safe drinking water act&quot; of 2015</td>
<td>111.10DW, 111.12DW</td>
</tr>
<tr>
<td>213.53DW</td>
<td>Drinking Water Gauge, Liquid Filled</td>
<td>2.5&quot;</td>
<td>-30...0&quot;Hg up to 0...600 psi</td>
<td>Lead free brass (≤ 0.25%)</td>
<td>304 Stainless steel</td>
<td>± 2/1/2% of full span</td>
<td>NSF 61 G approved, Meets &quot;Safe drinking water act&quot; of 2015, Factory liquid filled</td>
<td>213.53DW</td>
</tr>
</tbody>
</table>
# Mechanical Pressure Measurement

## All Stainless Steel Gauges

### 232.53, 233.53

**Crimped Bezel, Field Liquid Fillable**

<table>
<thead>
<tr>
<th>Case size:</th>
<th>2&quot;, 2.5&quot; &amp; 4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ranges:</td>
<td>-30...0&quot;Hg up to 0...15,000 psi</td>
</tr>
<tr>
<td>Wetted Parts:</td>
<td>316 stainless steel</td>
</tr>
<tr>
<td>Case:</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Ingress Protection:</td>
<td>IP 65</td>
</tr>
</tbody>
</table>

**Accuracy:**
- ± 2/1/2% of full span (2" & 2.5")
- ± 1% of full span (4")

**Unique Features:**
- Field fillable
- Easily adaptable with u-clamp bracket & front flange (optional)
- Liquid filled version 233.53

**Data Sheet:**
- 23X.53

### 232.54, 233.54

**Bayonet Bezel, Field Liquid Fillable**

<table>
<thead>
<tr>
<th>Case size:</th>
<th>2.5&quot; &amp; 4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ranges:</td>
<td>-30...0&quot;Hg up to 0...15,000 psi</td>
</tr>
<tr>
<td>Wetted Parts:</td>
<td>316 stainless steel</td>
</tr>
<tr>
<td>Case:</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Ingress Protection:</td>
<td>IP 65</td>
</tr>
</tbody>
</table>

**Accuracy:**
- ± 2/1/2% of full span (2.5")
- ± 1% of full span (4")

**Unique Features:**
- Field fillable
- Easily adaptable with u-clamp bracket & front flange (optional)
- Liquid filled version 233.54

**Data Sheet:**
- 23X.54

### 233.55

**Panel Builder Gauge, Factory Filled Case**

<table>
<thead>
<tr>
<th>Case size:</th>
<th>2.5&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ranges:</td>
<td>-30...0&quot;Hg up to 0...15,000 psi</td>
</tr>
<tr>
<td>Wetted Parts:</td>
<td>316 stainless steel</td>
</tr>
<tr>
<td>Case:</td>
<td>316 stainless steel</td>
</tr>
<tr>
<td>Ingress Protection:</td>
<td>IP 65</td>
</tr>
</tbody>
</table>

**Accuracy:**
- ± 2/1/2% of full span
- ± 1% of full span (4")

**Unique Features:**
- Case, ring & FF 316 stainless steel
- Case factory filled with Glycerin
- Front flange spot welded to case
- LBM connection position

**Data Sheet:**
- 233.55

### 232.50, 233.50

**Bayonet Bezel, European Style, Field Liquid Fillable**

<table>
<thead>
<tr>
<th>Case size:</th>
<th>2.5&quot;, 4&quot;, 4.5&quot; &amp; 6&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ranges:</td>
<td>-30...0&quot;Hg up to 0...15,000 psi</td>
</tr>
<tr>
<td>Wetted Parts:</td>
<td>316 stainless steel</td>
</tr>
<tr>
<td>Case:</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Ingress Protection:</td>
<td>IP 65</td>
</tr>
</tbody>
</table>

**Accuracy:**
- ± 2/1/2% of full span (2.5")
- ± 1% of full span (4", 4.5" & 6")

**Unique Features:**
- Field fillable
- Liquid filled version 233.50

**Data Sheet:**
- 23X.50 / 23X.50 4.5
Process Gauge
Solid Front Design, Field Liquid Fillable
232.34, 233.34 XSEL®

Case Size: 4½” & 6”
Pressure Ranges: -30"Hg up to 0…30,000 psi
Wetted parts: 316L stainless steel
Case: Black thermoplastic (Pocan)
Ingress Protection: IP 65 (LBM IP 54)
Accuracy: ± 0.5 % of full span
± 1.0 % (ranges 0/20,000 psi & up)
Unique Features: Field fillable (LM only)
Liquid filled version (233.34)
Data Sheet: 23X.34
## Mechanical Pressure Measurement

### Solid Front Safety Gauges

#### 232.30, 233.30

**Bayonet Bezel, Solid Front Design, Field Liquid Fillable**

- **Case size:** 4½”, 4”, 4.5” & 6”
- **Pressure Ranges:** -30…0”Hg up to 0…20,000 psi
- **Wetted Parts:** 316 stainless steel
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 65
- **Accuracy:** ± 2/1/2 % of full span (2.5“)
- **Unique Features:** Field fillable
  - Size 4.5” and 6” available in lower mount only.
  - Liquid filled version 233.30 (LM only)
- **Data Sheet:** 23X.30 / 23X.30 4.5

#### Set Point Indicator

**Red**

- **Case size:** 4.5”
- **Material:** Red plastic
- **P/N:** 52600050
- **Unique Features:**
  - Attaches to the outside of the window ring
  - Adjustable over 360 degrees
  - Fits all 4.5” turret style cases

#### 910.18.100

**Gauge Cover**

- **Case size:** 4.5”
- **Material:** Clear PVC, 0.025” (25 mil) thick
  - Flammability rating V-0 per UL-94
- **P/N:** 52551890
- **Unique Features:**
  - Ideally to protect gauge from spills, splashes and other environmental contaminations.

#### Data Sheet:

- 910.18.100

---

## Direct Drive Gauge

### Solid Front Design

**232.34DD**

- **Case Size:** 4½”
- **Pressure Ranges:** -30”Hg…30 psi up to 0…10,000 psi
- **Wetted parts:** Stainless steel & Inconel X-750
- **Case:** Yellow thermoplastic (Pocan)
- **Ingress Protection:** IP 54
- **Accuracy:**
  - ± 0.5 % of full span
  - ± 1.0 % (ranges 0/10,000 psi & up)
- **Unique Features:**
  - Silicone dampened Bourdon tube
- **Data Sheet:** 232.34DD

- Direct drive technology
- Inconel X-750 Bourdon tube material
- Shock, vibration, and pulsation resistant
- External zero point adjustment
- Case fill not necessary to achieve dampening effect.
- Yellow turret style Pocan case
- Standard supplied with compensating membrane for field case filling (LM gauges only).
- Standard equipped with a threaded restrictor for pulsation dampening.

- Case, ring and blow-out back made from black thermoplastic (Pocan) with a flammability rating of V-0 per UL-94
- Hardened SS movement with all moving parts lubricated with Krytox (dry gauges only).
- Industry leading 5-year warranty on the gauge and a 10-year warranty on the pressure system.

---

**Data Sheet:** 232.34DD
### Mechanical Pressure Measurement

#### US Process Type Gauges

#### 212.34, 213.34 XSEL

**Process Gauge, Solid Front Design, Field Liquid Fillable**

- **Case size:** 4.5” & 6”
- **Pressure Ranges:** -30”Hg up to 0…1,000 psi
- **Wetted Parts:** Copper alloy
- **Ingress Protection:** IP 65 (LBM IP 54)
- **Accuracy:** ± 0.5 % of full span
- **Unique Features:** Field fillable (LM only)
- **Data Sheet:** 21X.34

#### 262.34, 263.34 XSEL

**Process Gauge, Solid Front Design, Field Liquid Fillable**

- **Case size:** 4.5” & 6”
- **Pressure Ranges:** -30”Hg up to 0…15,000 psi
- **Wetted Parts:** Monel M400
- **Ingress Protection:** IP 65 (LBM IP 54)
- **Accuracy:** ± 0.5 % of full span
- **Unique Features:** Field fillable (LM only)
- **Data Sheet:** 26X.34

#### 212.25, 232.25

**“Hinged Ring” Panel Mount Process Gauge, Solid Front**

- **Case size:** 4.5” & 6”
- **Pressure Ranges:** -30”Hg up to 0…20,000 psi (232.25)
- **Wetted Parts:** 316 stainless steel (232.25)
- **Ingress Protection:** IP 54
- **Accuracy:** ± 1.0 % (range 0/20,000 psi)
- **Unique Features:** Access to adjustable pointer for zero point adjustment by removing the hinged ring.
- **Data Sheet:** 212.25, 232.25
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Case size</th>
<th>Pressure Ranges</th>
<th>Wetted Parts</th>
<th>Case</th>
<th>Ingress Protection</th>
<th>Accuracy</th>
<th>Unique Features</th>
<th>Data Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>611.10</td>
<td>Low Pressure Capsule Gauge, Standard Design</td>
<td>2” &amp; 2.5”</td>
<td>0…25 InWC to 0…250 InWC (2” case size), 0…10 InWC to 0…250 InWC (2.5” case size)</td>
<td>Copper alloy</td>
<td>Steel black</td>
<td>IP 33</td>
<td>± 1.6 % of full span</td>
<td>With zero-adjustment screw on dial</td>
<td>611.10</td>
</tr>
<tr>
<td>632.50, 633.50</td>
<td>Low Pressure Capsule Gauge, Industrial Design, All Stainless Steel</td>
<td>2.5”, 4” &amp; 6”</td>
<td>0…16 InWC to 0…250 InWC (2.5” case size), 0…6 InWC to 0…250 InWC (4” case size), 0…2 InWC to 0…250 InWC (6” case size)</td>
<td>316 stainless steel</td>
<td>304 stainless steel</td>
<td>IP 54</td>
<td>± 1.6 % of full span</td>
<td>With zero-adjustment screw on dial</td>
<td>632.50</td>
</tr>
<tr>
<td>612.34, 632.34, 633.34</td>
<td>Low Pressure Capsule Gauge, Process Type</td>
<td>4.5”</td>
<td>0…10 InWC to 0…250 InWC</td>
<td>Copper alloy (612.34)</td>
<td>Black thermoplastic (POCAN)</td>
<td>IP 54</td>
<td>± 1.6 % of full span</td>
<td>Silicone case filling (optional, 633.34 for ranges 0…40 InWC &amp; up)</td>
<td>6X2.34</td>
</tr>
</tbody>
</table>
### Mechanical Pressure Measurement

**Low Pressure Sealgauges™ (diaphragm gauges)**

#### 432.50, 433.50

**Low Pressure Sealgauges™, Standard Design**

<table>
<thead>
<tr>
<th>Case size:</th>
<th>4” &amp; 6”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ranges:</td>
<td>0…6 inWC to 0…100 inWC (6” flange size)</td>
</tr>
<tr>
<td>Wetted Parts:</td>
<td>316 stainless steel &amp; PTFE lined diaphragm</td>
</tr>
<tr>
<td>Case:</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Ingress Protection:</td>
<td>IP 54</td>
</tr>
<tr>
<td>Accuracy:</td>
<td>±2.5 % of full span</td>
</tr>
<tr>
<td>Unique Features:</td>
<td>5x overpressure safe, not exceeding 600 psi</td>
</tr>
<tr>
<td></td>
<td>1/2”NPT female process connection</td>
</tr>
<tr>
<td></td>
<td>Glycerin/Water case filling (optional, 433.50)</td>
</tr>
<tr>
<td></td>
<td>Solid front version (optional 432.30 &amp; 433.30)</td>
</tr>
<tr>
<td>Data Sheet:</td>
<td>43X.50</td>
</tr>
</tbody>
</table>

#### 452.50, 453.50

**Low Pressure Sealgauges™, PTFE Wetted Parts**

<table>
<thead>
<tr>
<th>Case size:</th>
<th>4” &amp; 6”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ranges:</td>
<td>0…6 inWC to 0…100 inWC (6” flange size)</td>
</tr>
<tr>
<td>Wetted Parts:</td>
<td>PTFE lined stainless steel</td>
</tr>
<tr>
<td>Case:</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Ingress Protection:</td>
<td>IP 54</td>
</tr>
<tr>
<td>Accuracy:</td>
<td>±2.5 % of full span</td>
</tr>
<tr>
<td>Unique Features:</td>
<td>5x overpressure safe, not exceeding 600 psi</td>
</tr>
<tr>
<td></td>
<td>Open flange process connection</td>
</tr>
<tr>
<td></td>
<td>Glycerin/Water case filling (optional, 453.50)</td>
</tr>
<tr>
<td></td>
<td>Solid front version (optional 452.30 &amp; 453.30)</td>
</tr>
<tr>
<td>Data Sheet:</td>
<td>45X.50</td>
</tr>
</tbody>
</table>

#### 432.56, 433.56

**Low Pressure Sealgauges™, High Overpressure Safe**

<table>
<thead>
<tr>
<th>Case size:</th>
<th>4” &amp; 6”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ranges:</td>
<td>0…6 inWC to 0…100 inWC (6” flange size)</td>
</tr>
<tr>
<td>Wetted Parts:</td>
<td>316 stainless steel</td>
</tr>
<tr>
<td>Case:</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Ingress Protection:</td>
<td>IP 54</td>
</tr>
<tr>
<td>Accuracy:</td>
<td>±1.6 % of full span</td>
</tr>
<tr>
<td>Unique Features:</td>
<td>High overpressure safe up to 600 psi, 1500 psi, or 6000 psi independent of the pressure range</td>
</tr>
<tr>
<td></td>
<td>Glycerin/Water case filling (optional, 433.56)</td>
</tr>
<tr>
<td></td>
<td>Solid front version (optional 432.36 &amp; 433.36)</td>
</tr>
<tr>
<td>Data Sheet:</td>
<td>43X.56</td>
</tr>
</tbody>
</table>
Mechanical Pressure Measurement

### Differential Pressure Gauges

#### 732.25, 733.25

**Differential Pressure Gauge, Dual Diaphragm, High Overpressure Safe**

- **Case size:** 4.5" & 6"
- **DP Ranges:** 0…100 inWC to 0…600 psi
- **Wetted Parts:** 316 stainless steel & Inconel 718 diaphragm, Viton O-ring
- **Case:** Black anodized aluminum
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:**
  - 2 x 1/4"NPT female back connection
  - Panel mount kit included
  - Max. over-/working pressure 3000 psi
  - Glycerin case filling (optional, 733.25)
  - NACE MR-0175 compliant
- **Data Sheet:** 732.25

#### 732.51, 733.51

**Differential Pressure Gauge, All Stainless Steel, All Welded Construction**

- **Case size:** 4.5" & 6"
- **DP Ranges:**
  - 0…6 inWC to 0…100 inWC (114 mm flange size)
  - 0…6 psi to 0…360 psi (78 mm flange size)
- **Wetted Parts:** 316 stainless steel & Inconel 718 diaphragm
- **Case:** 304 stainless steel
- **Accuracy:** ± 1.6 % of full span
- **Unique Features:**
  - 2 x 1/4"NPT female process connection
  - Manifold & integrated working pressure gauge (optional)
  - Switches and transmitters (optional)
  - Solid front version (optional, 733.51)
- **Data Sheet:** 732.51

#### 732.14, 733.14

**Differential Pressure Gauge, Dual Diaphragm, High Overpressure Safe**

- **Case size:** 4.5" & 6"
- **DP Ranges:**
  - 0…6 inWC to 0…100 inWC (140 mm flange size)
  - 0…6 psi to 0…360 psi (82 mm flange size)
- **Wetted Parts:** 316 stainless steel & Inconel 718 diaphragm, Viton O-ring
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 54
- **Accuracy:** ± 1.6 % of full span
- **Unique Features:**
  - Max. over-/working pressure 360 psi, depending on pressure range.
  - 2 x 1/4"NPT female process connection
  - Glycerin/Water case filling (optional, 733.14)
  - Solid front version (optional, 732.21 & 733.21)
- **Data Sheet:** 732.21

#### 712.15, 732.15

**Liquid Level Cryo Gauge**

- **Case size:** 4" & 6"
- **DP Ranges:**
  - 0…16 inWC to 0…1600 inWC
- **Wetted Parts:**
  - Brass, stainless steel, NBR (712.15)
  - Stainless steel, NBR (732.15)
  - Stainless steel, NBR membrane (732.15)
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 65
- **Accuracy:** ± 2.5 % of full span
- **Unique Features:**
  - Max. over-/working pressure 725 psi
  - 2 x 1/4"NPT female process connection
  - Manifold & integrated working pressure gauge (optional)
  - Switches and transmitters (optional)
- **Data Sheet:** 7X2.15

#### 732.25, 733.25

**Differential Pressure Gauge, Dual Diaphragm, High Overpressure Safe**

- **Case size:** 4.5" & 6"
- **DP Ranges:**
  - 0…100 inWC to 0…600 psi
- **Wetted Parts:** 316 stainless steel & Inconel 718 diaphragm, Viton O-ring
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 54
- **Accuracy:** ± 1.6 % of full span
- **Unique Features:**
  - 2 x 1/4"NPT female process connection
  - Manifold & integrated working pressure gauge (optional)
  - Switches and transmitters (optional)
  - Solid front version (optional, 733.31)
- **Data Sheet:** 732.31

#### 732.51, 733.51

**Differential Pressure Gauge, All Stainless Steel, All Welded Construction**

- **Case size:** 4.5" & 6"
- **DP Ranges:**
  - 0…100 inWC to 0…600 psi
- **Wetted Parts:** 316 stainless steel & Inconel 718 diaphragm, Viton O-ring
- **Case:** Black anodized aluminum
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:**
  - 2 x 1/4"NPT female back connection
  - Panel mount kit included
  - Max. over-/working pressure 3000 psi
  - Glycerin case filling (optional, 733.25)
  - NACE MR-0175 compliant
- **Data Sheet:** 732.25
### Mechanical Pressure Measurement

#### Differential Pressure Gauges

**Differential Pressure Gauge, Dual Diaphragm for Liquid Level Applications & O2 Service**

- **Case size:** 4.5” & 6”
- **DP Ranges:** 0…100 InWC to 0…400 psi
- **Wetted Parts:**
  - 316 Stainless steel & Inconel 718 diaphragm
  - PTFE O-ring
  - (halocarbon oil system fill)
- **Case:** Black anodized aluminum
- **Ingress Protection:** IP 65
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:**
  - 2 x 1/4”NPT female top/bottom connection
  - Panel mount kit included
  - Max. over-/working pressure 600 psi
- **Data Sheet:** 732.26

**Differential Pressure Gauge, Piston Type**

- **Case size:** 2.5” & 4.5”
- **DP Ranges:** 0…5 psi to 0…100 psi
- **Wetted Parts:**
  - Aluminum black anodized sensor housing, Ceramic magnet, SS spring & Viton O-ring
- **Case:** Fiberglass reinforced thermoplastic
- **Ingress Protection:** IP 65
- **Accuracy:** ± 2.0 % of full span (on increasing pressure)
- **Unique Features:**
  - 2 x 1/4”NPT female back connection
  - Panel mount kit included
  - Max. working pressure 500 psi
  - Top/bottom connection (optional)
- **Data Sheet:** 700.04

**Differential Pressure Gauge, Piston Type with Separating Membrane**

- **Case size:** 2.5” & 4.5”
- **DP Ranges:** 0…50 InWC to 0…100 psi
- **Wetted Parts:**
  - Aluminum black anodized sensor housing, ceramic magnet, SS spring & Buna-N membrane
- **Case:** Fiberglass reinforced thermoplastic
- **Ingress Protection:** IP 65
- **Accuracy:** ± 2.0 % of full span (ranges ≤ 15 psi)
  - ± 5.0 % of full span (ranges < 15 psi) (on increasing pressure)
- **Unique Features:**
  - 2 x 1/4”NPT female back connection
  - Panel mount kit included
  - Max. working pressure 3000 psi
  - Top/bottom connection (optional)
  - Stainless steel sensor housing (optional)
  - Case filling (optional, 703.05)
- **Data Sheet:** 700.05
Mechanical Pressure Measurement
differential pressure gauges

**712.25DP**
Differential Pressure Gauge, Bourdon Tube

- **Case size:** 4.5” & 6”
- **DP Ranges:**
  - 0 . . . 15 psi to 0 . . . 1000 psi
  - 15/15 psi to 500/500 psi (bi-directional)
- **Wetted Parts:** Copper alloy
- **Case:** Black epoxy coated aluminum
- **Ingress Protection:** IP 33
- **Accuracy:** ± 2/1/2 % of full span
- **Unique Features:**
  - 2 x 1/4”NPT male lower connection
  - DP indication via subtracting movement and one pointer
- **Data Sheet:** 712.25DP

**712.25DX**
Duplex Differential Pressure Gauge

- **Case size:** 4.5” & 6”
- **DP Ranges:**
  - 0 . . . 15 psi to 0 . . . 1000 psi
- **Wetted Parts:** Copper alloy
- **Case:** Black epoxy coated aluminum
- **Ingress Protection:** IP 33
- **Accuracy:** ± 2/1/2 % of full span
- **Unique Features:**
  - 2 x 1/4”NPT male lower connection
  - Duplex indication via red & black pointer: Black pointer on top indicates plus (+) side, Red pointer on bottom indicates minus (-) side
- **Data Sheet:** 712.25DX
# High Precision Test Gauges

## 332.54
### 4” Inspector Test Gauge, Accuracy Grade 3A
- **Case size:** 4”
- **Pressure Ranges:** 0…10 psi to 0…23,000 psi
- **Wetted Parts:** Stainless steel
- **Ingress Protection:** IP 65
- **Accuracy:**
  - Ranges < 1000 psi and > 1500 psi: ± 0.25 % of full span, per ASME B40.100 Grade 3A
  - Ranges 0…800 psi to 0…1500 psi: ± 0.5% of full span per ASME B40.100, Grade 3A
- **Unique Features:**
  - Mirror band dial
  - Micro-adjustable knife-edge pointer
  - Zipped carrying pouch
  - Calibration test report
- **Data Sheet:** 332.54

## 332.34
### 4.5” Process Type Test Gauge, Accuracy Grade 3A
- **Case size:** 4.5”
- **Pressure Ranges:** 0…15 psi to 0…20,000 psi
- **Wetted Parts:** 316 Stainless steel
- **Case:** Black thermoplastic (POCAN)
- **Accuracy:**
  - Ranges < 800 psi and > 1500 psi: ± 0.25 % of full span, per ASME B40.100 Grade 3A
  - Ranges 0…800 psi to 0…1500 psi: ± 0.5% of full span per ASME B40.100, Grade 3A
- **Unique Features:**
  - Mirror band dial
  - Micro-adjustable knife edge pointer
- **Data Sheet:** 332.34

## 312.20
### 6” Precision Test gauge, Accuracy Grade 3A
- **Case size:** 6”
- **Pressure Ranges:** 0…10 psi to 0…10,000 psi
- **Wetted Parts:** Copper alloy
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 64
- **Accuracy:**
  - Ranges < 1000 psi and > 1500 psi: ± 0.25 % of full span, per ASME B40.100 Grade 3A
  - Ranges 0…800 psi to 0…1500 psi: ± 0.5% of full span per ASME B40.100, Grade 3A
- **Unique Features:**
  - Mirror band dial
  - Micro-adjustable knife edge pointer
- **Data Sheet:** 312.20

## 342.11
### 10” High Precision Test gauge, Accuracy Grade 4A
- **Case size:** 10”
- **Pressure Ranges:** 0…10 psi to 0…23,000 psi
- **Wetted Parts:** 316 Stainless steel socket and Ni-Fe-alloy Bourdon Tube
- **Case:** Die-cast Aluminum, black-silver finish
- **Ingress Protection:** IP 54
- **Accuracy:** ± 0.1 % of full span per ASME B40.100 Grade 4A
- **Unique Features:**
  - Front side external zero-adjustment
  - Mirror band dial
  - Knife edge pointer
  - Calibration certificate per EN 13024-3.1
- **Data Sheet:** 342.11
CPG1500  
**Precision Digital Pressure Gauge, Grade 4A**

- **Case size:** 4” with 5-1/2 digit 7-segment display
- **Pressure Ranges:** 0…1.5 psi to 0…150,000 psi
- **Wetted Parts:** 316 Stainless steel
- **Case:** Die-cast aluminum
- **Ingress Protection:** IP 65
- **Accuracy:** ± 0.1 % of full span, per ASME B40.100 Grade 4A
  - ± 0.2 % of full span for ranges 0…1.5 psi
  - ± 0.15 % of full span for ranges 0…3 & 0…5 psi
- **Unique Features:**
  - Case rotatable over 330 degrees
  - Multiple pressure units to select from
  - Integrated data logger
  - WIKA-Cal compatible
  - Data transfer via WIKA wireless
  - Accuracy ± 0.05% (optional, calibration certificate included)
- **Data Sheet:** CT 10.51

CPH6200  
**Hand-Held Pressure Indicator**

- **Dimension:** 5.6 x 2.8 x 1.4 inches (142 x 71 x 36 mm)
- **Display:** 4-1/2 digits depending on range
- **Pressure Ranges:** 0…0.4 psi up to 0…14,500 psi
- **Wetted Parts:** 316 Stainless steel (transmitter)
- **Case:** Impact resistant ABS
- **Accuracy:** ± 0.2 % of full span
- **Unique Features:**
  - Eight selectable pressure units
  - Integrated data logger
  - Differential pressure measurement (optional)
  - Accuracy ± 0.1% (optional, calibration certificate included)
- **Data Sheet:** CT 11.01

CPH6300  
**Hand-Held Pressure Indicator**

- **Dimension:** 6.4 x 3.4 x 1.7 inches (163 x 86 x 42 mm)
- **Display:** 4-1/2 digits depending on range
- **Pressure Ranges:** 0…0.4 psi up to 0…14,500 bar
- **Wetted Parts:** 316 Stainless steel (transmitter)
- **Case:** Impact resistant ABS
- **Ingress Protection:** IP 65 & IP 67
- **Accuracy:** ± 0.2 % of full span
- **Unique Features:**
  - Robust and waterproof case
  - Nine selectable pressure units
  - Integrated data logger
  - Differential pressure measurement (optional)
  - Accuracy ± 0.1% (optional, calibration certificate included)
- **Data Sheet:** CT 12.01

CPP30  
**Pneumatic Hand Pump**

- **Dimension:** 8.7 x 4.1 x 2.5 inches (220 x 105 x 63 mm)
- **Weight:** 1.1 pounds (0.5 kg)
- **Measuring Range:** -950 mbar...+35 bar (-28”Hg/500 psi)
- **Materials:** Brass, chromium-plated anodized aluminum, heavy duty plastic for handles
- **Medium:** Air
- **Connection:** G1/2 female on top for reference gauge 1.5 Ft, tube with G1/4 female for test device
- **Unique Features:**
  - Selectable pressure and vacuum generation
  - Compact design
  - Fine adjustment valve
  - Set with NPT adapters available
- **Data Sheet:** CT 91.06

CPP700-H  
**Hydraulic Hand Pump**

- **Dimension:** 11.0 x 6.7 x 4.7 inches (280 x 170 x 120 mm)
- **Weight:** 4.2 pounds (1.9 kg)
- **Measuring Range:** 0…700 bar (0…10,000 psi)
- **Materials:** Brass, anodized aluminum, stainless steel, ABS
- **Medium:** Hydraulic fluid on mineral oil basis or distilled water
- **Connection:** G1/2 female on top for reference gauge 3.2 Ft, HP tube with G1/4 female for test device
- **Unique Features:**
  - Fine adjustment valve
  - Set with NPT adapters available
- **Data Sheet:** CT 91.07
Valves & Manifolds

**IV10, IV11**

**Needle Valve and Multiport Valve**

- **Sizes:** 1/4" to 1"
- **Pressure Ranges:** 6000 - 10000psi
- **Connections:** FNPT, MNPT, Compression, Socket/Butt weld
- **Materials:** 316st/st - Exotic alloys
- **Packing Material:** PTFE / Graphoil packing
- **Data Sheet:** AC 09.22

**IV20, IV21**

**Block-And-Bleed Valve**

- **Sizes:** 1/4" to 1"
- **Pressure Ranges:** 6000, 10000psi
- **Connections:** FNPT, MNPT, Compression
- **Materials:** 316st/st - Exotic Alloys
- **Packing Material:** PTFE / Graphoil Packing
- **Data Sheet:** AC 09.19

**IV30, IV31, IV50, IV51**

**Valve Manifold**

- **Sizes:** 1/4", 1/2"
- **Pressure Ranges:** 6000, 10000psi
- **Connections:** Remote mount, Direct flanged mount
- **Materials:** 316st/st - Exotic alloys
- **Packing Material:** PTFE / Graphoil packing
- **Centers:** 37mm & 54mm centers
- **Data Sheet:** AC 90.23
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Sizes</th>
<th>Pressure Class</th>
<th>Materials</th>
<th>Connections</th>
<th>Pressure Ranges</th>
<th>Seat/Seal Material</th>
<th>Data Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVH</td>
<td>Instrument Ball Valve</td>
<td>1/4” to 1”</td>
<td>Class 150 to 2500</td>
<td>316st/st, LF2, A105 and exotic alloys</td>
<td>FNPT, MNPT, BSP, Compression</td>
<td>6000, 10000psi</td>
<td>PTFE / PEEK seats and seals</td>
<td>AC 09.17</td>
</tr>
<tr>
<td>IVM</td>
<td>Monoflange</td>
<td>1/4” to 3”</td>
<td>Class 150 to 2500</td>
<td>316st/st, LF2, A105 and exotic alloys</td>
<td>RF - RTJ</td>
<td></td>
<td>PTFE / Graphoil packing</td>
<td>AC 09.17</td>
</tr>
<tr>
<td>IVB</td>
<td>DBB Valve</td>
<td>1/4” to 2”</td>
<td>Class 150 to 2500</td>
<td>316st/st, LF2, A105, Exotic alloys</td>
<td>RF - RTJ</td>
<td></td>
<td>PTFE / PEEK / Graphoil seats and seals</td>
<td>AC 09.17</td>
</tr>
</tbody>
</table>
Pressure Gauge Options

Dampened Movement

Availability: Most industrial and process type pressure gauges
Material: Brass and stainless steel
Application: For severe vibrations and pulsations where case filling is not permissible

InSight™ Dial Options

Available Colors:
- Fluorescent yellow, fluorescent orange
- Reflective white and reflective glow-in-the-dark

Available Models:
- 21X.53 2.5” & 4”
- 23X.53 2.5” & 4”
- 23X.54 2.5” & 6”
- 2XX.34 4.5” & 6”
- 2X.2.25 4.5” & 6”
- TI.30, TI.31, TI.32, TI.50, TI.51 and TI.52

Application: For better visibility and to indicate critical installations

Case Filling

Availability: Most industrial and process type pressure gauges
Fill Types:
- Glycerin (99.7%): Used in most standard applications
- Glycerin/Water: Used on gauges which require a lower viscosity
- Silicone Oil: Used in low temperature applications up to -40°F
- Halocarbon Oil: Inert oil used in O2 or chlorine applications

Application: For severe vibrations and pulsations and to dampen and cool internal parts
### XSEL® Process Gauge

**Case Size**: 4½”

**Material**: Aluminum cloth with silica aerogel insulator

**Part Number**: 52735671

**Unique Features**: Protects gauge from external heat source. Internal temp. drop of 170°F when exposed to 250°F

### Red Drag Pointer

<table>
<thead>
<tr>
<th>Availability</th>
<th>Most industrial and process type pressure gauges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Aluminum red on safety glass or plastic window</td>
</tr>
<tr>
<td>Adjustment</td>
<td>Externally adjustable with fixed or removable key</td>
</tr>
<tr>
<td>Application</td>
<td>For indication of maximum pressure values</td>
</tr>
</tbody>
</table>

### Restrictors

<table>
<thead>
<tr>
<th>Availability</th>
<th>Most gauges with male process connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Brass, 316 stainless steel &amp; Monel</td>
</tr>
<tr>
<td>Application</td>
<td>For severe pulsations and pressure spikes</td>
</tr>
</tbody>
</table>

### Mounting Options

<table>
<thead>
<tr>
<th>Availability</th>
<th>Most utility, industrial &amp; process type gauges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting Types</td>
<td>U-clamp bracket for panel mounting</td>
</tr>
<tr>
<td></td>
<td>Front flanges for panel mounting</td>
</tr>
<tr>
<td></td>
<td>Rear flanges for surface/wall mounting</td>
</tr>
<tr>
<td>Application</td>
<td>For installations into panels or onto surfaces</td>
</tr>
</tbody>
</table>
Pressure Gauge Accessories

Overpressure Protector
910.13
Application: To protect pressure gauge from damaging pressure spikes and surges
Material: 316 stainless steel
Data Sheet: 910.13

Pressure Snubbers
910.12.100, 910.12.100, 910.12.200
Application: To protect pressure gauge from pulsations and pressure spikes
Material: Brass & stainless steel
Data Sheet: 910.12

Cooling Adapters
910.32.100, 910.32.200
Application: For the protection of pressure gauges in high temperature applications exceeding the allowable media temperature range of the instrument
Material: 316 stainless steel
Data Sheet: 910.32.100, 910.32.200

Needle Valves
910.11, 910.11.100, 910.11.200, 910.11.300
Application: To isolate pressure gauges from the measured media
Material: Brass (910.11.100 only), carbon steel or 316 stainless steel
Data Sheet: 910.11, 910.11.100, 910.11.200, 910.11.300
Siphon Safety Cage
910.15.300

**Application**
To protect operators from exposure to extreme heat radiating from siphons in steam applications. Allows air circulation to reach the siphon and enhance the cooling and condensation process.

**Material**
304 stainless steel

**Data Sheet**
910.115.300

---

Mini Siphon
910.15.400

**Application**
For the protection of pressure gauges from high temperature in steam applications and where space restrictions apply. Reduces pressure surges and “water hammer”

**Material**
304 stainless steel

**Data Sheet**
910.15.400

---

Siphons
910.15.100, 910.15.200

**Application**
For the protection of pressure gauges in high temperature applications

**Material**
brass, steel & 316 stainless steel

**Data Sheet**
910.15
IntelliGAUGES – Pressure Gauges with Electrical Output Signal

The multi-functional intelliGAUGES provides a cost-effective and reliable solution for nearly all pressure measurement applications. They combine the local display of a mechanical pressure gauge with the electrical output signal of a pressure transmitter. These hybrid instruments are available with all commonly used electrical signals. The sensor is non-frictional without any mechanical influence on the measurement signal. Many of the instruments are available in accordance to ATEX Ex II 2 G ia. For pressure gauges in case sizes 4” and 6” the electrical output signal can also be combined with a switch contact.

PGT21
Utility Grade, Brass Internals

Case size: 2” & 2.5”
Pressure Ranges: -30”Hg...0 up to 0...6000 psi
Wetted Parts: Copper alloy
Case: 304 stainless steel
Ingress Protection: IP 65, optional IP 67
Output Signal: Various, depending on power supply
Accuracy: ± 1.6 % or ± 2.5 % of full span
Data Sheet: PV 11.03

PGT23.063
Process Grade, All Stainless Steel

Case size: 2.5”
Pressure Ranges: -30”Hg...0 up to 0...15000 psi
Wetted Parts: 316 stainless steel
Case: 304 stainless steel
Ingress Protection: IP 54, optional IP 65 (liquid filled)
Output Signal: 4...20 mA
Accuracy: ± 0.12/1.2% of full span
Unique Features: Solid front safety design (standard)
Silicone case filling (optional)
Data Sheet: PV 12.03

PGT23.100/160
Process Grade, All Stainless Steel

Case size: 4” & 6”
Pressure Ranges: -30”Hg...0 up to 0...30000 psi
Wetted Parts: 316 stainless steel
Case: 304 stainless steel
Ingress Protection: IP 54, optional IP 65 (liquid filled)
Output Signal: Various, ATEX version optional
Accuracy: ± 1.0 % of full span
Unique Features: Solid front safety design (standard)
Switch options available
Data Sheet: PV 12.04
**PGT43.100/160**

**Diaphragm Type, All Stainless Steel**

- **Case size:** 4” & 6”
- **Pressure Ranges:** 0…10”WC up to 0…360 psi
- **Wetted Parts:** 316 stainless steel
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 54, optional IP 65 (liquid filled)
- **Output Signal:** Various, ATEX version optional
- **Accuracy:** ± 1.6 % of full span
- **Unique Features:** Solid front safety design (standard)
- **Switch options available**
- **Data Sheet:** PV 14.03

**Data Sheet:** PV 14.03

---

**DPGT43.100/160**

**Differential Pressure Type, All Stainless Steel**

- **Case size:** 4” & 6”
- **Pressure Ranges:** 0…10”WC up to 0…360 psi
- **Wetted Parts:** 316 stainless steel
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 54, optional IP 65 (liquid filled)
- **Output Signal:** Various, ATEX version optional
- **Accuracy:** ± 1.6 % of full span
- **Unique Features:** Solid front safety design (standard)
- **Switch options available**
- **Data Sheet:** PV 17.05

**Data Sheet:** PV 17.05

---

**DPGT43HP.100/160**

**Differential Pressure Type, High Overpressure Safe**

- **Case size:** 4” & 6”
- **Pressure Ranges:** 0…25”WC up to 0…600 psi
- **Wetted Parts:** 316 stainless steel
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 54, optional IP 65 (liquid filled)
- **Output Signal:** 4…20 mA, 2-wire, ATEX version optional
- **Accuracy:** ± 1.6 % of full span
- **Unique Features:** Solid front safety design (standard)
- **Switch options available**
- **Data Sheet:** PV 17.13

**Data Sheet:** PV 17.13
SwitchGAUGES – Pressure Gauges with Switch Output

Control systems are becoming more important in industrial and process applications. Critical applications often require an alarm and the capability to open or close an electrical circuit. The WIKA USA switchGAUGE combines the local indication of a mechanical pressure gauge with the functions of a mechanical switch. One of the advantages of most WIKA USA switchGAUGES is the capability to easily adjust the set point externally between 10 and 90% of the pressure scale without the additional use of a separate reference gauge.

Depending on the gauge model the following switch types are available:
- Magnetic snap-action contact
- Inductive contact
- Electronic contact
- Reed switch
- Micro switch
- Transistor output NPN or PNP

All instruments with inductive contacts are considered intrinsically safe and can be certified in accordance with ATEX Ex II 2 GD c TX.
### PGS11
**Utility Grade, Externally Adjustable**
- **Case size:** 1.5, 2", & 2.5"
- **Pressure Ranges:** 0...60 psi up to 0...6000 psi
- **Wetted Parts:** Copper alloy
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 41
- **Switch Type:** Magnetic snap-action
- **Accuracy:** ± 2.5 % of full span
- **Unique Feature:** Up to 2 contacts available
- **Data Sheet:** PV 21.01

### PGS21
**Utility Grade, Fixed Set Point**
- **Case size:** 1.5, 2", & 2.5"
- **Pressure Ranges:** 0...60 psi up to 0...6000 psi
- **Wetted Parts:** Copper alloy
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 65
- **Switch Type:** Magnetic snap-action
- **Accuracy:** ± 2.5 % of full span
- **Unique Features:** Fixed, factory set switch point
- **Data Sheet:** PV 21.02

### PGS23.063
**Process Grade, All Stainless Steel**
- **Case size:** 2.5"
- **Pressure Ranges:** 0...60 psi up to 0...6000 psi
- **Wetted Parts:** 316 stainless steel
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 54, IP 65 (optional)
- **Switch Type:** Magnetic, Inductive, Reed & Electronic
- **Accuracy:** ± 1.6 % of full span
- **Unique Features:** Solid front safety design
- **Data Sheet:** PV 22.03

### PGS23.100/160
**Industrial/Process Grade, All Stainless Steel**
- **Case size:** 4" & 6"
- **Pressure Ranges:** -30"Hg...0 up to 0...15000 psi
- **Wetted Parts:** 316 stainless steel
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 65
- **Switch Type:** Magnetic, Inductive, Reed & Electronic
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:** Solid front safety design (optional)
- **Data Sheet:** PV 22.02

### PGS43.100/160
**Diaphragm Type, All Stainless Steel**
- **Case size:** 4" & 6"
- **Pressure Ranges:** 0...10"WC up to 0...360 psi
- **Wetted Parts:** 316 stainless steel
- **Case:** 304 stainless steel
- **Ingress Protection:** IP 54, optional IP 65 (liquid filled)
- **Switch Type:** Magnetic, Inductive, Reed & Electronic
- **Accuracy:** ± 1.6 % of full span
- **Unique Features:** Solid front safety design (optional)
- **Data Sheet:** PV 24.03
**DPGS43.100/160**

**Differential Pressure Type, All Stainless Steel**

- Case size: 4" & 6"
- Pressure Ranges: 0...10"WC up to 0...360 psi
- Wetted Parts: 316 stainless steel
- Case: 304 stainless steel
- Ingress Protection: IP 54, optional IP 65 (liquid filled)
- Switch Type: Magnetic, Inductive, Reed & Electronic
- Accuracy: ± 1.6 % of full span
- Unique Features: Max working pressure 360 psi, depending on range
- Solid front safety design (optional)
- Data Sheet: PV 27.05

**DPGS43HP.100/160**

**Differential Pressure Type, High Overpressure Safe**

- Case size: 4" & 6"
- Pressure Ranges: 0...25"WC up to 0...600 psi
- Wetted Parts: 316 stainless steel
- Case: 304 stainless steel
- Ingress Protection: IP 54, optional IP 65 (liquid filled)
- Switch Type: Magnetic, Inductive & Electronic
- Accuracy: ± 1.6 % of full span
- Unique Features: High overpressure safe up to 600 psi and optional
- Solid front safety design (optional)
- Data Sheet: PV 27.13

**CP3000, CP4000**

**Alarm Contacts for 4-1/2" XSEL Process Gauge**

- Case size: 4.5"
- Pressure Ranges: 0...60 psi up to 0...20000 psi (CP3000)
- Wetted Parts: 316 stainless steel
- Case: Black thermoplastic (Pocan)
- Switch Type: Magnetic (CP3000), Inductive (CP4000)
- Unique Features: Field installable
- Data Sheet: CP3000, CP4000
### Standard Industrial Grade Transmitters, Flush Diaphragm

**S-11, F-21**

**Standard Industrial Grade Transmitters, Flush Diaphragm**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Linearit</strong>y</td>
<td>Up to ± 0.125% F.S. of full span</td>
</tr>
<tr>
<td><strong>Measuring Ranges</strong></td>
<td>0...50&quot; W.C up to 0...8,000 psi</td>
</tr>
<tr>
<td><strong>Output Signal</strong></td>
<td>4...20 mA, DC 0...5 V, 0...10 V &amp; other current &amp; voltage output signals</td>
</tr>
<tr>
<td><strong>Unique Features</strong></td>
<td>Flush process connection for viscous media</td>
</tr>
<tr>
<td></td>
<td>Compact design and rugged construction</td>
</tr>
<tr>
<td></td>
<td>High temperature version up to 300°F (optional)</td>
</tr>
<tr>
<td><strong>Data Sheet</strong></td>
<td>PE 81.02</td>
</tr>
</tbody>
</table>

### A-10 General Purpose Transmitter

**A-10 General Purpose Transmitter**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Linearity</strong></td>
<td>Up to ± 0.25% F.S. of full span</td>
</tr>
<tr>
<td><strong>Measuring Ranges</strong></td>
<td>0...20&quot; W.C up to 0...15,000 psi</td>
</tr>
<tr>
<td><strong>Output Signal</strong></td>
<td>4...20 mA, DC 0...5 V, 0...10 V &amp; other voltage &amp; ratiometric output signals</td>
</tr>
<tr>
<td><strong>Unique Features</strong></td>
<td>Suitable for most general industrial applications</td>
</tr>
<tr>
<td></td>
<td>Compact design</td>
</tr>
<tr>
<td></td>
<td>Test report included with unit</td>
</tr>
<tr>
<td><strong>Data Sheet</strong></td>
<td>PE 81.60</td>
</tr>
</tbody>
</table>

### DG-10-S, DG-10-E Digital Pressure Gauges

**DG-10-S, DG-10-E Digital Pressure Gauges**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accuracy</strong></td>
<td>Up to ± 0.25% F.S. of full span</td>
</tr>
<tr>
<td><strong>Measuring Ranges</strong></td>
<td>0...100 psi up to 0...10,000 psi</td>
</tr>
<tr>
<td><strong>Output Signal</strong></td>
<td>Positive/negative gauge pressure and absolute pressure</td>
</tr>
<tr>
<td><strong>Unique Features</strong></td>
<td>Battery powered (2 x 1.5V AA batteries)</td>
</tr>
<tr>
<td></td>
<td>Enhanced version (DG-10-E) includes black rubber boot,</td>
</tr>
<tr>
<td></td>
<td>illuminated display, second display for min/max and with tare feature</td>
</tr>
<tr>
<td></td>
<td>DG-10-E rotatable over 300°</td>
</tr>
<tr>
<td><strong>Data Sheet</strong></td>
<td>PE 81.66</td>
</tr>
</tbody>
</table>

### Standard Industrial Grade Transmitter

**S-20**

**Standard Industrial Grade Transmitter S-20**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Linearity</strong></td>
<td>Up to ± 0.125% F.S. of full span</td>
</tr>
<tr>
<td><strong>Measuring Ranges</strong></td>
<td>0...10 psi up to 0...20,000 psi</td>
</tr>
<tr>
<td><strong>Output Signal</strong></td>
<td>Positive/negative gauge pressure and absolute pressure</td>
</tr>
<tr>
<td><strong>Unique Features</strong></td>
<td>4...20 mA, DC 0...5 V, 0...10 V &amp; other voltage &amp; ratiometric output signals</td>
</tr>
<tr>
<td><strong>Unique Features</strong></td>
<td>Robust design for use in harsh environments.</td>
</tr>
<tr>
<td></td>
<td>Extreme shock &amp; vibration resistant.</td>
</tr>
<tr>
<td></td>
<td>Test report included with each unit</td>
</tr>
<tr>
<td></td>
<td>With NEMA 4X connection head.</td>
</tr>
<tr>
<td><strong>Data Sheet</strong></td>
<td>PE 81.61</td>
</tr>
</tbody>
</table>
**Electronic Pressure Measurement**

**General Purpose Industrial Applications**

**PSD-4**

**Pressure Transmitters with Integral LED Display and Switch Options**

- **Non-Linearity:** ± 0.25% B.F.S.L. of full span
- **Measuring Ranges:** 0…15 psi up to 0…8000 psi
- **Output Signal:** Dual PNP/NPN switch output & 4-20mA or 0-10V
- **Unique Features:** User selectable NPN or PNP switch type, and optional user selectable 4-20mA or 0-10V output.

**Data Sheet:** PE 81.86

**TSD-30**

**Temperature Transmitter with Integral LED Display and Switch Options**

- **Non-Linearity:** ± 0.50% B.F.S.L. of full span
- **Measuring Ranges:** -4…+176°F (user selectable for °C)
- **Output Signal:** Dual PNP switch output & 4…20 mA or 0…10V
- **Unique Features:** Over 320° rotatable case and display
- **Data Sheet:** TE 67.03

**LSD-30**

**Level Transmitter with integral LED Display and Switch Options**

- **Non-Linearity:** ± 0.50% B.F.S.L. of full span (analog output)
- **Measuring Ranges:** 189 mm (7.44”) to 730 mm (26.34”)
- **Output Signal:** Dual PNP switch output & 4…20 mA or DC 0…10V
- **Unique Features:** Over 320° rotatable case and display
- **Data Sheet:** LM 40.01
Electronic Pressure Measurement
Special Purpose Industrial Applications

**HP-2-S, HP-2-D, HP-2-E**

**High Pressure Transmitters**

- **Non-Linearity:** Up to ± 0.25% B.F.S.L. of full span
- **Measuring Ranges:** 0...23000 psi up to 0...215,000 psi
- **Output Signal:** 4...20 mA, DC 0...5 V, 0...10 V output signals
- **Unique Features:**
  - Very high long-term stability
  - Excellent load cycle
  - Diaphragm impact protection system (HP-2-D)
  - Exchangeable process connection (HP-2-E)
  - Test report included with each unit
- **Data Sheet:** PE 81.53

**P-30, P-31**

**High Precision Pressure Transmitters**

- **Non-Linearity:** ± 0.05% B.F.S.L. of full span
- **Measuring Ranges:** 0...100"WC up to 0...10,000 psi
- **Output Signal:** 4...20 mA, 0...20 mA, DC 0...5 V, DC 0...10 V USB & CANopen®
- **Unique Features:**
  - Zero thermal error in the range of 50...140°F
  - Outstanding signal to noise ratio
  - On-Site calibration via product software
  - Test report included with every unit
  - Optional available with flush diaphragm (P-31)
- **Data Sheet:** PE 81.54

**UPT-20, UPT-21**

**Universal Process Transmitter**

- **Non-Linearity:** ± 0.15% B.F.S.L. of full span
- **Measuring Ranges:** 0...10 psi up to 0...15,000 psi
- **Output Signal:** 4...20 mA, HART®
- **Unique Features:**
  - Large multi-functional and rotatable display
  - Freely scalable measuring ranges
  - 100:1 turndown
  - Stainless steel case optional
  - Optional available with flush diaphragm (P-31)
- **Data Sheet:** PE 86.05
Electronic Pressure Measurement
Submersible Pressure Transmitters

LH-20
High Performance Submersible Level Transmitter for Measurements in Hazardous Areas

Non-Linearity:
- ± 0.1% B.F.S.L. of full span
Measuring Ranges:
- 0…50 inWC up to 0…300 psi positive gauge and absolute pressure
Output Signal:
- 4…20 mA, HART®
Ingress Protection:
- IP 68 for permanent submersion up to 984 feet (300 m) water column
Unique Features:
- Ideal for harsh environmental conditions
- Optional titanium body for high resistance
- Optional lighting protection
- Test report included with each unit
Data Sheet:
- PE 81.56

LF-1
High Performance Submersible Level Transmitter

Non-Linearity:
- ± 0.5% B.F.S.L. of full span
Measuring Ranges:
- 0…50 inWC up to 0…100 psi positive pressure, absolute ranges available as well
Output Signal:
- 4…20 mA, HART®, 0.1...2.5V low power
Ingress Protection:
- IP 68 for permanent submersion up to 325 feet (100 m) water column
Unique Features:
- Ideal for harsh environmental conditions
- Optional Hastelloy body
- Optional lightning protection
Data Sheet:
- LM 40.04
WIKI LevelGuard™
Fits Level Transmitters
LS-10, LF-1

Unique Features
- All 316 stainless steel construction.
- 2" diameter diaphragm for excellent sensitivity.
- Diaphragm protected from physical damages and turbulences.
- Added weight prevents movement of transmitter.

Data Sheet
- LevelGuard

Electronic Pressure Measurement
Submersible Pressure Transmitters
Non-Linearity: \[ \pm 0.25\% \text{ B.F.S.L. of full span} \]
Measuring Ranges: 
- E-10: 0...5 psi up to 0...15000 psi
- E-11: Positive/negative gauge pressure and absolute pressure
Output Signal: 4...20 mA, DC 0...5 V, 0.5...4.5 V, 1...5 V & 0...10 V
Unique Features: 
- For sour gas applications (NACE)
- FM/CSA approved as “explosion proof” for Class I, Div. 1 hazardous areas
- ATEX approved as “flameproof enclosure” for II 2 G Ex d II C
- Low-power version (optional)
- Optional available with flush diaphragm (E-11)
Data Sheet: PE 81.27

Non-Linearity: \[ \pm 0.25\% \text{ B.F.S.L. of full span} \]
Measuring Ranges: 
- IS-3: 0...3 psi up to 0...15000 psi
- IS-3-F: Positive/negative gauge pressure and absolute pressure
Output Signal: 4...20 mA
Unique Features: 
- Class I Division I Intrinsically Safe (ia)
- IP68 and IP69K electrical connections
- Optional available with flush diaphragm
Data Sheet: PE 81.58

Non-Linearity: \[ \pm 0.25\% \text{ B.F.S.L. of full span} \]
Measuring Ranges: 
- N-10: 0...50 inWC up to 0...15000 psi
- N-11: Output signal
Output Signal: 4...20 mA or DC 1...5 V low power output signal
Unique Features: 
- Wetted parts NACE MR0-175 compliant
- FM/CSA approved non-incendive for Class I, Div. 2, dust-ignition proof for Class II, Div. 1
- Optional available with flush diaphragm (N-11)
Data Sheet: N-10/N-11
Certified Safety & Reliability

Quality measurement technologies are essential for safe, reliable operations. WIKA USA’s pressure, temperature, level, flow, and force solutions have withstood rigorous testing of national and international authorizing bodies, and have earned a wide range of approvals and certifications worldwide.

D-20-9, D-21-9
Pressure Transmitter with CANopen Interface

Non-Linearity: ± 0.2% B.F.S.L. of full span
Measuring Ranges: 0…4 psi up to 0…15000 psi
   Positive/negative gauge pressure and absolute pressure
Output Signal: CANopen protocol per CiA DS-301
Unique Features: CANopen interface per DS-301
   Device profile DS-404
   Compact size
   Optional with integrated Y-connector
   Optional available with flush diaphragm (D-21-9)
Data Sheet: PE 81.39
Diaphragm Seal Systems Provide Protection to Ensure Safety & Reliability

Diaphragm seal systems protect gauges from hot, viscous, contaminated, or corrosive media. This added layer of protection ensures that the media doesn’t reach the gauge, helping to prevent gauge failure that can cause safety issues for operations and personnel.

Diaphragm Seals
- Prevent clogging, corrosion, or contamination of your pressure gauges
- Reduce fugitive emissions
- Extend the service life of the pressure instrument, which reduces process downtimes
- Reduce or eliminate maintenance costs

WIKA USA Combines Expertise and Technology to Provide Custom, Quality Systems

WIKA USA's Lean manufacturing-focused factory produces custom solutions for diaphragm seal systems.

WIKA USA's toolbox of modular solutions and proprietary software help determine results of newly configured systems prior to manufacturing. This process minimizes the design cycle, improves lead times, optimizes safety and assures performance of your diaphragm seal solutions.
All Welded System
AWS
M93X.D1

Ranges: -30"HG up to 5000 psi
Case Size: 4½"
Case: Fiberglass reinforced thermoplastic
Wetted Parts: 316L, HC276, Monel
Process: ½" NPT-M connection
Accuracy: ± 0.5 % of span
Options: Consult factory
Data Sheet: M93X.D1

---

990.10, 990.12
Standard Design, Threaded / Flanged

Instrument: 
- ¼" of ½" NPT-F
- ¼" to 1" NPT threaded

Process: 
- ½" to 2" NPS flanged
- ANSI B16.5 Class 150 to 1500

Wetted parts: 
- 316L, Monel, HC276

Options: 
- consult factory
- Express lane item

---

990.TA, 990.TB
Mini Seals

Instrument: 
- ¼" of ½" NPT-F
- ¼" to 1" NPT threaded

Process: 
- ½" to 1" NPT threaded

Wetted parts: 
- 316L, Monel, HC276

Options: 
- consult factory
- Express lane item

---

990.27, 990.28, 990.29
Flange Types, Flush & Extended

Instrument: 
- ¼" of ½" NPT-F

Process: 
- 2" – 5" NPS flanged 2" - 6" extension
- ANSI B16.5 Class 150 to 1500

Wetted parts: 
- 316L, Monel, HC276, Tantalum

Technology: 
- Diaphragm per TIG, Metal bonding,
  Beam or Laser Welding technic applied

Options: 
- consult factory
Diaphragm Seals

990.FR, 990.ER  
Flange Types, Flush & Extended - Rotatable

Instrument:  
- ¼" of ½" NPT-F

Process:  
- 2" - 5" NPS flanged 2" - 6" extension  
- ANSI B16.5 Class 150 to 1500

Wetted parts:  
- 316L, Monel, HC276, Tantalum

Technology:  
- Diaphragm per TIG, Metal bonding, Seam or Laser Welding technique applied

Options:  
- Consult factory

910.ZA, 910.ZB  
Saddle & Block Flanges

Instrument:  
- ¼" of ½" NPT-F

Process:  
- Saddle design  
- 1/2" - 3" socket or butt welded 
- Flanged

Wetted parts:  
- 316L, Monel, HC276

Options:  
- Consult factory

981.10, 981.27  
Inline Diaphragm Seals

Instrument:  
- ¼" of ½" NPT-F

Process:  
- Flare & Flange designs 1" - 4"

Wetted parts:  
- 316L, Monel, HC276, Tantalum

Options:  
- Consult factory
Sanitary Diaphragm Pressure Gauge with Integrated Diaphragm Monitoring and Double Containment
PG43SA-D

- Case Size: 4"
- Pressure Ranges: -30"Hg...30 psi up to 0...200 psi
- Wetted Parts: 316L stainless steel and Inconel® 718 diaphragm
- Case: 304 stainless steel electro polished
- Ingress Protection: IP 54
- Accuracy: ± 1.6 % of full span
- Unique Features: High over pressure safety (depending on range) Ranges > 36 psi suitable for vacuum typical of CIP or SIP cleaning Electropolishing per ASME BPE SF4 optional (wetted parts) optional
- Data Sheet: PM 04.17

- Mechanical pressure transmission without the use of a system fluid.
- Patented diaphragm monitoring system to emphasize highest safety requirements.
- Red warning sign will indicate breach of diaphragm element.
- Two barriers for secure separation of the process from the atmosphere.
- Completely autoclavable, suitable for CIP and SIP.
- Standard with external zero point adjustment (± 15°).
Sanitary Solutions

M932.3A, M933.3A
Diaphragm Seal Sanitary Gauge

- Case size: 2.5” & 4”
- Pressure Ranges: -30”Hg…0 up to 0…600 psi
- Wetted Parts: 316L stainless steel electro polished
- Case: 304 stainless steel electro polished
- Ingress Protection: IP 65
- Accuracy: ± 2/1/2 % of full span (2.5”) & ± 1.0 % (4”)
- Unique Features: Available with liquid filled case or dry case
  - Serial # and part # engraved in the gauge case
  - Material ID & heat # engraved in seal body or case
  - Food grade glycerin case filling optional (M933.3A)
- Data Sheet: M93X.3A

PG43SA-S
Sanitary Gauge with Dry Diaphragm

- Case size: 4”
- Pressure Ranges: -30”Hg…30 psi up to 0…200 psi
- Wetted Parts: 316L stainless steel electro polished
- Case: 304 stainless steel electro polished
- Ingress Protection: IP 54
- Accuracy: ± 1.6 % of full span
- Unique Features: Mechanical pressure transmission without internal transmission fluid
  - Standard with external zero adjustment (± 15°)
  - Visible Leak Monitoring included
  - High overpressure safe up to 5x full scale value
- Data Sheet: PM 04.16

M932.25, M933.25
Diaphragm Seal Sanitary Gauge

- Case size: 2.5”
- Pressure Ranges: -30”Hg…30 psi up to 0…600 psi
- Wetted Parts: 316L stainless steel electro polished
- Case: 304 stainless steel polished
- Ingress Protection: IP 65
- Accuracy: ± 2/1/2 % of full span
- Unique Features: Available with 3/4” or 1” Tri-Clamp® connection
  - External zero adjustment optional
  - Food grade glycerin case filling optional (M933.25)
  - Integral cooling element (max. 300°F) optional
- Data Sheet: M93X.25
**SA-11 High Temperature Sanitary Pressure Transmitter**

**Non-Linearity:**
- ± 0.25% B.F.S.L. of full span

**Measuring Ranges:**
- 0...100 °C up to 0...400 psi positive/negative gauge pressure and absolute pressure
- Large variety of sanitary connections available
- Fully welded version
- Suitable for media temp. up to 300°F (150°C)
- Suitable for CIP & SIP maintenance processes
- Available with NEMA 4X connection head (IP67)

**Output Signal:**
- 4...20 mA, 0...20 mA & 0...10 V

**Unique Features:**
- Large variety of sanitary connections available
- Fully welded version
- Suitable for media temp. up to 300°F (150°C)
- Suitable for CIP & SIP maintenance processes
- Available with NEMA 4X connection head (IP67)

**Data Sheet:**
- PE 81.80

---

**PSA-31 Pressure Switch with Display**

**Accuracy:**
- < 1% of span

**Measuring Ranges:**
- 0 ... 15 to 0 ... 300 psi relative
- 0 ... 15 to 0 ... 300 psi absolute
- -30 ... 0 inHg to -30 in HG ... 300 psi vacuum

**Switching output:**
- 1 or 2 (PNP or NPN)

**Analog output:**
- 4 ... 20 mA (optional)
- DC 0 ... 10 V (optional)

**Data Sheet:**
- PE81.85

---

**TR21-C, TR21-A Miniature Sanitary Temperature Transmitter**

**Accuracy:**
- Class A per in accordance with IEC 60751

**Measuring Ranges:**
- -22...+300°F (-30...+150°C) and -22...+480°F (-30...+250°C)

**Output Signal:**
- 4...20 mA, Pt100 & Pt1000

**Unique Features:**
- Compact design, ideal for areas with space with limitations
- Intrinsically version optional available
- Large variety of sanitary connections available With thermowell (TR21-A)

**Data Sheet:**
- TE 60.28 (TR21-C)
- TE 60.26 (TR21-A)
Mechanical Temperature Measurement
Twin Temp Thermometers

This rugged twin-temp system features two independent sensors in one unit.

- Allows independent local and remote reading and data acquisition from one insertion point.
- Easy installation and interchangeable with any existing standard thermometer.
- Allows for remote trouble shooting or calibration without removing the instrument from the thermowell.

### Process Grade Bimetal Thermometer
Combined with a Temperature Sensor
TT.30, TT.32, TT.50, TT.52

- **Ranges**: 3" & 5"
- **Measuring Ranges**: -100°F (-70°C) up to 550°F (260°C)
- **Stem Material**: 304 stainless steel
- **Case Material**: 304 stainless steel
- **Stem Length**: 2-1/2" up to 48" (Thermocouple) 4" up to 48" (RTD) Bulb diameter 1/4"
- **Accuracy**: ± 1.0 % of full span
- **Unique Features**: Thermocouple or RTD electrical output Explosion proof housing (optional) With 4…20 mA output signal (optional)
- **Data Sheet**: TT.32/TT.52, TT.30 & TT.50
Mechanical Temperature Measurement

Bimetals, Vapor, & Gas Actuated Thermometers

**Mechanical Temperature Measurement**

**Bimetals, Vapor, & Gas Actuated Thermometers**

**TI.V20, TI.V25, TI.V35, TI.V45**
*Industrial Grade Vapor Thermometer*
- **Case size:** 2", 2-1/2", 3-1/2" & 4-1/2"
- **Measuring Ranges:** -40°F (-40°C) up to 100°F (37°C)
- **Bulb Material:** Copper alloy or stainless steel
- **Bulb Length:** 2-1/2" up to 9.4", diameter 3/8" & 7/16"
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:**
  - Remote Reading
  - Capillary length up to 99 feet
  - Large variety of mounting options available
  - With integrated thermowell (optional)
- **Data Sheet:** TI.VXX

**TI.R45, TI.R60**
*Process Grade Gas Actuated Thermometer*
- **Case size:** 4-1/2" & 6"
- **Measuring Ranges:** -320°F (-200°C) up to 1200°F (650°C)
- **Bulb Material:** 316 stainless steel
- **Bulb Length:** 3/8" diameter x 3"
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:**
  - Remote reading or adjustable angle
  - 316SS capillary length up to 80 feet
  - Large variety of mounting options available
  - With integrated thermowell (optional)
- **Data Sheet:** TI.RXX

**TI.RD50**
*Light Powered Digital Bimetal Thermometer*
- **Case size:** 5"
- **Measuring Ranges:** -50°F...300°F (-45°C...150°C)
- **Stem Material:** 316 stainless steel
- **Stem Length:** 2-1/2" up to 12"
- **Accuracy:** ± 0.5 % of full span
- **Unique Features:**
  - Adjustable angle
  - High Accuracy
  - Large 1/2" LCD display
  - Low light level required (10 lux/1 foot candle)
  - With external recalibration potentiometer
- **Data Sheet:** TI.RD50

**TI.V20, TI.V25, TI.V35, TI.V45**
*Industrial Grade Vapor Thermometer*
- **Case size:** 2", 2-1/2", 3-1/2" & 4-1/2"
- **Measuring Ranges:** -40°F (-40°C) up to 1000°F (550°C)
- **Stem Material:** 304 stainless steel
- **Stem Length:** 2-1/2" up to 72", bulb diameter 1/4"
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:**
  - Hermetically sealed per ASME B40.200
  - NEMA 4X (IP 66) weather protection
  - Guaranteed not to fog
- **Data Sheet:** TI.VXX

**TI.30, TI.31, TI.32, TI.50, TI.51, TI.52**
*Process Grade Bimetal Thermometer*
- **Case size:** 3" & 5"
- **Measuring Ranges:** -100°F (-70°C) up to 1200°F (-550°C)
- **Stem Material:** 304 stainless steel
- **Stem Length:** 2-1/2" up to 24"
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:**
  - Hermetically sealed per ASME B40.200
  - NEMA 4X (IP 66) weather protection
  - Guaranteed not to fog
- **Data Sheet:** TI.30, TI.31, TI.32, TI.50, TI.51, TI.52

**TI.R45, TI.R60**
*Process Grade Gas Actuated Thermometer*
- **Case size:** 4-1/2" & 6"
- **Measuring Ranges:** -320°F (-200°C) up to 1200°F (650°C)
- **Bulb Material:** 316 stainless steel
- **Bulb Length:** 3/8" diameter x 3"
- **Accuracy:** ± 1.0 % of full span
- **Unique Features:**
  - Remote reading or adjustable angle
  - 316SS capillary length up to 80 feet
  - Large variety of mounting options available
  - With integrated thermowell (optional)
- **Data Sheet:** TI.RXX

**TI.RD50**
*Light Powered Digital Bimetal Thermometer*
- **Case size:** 5"
- **Measuring Ranges:** -50°F...300°F (-45°C...150°C)
- **Stem Material:** 316 stainless steel
- **Stem Length:** 2-1/2" up to 12"
- **Accuracy:** ± 0.5 % of full span
- **Unique Features:**
  - Adjustable angle
  - High Accuracy
  - Large 1/2" LCD display
  - Low light level required (10 lux/1 foot candle)
  - With external recalibration potentiometer
- **Data Sheet:** TI.RD50
### Electrical Temperature Measurement

#### TC10-2

**Spring Loaded Thermocouple Assembly**

**Sensor Element:**
- Type J, K, E, T

**Measuring Ranges:**
- -328°F ... 2300°F (-200°C up to 1260°C)

**Junction:**
- Grounded/Ungrounded, Single/Dual

**Probe Diameter:**
- 1/4" or 6 mm

**Sheath Material:**
- 316 stainless steel, Alloy 600

**Connection Head:**
- Aluminum, 1/2"NPT x Conduit 3/4"NPT

**Unique Features:**
- Designed to be mounted in a thermowell

**Data Sheet:**
- TC10-2

#### TC15-2

**Remote Mount Thermocouple Assembly, Fixed or Spring Loaded**

**Sensor Element:**
- Type K, J, T, E

**Measuring Ranges:**
- -328°F ... 2300°F (-200°C up to 1260°C)

**Junction:**
- Grounded/Ungrounded, Single/Dual

**Probe Diameter:**
- 1/4" or 6 mm

**Sheath Material:**
- 316 stainless steel, Alloy 600

**Connection Head:**
- Aluminum, 1/2"NPT x Conduit 3/4"NPT

**Unique Features:**
- To be used with thermowell or directly into process

**Data Sheet:**
- TC15-2

#### TC40

**Cut to Length Thermocouple Sensor**

**Sensor Element:**
- Type K, J, E, N or T

**Measuring Ranges:**
- -328°F ... +2300°F (-200°C up to 1260°C)

**Termination:**
- Stripped leads, Connectors

**Junction:**
- Grounded / Ungrounded, Single/Dual

**Probe Diameter:**
- 0.020" ... 3/8"

**Sheath Material:**
- 316 stainless steel, Alloy 600

**Cable:**
- PTFE, Fiberglass, PVC, Silicone

**Process Connections:**
- Compression fitting, fixed bushing

**Data Sheet:**
- TE 65.40
**TR10-2**

**Spring Loaded RTD Assembly**

- **Sensor Element:** Pt10, Pt100, Pt1000
- **Measuring Ranges:** -328°F… 1382°F (-200°C up to 750°C)
- **Sensor Type:** Single/Dual
- **Wiring Configuration:** 2, 3, and 4 wire
- **Probe Diameter:** 1/4" or 6 mm
- **Sheath Material:** 316 stainless steel, Alloy 600
- **Connection Head:** Aluminum, 1/2"NPT x Conduit 3/4"NPT
- **Unique Features:** Designed to be mounted in a thermowell
- **Data Sheet:** TR10-2

**TR15-2**

**Remote Mount RTD Assembly, Fixed or Spring Loaded**

- **Sensor Element:** Pt10, Pt100, Pt1000
- **Measuring Ranges:** -328°F… 1382°F (-200°C up to 750°C)
- **Sensor Type:** Single/Dual
- **Wiring Configuration:** 2, 3, and 4 wire
- **Probe Diameter:** 1/4" or 6 mm
- **Sheath Material:** 316 stainless steel, Alloy 600
- **Connection Head:** Aluminum, 1/2"NPT x Conduit 3/4"NPT
- **Unique Features:** To be used with thermowell or directly into process
- **Data Sheet:** TR15-2

**TR40**

**Cut to Length RTD Sensor**

- **Sensor Element:** Pt100, PT1000, Pt10
- **Measuring Ranges:** -320 ... +1,112 °F (-196 ... +600 °C)
- **Sensor Type:** Single, Dual
- **Wiring Configuration:** 2, 3, and 4 wire
- **Termination:** Stripped leads, Connectors
- **Probe Diameter:** 1/8"... 3/8"
- **Sheath Material:** 316 stainless steel, Alloy 600
- **Cable:** PTFE, Fiberglass, PVC, Silicone
- **Process Connections:** Compression fitting, fixed bushing
- **Data Sheet:** TE 60.40

**T15**

**Digital Temperature Transmitter**

- **Input:** Resistance temperature sensors, potentiometers
- **Accuracy:** < 0.1%
- **Output Signal:** 4...20 mA
- **Unique Features:** Extremely easy and fast configuration
- **Data Sheet:** TE 15.01

**T32.1S, T32.3S**

**Digital Temperature Transmitter with HART® Protocol**

- **Accuracy:** <0.1 %
- **Measuring Ranges:** -454°F... +3308°F (-270°C up to +1820°C), depending on sensor device
- **Input:** RTD, Thermocouples, Potentiometers
- **Output Signal:** 4...20 mA, HART® protocol
- **Unique Features:** Configurable with a variety of open configuration tools
- **Data Sheet:** (T32.3S)
**TC59-W**

**Weld Pad Thermocouple**

- Sensor element: Type K, J, E, or N
- Measuring range: 0 ... +1,260 °C, 32 ... +2,300 °F
- Measuring point: Grounded or ungrounded
- Process connection: Surface mount welded
- Data sheet: TE 65.56

---

**TC59-V**

**Tubeskin Thermocouple V-Pad®**

- Sensor element: Type K, J, E or N
- Measuring range: 0 ... +1,260 °C, 32 ... +2,300 °F
- Measuring point: Grounded
- Process connection: Surface mount welded
- Data sheet: TE 65.59

---

**TC59-X**

**Tubeskin Thermocouple Assembly Gayesco Xtracto-Pad®**

- Sensor element: Type K, J, E or N
- Measuring range: 0 ... +1,260 °C, 32 ... +2,300 °F
- Measuring point: Grounded or ungrounded
- Process connection: Surface mount removable / shielded
- Data sheet: TE 65.57

---

**TC59-R**

**Tubeskin Thermocouple Assembly Gayesco Refracto-Pad®**

- Sensor element: Type K, J, E or N
- Measuring range: 0 ... +1,260 °C, 32 ... +2,300 °F
- Measuring point: Grounded or ungrounded
- Process connection: Surface mount removable / shielded
- Data sheet: TE 65.56
TC95
Multipoint Thermocouple In Band Design

Sensor element: Types K, J, E, N, or T
Measuring range: 0 ... 1,200 °C, 32 ... 2,192 °F
Measuring point: Ungrounded or grounded
Process connection: Various process connections
Data sheet: TE 70.01

TC96-R
Gayesco Flex-R® Flexible Multipoint Thermometer

Sensor element: Types K, J, E, or N
Measuring range: 0 ... 1,200 °C, 32 ... 2,192 °F
Measuring point: Ungrounded or grounded
Process connection: Various process connections
Data sheet: TE 70.10

TC96-O
Gayesco Flex-O® Flexible Multipoint Thermometer

Sensor element: Types K, J, E, or N
Measuring range: 0 ... 1,200 °C, 32 ... 2,192 °F
Measuring point: Ungrounded or grounded
Process connection: Various process connections
Data sheet: TE 70.11
Thermowells

- Ideal for highest process loads.
- Reduces the amplitude of oscillation by more than 90% compared to a conventional well.
- Easy, fast and trouble-free installation without modifications to the measuring point.
- Eliminating the use of support collars.

ScrutonWell® Design Option

<table>
<thead>
<tr>
<th>Thermowell Form</th>
<th>Engineered Helical Strake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Various threaded, flanged or Vanstone process connection</td>
</tr>
<tr>
<td>Process Connection</td>
<td>Various threaded or flanged process connection</td>
</tr>
<tr>
<td>Bore Diameter</td>
<td>0.260&quot;, 0.385&quot;, others</td>
</tr>
<tr>
<td>Data Sheet</td>
<td>SP 05.16</td>
</tr>
</tbody>
</table>

Helical strakes break up the flow and thus impede the formation of a clearly defined Kármán vortex street.
**Thermowells**

**TW15**

**Threaded Type (Solid Machined)**
- Thermowell Form: Tapered, straight or stepped
- Process Connection: 1/2"NPT, 3/4"NPT or 1"NPT
- Bore Diameter: 0.260", 0.385", others
- Unique Features: Large variety of materials available
- Data Sheet: TW.TH/TW15

**TW20, TW25**

**Socket Weld & Weld-In Type (Solid Machined)**
- Thermowell Form: Tapered, straight or stepped
- Weld-In Diameter: Up to 2" pipe size
- Bore Diameter: 0.260", 0.385", others
- Unique Features: Large variety of materials available
- Data Sheet: TW.SW/TW20, TW.WI/TW25

**TW60**

**Sanitary Type (Solid Machined)**
- Thermowell Form: Straight or stepped
- Material: 316L (1.4435) stainless steel
- Process Connection: Wide variety of sanitary connections available
- Bore Diameter: 0.260", 0.385", others
- Unique Features: Surface Finish Ra ≤ 25 μin (Ra ≤ 0.64 μm) per ASME BPE, SF2 Electro polished surface finish (optional)
- Data Sheet: TW 95.22

**TW10**

**Flanged Type**
- Thermowell Form: Tapered, straight or stepped
- Flange Size: 1" up to 4" per ASME B16.5
- Flange Rating: 150 lbs to 2500 lbs
- Flange Face: RF or RTJ
- Bore Diameter: 0.260", 0.385", others
- Unique Features: Full penetration weld standard Large variety of flange & thermowell material
- Data Sheet: TW.FL/TW10
**Level Measurement**

**Magnetic Level**

### BLM Magnetostriective Level Transmitter

- **Resolution:** 0.04" / < 0.1 mm
- **Measuring Ranges:** 12" – 240"
- **Input:** 24 VDC
- **Output:** 4-20mA with or without digital display
- **Protocol:** HART
- **Approvals:** FM, ATEX Exi, Exd, EAC, NEPSI
- **Certifications:** SIL 2, CL.I Gr.ABCD/CL.II Gr.EFG, Zone 1 II 2G Ex d IIB T3 ... T6 Gb, II 2G Ex ia IIB T3 ... T6
- **Unique Features:** Requires no calibration, All 316ss
- **Data Sheet:** LM 10.05

### WRS, WCS, BGU Level Switch

- **Contact:** SPDT (Reed), DPDT (Reed), Dry Contact
- **Switch Power:** 230VAC, 60 VA, 1 A DC 230V, 30 W, 0.5 A, 230V AC, 200VA, 5A or 230V DC, 60W, 2A
- **Approvals:** FM, CSA, ATEX Exi, Exd, DNV-GL, EAC, or IEC Exd
- **Certifications:** CL.I Div.1 Gr.ABCD/CL.II Gr.EFG, Zone 1 II 2G Ex d IIB T3 ... T6 Gb, II 2G Ex ia IIB T3 ... T6
- **Unique Features:** Requires no calibration, All 316ss
- **Data Sheet:** WRS WCS, BGU
Dependable level indication for years with little to no maintenance required
Hundreds of designs available for easy reto-fit replacement of traditional sight glass
High vibration designs available
High temperature insulation, cryogenic insulation, steam tracing, electrical heat tracing, liquid gas chamber construction
Built to ASME B31.3, B31.1, U-Stamp, PED-Stamp, EAC, DNV, ABS, and ATEX Exd,
### Flow Measurement

**FCM-OP**
- **Orifice Plate**
  - **Standards:** ISO 5167-2, ASME MFC3M
  - **Material:** 316L SS, Hastelloy C276, Monel M400, Duplex & others
  - **Pipe Size:** ≥ 2" (≥ 50 mm)
  - **Beta Ratio β = d/D:** Depending on version
  - **Accuracy:** ± 0.5...2.5% of full scale flow rate
  - **Max. operating temperature up to:** 1472°F (800°C)
  - **Max. working pressure up to:** 5800 psi (400 bar)
  - **Unique Features:**
    - Repeatability 0.1% of flow rate
    - Wide range of materials available
    - Nominal size & pressure rating available in accordance with all relevant standards.
  - **Data sheet:** FL 10.01

**FLC-FL**
- **Venturi Meter**
  - **Application:** Gas processing, power, petrochemical, refinery and water
  - **Fluids of Measurement:** Gas, liquid, steam
  - **Standards:** ISO 5167-4, ASME PTC 19.5 & ASME MFC-3M
  - **Line Size:** 2" thru 48" (Note: large diameter meters are available upon request)
  - **Pressure Taps:** Meter bodies are fabricated with a wide variety of pressure taps, common sizes 1/2" to 1"
  - **Material:** Plate or machined bar-forgings in carbon steel, stainless steel or various other material depending on the process application
  - **End Connections:** Raised face/RTJ flanged or weld-in connections
  - **Accuracy:** ≤ ±0.5% of actual flow rate. By means of a calibration a higher accuracy can be achieved
  - **Calibration:** Available upon request

**FLC-RO-ST, FLC-RO-MS**
- **Single-Step and Multi-Step Restriction Orifice**
  - **Flange Material:** 304/304L & 316/316L stainless steel, Monel 400, Duplex, Super Duplex, Hastelloy C276 & other
  - **Unique Features:**
    - Suitable for liquids, gases and steam
    - Multi-bore option to reduce noise level
    - Multi-step restriction orifices reduce the pressure by more than 50% of the inlet valve.
  - **Data sheet:** FL 20.01
## Honed Meter Runs

**FLC-MR**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flange Material</td>
<td>Wide range of materials available</td>
</tr>
<tr>
<td>Pipe Size</td>
<td>½”... 1½” (12... 40mm)</td>
</tr>
<tr>
<td>Pressure Rating</td>
<td>300... 2500 lbs.</td>
</tr>
<tr>
<td>Beta Ratio $\beta = \frac{d}{D}$</td>
<td>0.15...0.7</td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 0.75% of full scale flow rate</td>
</tr>
<tr>
<td>Unique Features</td>
<td>Suitable for liquid, gas &amp; steam flow measurement Repeatability of measurement 0.1%</td>
</tr>
<tr>
<td>Standards</td>
<td>ASME MFC 14M</td>
</tr>
<tr>
<td>Data Sheet</td>
<td>FL 10.02</td>
</tr>
<tr>
<td>Model</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>XLU68f</strong></td>
<td>Miniature Tension/Compression</td>
</tr>
<tr>
<td><strong>XLC86</strong></td>
<td>Subminiature ‘Button’ Load Cell</td>
</tr>
<tr>
<td><strong>XLP58</strong></td>
<td>Low Profile Pancake Load Cell</td>
</tr>
</tbody>
</table>
**XLD150/300**

**Thru-Hole 'Donut' Load Cell**
- **Load Range:** 0...5 lbs. to 0...100000 lbs.
- **Output:** Voltage or current
- **Size:** 1.50" to 3" Diameter
- **Accuracy:** ±0.1% Repeatability
- **Operation:** Compression Only
- **Construction:** Welded Stainless Steel
- **Feature:** 150% Safe Overload

**F5301 & F53C1**

**Industrial Load Pin**
- **Load Range:** 0...1100 lbs. to 0...45000 lbs.
- **Output:** Voltage or current
- **Size:** 20mm to 70mm Diameter
- **Accuracy:** ±2.0% Linearity, ±0.20% Hysteresis
- **Element:** Thin Film Technology
- **Construction:** Welded Stainless Steel
- **Feature:** ATEX Approval

**XLRM**

**Rod End, Male/Male Load Cell**
- **Load Range:** 0...2000 lbs. to 0...750000 lbs.
- **Output:** Voltage or current
- **Size:** 1.50" to 6.63" Diameter
- **Accuracy:** ±0.05% Repeatability
- **Operation:** Tension/Compression
- **Construction:** Welded Stainless Steel
- **Feature:** Hermetically Sealed
Unfortunately, unplanned shutdowns and failures happen, causing unexpected product needs to arise. Fortunately though, WIKA USA is here to help.

WIKA’s Express Lane program offers you ordering flexibility, when you need it. Using our over 70 years of industry experience and instrumentation expertise, we have selected the top Diaphragm Seal products that customers need in a rush. These preselected items can now be ordered through WIKA USA’s Express Lane program with 1-day, 2-day or 5-day lead time options.*

For more information about the Diaphragm Seal Express Lane, call 1-855-398-3701 or email ExpressDS@wika.com.

*Quantity limits apply.

Calibration Services
Ensuring Accurate Data for Optimal Outcomes
WIKA USA’s full-service ISO 17025 accredited Calibration Lab can calibrate all types of pressure and temperature instruments, as well as perform repairs or refitting as required. For damaged devices, our experienced technicians can replace parts on gauges, such as movements and window, as well as replace and reset pointers. The lab can also make the necessary adjustments to restore gauges to published accuracy specifications. We supply:

- Pressure capabilities from -15 psi to 72,000 psi at accuracies from .005% of reading to .15% FS depending on pressure range.

- Temperature capabilities are from -22°F (-30°C) to 788°F (420°C).

- Calibrated or repaired gauge back to you within approximately three business days.
An on-site FAST Audit is the first step in constructing a world-class instrumentation program. During an audit, FAST engineers visually inspect your population of mechanical pressure and temperature indicators, documenting failures as well as opportunities for improving reliability. FAST engineers then analyze the data to supply you with best practice recommendations for individual installations and your plant as a whole.

With this data in hand, FAST engineers will then be able to assess your plant's needs and streamline your gauge management process.

fast@wika.com • www.wika.com/fast

40% of instruments in a typical processing plant have failed or are about to fail*

*Based on results from more than 250 WIKA instrument audits
For over 70 years, WIKA has continuously advanced instrumentation for pressure, temperature, level, flow, and force measurement. Our broad selection of standard and custom solutions, as well as services, work to support operational safety, productivity and profitability. A global leader in lean manufacturing, WIKA can be your reliable partner anywhere in the world.