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# Solutions and Services for Pressure, Temperature, Level and Flow Measurement

At WIKA, 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 and flow measurement solutions and services.

Wherever you are in the world, you can rely on WIKA quality.

# WIKA: Your Reliable Partner for Measurement Technology

#### WIKA's LeanSigma® Methodology

WIKA 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 has embraced a new manufacturing philosophy named LeanSigma®.

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

#### The benefits are:

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

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

#### WIKA's Customized Dial Printing Capabilities

WIKA's customized printing capabilities are among the best in the industry. WIKA 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's NIST Traceable Calibration Lab

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

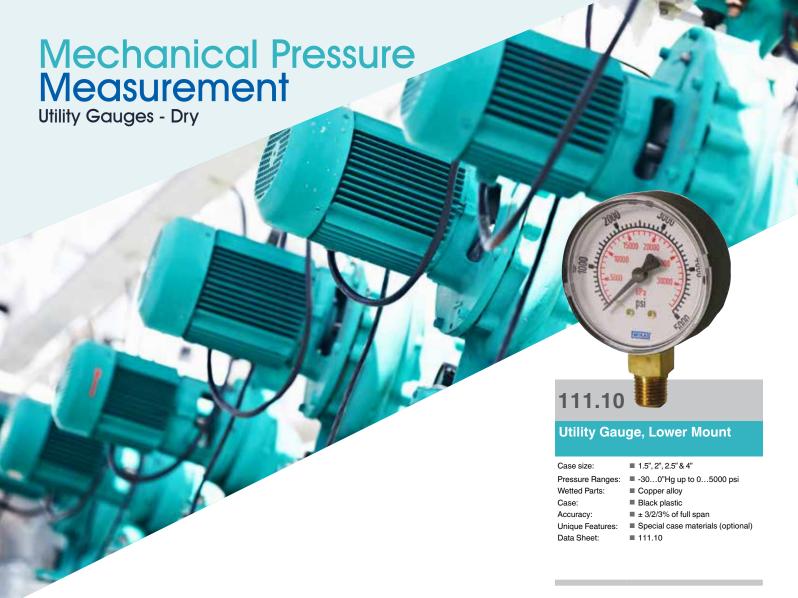
Mechanical and electronic pressure measuring instruments, deadweight testers as well as temperature sensors and temperature measuring instruments, resistance thermometers or dry well calibrators can all be calibrated and certified by WIKA.



WIKA 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 ensure you have trusted







## 111.12

#### **Utility Gauge, Back Mount**

**1.5**", 2", 2.5" & 4" Case size:

Pressure Ranges: ■ -30...0"Hg up to 0...5000 psi

Wetted Parts: ■ Copper alloy Case: ■ Black plastic

■ ± 3/2/3% of full span Unique Features: ■ Special case materials (optional)

■ Panel mount w/u-clamp (optional)

■ 111.12 Data Sheet:



#### **Regulator Gauge**

**1.5**", 2" & 2.5" Case size:

Pressure Ranges: ■ -30...0"Hg up to 0...5000 psi

Wetted Parts: ■ Copper alloy Case: ■ Steel gold plated ■ ± 3/2/3% of full span Accuracy: ■ UL 252 & UL 404 approvals Unique features: ■ Free of oil and grease

■ Other case materials (optional) Data Sheet:



111.25



#### **Contractor Gauge**

**4.5** Case size:

Pressure Ranges: ■ -30...0"Hg up to 0...5000 psi

Wetted Parts: ■ Copper alloy Case: ■ 304 stainless steel Accuracy: ■ ± 1.0 % of full span

■ Surface mounting flange (optional) Unique Features:

■ 111.25 Data Sheet:

**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: ■ Black plastic, glycerin filled

Ingress Protection: ■ IP 65

Accuracy: ■ ± 3/2/3 % of full span
Unique Features: ■ Factory glycerin filled

■ 1.5" only available in CBM

Data Sheet: ■ 113.13



213.53

# 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:  $\equiv \pm 2/1/2 \%$  of full span

Unique Features: ■ Factory glycerin filled

Easily adaptable with u-clamp bracket & front flange (optional)

Data Sheet: ■ 21X.53

**Hydraulic Gauge, Liquid Filled** 213.40

**Case Size** 2½" & 4"

Pressure Ranges

-30...0"Hg up to 0...15000 psi

Wetted parts Copper alloy

Case Cast brass

Ingress Protection IP65

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





### 111.12DW

# **Drinking Water Gauge, Back Mount**

Case size: ■

■ 1.5", 2" & 2.5"

Pressure Range Wetted Parts:

Pressure Ranges: ■ -30...0"Hg up to 0...600 psi

vvetted Parts:

-30...0"Hg up to 0...600 psLead free brass (≤ 0.25%)

Case:

■ Black plastic (standard)

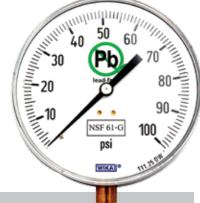
Accuracy:

■ ± 3/2/3% of full span

Unique Features: ■ NSF 61 G approved

Meets "Safe drinking water act" of 2015.

Data Sheet: ■ 111.12DW



## 111.25DW

# **Drinking Water Gauge, Contractor Style**

Case size:

**4.5**"

Pressure Ranges: Wetted Parts:

■ -30...0"Hg up to 0...600 psi

vetted Parts:

Lead free brass (≤ 0.25%)304 Stainless steel

Case:

Data Sheet:

■ ± 3/2/3% of full span ■ NSF 61 G approved

Accuracy: Unique Features:

■ Meets "Safe drinking water act"

of 2015.

■ 111.25DW



# **Drinking Water Gauge, Liquid Filled**

Case size: ■ 2

Pressure Ranges: -30...0"Hg up to 0...600 psi

Wetted Parts: ■ Lead free brass (≤ 0.25%)

Case: ■ 304 stainless steel

Ingress Protection: ■ IP65

Data Sheet:

Accuracy: ■ ± 2/1/2% of full span
Unique Features: ■ NSF 61 G approved

■ Meets "Safe drinking water act"

of 2015.

■ Factory liquid filled.■ 213.53DW

All Stainless Steel Gauges



232.53, 233.53

#### Crimped Bezel, Field Liquid Fillable

Case size:

Pressure Ranges: ■ -30...0"Hg up to 0...15,000 psi

Wetted Parts: ■ 316 stainless steel ■ 304 stainless steel Case:

Ingress Protection: ■ IP 65

■ ± 2/1/2 % of full span (2" & 2.5") Accuracy:

■ ± 1% of full span (4")

■ Field fillable Unique Features:

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

Pressure Ranges: ■ -30...0"Hg up to 0...15,000 psi

■ 316 stainless steel Wetted Parts: Case: 304 stainless steel

Ingress Protection: ■ IP 65

■ ± 2/1/2 % of full span (2.5") Accuracy:

■ ± 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**

Case size:

Pressure Ranges: ■ -30...0"Hg up to 0...15,000 psi

Wetted Parts: ■ 316 stainless steel Case: 316 stainless steel

Ingress Protection: ■ IP 65

■ ± 2/1/2 % of full span Accuracy:

■ Case, ring & FF 316 stainless steel Unique Features:

> ■ Case factory filled with Glycerin Front flange spot welded to case ■ LBM connection position

■ 233.55 Data Sheet:



232.50, 233.50

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

**2.5**", 4", 4.5" & 6"

Pressure Ranges: ■ -30...0"Hg up to 0...15,000 psi

Wetted Parts: ■ 316 stainless steel ■ 304 stainless steel Case:

Ingress Protection: ■ IP 65 Accuracy:  $\blacksquare$  ± 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





**US Process Type Gauges** 

- 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.



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



### 910.18.100

#### **Gauge Cover**

Case size: ■ 4.5

P/N:

Material: ■ Clear PVC, 0.025" (25 mil) thick

■ Flammability rating V-0 per UL-94

**52551890** 

Unique Features: ■ Ideally to protect gauge from

spills, splashes and other environmental contaminations.

Data Sheet: ■ 910.18.100



## **Set Point Indicator**

#### Red

Case size:

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



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

Case: ■ Black thermoplastic (Pocan)
Ingress Protection: ■ IP 65 (LBM IP 54)

Accuracy: = ± 0.5 % of full span

Unique Features: ■ Field fillable (LM only)

■ Liquid filled version 213.34

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

Case: ■ Black thermoplastic (Pocan)

Ingress Protection:  $\blacksquare$  IP 65 (LBM IP 54) Accuracy:  $\blacksquare$   $\pm$  0.5 % of full span

Unique Features: ■ Field fillable (LM only)

■ Liquid filled version 263.34

Data Sheet: ■ 26X.34

212.25, 232.25

#### "Hinged Ring" Panel Mount Process Gauge, Solid Front

Case size: ■ 4.5" & 6"

Pressure Ranges:  $\blacksquare$  -30"Hg up to 0...20,000 psi (232.25)

■ -30"Hg up to 0...1,000 psi (212.25)

Wetted Parts: ■ 316 stainless steel (232.25)

■ Copper alloy (212.25)

Case: ■ Aluminum black painted with steel

black ring and 304SS blow-out back

Ingress Protection: ■ IP 54

Unique Features:

Accuracy: ■ ± 0.5 % of full span

■ ± 1.0 % (range 0/20,000 psi)
■ Access to adjustable pointer for

zero point adjustment by removing

the hinged ring.

Data Sheet: ■ 212.25, 232.25

Low Pressure Capsule Gauges



611.10

#### Low Pressure Capsule Gauge, **Standard Design**

■ 2" & 2.5" Case size:

■ 0...25 InWC to 0...250 InWC Pressure Ranges:

(2" case size)

■ 0...10 InWC to 0...250 InWC

(2.5" case size)

Wetted Parts: ■ Copper alloy ■ Steel black Case:

Ingress Protection: ■ IP 33

■ ± 1.6 % of full span Accuracy:

Unique Features: ■ With zero-adjustment screw on dial

For dry, non-aggressive gaseous

media only

■ Case size 2" only available in

CBM only

Data Sheet: **611.10** 



632.50, 633.50

#### Low Pressure Capsule Gauge, Industrial Design, All Stainless Steel

**2.5**", 4" & 6" Case size:

■ 0...16 InWC to 0...250 InWC Pressure Ranges:

(2.5" case size)

■ 0...6 InWC to 0...250 InWC

(4" case size)

■ 0...1 InWC to 0...250 InWC

(6" case size)

Wetted Parts: ■ 316 stainless steel ■ 304 stainless steel Case:

Ingress Protection:

Accuracy: ■ ± 1.6 % of full span

Data Sheet:

Unique Features: ■ With zero-adjustment screw on dial

For dry, gaseous media only

■ Silicone case filling (optional, 633.50, in sizes

■ 4" & 6" for ranges 0...25 InWC

(au &

**632.50** 

612.34, 632.34, 633.34

#### Low Pressure Capsule Gauge, **Process Type**

Case size: **4.5** 

■ 0...10 InWC to 0...250 InWC Pressure Ranges: Wetted Parts:

Copper alloy (612.34) ■ Stainless steel (632.34)

Case: ■ Black thermoplastic (POCAN)

Ingress Protection: ■ IP 54

■ ± 1.6 % of full span Accuracy:

Unique Features: For dry, gaseous media only

■ Silicone case filling (optional, 633.34 for ranges 0...40 InWC

& up)

Data Sheet: ■ 6X2.34





432.50, 433.50

#### Low Pressure Sealgauge™, Standard Design

Case size: ■ 4" & 6"

Pressure Ranges: ■ 0...6 InWC to 0...100 InWC

(6" flange size)

■ 0...6 psi to 0...360 psi (4" flange size)

Wetted Parts: ■ 316 stainless steel & PTFE lined diaphragm

Case: ■ 304 stainless steel

Ingress Protection: ■ IP 54

Data Sheet:

Accuracy: ■ ±2.5 % of full span

Unique Features: ■ 5x overpressure safe, not

exceeding 600 psi

■ 1/2"NPT female process connection

■ Glycerin/Water case filling

(optional, 433.50)

■ Solid front version (optional 432.30 & 433.30)

€ 43X.50

452.50, 453.50

#### Low Pressure Sealgauge™, PTFE Wetted Parts

Case size: ■ 4" & 6"

Pressure Ranges: ■ 0...6 InWC to 0...100 InWC

(6" flange size)

■ 0...6 psi to 0...360 psi (4" flange size)

Wetted Parts: PTFE lined tainless steel

Case: 304 stainless steel

Ingress Protection: ■ IP 54

Accuracy: ■ ±2.5 % of full span

Unique Features: ■ 5x overpressure safe, not

exceeding 600 psi

■ Open flange process connection

■ Glycerin/Water case filling (optional, 453.50)

■ Solid front version (optional 452.30

& 453.30)

Data Sheet: ■ 45X.50



432.56, 433.56

#### Low Pressure Sealgauge™, High Overpressure Safe

Case size: ■ 4" & 6"

Pressure Ranges: ■ 0...6 InWC to 0...100 InWC

(6" flange size)
■ 0...6 psi to 0...360 psi

(4" flange size)
■ 316 stainless steel

Wetted Parts: ■ 316 stainless steel
Case: ■ 304 stainless steel

Ingress Protection: ■ IP 54

Accuracy: ■ ±1.6 % of full span

Unique Features: High overpressure safe up to 600 psi, 1500 psi, or 6000 psi

independent of the pressure range

■ Glycerin/Water case filling (optional, 433.56)

■ Solid front version (optional 432.56

& 433.56)

Data Sheet: ■ 43X.56

**Differential Pressure Gauges** 



732.25, 733.25

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

**4.5**" & 6" Case size:

DP Ranges: ■ 0...100 InWC to 0...600 psi

■ 316 stainless steel & Inconel 718 Wetted Parts:

diaphragm Viton O-ring

■ Black anodized aluminum Case: Accuracy: ■ ± 1.0 % of full span

■ 2 x 1/4"NPT female back connection Unique Features:

■ 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:

Accuracy:

DP Ranges: ■ 0...6 InWC to 0...100 InWC

(114 mm flange size) ■ 0...6 psi to 0...360 psi

(78 mm flange size) ■ 316 stainless steel &

■ ± 1.6 % of full span

Wetted Parts: Inconel 718 diaphragm

■ 304 stainless steel Case:

Unique Features: ■ Max. over-/working pressure 360

psi, depending on pressure range.

■ 2 x 1/4"NPT female process connection

■ Glycerin/Water case (optional, 733,51)

■ Solid front version (optional, 732.31

& 733.31) ■ 732.51

Data Sheet:



#### **Liquid Level** Cryo Gauge

Case size:

DP Ranges: ■ 0...16 InWC to 0...1600 InWC Wetted Parts: Brass, stainless steel.

NBR (712.15)

■ Stainless steel, NBR

■ membrane (732.15)

■ 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



732.14, 733.14

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

Case size:

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

■ 304 stainless steel Case:

Ingress Protection: ■ IP 54

Accuracy: Unique Features:

■ ± 1.6 % of full span ■ Max. over-/working pressure 600 psi (standard) 1500 psi, 3600 psi

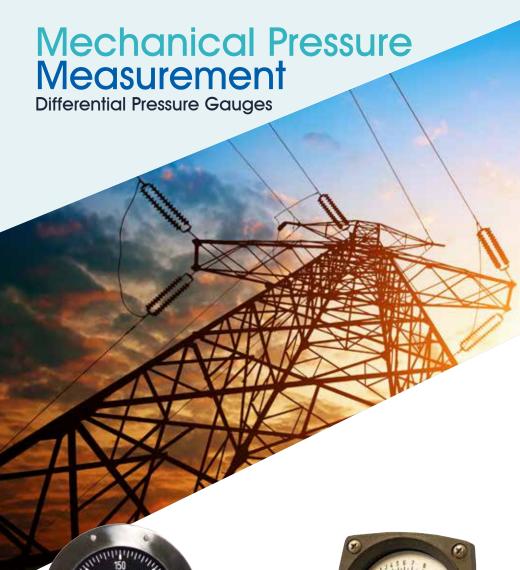
or 6000 psi (optional)

■ Glycerin/Water case fille (733.14)

■ Monel wetted parts (optional, 762.14, 763.14)

■ Hastelloy C276 wetted parts (optional)

Data Sheet ■ PM 07.13





## **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) ■ Black anodized aluminum

Ingress Protection: ■ IP 65

Case:

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** 



700.04, 703.04

#### 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

Fiberglass reinforced thermoplastic Case:

Ingress Protection: ■ IP 65

Accuracy: ■ ± 2.0 % of full span

(on increasing pressure)

■ 2 x 1/4"NPT female Unique Features: back connection

■ Max. working pressure 6000 psi

Panel mount kit included

■ End connection (optional)

■ Stainless steel sensor housing (optional)

■ Case filling (optional, 703.04)

Data Sheet: ■ 700.04



700.05, 703.05

## Differential Pressure Gauge, Piston Type with Separating Membrane

Case size:

DP Ranges: ■ 0...50 InWC to 0...100 psi

Wetted Parts: Aluminum black anodized sensor housing, ceramic magnet, SS spring & Buna-N membrane

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)

■ 2 x 1/4"NPT female back connection Unique Features:

Max. working pressure 3000 psi

■ Panel mount kit included

■ Top/bottom connection (optional)

Stainless steel sensor housing

(optional)

■ Case filling (optional, 703.05)

Data Sheet: ■ 700.05

**Differential Pressure Gauges** 



### 712.25DP

#### **Differential Pressure Gauge, Bourdon Tube**

**4.5**" & 6" Case size:

DP Ranges: ■ 0...15 psi to 0...1000 psi

■ 15/15 psi to 500/500 psi (bi-directional)

Wetted Parts: ■ Copper alloy

■ Black epoxy coated aluminum

Ingress Protection: ■ IP 33

■ ± 2/1/2 % of full span Accuracy:

Unique Features: ■ 2 x 1/4"NPT male lower connection

DP indication via subtracting movement and one pointer

■ 712 25DP Data Sheet:



### 712.25DX

#### **Duplex Differential** Pressure Gauge

Case size: **45**"&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



332.34

# 4.5" Process Type Test Gauge, Accuracy Grade 3A

Case size: ■ 45

Pressure Ranges: ■ 0...15 psi to 0...20,000 psi Wetted Parts:

■ 316 Stainless steel ■ Black thermoplastic (POCAN)

Case: Accuracy:

■ Ranges < 800 psi and > 1500 psi:  $\pm\,0.25~\%$  of full span, per ASME B40.100 Grade 3A

■ Ranges 0...800 psi to 0...1500 psi:  $\pm\,0.5\%$  of full span per ASME

B40.100, Grade 3A Unique Features: ■ Mirror band dial

■ Micro-adjustable knife edge pointer

■ 332.34 Data Sheet:



312.20

# 6" Precision Test gauge, Accuracy Grade 3A

Case size:

Pressure Ranges: ■ 0...10 psi to 0...10,000 psi

Wetted Parts: ■ Copper alloy ■ 304 stainless steel

Ingress Protection: ■ IP 54

Accuracy:  $\blacksquare$  ± 0.25 % of full span, per ASME

B40.100 Grade 3A

Unique Features: ■ Mirror band dial

■ Micro-adjustable knife edge pointer

Data Sheet: ■ 312 20



#### 4" Inspector Test Gauge, **Accuracy Grade 3A**

Case size:

Pressure Ranges: ■ 0...15 psi to 0...20,000 psi

Wetted Parts: ■ Stainless steel ■ Stainless steel Case:

Ingress Protection: ■ IP 65

■ Ranges < 1000 psi and > 1500 psi: Accuracy:

 $\pm\,0.25$  % of full span, per ASME B40.100 Grade 3A

■ Ranges 0...800 psi to 0...1500 psi:  $\pm\,0.5\%$  of full span per ASME B40.100, Grade 3A

■ Mirror band dial Unique Features:

■ Micro-adjustable knife-edge pointer

■ Zipped carrying pouch ■ Calibration test report

Data Sheet: ■ 332.54



### 342.11



# 10" High Precision Test gauge, Accuracy Grade 4A

Case size:

Pressure Ranges: ■ 0...10 psi to 0...23,000 psi

Wetted Parts: ■ 316 Stainless steel socket and Ni-Fe-alloy Bourdon Tube

■ Die-cast Aluminum, black-silver finish

Ingress Protection: ■ IP 54

Unique Features:

Accuracy: ■ ± 0.1 % of full span per ASME B40.100 Grade 4A

■ Front side external zero-adjustment

■ Mirror band dial ■ Knife edge pointer

■ Calibration certificate per EN 10204-3.1

Data Sheet: ■ 342.11



#### **Precision Digital Pressure** Gauge, Grade 4A

■ 4" with 5-1/2 digit 7-segment display

Wetted Parts:

Pressure Ranges: ■ 0...1.5 psi to 0...15,000 psi ■ 316 Stainless steel

Case:

■ Die-cast aluminum

Accuracy:

Ingress Protection: ■ IP 65

■ ± 0.1 % of full span, per ASME B40.100 Grade 4A

■ ± 0.2 % of full span for rangers 0...1.5 psi

■ ± 0.15 % of full span for rangers 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



#### **Hand-Held Pressure Indicator**

Dimension: Display:

■ 5.6 x 2.8 x 1.4 inches (142 x 71 x 36 mm) ■ 4-1/2 digits depending on range

Pressure Ranges: Wetted Parts:

■ 0...0.4 psi up to 0...14,500 psi ■ 316 Stainless steel (transmitter)

Case: Accuracy: Unique Features:

■ Impact resistant ABS ■ ± 0.2 % of full span ■ Eight selectable pressure units

■ Integrated data logger ■ Differential pressure

measurement (optional) ■ Accuracy ± 0.1% (optional, calibration certificate included)

Data Sheet: ■ CT 11.01 Calibration Equipment



#### Hand-Held Pressure Indicator

Dimension: Display:

6.4 x 3.4 x 1.7 inches (163 x 86 x 42 mm)

Pressure Ranges: Wetted Parts:

■ 4-1/2 digits depending on range ■ 0...0.4 psi up to 0...14,500 bar ■ 316 Stainless steel (transmitter)

Case: ■ Impact resistant ABS Ingress Protection:

■ IP 65 & IP 67 ■ ± 0.2 % of full span

Accuracy: 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



#### **Pneumatic Hand Pump**

Dimension:

■ 8.7 x 4.1 x 2.5 inches (220 x 105 x 63 mm)

Weight: Measuring Range: Materials:

■ 1.1 pounds (0.5 kg) ■ -950 mbar...+35 bar (-28"Hg/500 psi)

■ Brass, chromium-plated anodized aluminum, heavy duty plastic for handles

Medium:

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

Weight: Measuring Range: ■ 4.2 pounds (1.9 kg)

120 mm)

Materials:

■ 0...700 bar (0...10,000 psi) ■ 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 Pressure Gauge Options



## 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" 2X2.25 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



#### **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

## **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



# Pressure Gauge Options



Case Size 4.5"

#### **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





#### **Availability**

Most industrial and process type pressure gauges

#### Materia

Aluminum red on safety glass or plastic window

#### **Adjustment**

Externally adjustable with fixed or removable key

#### **Application**

For indication of maximum pressure values



## **Restrictors**

#### **Availability**

Most gauges with male process connection

#### **Material**

Brass, 316 stainless steel & Monel

#### **Application**

For severe pulsations and pressure spikes



## **Mounting Options**

#### **Availability**

Most utility, industrial & process type gauges

#### **Mounting Types**

U-clamp bracket for panel mounting Front flanges for panel mounting Rear flanges for surface/wall mounting

#### **Applicatio**

For installations into panels or onto surfaces

# Pressure Gauge Accessories



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

# **Pressure Snubbers** 910.12.100, 910.12.200

#### **Application**

To protect pressure gauge from pulsations and pressure spikes

#### Material

Brass & stainless steel

# **Data Sheet** 910.12





# Pressure Gauge Accessories

## **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



### **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**

316 stainless steel

910.15.400

**Data Sheet** 

# **Siphons**

910.15.100, 910.15.200

#### **Application**

For the protection of pressure gauges from high temperature in steam applications.



# IntelliGAUGES – Pressure gauges with electrical output signal

The multi-functional intelliGAUGE 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 works 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.





PGT23.100, PGT23.160

#### **Process Grade**, **All Stainless Steel**

Pressure Ranges: ■ -30"Hg...0 up to 0...30000 psi

Wetted Parts: ■ 316 stainless steel ■ 304 stainless steel Case:

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:



PGT43.100, PGT43.160

#### Diaphragm Type, All Stainless Steel

Output Signal:

Pressure Ranges: ■ 0...10"WC up to 0...360 psi ■ 316 stainless steel Wetted Parts:

Case: ■ 304 stainless steel Ingress Protection: ■ IP 54, optional IP 65 (liquid filled)

Accuracy: ■ ± 1.6 % of full span

Unique Features: ■ Solid front safety design (standard)

■ 5-times OP safe, up to 600 psi

■ Various, ATEX version optional

■ Switch options available

Data Sheet: ■ PV 14.03





DPGT43.100, DPGT43.160

#### **Differential Pressure Type, All Stainless Steel**

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)

■ Max working pressure 360 psi, depending on range

■ Switch options available

Data Sheet: ■ PV 17.05





## DPGT43HP.100, DPGT43HP.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

Output Signal:

Ingress Protection: ■ IP 54, optional IP 65 (liquid filled) ■ 4...20 mA, 2-wire, ATEX version optional

Accuracy:

■ ± 1.6 % of full span

Unique Features:

Data Sheet:

■ High overpressure safe up to 600

psi and optional up to 1500 psi, 3600 psi or 6000 psi.

■ Switch options available ■ PV 17.13

# switchGAUGES – Pressure gauges with switch output

Control systems are becoming more and 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 switchGAUGE combines the local indication of a mechanical pressure gauge with the functions of a mechanical switch. One of the advantages of most WIKA switchGAUGE's 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.





## Utility Grade,

**Externally Adjustable 1.5. 2" & 2.5"** Case size:

Pressure Ranges: ■ 0...60 psi up to 0...6000 psi

Wetted Parts: ■ Copper alloy Case: ■ 304 stainless steel

Ingress Protection: ■ IP 41 ■ Magnetic snap-action Switch Type: ■ ± 2.5 % of full span Accuracy:

■ Up to 2 contacts available

Data Sheet:

Unique Feature:



#### **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

■ Magnetic snap-action Switch Type: Accuracy: ■ ± 2.5 % of full span

Unique Features: Fixed, factory set switch point ■ Silicone oil case filling (optional)

Data Sheet: ■ PV 21.02



### PGS23.063

#### **Process Grade**, **All Stainless Steel**

Case size:

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 ■ Solid front safety design Unique Feature:

Data Sheet: ■ PV 22.03





## PGS23.100, PGS23.160

#### Industrial/Process Grade, **All Stainless Steel**

**4**"&6" Case size:

Pressure Ranges: ■ -30"Hg...0 up to 0...15000 psi

Wetted Parts: ■ 316 stainless steel

■ 304 stainless steel Case:

Ingress Protection: ■ IP 65 Switch Type:

■ Magnetic, Inductive, Reed & Electronic

Accuracy: ■ ± 1.0 % of full span

■ Solid front safety design (optional) Unique Feature: ■ Silicone case filling (optional)

Data Sheet: ■ PV 22.02





PGS43.100, PGS43.160

#### 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, DPGS43.160

# 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



■ Field installable

■ CP3000, CP4000

■ Magnetic (CP3000), Inductive (CP4000

## DPGS43HP.100, DPGS43HP.160

#### Differential Pressure Type, High Overpressure Safe

Case size: ■ 4" & 6"

Switch Type:

Data Sheet:

Unique Features:

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

 $\blacksquare$  up to 1500 psi, 3600 psi or 6000 psi.

■ Silicone case filling (optional)

Data Sheet: ■ PV 27.13

# **Electronic Pressure** Measurement

**General Purpose Industrial Applications** 



#### **Standard Industrial Grade** Transmitters, Flush Diaphragm

Non-Linearity:

- Up to ± 0.125% B.F.S.L. of full span
- Measuring Ranges: 0...50"WC up to 0...8,000 psi ■ Positive/negative gauge pressure
- and absolute pressure Output Signal:
- 4...20 mA, DC 0...5 V, 0...10 V & other current & voltage output signals ■ Flush process connection for
- Unique Features:
  - viscous media Compact design and rugged
    - construction ■ High temperature version up to
    - 300°F (optional)
- Data Sheet: ■ PE 81.02



#### **General Purpose Transmitter**

Accuracy:

- Up to ± 0.25% B.F.S.L. of full span
- Measuring Ranges: 0...20"WC up to 0...15,000 psi ■ Positive/negative gauge pressure and absolute pressure
- Output Signal:
- 4...20 mA. DC 0...5 V. 0...10 V & other voltage & ratiometric output signals
- Unique Features:
- Suitable for most general industrial applications
- Compact design
- Test report included with unit
- Exceptional number of variations
- Data Sheet: ■ PE 81.60



## DG-10-S, DG-10-E

#### **Digital Pressure Gauges**

Accuracy:

- Up to ± 0.25% of full span B.F.S.L.
- Measuring Ranges: 0...100 psi up to 0...10000 psi
- Positive/negative gauge pressure
- Ingress Protection: IP 65

Data Sheet:

- Unique Features: Local indication with transmitter accuracy
  - 3.15" (80 mm) case diameter
  - Battery powered (2 x 1.5V AA batteries)
  - Enhanced version (DG-10-E) includes black rubber boot. illuminated display, second display for min/max and with tare feature
  - DG-10-E rotatable over 300°
  - PE 81.66





## Standard Industrial **Grade Transmitter** S-20

Non-Linearity
Up to ± 0.125% B.F.S.L. of full span

**Measuring Ranges** 

0...10 psi up to 0...20,000 psi (S-20) Positive/negative gauge pressure and absolute pressure

**Output Signal** 

4...20 mA, DC 0...5 V, 0...10 V & other current, voltage & ratiometric (S-20) output signals

#### **Unique Features**

Robust design for use in harsh environments Extreme shock & vibration resistant Test report included with each unit With NEMA 4X connection head (S-20F)

**Data Sheet** PE 81.61



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Unique Features:

Data Sheet:

■ Over 320° rotatable case and display

■ Optional available with flush

diaphragm (PSD-31)

■ I/O link compatible

■ PE 81.67

Unique Features:

Data Sheet:

Over 320° rotatable case and

display

■ TE 67.03

■ I/O link compatible

mm (28.74")

display

■ LM 40.01

Over 320° rotatable case and

■ User selectable units in mm, cm & %

Unique Features:

Data Sheet:

# **Electronic Pressure** Measurement

Special Purpose Industrial Applications



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

#### **High Pressure Transmitters**

Non-Linearity:

■ Up to  $\pm$  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**

FRI C €

■ ± 0.05 % B.F.S.L. of full span

Measuring Ranges: ■ 0...100"WC up to 0...10,000 psi

■ Positive gauge pressure and

absolute pressure ■ 4...20 mA, 0...20 mA, DC 0...5 V,

Output Signal: Unique Features:

DC 0...10 V USB & CANopen®

■ 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)

■ PE 81.54 Data Sheet:



## **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

■ Positive/negative gauge pressure

Output Signal:

■ 4...20 mA. HART®

Unique Features:

■ Large multi-functional and rotatable

■ Freely scalable measuring ranges

■ 100:1 turndown

Stainless steel case optional

■ Optional available with flush

diaphragm (P-31)

Data Sheet: ■ PE 86.05









- Measuring Ranges: 0...5 psi up to 0...15000 psi
  - 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)

- - 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

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

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# 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.

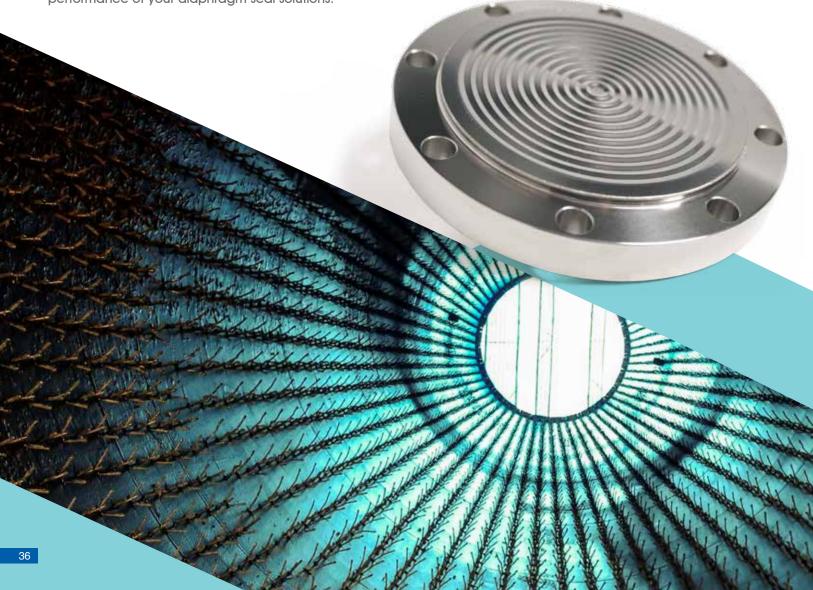
#### Diaphragm Seals

- 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 Combines Expertise and Technology to Provide Custom, Quality Systems

WIKA's dedicated lean manufacturing focus factory produces custom solutions for diaphragm seal systems. We fabricate seal components from raw materials using state-of-the-art CNC machining equipment, and we use innovative technologies such as metal bonding and laser welding to produce durable finished systems.

WIKA'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.



# 80 100 120 60 XSEL 140 160 180 200 psi

#### All Welded System (AWS)

Ranges: ■ -30inHG up to 5000PSI

Case size: ■ 4.5

Case: ■ fiberglass reinforced thermoplastic

Wetted parts: ■ 316L, HC276, Monel
Process: ■ ½" NPT-M connection
Accuracy: ■ +/- 0.5% of span
Options: ■ consult factory
■ Express lane item



990.10, 990.12

#### Standard Design, Threaded / Flanged

Instrument: ■ 1/4" of 1/2" NPT-F

Process: ■ ¼" to 1" NPT threaded
■ ½" to 2" NPS flanged

■ ANSI B16.5 Class 150 to1500

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

Options: consult factory

■ Express lane item



Diaphragm Seals

990.TA, 990.TB

#### **Mini Seals**

Instrument

■ ¼" of ½" NPT-F

Process:

■ ¼" to 1" NPT threaded

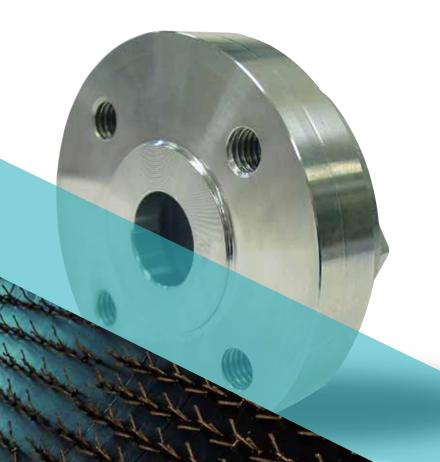
Wetted parts:

■ 316L, Monel, HC276,

Options: 

consult factory

■ Express lane item





990.27,990.28,990.29

## Flange Types, Flush & Extended

Instrument ■ 1/4" of 1/2" 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

■ Diaphragm per TIG, Metal bonding, Seam or Laser Welding technic applied

Options: consult factory





990.FR, 990.ER

## Flange Types, Flush & Extended - Rotatable

Instrument

■ 1/4" of 1/2" NPT-F

Process:

■ 2" - 5" NPS flanged 2" -6" extension

■ ANSI B16.5 Class 150 to 1500

Wetted parts: Technology:

■ 316L, Monel, HC276, Tantalum ■ Diaphragm per TIG, Metal bonding, Seam or Laser Welding technic

applied

Options: ■ consult factory



910.ZA, 910.ZB

#### Saddle & Block Flanges

Instrument

■ 1/4" of 1/2" NPT-F

Process:

■ Saddle design

■ 1/2" - 3" socket or

butt weld & flanged

Wetted parts: Options:

■ 316L, Monel, HC276 ■ consult factory



981.10, 981.27

#### **Inline Diaphragm Seals**

Instrument Process:

■ 1/4" of 1/2" NPT-F

Wetted parts:

■ Wafer & Flange designs 1"-4"

■ 316L, Monel, HC276, Tantalum Options:

■ consult factory

## **Sanitary Solutions**

Sanitary Gauge with **Dual Diaphragm Monitoring System** PG43SA-D

Case size

**Pressure Ranges** 

-30"Hg...30 psi up to 0...200 psi

**Wetted Parts** 

316L stainless steel and Inconel® 718 diaphragm

304 stainless steel electro polished

**Ingress Protection** IP 54

**Accuracy** 

± 1.6 % of full span

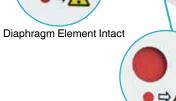
**Unique Features** 

High over pressure safe (depending on range) Ranges > 36 psi suitable for vacuum typical of CIP or SIP cleaning

Electro polishing (wetted parts) optional

**Data Sheet** PM 04.17

> External Zero Adjustment Setting Range ± 15°



Status Display

Diaphragm Element Defective



RAGM INCONEL 718

VETTED PARTS 1 4435

overpressure safe: 8 bar

AITTOCLAVABLE

bar

WIKA

CL 1.6

- Patented diaphragm monitoring system to emphasize highest safety requirements
- Red warning sign will indicate breach of first barrier
- 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°)









#### M932.3A, M933.3A

## Diaphragm Seal Sanitary Gauge

**2.5" & 4"** Case size:

Pressure Ranges: ■ -30"Hg...0 up to 0...600 psi

Wetted Parts: ■ 316L stainless steel electro polished

■ 304 stainless steel electro polished Case:

Ingress Protection: ■ IP 65

 $\blacksquare$  ± 2/1/2 % of full span (2.5") & ± Accuracy:

1.0 % (4")

Unique Features: ■ Tri-Clamp® connections from 1"

up to 4"

■ Serial # and part # engraved in the

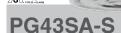
gauge case

■ Material ID & heat # engraved in

seal body or case

■ Food grade glycerin case filling optional (M933.3A)

Data Sheet: ■ M93X 3A



## Sanitary Gauge with Dry Diaphragm

Case size:

Pressure Ranges:

Data Sheet:

■ -30"Hg...30 psi up to 0...200 psi ■ 316L stainless steel electro polished

WIKA

Wetted Parts: ■ 304 stainless steel electro polished Case:

Ingress Protection: ■ IP 54

Accuracy: ■ ± 1.6 % of full span Unique Features:

■ Mechanical pressure transmission

without fluid

Standard with external zero adjustment (± 15°)

■ Large variety of sanitary connections available

■ High overpressure safe up to 5x full scale value





#### M932.25, M933.25

## Diaphragm Seal Sanitary Gauge

Case size:

■ 2.5"

Pressure Ranges: Wetted Parts:

■ -30"Hg...30 psi up to 0...600 psi

■ 316L stainless steel electro polished

■ 304 stainless steel polished Case: Ingress Protection: ■ IP 65

Accuracy:

Unique Features:

■ ± 2/1/2 % of full span

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

## Sanitary Solutions



### **Pressure Transmitter**

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

Measuring Ranges: ■ 0...100 "WC up to 0...400 psi positive/negative gauge pressure

and absolute pressure

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



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

■ ± 0.50% B.F.S.L. of full span for 3/4"

Tri-Clamp®

Measuring Ranges: ■ -30"Hg...0 up to 0...1000 psi,

positive/negative gauge pressure and absolute pressure

Output Signal: ■ 4...20 mA, DC 0...5 V, 0...10 V &

other output signals

Unique Features: ■ Compliant with 3A

■ Available with 3/4", 1.5" or 2"

Tri-Clamp® connection

■ Suitable for CIP & SIP maintenance

processes ■ S-10-3A

Data Sheet:



#### TR21-C, TR21-A

#### **Miniature Sanitary Temperature Transmitter**

■ Class A per in accordance with Accuracy:

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)

■ TE 60.28 (TR21-C),

Data Sheet:

TE 60.26 (TR21-A)



# Mechanical Temperature Twin Temp Thermometers

**Process Grade Bimetal Thermometer** combined with a Temperature Sensor TT.30, TT.32, TT.50, TT.52

Case size 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



- 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.

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

#### **Industrial Grade** Bimetal Thermometer

Case size: **2**", 3" & 5"

Measuring Ranges: ■ -100°F (-70°C) up to 1000°F (550°C)

Stem Material: ■ 304 stainless steel Case Material: ■ 304 stainless steel

Stem Length: ■ 2-1/2" up to 24" ■ ± 1.0 % of full span Accuracy:

■ Hermetically sealed per Unique Features: **ASME B40.200** 

■ NEMA 4X (IP 66) weather protection ■ Guaranteed not to fog

Data Sheet: ■ TI.20, TI.33, TI.34, TI.53, TI.54

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 1000°F (550°C)

Stem Material: ■ 304 stainless steel Case Material: 304 stainless steel

■ 2-1/2" up to 72", bulb diameter 1/4" Stem Length:

Accuracy: ■ ± 1.0 % of full span

■ External zero adjustment Unique Features:

■ NEMA 4X (IP 66) weather protection

120 140

WIKA

200

240

■ Dampened Movement (optional) ■ InSight<sup>™</sup> dial (optional)

■ Silicone case filling (optional)

■ 316 stainless steel stem material (optional)

■ TI.30, TI.31, TI.32, TI.50, TI.51, TI.52 Data Sheet



Mechanical

Temperature Bimetals, Vapor

& Gas Actuated

**Thermometers** 





#### **Industrial Grade Vapor Thermometer**

**2**". 2-1/2". 3-1/2" & 4-1/2" Case size:

Measuring Ranges: ■ -40°F (-40°C) up to 350°F (176°C)

Bulb Material: ■ Copper alloy or stainless steel Case Material: Stainless steel

Bulb Length: ■ 2-1/2" up to 9 4" diameter 3/8"

& 7/16"

Accuracy: ■ One scale division throughout

range ■ Remote Reading

Unique Features:

■ Capillary length up to 99 feet

■ Large variety of mounting

options available

With integrated thermowell (optional)

■ TI.VXX Data Sheet:

TI.R45,

#### **Process Grade Gas Actuated Thermometer**

**4-1/2" & 6"** Case size:

Measuring Ranges: ■ -320°F (-200°C) up to 1200°F

(650°C)

Bulb Material: ■ 316 stainless steel Case Material:

■ Stainless steel, aluminum or phenolic (turret style)

Bulb Lenath: ■ 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



#### **Solar Powered Digital Gas Thermometer**

**■** 5" Case size:

Measuring Ranges: ■ -50°F... 300°F (-45°C...150°C)

■ Switchable from °F to °C

■ 316 stainless steel Stem Material: ■ 304 stainless steel Case Material:

Stem Length: ■ 2-1/2" up to 12" ■ ± 0.5 % of full span Accuracy:

Unique Features: Adjustable angle

■ High Accuracy

■ Large 1/2" LCD display

■ Low light level required (10 lux/1

foot candle)

■ With external recalibration poten-

tiometer

Data Sheet: ■ TI.RD50





## **RTD Sensor**

Sensor Element: ■ Pt100,

Measuring Ranges: ■ -58°F... 842°F (-50°C up to 450°C),

■ Stripped leads Termination:

Junction:

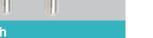
■ Grounded/Ungrounded, Single

■ 3/16" & 1/4" and 4 & 6 mm Probe Diameter:

Sheath Material: ■ 316 stainless steel

Unique Features: Fast delivery essential during downtime and low cost solution

Data Sheet: ■ TR45





#### TR10-2

#### **Spring Loaded RTD Assembly**

Sensor Element: ■ Pt10, Pt100, Pt1000 multi-point

available ■ -328°F... 1382°F (-200°C up to Measuring Ranges: 750°C)

■ Grounded/Ungrounded, Single/Dual Junction:

Wiring Configuration: ■ 2, 3, and 4 wire

Probe Diameter: ■ 1/4" or 6 mm Sheath Material:

■ 316 stainless steel, Inconel 600 Connection Head: ■ Aluminum, 1/2"NPT x Conduit

3/4"NPT

Unique Features: ■ Designed to be mounted

in a thermowell

■ TR10-2



#### T24.10

Data Sheet:

#### Analogue Temperature Transmitter for Pt100 Sensors, Head Mounting

■ ±0.2 % per DIN EN 60770, Accuracy:

23°C ±5 K

Measuring Ranges: ■ -238°F... +1562°F

(-150°C up to +850°C) ■ Pt100, 2-wire or 3-wire Input:

Output Signal: ■ 4...20 mA

Unique Features: ■ PC configurable

■ Remotely configurable from

control room via the current loop.

Data Sheet: ■ TE 24.01



**Electrical** 

**Temperature** 

Sensor Element: ■ Pt10, Pt100, Pt1000 multi-point

available Measuring Ranges: ■ -328°F... 1382°F (-200°C up to

750°C)

■ Grounded/Ungrounded, Single/

Dual Probe Diameter: ■ 1/4" or 6 mm

Junction:

Sheath Material: ■ 316 stainless steel, Inconel 600

Connection Head: ■ Aluminum, 1/2"NPT x Conduit

3/4"NPT

Lead length: ■ Up to 36"

Unique Features: ■ To be used with thermowell or direct

Data Sheet: ■ TR15-2



#### **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 RTD, Thermocouples,

Input: Potentiometers

■ 4...20 mA, HART® protocol Output Signal:

Unique Features: ■ Configurable with a variety of open

configuration tools ■ Rail mount version available

(T32.3S)





Thermowell Form: 

Tapered, straight or stepped Process Connection: ■ 1/2"NPTM, 3/4"NPTM or 1"NPTM

**0.260**, 0.385 Bore Diameter:

Unique Features: Large variety of materials available

■ TW.TH/TW15 Data Sheet:



## Socket Weld & Weld-In Type (Solid Machined)

Thermowell Form: ■ Tapered, straight or stepped Weld-In Diameter: ■ Up to 2" pipe size **0.260**", 0.385" Bore Diameter:

Unique Features: Large variety of materials available TW.SW/TW20, TW.WI/TW25 Data Sheet:

## Sanitary Type (Solid Machined)

**TW60** 

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

Unique Features: ■ Surface Finish Ra ≤ 25 µin (Ra ≤

0.64 μm) per ASME BPE, SF2 ■ Electro polished surface finish

**Thermowells** 

(optional) ■ TW 95.22 Data Sheet:





**FLC-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

Unique Features: ■ Repeatability 0.1% of flow rate

Max. operating temperature up to 1472°F (800°C)

■ Max. working pressure up to 5800

■ FL 10.01

psi (400 bar) Data sheet:

## **Orifice Plates**

Pipe Size:

Accuracy:

Data sheet:

■ ≥ 2" (≥ 50 mm)

flange standard

■ ± 0.5...2.5% of full scale flow rate

■ Wide range of materials available

available in accordance with all relevant standards.

■ Nominal size & pressure rating

Beta Ratio β = d/D: ■ Depending on version

Unique Features: ■ Two 1/2"NPT threads in each

Orifice plates are the most economical and widely utilized primary flow elements in the world. Their ease of installation and range of applications makes them an excellent option for any industry.

flanges when an orifice plate must be installed.

Pairs of pressure tappings are machined into the orifice flange, making separate orifice carriers or tappings in the pipe wall unnecessary.





### 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

## **Restriction Orifices**

A restriction orifice is used to achieve either a specified pressure drop or choked flow. Our technical department will produce the correct design for the restriction orifice, depending on customer requirements and flow conditions.

In high differential pressure drops, a change in phase or sonic issues can occur. The solution in these cases is to decrease the pressure in several steps, avoiding all the issued created by these factors. This solution is called a multi-step restriction orifice assembly.

## **Honed Meter Runs**

To ensure high accuracy the primary flow element is supplied as an assembly incorporating the upstream and downstream pipe sections. This assembly is known as a 'meter run'.



#### FLC-MR

#### **Meter Run**

Standards: ■ ISO 5167-2

Flange Material:

■ Wide range of materials available ■ 1/2"...1-1/2" (12...40 mm)

Pipe Size: ■
Pressure Rating: ■

■ 300...2500 lbs.

Accuracy:

Beta Ratio β = d/D: ■ 0.2...0.75

Unique Features:

■ ± 1...2% of full scale flow rate

■ Suitable for liquid, gas & steam flow measurement

■ Repeatability of measurement 0.1%

Can be designed in accordance with the following standards: ISO5167-1:2003, ASME MFC-3M, AGA3 or ASME PTC 19.5 ASME

MFC 14M

Data sheet:

■ FL 10.02

# WIKA Diaphragm Seal Express Lane

Unfortunately, unplanned shutdowns and failures happen, causing unexpected product needs to arise. Fortunately though, WIKA Instrument, LP is here to help.

WIKA's Express Lane program offers you ordering flexibility, when you need it. Using our almost 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's Express Lane program with 1-day, 2-day or 5-day lead time options.

#### How the Express Lane Program Works:

WIKA offers a standard 12 business days, minimum, lead time for all Diaphragm Seal products, while nonstandard products may require longer lead times based on the order and available capacity.

If you need your Diaphragm Seal order shipped in less than 12 business days, the WIKA Express Lane Program offers 3 convenient ordering options:

Express Lane OptionExpress Lane Program ChargeQuantity Limit5 Business Days\*MSRP25 pieces2 Business Days\*2X MSRP5 pieces1 Business Day\*3X MSRP2 pieces

\*WIKA reserves the right to decline customer requests based on existing capacity, order quantity and availability of materials. All lead times are subject to Diaphragm Seal customer service representative approval by written confirmation; lead times begin when written confirmation approval is issued. All lead times consider the manufacturing and production time only; WIKA is not responsible for shipping lead times. All orders must be placed no later than 2:00PM central time for next day shipment by 12:00PM. Saturday shipments are possible where service is available; Saturday shipments are possible for Monday delivery. All non-business days, company holidays and closings are excluded from lead times. Exceptions may be made on a case by case basis.

Contact the WIKA office at 1-888-WIKA-USA(945-2872) for more information or email DSExpress@wika.com

## **FAST Audit**





For 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.





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