# **SASHCROFT®**

PRESSURE & TEMPERATURE INSTRUMENT QUICK GUIDE



# Ashcroft® Inc. – the experts in pressure and temperature measurement

Over 150 years ago, Edward
Ashcroft saw the need for
safer, more sophisticated
pressure and temperature
instruments for use in the
emerging steam industry.
In response, he introduced
a then-revolutionary new
Bourdon tube pressure gauge.

The rest is history.

Times continue to change and so do the needs of industry. Products manufactured by Ashcroft Inc. have become the benchmark in pressure and temperature measurement and include gauges, thermometers, switches, transducers, transmitters, instrument isolators and diaphragm seals and control and calibration equipment.

Specified around the world for the most demanding requirements, these instruments are widely recognized under the brand names Ashcroft, Heise, Milly, and Weksler. And you can find them in wastewater treatment facilities, biotech and pharmaceutical labs, medical applications, semiconductor facilities, refineries, power generation plants, food processing plants, pulp and paper mills, chemical manufacturing plants and the host of support companies that serve these industries.

Our team consists of experts ready to help resolve even the most difficult applications and technical issues. If you require broader specifications than our standard product line offers, our engineers, technical staff and product marketing specialists can work with you to custom fit the right product to the job. Our customer service representatives are highly trained to answer product application questions, offer competitive product cross references and work closely with you to help meet your goals.

We maintain an extensive network of field and in-house sales personnel, local representatives and distributors to ensure you receive quick product delivery and service. Along with our "partner" representatives we offer product training and education, facility surveys, calibration services, seal assembly and answers to your application questions.

Safety is a critical issue, and our instrument audit can improve the safety or your plant. Industry surveys indicate that 20% to 30% of customers' instruments are misapplied and fail prematurely due to pulsation and vibration, allowing the process media or liquid fill to escape and cause environmental damage or even harm those nearby. Experts from Ashcroft Inc. can help identify areas of concern before they become problems. This important service will help prevent accidents, avoid misapplications and save money and time.

As the leader in technology and innovation we design new products based on current and emerging market requirements as well as individual customer's requirements. As the industry leader our "firsts" lead the way with breakthrough new product features and value added benefits for the customer.











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# **Quick Guide Digital Gauges**

# TYPES 2089, 2086, 2084 Precision digital TEST GAUGE



#### ACCURACY

±0.05%, 0.10% or 0.25% of span

#### **CASE SIZE**

**CASE MATERIAL** 

300 Series stainless steel

#### WETTED MATERIALS

316 stainless steel

#### **SOCKET SIZE**

1/4 NPT, 1/8 NPT (others on application)

#### CONNECTION

Lower (6 o'clock), top, side

Vac., 5 psi thru 7000 psi including compound and absolute

#### POWER SOURCE

Three AAA alkaline batteries

#### **BATTERY LIFE**

1000 hrs

#### **OPERATING TEMPERATURE**

Temperature corrected from 0/150°F (-18/63°C)

#### STORAGE TEMPERATURE -40/180°F (-40/82°C)

#### AGENCY APPROVALS

CE, EN 50082-1 (1997), FM, CSA









TYPES 2074, 2174, 2274 INDUSTRIAL DIGITAL GAUGE



#### ACCURACY: ±0.25% of span

CASE SIZE 3," 41/2

# CASE MATERIAL

(3") 300 series stainless steel (41/2") fiberglass reinforced thermoplastic (4¹/2″) black painted aluminum

#### WETTED MATERIALS

17-4 PH stainless steel sensor: 316 stainless steel socket

#### SOCKET SIZE

1/4 NPT, 1/2 NPT (41/2" case only) Others on application

# CONNECTION

Lower (6 o'clock), top, side

Vac. and 15 psi thru 20,000 psi including

# compound **POWER SOURCE**

Battery (3") Two AA alkaline batteries (4<sup>1</sup>/<sub>2</sub>") Two C alkaline batteries Loop powered 4-20mA Line powered, (12-36 Vdc, 1 amp)

## **BATTERY LIFE**

(3") <1500 hrs. (41/2") <2500 hrs.

# OPERATING TEMPERATURE

14/140°F (-10/60°C)

#### STORAGE TEMPERATURE

-4/158°F (-20/70°C)

## AGENCY APPROVALS

CE, EN 50082-1 (1997) optional, FM, CSA,







#### TYPE DG25 **GENERAL PURPOSE DIGITAL GAUGE**



#### ACCURACY

±0.5% of span or ±0.25% span

#### CASE SIZE 21/2

CASE MATERIAL Polycarbonate/ABS

#### WETTED MATERIALS

17-4 PH stainless steel sensor: 316 stainless steel socket

#### SOCKET SIZE

1/4 NPT, 1/8 NPT, G1/4A, G1/4B, 9/16-18 UNF Others on application

#### CONNECTION

Lower

#### RANGES

Vac. thru 25,000 psi, including compound

#### POWER SOURCE

Two AA alkaline batteries

#### **BATTERY LIFE**

2000 hrs

# **OPERATING TEMPERATURE (Media)**

-4/176°F (-20/80°C)

#### STORAGE TEMPERATURE (Batteries Removed)

-4/140°F (-20/00°C)

# AGENCY APPROVALS

CE, EN 61326 (1998) CE, EN 61326 Annex A (heavy industrial)

UL-61010-1

LOOK FOR THIS MARK ON OUR PRODUCT







# **TYPE 2030 SERIES DIGITAL SANITARY GAUGE**



#### ACCURACY

±0.25% of span terminal point accuracy

DIAL SIZE

#### CASE MATERIAL/FINISH

(3") 300 series SS, electropolished

#### WETTED MATERIALS

316L stainless steel

#### TRI-CLAMP CONNECTION

Direct, in-line 1.5", 2.0"; Ashcroft remote in-line (XRE)

#### RANGES

15 psi thru 1000 psi including metric. compound and vacuum

#### POWER SOURCE

2032 Battery 2132 4-20mA loop powered 2232 12-36 Vdc

#### **BATTERY LIFE**

500 hrs.

## OPERATING TEMPERATURE

14°F/140°F (-10°C/60°C)

#### STORAGE TEMPERATURE -4°F/158°F (-20°C/70°C)





With total error band accuracy including temperature from 0/150°F (-18 to 63°C) applications include metrology labs, gas distribution and transmission and analog test gauge users.

Available with optional (1) or (2) SPDT switches and 4-20mA output, this gauge is ideal for many industrial applications. This product eliminates the need for unnecessary piping, switches and transducers.

This product is an excellent choice for a wide variety of pressure measurement applications. When compared to mechanical gauges the DG25 offers overall enhanced value.

Sanitary pharmaceutical, biotech or food applications requiring Tri-Clover type fittings and highly polished stainless steel surfaces.



# Quick Guide Test Instruments

#### TYPES 2089, 2086, 2084 PRECISION DIGITAL 1082, 4<sup>1</sup>/<sub>2</sub>," 6," 8<sup>1</sup>/<sub>2</sub>" TEST GAUGE 1084, 3" TYPE ATE-2 LCD DIGITAL CALIBRATOR **TEST GAUGE TEST GAUGES** PRESSURE MEASUREMENT ACCURACY ACCURACY ACCURACY ACCURACY ASME B 40.100 Grade 2A (±0.5% of span) ASME B 40.100 Grade 3A (±0.25% of span) ±0.05%, 0.10% or 0.25% of span ±0.025, 0.05 and 0.1% of span PRESSURE RANGES DIAL SIZE DIAL SIZE CASE SIZE 0/0.25 in.H<sub>2</sub>0 through 0/10,000 psi 41/2,"6,"81/2 **CASE MATERIAL** 300 series polished stainless steel **CASE MATERIAL CASE MATERIAL** PRESSURE TYPES Gauge, compound, vacuum, absolute and Aluminum, phenolic, polypropylene 300 Series stainless steel MATERIAL WETTED MATERIAL WETTED MATERIALS 316 stainless steel Bronze/brass, Monel TEMPERATURE COMPENSATION 316 stainless steel 20-120°F SENSING ELEMENT SENSING ELEMENT SOCKET SIZE TEMPERATURE MEASUREMENT Bourdon tube Bourdon tube 1/4 NPT, 1/8 NPT Supports most common RTD-type temperature probes and thermocouples (others on application) CONNECTION CONNECTION 1/4 NPT (standard) and CONNECTION 1/4 NPT lower only Lower (6 o'clock), top, side DIMENSIONS 1/2 NPT lower or back (optional) RANGES 8.7 in. (L) x 5.1 in. (W) x 3.8 in. (H) Vac. to 1000 psi **RANGES** Vac. to 10,000 psi Vac., 5 psi thru 7000 psi including compound WEIGHT and absolute Max. 2.4 lbs. w/2 pressure modules TEMPERATURE ERROR installed <.005% per degree F above or below refer-POWER SOURCE Three AAA alkaline batteries CASE MATERIAL ence temperature of 68°F (20°C) High impact PC-ABS **BATTERY LIFE** SENSOR MODULE CAPACITY 1000 hrs. 2 bays for Ashcroft AM2 sensor modules **OPERATING TEMPERATURE** Temperature corrected from 0/150°F 1.5" x 2.5" graphic LCD display with backlight. Can display readings from 2 (-18/63°C) STORAGE TEMPERATURE simultaneous modules -40/180°F (-40/82°C) **ELECTRICAL CONNECTION** 4mm banana jacks (one set of test leads provided with each ATE-2) AGENCY APPROVALS CE, EN 50082-1 (1997), FM, CSA UPDATE RATE 100 ms (nominal) with one module installed RESOLUTION ±0.0015% of span, 66,000 counts (max) DAMPING Programmable filtering levels one through 16 SERIAL INTERFACE Type: USB AGENCY APPROVALS Standard: CE. UL. FCC Optional: FM, CSA, ATEX Ideal for use when a quality analog pocket test 1/4% full scale accuracy for test and laboratory Superior accuracy for test and laboratory Field or laboratory precision pressure standard gauge is required. applications. applications. for calibrating or setting other instruments and devices. Also used for high accuracy temperature or pressure measurement in critical pro-



# Quick Guide Test Instruments

#### MODEL PT, DUAL DISPLAY LCD DIGITAL INDICATOR ST-2A LCD DIGITAL INDICATOR TYPE 1305D TYPE 1327D, 1327CM **DEADWEIGHT TESTER GAUGE COMPARATOR** PRESSURE MEASUREMENT ACCURACY **ACCURACY OPERATING PRESSURE** PRESSURE MEASUREMENT ACCURACY ±0.025, 0.05 and 0.1% of span ±0.1% of reading 0-10,000 psi (maximum) (0-60,000 kPa) ±0.025, 0.05 and 0.1% of span **OPERATING PRESSURE OPERATING MEDIA** PRESSURE RANGES PRESSURE RANGES 0/0.25 in.H<sub>2</sub>O through 0/10,000 psi 15 psi to 10,000 psi Std.: SAE 20 weight automotive or 0/0.25 in.H<sub>2</sub>O through 0/10,000 psi machine oil **OPERATING MEDIA** PRESSURE TYPES PRESSURE TYPES Opt.: Phosphate-based or glycol fluids Gauge, compound, vacuum, absolute and 1305D: SAE 20 weight automotive or Gauge, compound, vacuum, absolute and Distilled water for oxygen service machine oil **O-RING MATERIAL** TEMPERATURE COMPENSATION Standard: Buna N (D Series) TEMPERATURE MEASUREMENT Phosphate-based or glycol fluids Supports most common RTD-type 20-120°F Optional: Ethylene Propylene temperature probes (DH Series) TEMPERATURE MEASUREMENT **O-RING MATERIAL** 1305D: Buna-N (D series) DIMENSIONS Supports most common RTD-type tem-RESERVOIR VOLUME perature probes and thermocouples 7.72 in. (L) x 6 in. (W) x 2.95 in. (H) Approximately 1.5 pints (0.7 liter) PANEL CUTOUT Ethylene Propylene (DH Series) DIMENSIONS **SPECIFICATIONS TYPE 1327DG** 10.9 in. (L) x 6.74 in. (W) x 4.0 in. (H) 5.4 in. x 2.68 in. PISTON AND CYLINDER MATERIAL **ACCURACY** PANEL CUTOUT Stainless steel ±0.25% F.S Depending on configuration 6.56 in. x 3.53 in. WEIGHT MATERIAL **GAUGE TYPE** Max. <4 lbs. w/2 sensors and battery pack Non-magnetic die cast zinc Ashcroft 41/2 inch Type 1082 gauges with Max. 4.08 lbs. w/2 pressure modules CASE MATERIAL temperature compensation RESERVOIR VOLUME installed High impact ABS Approximately 1.5 pints (0.7 liter) Special "CD-4" Certification package avail-**CASE MATERIAL** SENSOR CAPACITY able (see Price Sheet TE/PS-1) 2 bays for Ashcroft PPT sensors High impact ABS SPECIFICATIONS TYPE 1327CM Special "CD-5" Certification package avail-SENSOR MODULE CAPACITY 2 bays for Ashcroft AQS "Quick Select®" able (see Price Sheet TE/PS-1) **ACCURACY** 5 digit, 2 line LCD, 0.38 in. height per line. sensor modules ±0.1% F.S. Can display simultaneous readings from 2 modules. **GAUGE TYPE** 2 line LCD, 0.37 in. height per line. Can Ashcroft 6-inch Type A4A with temperature OUTPUT Full function RS-232 display simultaneous readings from 2 compensation modules. TEMPERATURE COMPENSATION **ELECTRICAL CONNECTION** -25°F to +125°F (will maintain Backlit Display; Built-in NiCad Recharge-Standard banana jacks ±0.1% F.S. accuracy) able Batteries; Handle; Panel Mounting **Brackets OPERATING TEMPERATURE RANGE OPERATING TEMPERATURE RANGE** 32° to 120°F 32° to 120°F **UPDATE RATE** TEMPERATURE COMPENSATION 130 ms (nominal) with one sensor installed 20-120°F ±0.002% of span, 60,000 counts (max) **UPDATE RATE** 130 ms (nominal) with one sensor installed **ELECTRICAL MEASUREMENTS** RESOLUTION 0-20 mA or 0-30 Vdc ±0.002% of span, 60,000 counts (max)

Primary deadweight pressure standard and

hydraulic pressure source for calibration of

other pressure instruments

Laboratory precision pressure standard for

calibrating or setting other instruments and

devices. Also used for high accuracy temperature or pressure measurement in critical

processes

Primary deadweight pressure standard and

hydraulic pressure source for calibration of

other pressure instruments.

Consult factory for guidance in product selection. Phone 203-378-8281, visit our web site www.ashcroft.com or email: info@ashcroft.com.

Laboratory precision pressure standard for

calibrating or setting other instruments and

perature or pressure measurement in critical

devices. Also used for high accuracy tem-

processes



# **Quick Guide Test Instruments**

# TYPE AVC-1000 & 3000 VOLUME CONTROLLER

# TYPE A4A PRECISION DIAL PRESSURE GAUGE



AVC-1000 / AVC-3000

RANGE (psi) vacuum-1000 / vacuum-3000

RESOLUTION (psi) 0.00025 / 0.0005

**VOLUME CHANGE (cubic inches)** 

3.5 / 2.5

**MECHANICAL ROTATION (turns)** 31 / 61

PROOF PRESSURE (psi) 3000 / 6000

BURST PRESSURE (psi)

6000 min / 12,000 min

**OPERATING TEMPERATURE RANGE** 

20-120°F / 20-120°F

**OPERATING MEDIA** 

Clean, dry noncorrosive gas such as compressed air or nitrogen

CONSTRUCTION

Aluminum body, stainless steel, brass Teflon, Delrin and Buna N



**ACCURACY** 

±0.10% of span - ASME B40.1, Grade 4A

Cast aluminum solid front

DIAL SIZE

6", 81/2", 12" & 16"

POINTER TRAVEL

350° (15-30,000 psi) 300° (40,000-50,000 psi) 270° (60,000-100,000 psi)

**BOURDON TUBE** 

Bleeder tipped

Gauge, compound, vacuum & absolute 0-15-0/100,000 psi

Usage requiring 1/2% full scale accuracy in chemical, petrochemical, refinery, oil prodution, other process, power and general industry.

Usage requiring 1/2% full scale accuracy in chemical, petrochemical, refinery, oil prodution, other process, power and 'general industry.

Added to any pneumatic calibration system, the VC works as a "fine tune" device to achieve specific test points not easily attained with the use of a regulator alone. Used in the calibration of any pneumatic pressure instrument up to

Consult factory for guidance in product selection. Phone 203-378-8281, visit our web site www.ashcroft.com or email: info@ashcroft.com.



# Quick Guide Process Gauges

#### 1279 DURAGAUGE® 1377 DURAGAUGE® 1379 DURAGAUGE® 2462 DURAGAUGE® PRESSURE GAUGE **PRESSURE GAUGE PRESSURE GAUGE** PRESSURE GAUGE PLUS! PLUS! PLUS! PLUS! **ACCURACY ACCURACY ACCURACY** ACCURACY ASME B 40.100 Grade 2A (±0.5% of span) DIAL SIZE **DIAL SIZE** DIAL SIZE **DIAL SIZE** 41/2," 6," 81/2 41/2," 6," 81/2 CASE MATERIAL CASE MATERIAL **CASE MATERIAL** CASE MATERIAL Phenolic Polypropylene Aluminum Aluminum WETTED MATERIAL WETTED MATERIAL WETTED MATERIAL WETTED MATERIAL 316 stainless steel, bronze/brass, Monel 316 stainless steel, bronze/brass, Monel 316 stainless steel, bronze/brass, steel, Monel 316 stainless steel, bronze/brass, Monel, Inconel SENSING ELEMENT SENSING ELEMENT SENSING ELEMENT SENSING ELEMENT Bourdon tube Bourdon tube Bourdon tube Bourdon tube CONNECTION CONNECTION CONNECTION 1/2 NPT (standard) lower or back 1/4 NPT (optional) 1/2 NPT (standard) lower or back 1/4 NPT (optional) 1/2 NPT (standard) lower or back 1/4 NPT (optional) CONNECTION 1/2 NPT (standard) lower or back 1/4 NPT (optional) RANGES RANGES 1/4" HP connection over 30,000 psi Vacuum, 15 to 30,000 psi, compound Vacuum, 15 to 30,000 psi, compound Vacuum, 15 to 30,000 psi, compound Vacuum, 15 to 100,000 psi, compound

Usage requiring ½% full scale accuracy in chemical, petrochemical, refinery, oil prodution, other process, power and general industry.

Usage requiring ½% full scale accuracy in chemical, petrochemical, refinery, oil production, other process, power and general industry.

Usage requiring 1/2% full scale accuracy in chemical, petrochemical, refinery, oil production, other process, power and general industry.

Usage requiring 1/2% full scale accuracy in chemical, petrochemical, refinery, oil prodution, other process, power and general industry.





#### **1259 PROCESS** PRESSURE GAUGE

# 1279, 1379, 1377, 2462 RECEIVER GAUGES



ACCURACY ASME B 40.100 Grade 2A (±0.5% of span)

DIAL SIZE

**CASE MATERIAL** 

Polypropylene

WETTED MATERIAL 316 stainless steel, Monel

**SENSING ELEMENT** 

Bourdon tube

CONNECTION

1/2 NPT (standard) lower 1/4 NPT (optional)

Vacuum, 15 to 20,000 psi, compound



ACCURACY ASME B 40.100 Grade 2A (±0.5% of span)

**DIAL SIZES** 

1279AS-XPR – 41/2" 1377AS-XPR – 41/2", 6", 81/2" 1379AS-XPR – 41/2", 6", 81/2" 2462AS-XPR - 6"

CASE MATERIAL

1279AS-XPR – Phenolic 1377AS-XPR – Aluminum 1379AS-XPR – Aluminum 2462AS-XPR – Polypropylene

**SENSING ELEMENT** 

Bourdon tube

CONNECTION

1/2 NPT (standard) 1/4 NPT (optional)

CONNCTION LOCATION

1279AS-XPR – Lower/Back, Back 1377AS-XPR – Back, Lower/Back 1379AS-XPR - Back, Lower/Back 2462AS-XPR - Lower/Back, Back

RANGES

3-15 psi & 3-27 psi

Usage requiring 1/2% full scale accuracy in chemical, petrochemical, refinery, oil production, other process, power and general industry.

For use with pneumatic transmitters.



#### T5500 & T6500 PRESSURE GAUGE 1008S 40 & 50 mm PRESSURE GAUGE 1008S/SL 63 & 100mm PRESSURE GAUGE 1008S/SL 63 & 100mm CENTER **BACK CONNECT GAUGES** ( € €x PLUS! PLUS! ACCURACY 1.6% F. S. ACCURACY ASME B 40.100 Grade B (±3-2-3% of span) **ACCURACY** ACCURACY Std. Class 1, 1% full scale ASME B 40.100 Grade B (±3-2-3% of span) DIAL SIZE DIAL SIZE DIAL SIZE DIAL SIZE 100mm, 160mm 63mm, 100mm 63mm, 100mm 40mm, 50mm **CASE MATERIAL** CASE MATERIAL **CASE MATERIAL** CASE MATERIAL 304 stainless steel, 316 stainless steel Stainless steel Stainless steel Stainless steel MOVEMENT WETTED MATERIAL WETTED MATERIAL WETTED MATERIAL 304/303 stainless steel 316 stainless steel 316L stainless steel 316L stainless steel SENSING ELEMENT SENSING ELEMENT SENSING ELEMENT SENSING ELEMENT Bourdon tube Bourdon tube Bourdon tube Bourdon tube CONNECTION CONNECTION CONNECTION CONNECTION T5500 – lower or back, open front T6500 – lower only, solid front 1/8 NPT lower or lower back 1/4 NPT lower or lower back 1/8 NPT lower or back 1/4 NPT center back 1/4 NPT lower or back **RANGES** 1/2 NPT lower (100mm) JIS, DIN, BSP sockets available Vac. to 20,000 psi Vacuum, compound, pressure psi: -30in. Hg-0, 0-36,000 psi Vac. to 15,000 psi RANGES Available dry and glycerin filled Vac. to 15,000 psi bar: -1-0, 0-2500 bar Available dry and glycerin filled

The Ashcroft® T5500 and T6500 all stainless steel process pressure gauge is one of the finest production gauges on the market for industrial use where precise indications are required

Applications include industrial compressors, valve indicators, firefighting equipment, measurement/control, metal working and hydraulic equipment. Especially suited for pneumatic controllers and transmitters located in corrosive environments.

Applications include industrial compressors, firefighting equipment, measurement/control, metal working, hydraulic equipment and panel builders. Can be supplied EN837 compliant.

Applications include industrial compressors, firefighting equipment, measurement/control, metal working, hydraulic equipment and panel builders requiring center back connections.



#### 1009 2½" & 3½" DURALIFE® Pressure gauge 2008S/SL 63mm 1009 41/2" & 6" 1109 41/2" **PANEL GUAGE** STAINLESS STEEL CASE STAINLESS STEEL CASE PLUS! PLUS **ACCURACY ACCURACY** ACCURACY **ACCURACY** ASME B 40.100 Grade 1A (±1% of span) 1.6% F. S. ASME B 40.100 Grade 1A (±1% of span) ASME B 40.100 Grade 1A (±1% of span) DIAL SIZE DIAL SIZE DIAL SIZE 21/2," 31/2" 63mm 41/2,"6" CASE MATERIAL CASE MATERIAL CASE MATERIAL CASE MATERIAL Stainless steel Stainless steel Stainless Steel Stainless Steel WETTED MATERIAL **WETTED MATERIAL** TUBE MATERIAL TUBE MATERIAL 316L stainless steel, Bourdon tube 316L stainless steel Bronze, 316 stainless steel, Monel 316 stainless steel SENSING ELEMENT SENSING ELEMENT SENSING ELEMENT Bourdon tube Bourdon tube SENSING ELEMENT Bourdon tube Bourdon tube CONNECTION CONNECTION CONNECTION 1/8 NPT lower or lower back 1/4 NPT only lower back 1/4 NPT lower or back CONNECTION 1/2 NPT lower, 1/4 NPT lower (optional) 1/4 NPT lower high pressure 1/4 NPT lower or lower back 1/2 NPT lower or back 1/2 NPT lower (31/2") JIS, DIN, BSP, tube stub **RANGES** Vac., Compound 0-15,000 psi RANGES Vac. to 30.000 psi Available dry and glycerin filled, with RANGES Vac. to 1500 psi / 2000-20,000 psi **PLUS!** Performance Vac. to 15,000 psi 50,000-100,000 psi Stainless steel and aluminum bronze sockets

For use on fluid power equipment in oil and gas production, construction, mining, machine tools, logging, pulp and paper, general industrial applications and panel builders.

The Ashcroft 2008S/SL was designed specifically for the rugged requirements of panel installation. Oil, gas, offshore, environmentally and process challenged applications are the target for these gauge markets.

Stainless steel case Type 1009 applications include boilers, compressors, water blasting equipment, pharmaceutical and food processing equipment.

Stainless steel case Type 1109 applications include water jet or water blasting equipment, offshore platform, etc.



# 1009, 1010, 1017, 1220 HYDRAULIC GAUGES

# 1009, 1010, 1017, 1220 RECEIVER GAUGES

# 1009, 1010, 1017, 1220 REFRIGERATION GAUGE

# 1010 4½, "6, "8½, "12" GENERAL SERVICE GAUGE



**ACCURACY** 

ASME B 40.100 Grade 1A (±1% of span)

DIAL SIZE

1009 – 41/2,"6"

1010 - 4½, 6, 8½, 12" 1017 - 4½, 6"

1220 - 41/2," 6," 81/2"

**CASE MATERIAL** 

Stainless steel, aluminum, phenolic

**TUBE MATERIAL** 

Bronze, 316 stainless steel, Monel

SENSING ELEMENT

Bourdon tube

CONNECTION

1/4 NPT lower or back 1/2 NPT lower or back

RANGES

Vac. to 30,000 psi



**ACCURACY** 

ASME B 40.100 Grade 1A (±1% of span)

DIAL SIZE

 $1009 - 4^{1/2}$ , 6"

1010 - 4½, 6, 8½, 12″ 1017 - 4½, 6″ 1017 - 4½, 6″

1220 - 41/2,"6,"81/2"

**CASE MATERIAL** Stainless steel, aluminum, phenolic

**TUBE MATERIAL** 

Bronze, 316 stainless steel, Monel

SENSING ELEMENT Bourdon tube

CONNECTION

1/4 NPT lower or back 1/2 NPT lower or back

**RANGES** 

3/15 and 3/27 psi



**ACCURACY** 

ASME B 40.100 Grade 1A (±1% of span)

DIAL SIZE

1009 - 4½, 6″ 1010 - 4½, 6, 8½, 12″ 1017 - 4½, 6″

1220 - 41/2," 6," 81/2"

**CASE MATERIAL** 

Stainless steel, aluminum, phenolic

**TUBE MATERIAL** 

Bronze, stainless steel

SENSING ELEMENT

Bourdon tube

CONNECTION(1) 1/4 NPT lower or back

1/2 NPT lower or back

RANGES

30 in.Hg Vac/150 psi, 30 in.Hg Vac/300 psi

(1) 1017 back connect only



**ACCURACY** 

ASME B 40.100 Grade 1A (±1% of span)

DIAL SIZE

41/2,"6,"81/2,"12"

**CASE MATERIAL** 

Stainless steel, aluminum, phenolic

**TUBE MATERIAL** 

Bronze, stainless steel, Monel

SENSING ELEMENT

Bourdon tube

CONNECTION

1/4 NPT lower or back 1/2 NPT lower or back

RANGES

Vac. to 30,000 psi

Uniquely designed for rigorous hydraulic

For monitoring pneumatic systems requiring percentage and/or square root readings.

For use on refrigeration equipment utilizing ammonia, freon or other refrigerants.

General industrial applications requiring larger dials. Applications include oil monitoring, repair and compressors, etc.



1017 4½,″6″ General Service Gauge	1220 4½,″ 6,″ 8½″ GENERAL SERVICE GAUGE	1020S 4½" XMAS TREE GAUGE	1038, 1339 3½," 4½," DUPLEX GAUGE
30 50 60 70 80 90 90 90 90 90 90 90 90 90 90 90 90 90	40 50 60 70 80 100 90 100 90 100 90	400 500 600 000 000 000 000 000 000 000 0	1038 GAUGES SHOWN
ACCURACY ASME B 40.100 Grade 1A (±1% of span)	ACCURACY ASME B 40.100 Grade 1A (±1% of span)	ACCURACY ASME B 40.100 Grade 1A (±1% of span)	ACCURACY ASME B 40.100 Grade A (±2-1-2% of span)
DIAL SIZE 41/2,"6"	DIAL SIZE 4½," 6," 8½2"	DIAL SIZE 41/2"	DIAL SIZE 31/2," 41/2"
CASE MATERIAL Stainless steel, aluminum, phenolic	CASE MATERIAL Stainless steel, aluminum, phenolic	CASE MATERIAL Stainless steel	CASE MATERIAL Aluminum, cast iron
TUBE MATERIAL Bronze, stainless steel, Monel	TUBE MATERIAL Bronze, stainless steel, Monel	TUBE MATERIAL 316 stainless steel	TUBE MATERIAL Bronze
SENSING ELEMENT Bourdon tube	SENSING ELEMENT Bourdon tube	SENSING ELEMENT Bourdon tube	SENSING ELEMENT Bourdon tube
1/4 NPT back 1/2 NPT back	CONNECTION 1/4 NPT lower or back 1/2 NPT lower or back	CONNECTION Lower RANGES	CONNECTION Lower/back RANGES
RANGES Vac. to 30,000 psi	RANGES Vac. to 30,000 psi	Up to 20,000 psi – ½ NPT, ¼ NPT	1038A – 3½," 4½"–½ NPT 30/1000 psi 1339A – 4½"–¼ NPT 30/1000 psi Back conn. only
General industrial applications, large dials for easier readings. used on pumps, air or oil monitoring, etc. for panel mount applications.	General industrial applications, large dials for easier readings. used on pumps, air or oil monitoring, etc.	Uniquely designed to meet rugged oil field applications.	Uniquely designed to indicate two related pressures on the same dial.



1125, 1125A 4½″	1127, 1128 4½," 6"	1130 2," 2½,", 3½,", 4,", 4½,", 6"	1131 2½," 3½," 4," 4½," 6"
Differential gauge	Differential Gauge	DIFFERENTIAL GAUGE	DIFFERENTIAL GAUGE
30 50 60 70 80 90 90 90 90 90 90 90 90 90 90 90 90 90	10 20 25 30 30 30 30 30 30 30 30 30 30 30 30 30	EXPLOSION PROOF SWITCH ENGLOSURES AVAILABLE PSID PSID	EXPLOSION PROOF SWITCH ENGLOSURES AVAILABLE  PSID PSID PSID
ACCURACY	ACCURACY ASME B 40.100 Grade A (±2-1-2% of span)	ACCURACY	ACCURACY
ASME B 40.100 Grade A (±2-1-2% of span)		±2% ascending	±2% ascending
DIAL SIZE	DIAL SIZE	DIAL SIZE	DIAL SIZE
41/2,"6"	4½,″ 6″	2," 21/2," 31/2," 4," 41/2," 6"	21/2," 31/2," 4," 41/2," 6"
CASE MATERIAL	CASE MATERIAL	CASE MATERIAL	CASE MATERIAL
Aluminum	Aluminum	Stainless steel	Stainless steel
TUBE MATERIAL	TUBE MATERIAL	BODY MATERIAL Aluminum, brass, stainless steel	BODY MATERIAL
Bronze	316 stainless steel		Aluminum, brass, stainless steel
SENSING ELEMENT	SENSING ELEMENT	SENSING ELEMENT Piston	SENSING ELEMENT
Bourdon tube	Bourdon tube		Rolling diaphragm
CONNECTION	CONNECTION	CONNECTION	CONNECTION
Lower/back	Lower	In-line, lower, back	In-line, lower, back
RANGES 1125 — 41/2," 6"10 — 1/4 NPT 20/1000 psi 1125A — 41/2," 6"10 — 1/4 NPT 10/0/10 psi- 500/0/500 psi  (1) Lower connect only	RANGES 1127 – 41/2," 6" – 1/4 NPT 10/1000 psi 1128 – 41/2," 6" – 1/4 NPT 10/0/00 psi- 400/0/400 psi	RANGES 0-5 psid to 150 psid	RANGES 0-5 psid to 100 psid
Application include filter monitoring, flow, leak and level measurements.	Application include filter monitoring, flow, leak and level measurements.	Applications include filter monitoring, flow, leak and level measurement. High pressure, high differential with migration.	Applications include filter monitoring, flow, leak and level measurement. High pressure, high differential, no migration.



1132 2½,"3½,"4,"4½,"6" Differential gauge	1133 3½,"4,"4½,"6" Differential gauge	1134 4½" Differential gauge	5503 100mm &160mm Differential gauge
EXPLOSION PROOF SWITCH ENCLOSURES AVAILABLE  A PIN HO SCHOROFT	A P IN. H <sub>2</sub> O	2 3 Section of states	0.4 0.6 0.2 0.8 0.8 0.8
ACCURACY ±2% ascending	ACCURACY ±2% ascending	ACCURACY ±3% ascending	ACCURACY ±1.6% of span
DIAL SIZE 2½,"3½,"4,"4½,"6″	DIAL SIZE 31/2," 4," 41/2," 6"	DIAL SIZE 41/2"	DIAL SIZE 100mm, 160mm
CASE MATERIAL Stainless steel	CASE MATERIAL Stainless steel	CASE MATERIAL Stainless steel	CASE MATERIAL Stainless steel
BODY MATERIAL Aluminum, brass, stainless steel	BODY MATERIAL Aluminum, stainless steel	BODY MATERIAL Glass filled nylon	SENSING MATERIAL 316 stainless steel
SENSING ELEMENT Convoluted diaphragm	SENSING ELEMENT Convoluted diaphragm	SENSING ELEMENT Convoluted diaphragm	SENSING ELEMENT Diaphragm
CONNECTION In-line, lower, back	CONNECTION In-line, lower, back	CONNECTION Dual (In-line or back)	CONNECTION Lower
PRANGES 0-1 psid to 60 psid (including inches of water ranges)	RANGES 0-1 IWD to 25 IWD	RANGES 0-0.6 IWD to 60 IWD	RANGES 0-16 IWD to 400 psid
Applications include filter monitoring, flow, leak and level measurement. High pressure, high differential, no migration.	Applications include filter monitoring, flow, leak and level measurement. High pressure, high differential, no migration.	Applications include fume hoods, air handlers, filter monitoring, flow and level. Inches of water with no migration.	Applications include filter monitoring, flow, leak and level measurement requiring high recovery, all stainless steel.



5509 100mm &160mm Differential gauge	1150H 4½" Reid Vapor Gauge	1122, 2½″ GAUGE	1187, 1188, 1189 LOW PRESSURE BELLOWS GAUGES
13 20 20 20 20 20 20 20 20 20 20 20 20 20	S T S T S T S T S T S T S T S T S T S T	20 30 35 40 55 55 50 55 50 50 50 50 50 50 50 50 50	NUSP SASTORT S
ACCURACY ±2.5% of span	ACCURACY ASME B 40.100 Grade 2A (±0.5% of span)	ACCURACY ASME B 40.100 Grade A (±2-1-2% of span)	ACCURACY ASME B 40.100 Grade A (±2-1-2% of span)
DIAL SIZE 100mm, 160mm	DIAL SIZE 41/2"	DIAL SIZE 21/2"	Available with optional ASME B40.100 Grade 1A (1% of span)
CASE MATERIAL Stainless steel	CASE MATERIAL Aluminum	CASE MATERIAL Stainless steel	<b>DIAL SIZE</b> 1187 <sup>(1)</sup> – 4 <sup>1</sup> / <sub>2</sub> "  1188 – 4 <sup>1</sup> / <sub>2</sub> "
SENSING MATERIAL 316 stainless steel	TUBE MATERIAL 316 stainless steel	TUBE MATERIAL Stainless steel	1189 <sup>(2)</sup> – 4 <sup>1</sup> / <sub>2</sub> ,"6"  CASE MATERIAL
SENSING ELEMENT Diaphragm	SENSING ELEMENT Bourdon tube	SENSING ELEMENT Bourdon tube	Aluminum, phenolic TUBE MATERIAL
CONNECTION Lower	CONNECTION 1/4 NPT lower	CONNECTION 1/4 NPT lower	Brass, 316 stainless steel, Monel SENSING ELEMENT
RANGES 0-10 IWD to 400 psid	RANGES 15/600 psi	RANGES 15/1000 psi	CONNECTION  1187 – 1/4, 1/2 NPT back  1188 – 1/4, 1/2 NPT lower or back  1189 – 1/4, 1/2 NPT lower  RANGES  10 in.H <sub>2</sub> 0 to 10 psi including vacuum and compound  (1) Back connect only (2) Lower connect only
Applications include filter monitoring, flow, leak and level measurement requiring high recovery, all stainless steel.	Uniquely designed for testing petroleum products with the Reid vapor process.	Applications include compressors, pumps and turbines.	Low pressure monitoring for general industrial applications on air, liquids or gases.



1490, 2½,"3½"LOW PRESSURE DIAPHRAGM GAUGE

#### 1495, 2½, "3½" LOW PRESSURE RECEIVER GAUGE

TYPES 2074, 2174, 2274 **INDUSTRIAL DIGITAL GAUGE** 

TYPE DG25 **GENERAL PURPOSE** DIGITAL GAUGE



#### ACCURACY

ASME B 40.100 Grade A (±2-1-2% of span) Available with optional ASME B40.100 Grade 1A (1% of span)

# DIAL SIZE

21/2," 31/2"

#### CASE MATERIAL

Polysulfone

#### WETTED MATERIAL

Copper, Brass, Polysulfone, RTV, Silicone

#### SENSING ELEMENT

Diaphragm

# CONNECTION

1/8 NPT lower or center back 1/4 NPT lower or center back Hose barb

#### RANGES

0/10 in.H₂O to 0/15 psi including vacuum and compound



#### ACCURACY

ASME B 40.100 Grade A (±2-1-2% of span) Available with optional ASME B40.100 Grade 1A (1% of span)

# DIAL SIZE

21/2," 31/2"

#### CASE MATERIAL

Polysulfone

## WETTED MATERIAL

Copper, Brass, Polysulfone, RTV, Silicone

# SENSING ELEMENT

Diaphragm

# CONNECTION

1/8 NPT lower or center back 1/4 NPT lower or center back Hose barb

#### RANGES

0-100%, 0-10 sq rt 0/10 sq rt /0-100 linear



#### ACCURACY:

±0.25% of span

#### CASE SIZE

3." 41/2"

#### CASE MATERIAL

(3") 300 series stainless steel (4<sup>1</sup>/<sub>2</sub>") fiberglass reinforced thermoplastic

#### (4<sup>1</sup>/<sub>2</sub>") black painted aluminum

WETTED MATERIALS 17-4 PH stainless steel sensor: 316 stainless steel socket

#### SOCKET SIZE

1/4 NPT, 1/2 NPT (41/2" case only) Others on application

#### CONNECTION

Lower (6 o'clock), top, side

## RANGES

Vac. and 15 psi thru 20,000 psi including compound

## **POWER SOURCE**

Battery
(3") Two AA alkaline batteries (4<sup>1</sup>/<sub>2</sub>'') Two C alkaline batteries Loop powered 4-20mA Line powered, (12-36 Vdc, 1 amp)

#### **BATTERY LIFE**

(3″) 500 hrs. (4¹/2″) 2500 hrs.

## **OPERATING TEMPERATURE**

14/140°F (-10/60°C)

# STORAGE TEMPERATURE

-4/158°F (-20/70°C)

#### AGENCY APPROVALS

CE, EN 50082-1 (1997) optional, FM, CSA









\*Protective Boot Optional

#### ACCURACY

±0.5% of span or ±0.25% span

#### CASE SIZE

# **CASE MATERIAL**

Polycarbonate/ABS

# WETTED MATERIALS

17-4 PH stainless steel sensor: 316 stainless steel socket

#### **SOCKET SIZE**

1/4 NPT, 1/8 NPT, G1/4A, G1/4B, 9/16-18 UNF

#### CONNECTION

Lower (6 o'clock), 3, 9 and 12 o'clock (others on application)

## RANGES

Vac. thru 25,000 psi, including compound

POWER SOURCE Two AA alkaline batteries

#### **BATTERY LIFE**

2000 hrs.

# **OPERATING TEMPERATURE (Media)**

-4/176°F (-20/80°C)

#### STORAGE TEMPERATURE

(Batteries Removed) -4/140°F (-20/00°C)

AGENCY APPROVALS

CE, EN 61326 (1998) CE, EN 61326 Annex A (heavy industrial) UL-61010-1A

LOOK FOR THIS MARK ON OUR PRODUCT







Low pressure monitoring of gases including ovens, burners or medical applications.

Low pressure monitoring of pneumatic or air handling systems requiring linear or square root readings.

Available with optional (1) or (2) SPDT switches and 4-20mA output, this gauge is ideal for many industrial applications. This product eliminates the need for unnecessary instrument T's, when switches and/or 40-20mA output is a requirement.

This product is an excellent choice for a wide variety of pressure measurement applications. When compared to mechanical gauges the DG25 offers overall enhanced value.



# Quick Guide Sanitary Gauges

# TYPE 2030 SERIES DIGITAL SANITARY GAUGE



#### ACCURACY

±0.25% of span terminal point accuracy

#### DIAL SIZE

2"

#### CASE MATERIAL/FINISH

(3") 300 series SS, electropolished

#### **WETTED MATERIALS**

316L stainless steel

#### TRI-CLAMP CONNECTION

Direct, in-line 1.5", 2.0"; Ashcroft remote in-line (XRE)

#### RANGES

15 psi thru 1000 psi including metric, compound and vacuum

# POWER SOURCE

2032 Battery 2132 4-20mA loop powered 2232 12-36 Vdc

#### **BATTERY LIFE**

500 hrs.

#### **OPERATING TEMPERATURE**

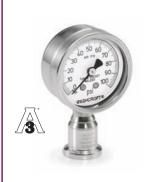
14°F/140°F (-10°C/60°C)

#### STORAGE TEMPERATURE

-4°F/158°F (-20°C/70°C)



TYPE 1032 FRACTIONAL SANITARY GAUGE



#### **ACCURACY**

±3% upscale accuracy; up to ±5% downscale accuracy

# DIAL SIZE

2"only

#### **CASE & RING MATERIAL**

300 series stainless steel

#### **TUBE & SOCKET MATERIAL**

316 stainless steel

#### WETTED PARTS

Electropolished 12 to 20RA surface finish 316 stainless steel

# MOUNTING CONNECTION

Lower (3/4"Tri-Clamp®) only

## RANGES

30# thru 600#, including compound

Meets EN 10204 : 2004 3.1 requirement for material traceability; documents provided as standard

TYPE 1032 Sanitary Gauge



#### ACCURACY

2½", 3½", 4½" – ±1.5% F.S. for pressure ranges 100 psi and above. ±2.0% F.S. for vacuum, compound and ranges below 100 psi

# DIAL SIZE

2½″, 3½″, 4½″

# CASE & RING MATERIAL

300 series stainless steel

# **TUBE & SOCKET MATERIAL**

316 stainless steel

#### WETTED PARTS

Electropolished 12 to 20 RA surface finish 316 stainless steel

#### MOUNTING CONNECTION

Lower and back (11/2" or 2"Tri-Clamp®)

#### RANGES

15# thru 1000#, including compound and vacuum

Meets EN 10204 : 2004 3.1 requirement for material traceability; documents provided as standard

TYPE 1036 SANITARY GAUGE with Type 1037 Sanitary instrument fitting



#### **TYPE 1036 SANITARY GAUGE**

#### **ACCURACY**

±1.5% F.S. for pressure ranges 100 psi and above. ±2.0% F.S. for vacuum, compound and ranges below 100 psi

# DIAL SIZE

31/2"

## **CASE & RING MATERIAL**

300 series stainless steel

#### **TUBE & SOCKET MATERIAL**

316 stainless steel

#### WETTED PARTS

Electropolished 12 to 20 RA surface finish 316 stainless steel

# MOUNTING CONNECTION

Lower, back (11/2"Tri-Clamp®)

#### RANGES

15# thru 1000#, including compound and vacuum

#### TYPE 1037 INSTRUMENT FITTING

#### CONSTRUCTION

316 L stainless steel

## WETTED PARTS

Electropolished 12 to 20RA surface finish

#### MOUNTING CONNECTION

(1/2"thru 2"Tri-Clamp®)

# HEAT NUMBER

Stamped on fitting

Meets EN 10204: 2004 3.1 requirement for material traceability; documents provided as standard

Sanitary pharmaceutical, biotech or food applications requiring Tri-Clamp® type fittings and highly polished stainless steel surfaces.

Sanitary pharmaceutical, biotech or food applications requiring Tri-Clamp® type fittings and highly polished stainless steel surfaces. Can be autoclaved. Standard window glass.

Sanitary pharmaceutical, biotech or food applications requiring Tri-Clamp® type fittings and highly polished stainless steel surfaces. Can be autoclaved with polysulfone window.

Sanitary pharmaceutical, biotech or food applications requiring Tri-Clamp® type fittings with zero deadleg and highly polished stainless steel surfaces.



# Quick Guide Commercial Gauges

This product was designed to withstand rugged agricultural applications. Features include stainless tube and socket, in

addition to glass window, necessary for

anhydrous ammonia applications.

#### **TYPE 1001T** TYPE 1008A/AL TYPE 1005M, XRG TYPE 1005P/1005/1005S AGRICULTURAL AMMONIA PANEL GAUGE **GENERAL SERVICE GAUGE ACCURACY ACCURACY ACCURACY** ACCURACY ASME B 40.100 Grade B (±3-2-3% of span) **DIAL SIZE DIAL SIZE** DIAL SIZE 1½," 2", 2½," 3½" (4½" available with steel case/ring and plastic window, Type 1000) 11/2," 2," 21/2," 31/2" 63mm (2½"), 100mm (4") **CASE MATERIAL CASE & RING MATERIAL** CASE MATERIAL **CASE MATERIAL** 304 stainless steel, dry, liquid filled or field Black painted steel Black painted steel 1005P – ABS, black 1005 – Black painted steel 1005S – Stainless steel (1½" & 2" only) WETTED MATERIAL WETTED MATERIAL WETTED MATERIAL Bronze/brass. 316 stainless steel/steel Optional, color other than black, vent hole, panel Bronze/brass SENSING ELEMENT SENSING ELEMENT mount sleeve for 1005P back connect **SENSING ELEMENT** Bourdon tube; Ashcroft patented Power Flex" Bourdon tube; Ashcroft patented PowerFlex\*\* Bourdon tube; Ashcroft patented Power Flex\*\* WETTED MATERIAL movement Bronze/brass. Optional sockets, nickel plated, Teflon taped, top or side 1/8 NPT back, 1/4 NPT back (11/2" not available CONNECTION 1/4 NPT lower connections, throttle plugs in 1/4 NPT) 1/4 NPT lower and back Optional, 0.020" orifice stainless steel SENSING ELEMENT Optional, metric and SAE connection throttle plug **RANGES** Bourdon tube; Ashcroft patented PowerFlex™ Vac.-6000 psi and compound\* RANGES movement Vac.-15,000 psi and compound 0/60 psi, 0/150 psi, 0/400 psi **Note:** For panel mount refrigeration gauge (recovery, recycling) specify 1001T, XRR gauge CONNECTION $rac{1}{2}$ and $rac{1}{4}$ NPT back and lower (1 $rac{1}{2}$ \*All ranges may not be available in all ranges/connec-1005S available in 1/8 NPT back only; 11/2" 1005/1005P available in 1/8 NPT lower and back; 41/2 "Type 1000 available in 1/4 NPT only) tions. Please consult individual spec sheets **RANGES** Vac.-6000 psi and compound\* \*All ranges listed may not be available in all sizes/ connections. Please consult individual spec sheets.

Applications include hydraulic systems.

machine tools, pressure washers/sprayers

and a variety of other applications.

Consult factory for guidance in product selection. Phone 203-378-8281, visit our web site www.ashcroft.com or email: info@ashcroft.com.

Applications include compressors, filter

regulators, medical equipment, automotive

diagnostic, beverage dispensing, industrial

machinery and a variety of other applications.

Applications include instrument panels,

air-conditioning equipment, air and gas

of other applications.

compressors machine tools and a variety



# Quick Guide Commercial Gauges

# TYPE 1005P, XUL SPRINKLER SERVICE GAUGE

150

# FurterGuard Sandard feature are this product.

TYPE 1007P, XOR REFRIGERATION MANIFOLD

# ACCURACY ASME B 40.100 Grade B (±3-2-3% of span)

300

# DIAL SIZE

31/2

# CASE MATERIAL

ABS/polycarbonate blend

#### WETTED MATERIAL

Bronze/brass

#### SENSING ELEMENT

Bourdon tube; Ashcroft patented Power Flex\*
movement

#### CONNECTION

1/4 NPT lower

#### RANGES

0-300 psi (water), 0-80 psi retard to 250 psi (air), 0-600 psi Optional, dual and triple scale metric dials

# ACCURACY

 $\pm 1\%$  at zero,  $\pm 2\%$  three fourths of scale,  $\pm 5\%$  last fourth of scale

#### DIAL SIZE

21/2"

#### **CASE MATERIAL**

ABS, red (high pressure) ABS, blue (low pressure) Optional, black, ABS

#### WETTED MATERIAL

Bronze/brass

#### SENSING ELEMENT

Bourdon tube; Ashcroft patented PowerFlex™ movement with FlutterGuard™

# CONNECTION

1/8 NPT lower

#### RANGES

Vac/0/120 psi retard to 250 psi, 0/500 psi Vac/0/500 psi retard to 800 psi, 0/800 psi Optional, alternate refrigerant ranges

Note: for panel mount refrigeration gauges (recovery, recycling) see Type 1001T gauge. Specify 1001T, XRR gauge

# TYPE 2071 CONTRACTOR GAUGE



#### **ACCURACY**

ASME B 40.100 Grade A (±2-1-2% of span)

#### DIAL SIZE

41/5"

#### **CASE & RING MATERIAL**

Aluminum with back-flange case, painted black; chrome plated ring

**WETTED MATERIAL** Bronze/brass soldered, siphon required for steam service

#### SENSING ELEMENT

Bourdon tube; Ashcroft patented Power Flex\*\*
movement

# CONNECTION

1/4 NPT lower Optional, throttle plugs

#### RANGES

Vac-600 psi and compound

# TYPE 23DDG MINIGAUGE® Pressure gauge



#### ACCURACY ±5% of span

DIAL SIZE

#### 23mm (0.906")

CASE MATERIAL ABS blend, black

# WETTED MATERIAL

Beryllium copper tube/brass socket

#### SENSING ELEMENT

Spiral wound Bourdon tube

#### CONNECTION

1/8 NPT back with 15mm (9/16") wrench flats. Optional, throttle plugs, PT 1/8" (JIS) and R 1/8" (BSPT) threads

#### RANGES

60 psi-100 psi (180° dial arc) 160 psi-300 psi (235° dial arc)

Consult factory for high cycle life applications

These gauges are UL-393 listed, UL of Canada listed and FM approved for fire protection sprinkler service for either water or air systems.

Typical applications include checking or servicing refrigerant levels in automotive, residential or industrial air-conditioning units; refrigerant recovery and reclamation units; refrigerant transport systems and large scale air-conditioning and chilling equipment.

These gauges are designed to meet the needs of heating, ventilating, plumbing and air-conditioning contractors.

These gauges are perfect for a multitude of applications where a 1½ conventional size gauge is too large, such as mini-FRL's, pneumatic stack valves, air compressors and accessories.



# **Quick Guide Commercial Gauges**

# TYPE 12DDG/15DDG DIRECT DRIVE GAUGE



#### **ACCURACY**

Standard: ±2% at setpoint (setpoint is normally 50% of range) UL listed: ±3.5% of span of middle three-fifths of scale

# DIAL SIZE

11/4," 11/2"

#### **CASE MATERIAL**

#### WETTED MATERIAL

Beryllium copper tube/brass socket

## SENSING ELEMENT

Spiral wound Bourdon tube Optional, silicone dampened tube, silicone-filled tube

#### CONNECTION

1/8 NPT back, safety plug in 1500 psi-4000 psi ranges. *Optional*, 1/4 NPT back, throttle plugs

RANGES
0/60 psi (180° arc)
0/100 psi, 0/160 psi, 0/200 psi,
0/300 psi, (235° arc)
0/700 psi (200° arc)
0/1,200 psi (180° arc)
0/1,500 psi 0/2,000 psi, 0/3,000 psi, 0/4,000 psi (165° arc)

Consult factory for high cycle life applications

Applications include pumps, air compressors, portable tire inflators, portable oxygen equipment, self-contained breathing apparatus, portable industrial gas cylinders and a variety of other applications.



# **Specification Matrix**

Ashcroft Diaphragm Seals & Pressure Instrument Isolators

F = Female

• = AVAILABLE







READED





F = Female M = Male ■ = AVAI	LABLE			9			
Process Connection Type		Threaded	Threaded w/Flushing	Threaded or Threaded	Threaded or Threaded	Low Pressure Threaded or	
Model No.	Code		100/200/300(1)	Connection 101/201/301 <sup>(1)</sup>	w/Flushing Connection 400/401 <sup>(1)</sup>	w/Flushing Connection 500/501(1)	Threaded w/Flushing Conn.* 740/741(1)
Process Connection Size		Male	100/200/300	101/201/301	400/40107	300/301117	740/741(**
1/4	25	02	F/M	F/M	F/M	F/M	F
1/2	50	04	F/M	F/M	F/M	F/M	F
3/4	75	06	F/M	F/M	F/M	F/M	F
1	10	08	F/M	F/M	F/M	F/M	F
1½	15	00	17.00	17.55	17.55	1788	
2	20						
3	30						
4	40						
6	60						
8	80						
Diaphragm Materials							
316L stainless steel	S		100 & 200	101 & 201			
304L stainless steel	C		100 & 200	101 & 201			
Monel 400	P		100 & 200	101 & 201			
Nickel	N.		100 & 200	101 & 201			
Carpenter 20	D		100 & 200	101 & 201			
Tantalum	U		100 & 200	101 & 201			
Hastelloy B	G		100 & 200	101 & 201		•	
Hastelloy C 22	J		100 & 200	101 & 201			
Hastelloy C 276	Н		100 & 200	101 & 201		•	
Teflon	т.		200 & 300	201 & 301			
Viton	Y		200 & 300	201 & 301			
Kalrez	K		200 & 300	201 & 301			
Titanium	TI		200	201		•	
Halar Coated Monel	R		100	101	-	-	
Bottom Housing Materials			100	101			
Steel	В		•				
304L stainless steel	С		•	•			
316L stainless steel	S		•	•		•	
Hastelloy B	G						
Hastelloy C 22	J		•	•		•	
Hastelloy C 276	Н						
Carpenter 20	D		•	•		-	
Monel 400	M		•	•			
Inconel 600	W		•	•		-	
Nickel	N		•				
PVC	V		Only 1/4 or 1/2 NPT	·			
	KY						
Kynar Titanium	TI		Only ¼ or ½ NPT			•	
	- 11		•	•	•	•	•
Pressure Ratings (1)			Viton or Kalrez diaph.	Viton or Kalrez diaph.			
500 psi 2500 psi			Metal & Teflon® diaph.	Metal & Teflon® diaph.		•	750 noi
			ivietai & Teriori- urapri.	іметаї а тепоп- шарії.			750 psi
4400 psi	HP		100 8 200 matal disab	101 8 201 motel disph	401		
5000 psi			100 & 200 metal diaph.	101 & 201 metal diaph.	401		
9000 psi	HP				400		
Instrument Connection Size	007						
1/4	02T		•	•	•	•	
1/2	04T		•	•	•	•	•
Filling Fluid							e(4)
Glycerin	CG		•	•	•	•	•(4)
Silicone (direct to 10' capillary)				•	•	•	•
Silicone (over 10' capillary)	DJ		•	•	•	•	•
Halocarbon	CF		•	•	•	•	•
Syltherm	HA		•	•	•	•	•
Food Grade Silicone	CZ		•	•	•	•	•
Distilled Water	FJ		•	•	•	•	•
Ethylene Glycol & Water	CT		•	•	•	•	•
Propylene Glycol	CV		•	•	•	•	•

(1) See Table A on pages 170-171 of OH-1 for instrument compatibility. Minimum pressure is determined by the instrument that will be attached to the diaphram seal.

<sup>(4)</sup> Glycerin not recommended for vacuum, compound or inches of water.



#### HREADED **Specification Matrix** Ashcroft Diaphragm Seals & Pressure Instrument Isolators • = AVAILABLE M = Male Diaphragm Seal (w/Flushing Connection) Diaphragm Seal (w/Flushing Connection) Female & Male Process Connection Type Diaphragm Seal Diaphragm Seal Threaded Model No. Code 510<sup>(1)</sup> 510HP(1) 511 511HP 311 25 02 F/M 1/4 04 F/M 1/2 50 3/4 75 06 F/M 10 F/M 11/2 15 20 2 3 30 40 60 6 80 Diaphragm Materials 316L stainless steel 304L stainless steel С Monel 400 Р Nickel Ν Carpenter 20 D Tantalum Hastellov B G Hastelloy C 22 Hastelloy C 276 Teflon Т Viton Kalrez Titanium ΤI Halar Coated Monel R Bottom Housing Mate Steel В 304L stainless steel 316L stainless steel S Hastelloy B G Hastelloy C 22 .1 Hastelloy C 276 Carpenter 20 D Monel 400 М Inconel 600 w Nickel PVC Kynar KY Titanium ΤI Pressure Ratings (1) 500 psi 1000 psi 1500 psi 2500 psi 5000 psi 9000 psi HP nt Connection Siz 1/4 02T 04T Glycerin CG Silicone (direct to 10' capillary) CK Silicone (over 10' capillary) Halocarbon CF Syltherm НΑ Food Grade Silicone CZ Distilled Water FJ Ethylene Glycol & Water СТ Propylene Glycol CV

See Table A on pages 170-171 of OH-1 for instrument compatibility.
 Minimum pressure is determined by the instrument that will be attached to the diaphram seal.
 Type 300 series not available with netallic diaphragms.
 Type 302/303 not available with 1" process size.



# **Specification Matrix**

Ashcroft Diaphragm Seals & Pressure Instrument Isolators

F = Female

A = AVAII ARI F







THREADED







= Fernale = Male		MICROFT STATE OF THE PARTY OF T				2	
		Female Threaded (w/Flushing Connection)	Male/Female Threaded Mini (w/Flushing Connection)	1″ Male Flush Mini	Quick Connect	In-line Threaded	
Model No.	Co	de	312	310/315*	330	320/321	104/204
Process Connection Size	Female	Male					
1/4	25	02	F	F/M			F
1/2	50	04	F	F/M			F
3/4	75	06		M			
1	10	08		M	M		
1½	15					•	
2	20						
3	30						
4	40						
6	60						
8	80						
	80						
Diaphragm Materials		2					
316L stainless steel		S	•	•	•	•	•
304L stainless steel		0					•
Monel 400	F			•			•
Nickel	1	N					•
Carpenter 20	[	D					•
Tantalum	l	J	•				•
Hastelloy B	(	G		•			•
Hastelloy C 22		J					•
Hastelloy C 276	ŀ	Н	•	•			
Teflon		Т					204
Viton	,						204
Kalrez		K					204
Titanium		ГІ					•
Halar Coated Monel	1	R					104
Bottom Housing Materials							
Steel		В					•
304L stainless steel		0					•
316L stainless steel		S	•	•	•	•	•
Hastelloy B	(	G		•			•
Hastelloy C 22		J					•
Hastelloy C 276	H	Н	•	•			•
Carpenter 20	1	D					•
Monel 400	N	M					•
Inconel 600	٧	V					•
Nickel		V					
PVC	,						
Kynar		Υ					
Titanium		П					
		11					•
Pressure Ratings (1)							Vitage of Malays at 1
500 psi							Viton or Kalrez diaph
1000 psi			•			•	
2500 psi				•			Metal & Teflon® diaph
3000 psi					•		
5000 psi	Н						
9000 psi	Н	IP					
strument Connection Size							
1/4	02	2T	•	•	•	•	•
1/2	04	4T	•	•	•	2" only	•
illing Fluid						_ 5,	
Glycerin	0	G	•		•	•	•
Silicone (direct to 10' capillary)		K .	•		•	•	
Silicone (over 10' capillary)		)J			•		
Halocarbon			•				
		F		•	•	•	
Syltherm		IA	•	•	•	•	•
Food Grade Silicone		Z	•	•	•	•	•
Distilled Water	F	-J	•	•	•	•	•
Ethylene Glycol & Water	C	T V	•	•	•	•	•

<sup>(1)</sup> See Table A on pages 170-171 of OH-1 for instrument compatibility.

Minimum pressure is determined by the instrument that will be attached to the diaphram seal.

(2) Type 300 series not available with metallic diaphragms.

<sup>(3)</sup> Type 302/303 not available with 1" process size.



# **Specification Matrix**

Ashcroft Diaphragm Seals & Pressure Instrument Isolators

F = Female

• = AVAILABLE







FLANGED





I = Male	<b>-</b>					• •
Process Connection	п Туре	Raised Face Flange	Raised Face Flange w/Flushing Connection	In-Line Flanged	Raised Face Flange *w/Flushing Connection	Low Pressure Flanged *w/Flushing Connection
Model No.	Code	102/202/302(1,2)	103/203/303(1,2)	106/206	402/403*	702/703*
Process Connection Size						
1/4	25					
1/2	50	•	•	•	•	•
3/4	75	•	•	•	•	•
1	10	•	•	•	•	•
1½	15	•	•	•	•	•
2	20	•	•	•	•	•
3	30	•	•	•	•	•
4	40			•		
6	60			•		
8	80			•		
Diaphragm Materials						
316L stainless steel	S	102 & 202	103 & 203	•	•	•
304L stainless steel	С	102 & 202	103 & 203	•		
Monel 400	P	102 & 202	103 & 203	•	•	•
Nickel	N	102 & 202	103 & 203	•		
Carpenter 20	D	102 & 202	103 & 203	•		
Tantalum	U	102 & 202	103 & 203	•	•	•
Hastelloy B	G	102 & 202	103 & 203	•	•	•
Hastelloy C 22	J	102 & 202	103 & 203	•	•	
Hastelloy C 276	Н	102 & 202	103 & 203	•	•	•
Teflon	T	202 & 302	203 & 303	206		
Viton	Υ	202 & 302	203 & 303	206		
Kalrez	K	202 & 302	203 & 303	206		
Titanium	TI	202	203	206	•	•
Halar Coated Monel	R	102	103	106		
Bottom Housing Materials						
Steel	В	•	•	•		
304L stainless steel	С	•	•	•		
316L stainless steel	S	•	•	•	•	•
Hastelloy B	G	•	•	•	•	•
Hastelloy C 22	J	•	•	•	•	•
Hastelloy C 276	Н	•	•	•	•	•
Carpenter 20	D	•	•	•		•
Monel 400	М	•	•	•	•	•
Inconel 600	W	•	•			
Nickel	N	•	•			
PVC	V	1, 1½, 2				
Kynar	KY	1, 1½, 2				
Titanium	TI	•	•		•	•
Pressure Ratings (1)						
500 psi						
2500 psi						
Flange Class						
150, 300, 600, 900 or 1500		•	•	150	•	150, 300, 600
nstrument Connection Size						
1/4	02T	•	•	•	•	•
1/2	04T	•	•	•	•	•
illing Fluid						
Glycerin	CG	•	•	•	•	•
Silicone (direct to 10' capillary)	CK	•	•	•	•	•
Silicone (over 10' capillary)	DJ	•	•	•	•	•
Halocarbon	CF	•	•	•	•	•
Syltherm	НА	•	•	•	•	•
Food Grade Silicone	CZ	•	•	•	•	•
Distilled Water	FJ	•	•	•	•	•
	FJ CT	•	•	•	•	•

 <sup>(1)</sup> See Table A on pages 170-171 of OH-1 for instrument compatibility.
 Minimum pressure is determined by the instrument that will be attached to the diaphram seal.
 (2) Type 300 series not available with metallic diaphragms.
 (3) Type 302/303 not available with 1" process size.



# **Specification Matrix**

Ashcroft Diaphragm Seals & Pressure Instrument Isolators

F = Female

• = AVAILABLE











F = Female M = Male   ● = AVAILA	BLE				1		
		Saddle	In-line Socket Weld	In-line Butt Weld	Isolation Ring	Isolation Spool	
		105/205	107/207	108/208	80/81	85/86	
Process Connection Size					Pipe Size (inches)	Pipe Size (inches)	
1/4	25		•	•	2.0 Type 80 only	1.0	
1/2	50		•	•	3.0 12.0	1.5	
3/4	75		•	•	4.0 14.0	Type 86	
1	10		•	•	5.0 16.0	only	
11/2	15		•	•	6.0 18.0	2.0	
2	20		•	•	8.0 20.0		
3	30	3″			10.0		
4	40	4" and larger					
6	60						
8	80						
Diaphragm Materials					Inner Flexible Wall	Inner Flexible Wall	
316L stainless steel	S	•	•	•	Buna N (E)	Buna N (E)	
304L stainless steel	С	•			Teflon (T)	Teflon (T)	
Monel 400	P		•		Viton (Y)	Viton (Y)	
Nickel	N				Natural Rubber (NP)	Natural Rubber (NP)	
Carpenter 20	D		•	•	Silicone (S)	Silicone (S)	
Tantalum	U		•	•	Officorie (O)	Silicone (S)	
	G						
Hastelloy B		•	•	·			
Hastelloy C 22	J			•			
Hastelloy C 276	H	•	•	•			
Teflon	T	205	207	208			
Viton	Υ	205	207	208			
Kalrez	K	205	207	208			
Titanium	TI	205	207	208			
Halar Coated Monel	R	105	107	108			
Bottom Housing Materials					Ass'y. Flanges / Code	Ass'y. Flanges / Cod	
Steel	В	•	•	•	Carbon Steel (B)	Carbon Steel (B)	
304L stainless steel	С	•	•	•	316 SS (S)	316 SS (S)	
316L stainless steel	S	•	•	•	CPVC (CP)	CPVC (CP)	
Hastelloy B	G	•	•	•	Teflon Enveloped (CT)	Teflon Enveloped (CT)	
Hastelloy C 22	J	•	•	•	Polypropylene (P)	Polypropylene (P)	
Hastelloy C 276	Н		•	•			
Carpenter 20	D	•	•	•			
Monel 400	М	•	•	•			
Inconel 600	W	•					
Nickel	N	•	•				
PVC	V						
Kynar	KY						
Titanium	TI						
Pressure Ratings (1)	11					Pressure Rating Type	
		Vites as Kalasa disah salu	Vites es Velses diseb est.	Vitas as Values disable and			
500 psi		Viton or Kalrez diaph. only	Viton or Kalrez diaph. only	Viton or Kalrez diaph. only		2000 psi	
2500 psi		Metal & Teflon® diaph.	Metal & Teflon® diaph.	Metal & Teflon® diaph.			
Flange Class							
150, 300, 600, 900 or 1500					150 or 300	150 or 300	
nstrument Connection Size							
1/4	02T	•	•	•	1/4 NPT (02T)	1/4 NPT (02T)	
1/2	04T	•	•	•	1/2 NPT (04T)	1/2 NPT (04T)	
Filling Fluid							
Glycerin	CG	•	•	•	•	•	
Silicone (direct to 10' capillary)	CK	•	•	•	•	•	
Silicone (over 10' capillary)	DJ	•	•	•	•	•	
Halocarbon	CF	•	•	•	•	•	
Syltherm	HA	•	•	•	•		
Food Grade Silicone	CZ		•	•	•		
Distilled Water	FJ	•	•	•	•		
Ethylene Glycol & Water	CT	•					
Propylene Glycol	CV	•					
гторутеле Слусог	υv	•	•	•	•	•	

See Table A on pages 170-171 of OH-1 for instrument compatibility.
 Minimum pressure is determined by the instrument that will be attached to the diaphram seal.
 Type 300 series not available with metallic diaphragms.
 Type 302/303 not available with 17 process size.



# **Quick Guide Transducers & Transmitters**

#### **MODEL GC31 ULTRA-COMPACT DIGITAL** PRESSURE SENSOR



**MODEL GC35 ULTRA-COMPACT** DIGITAL PRESSURE SENSOR

**TYPE GC51 RANGEABLE** PRESSURE TRANSMITTER

TYPE GC55 WET/WET DIFFERENTIAL PRESSURE TRANSDUCER



ACCURACY: ±1.0% Span ANALOG OUTPUT: (1-5Vdc)

DISPLAY TYPE: 3½ digit, 10mm LED

STANDARD RANGES (Gauge): 50 to 1500 psia

STANDARD RANGES (Compound): -15 to 15 psig thru -15 to 300 psig Proof Pressure:

2X range: 500 psi & below 1.5X range: 1000 psi & above Burst Pressure:

10X range

#### SWITCH CONTACTS:

(2) NPN or PNP open collector outputs

MEDIA: Fluids and gases compatible with 304SS (sensor housing) and 17-4 pH SS (sensor diaphragm)

**ENVIRONMENTAL RATING: IP40** 

AGENCY APPROVALS: CF





ACCURACY: ±1.0% Span ANALOG OUTPUT: (4-20mA) DISPLAY TYPE: 4 digit, 8mm LED

STANDARD RANGES (Gauge): 50 to 7500 psig

STANDARD RANGES (Compound):

-15 to 75 psig thru -15 to 300 psig **Proof Pressure**:

Ranges 1500 psig & below: 4X range Ranges 3000 psig & above: 2.5X range **Burst Pressure:** 

Ranges 1500 psi & below: 10X range Ranges 3000 psi & below: 5X range Ranges 5000 psi & above: 3X range

#### **SWITCH CONTACTS:**

(2) NPN or PNP open collector outputs MEDIA: Fluids and gases compatible with 304SS (sensor housing) and 17-4 pH SS (sensor diaphragm)

**ENVIRONMENTAL RATING: IP40** 

**AGENCY APPROVALS: CE** 





ACCURACY: ±0.25% Span (URL)0

ANALOG OUTPUT: 4-20mA (2-wire)

DISPLAY TYPE: 4 digit, 10mm LCD with LED backlight

STANDARD RANGES (Compound): –15 to 15psi thru –15 to 50psi

STANDARD RANGES (Gauge):

50 to 7500 psig **Overpressure (Span):** 

Proof Burst 1500psi and below 200% 500% 3000, 5000psi 150% 300% 7500psi 120% 150%

**ENVIRONMENTAL RATING:** 

IP65 / NEMA 4X

MEDIA: Fluids and gases compatible with 316SS and pH17-4 stainless steel

AGENCY APPROVALS: CE





ACCURACY: ± 0.5% Span

ANALOG OUTPUT: (4-20mA or 1-5Vdc)

DISPLAY TYPE: 3½ digits

STANDARD RANGES (Differential):

75 to 300 psid Pressure Range

Burst Proof

2X Span (URL) 10X Span (URL)

Static (Line) Pressure Effects: None Single Side (Differential Limits): Pressure Range

Proof

**Burst** 2X Span (URL) 10X Span (URL)

MEDIA: Fluids and gases compatible with 304SS (sensor housing) and 17-4 pH SS (sensor diaphragm)

**ENVIRONMENTAL RATING: IP66** 

This ultra-compact pressure sensor is used on a wide variety of applications where consistent, reliable pressure measurement is essential. The GC31 features an integral display, user scalable analog ouput and two independent switches. Ideal for monitoring and control of pneumatic and hydraulic systems where high cycle life and functionality is required.

Ultra-compact digital pressure sensor, ideal for monitoring pressures within hydraulic presses/stamping equipment and lifts, water/wastewater pressure control and cooling / lubrication systems. This versatile sensor offers a highly visible LED display for local indication. Product features allow the user to configure the analog scaling to any range within the full scale of the sensor range while integrated switches offer actuation and deadband to any points within the full scale range.

Compact pressure transmitter used to monitor wet/dry media pressures within process automation, hydraulic systems, compressors, pumps and tank level applications.

Compact high-differential pressure transducer for filter monitoring on HVAC hydronic cooling/heating systems and pump controls. Model contains two polysilicon thin film sensors with welded Stainless Steel wetted components to accommodate wet or dry pressure media. The product features a bright LED front panel display for local indication and button to allow the user to select between the dP value and line pressure readings from either sensor.



# **Quick Guide Transducers & Transmitters**

# **A2 HEAVY INDUSTRIAL AND EXPLOSION PROOF TRANSMITTERS**



**ACCURACY:** ±0.25, ±0.5, ±1.0% Span

OUTPUT: 4-20mA. 0-5Vdc. 0-10Vdc. 1-5Vdc, 1-6Vdc, 0.5-4.5Vdc (ratiometric)

#### STANDARD RANGES:

15 to 7500 psi absolute, 1.5 to 10,000 psig, compound to 100 psig

Overpressure: (Varies w/pressure range) Proof: up to 2 x Span Burst: up to 4 x Span

# **ENVIRONMENTAL RATING:**

IP65, IP67\*, NEMA 4X, 6, 7, 9

**AGENCY APPROVALS: CE** 

\*varies with pressure range



## **A2X EXPLOSION/FLAME PROOF** PRESSURE TRANSMITTER



ACCURACY: ±0.25, ±0.5, ±1.0% Span

OUTPUT: 4-20mA, 0-5Vdc, 0-10Vdc, 1-5Vdc, 1-6Vdc, 0.5-4.5Vdc (ratiometric)

#### STANDARD RANGES:

15 to 7500 psi absolute, 1.5 to 10,000 psig, compound to 100 psig

Overpressure: (Varies w/pressure range) Proof: up to 2 x Span Burst up to 4 x Span

#### **ENVIRONMENTAL RATING:**

Ingress Protection Rating: IP65; NEMA 7,9

#### AGENCY APPROVALS: Explosion Proof – cUL (USL/CNL):

Flame Proof – ATEX: Intrinsically Safe – FM (4-20mA) - CE

LOOK FOR THESE MARKS ON OUR PRODUCTS











#### **A4 INTRINSICALLY** SAFE & NON-INCENDIVE PRESSURE TRANSMITTER



ACCURACY: ±.25, ±0.5, ±1.0% Span

#### OUTPUT: 4-20mA

#### STANDARD RANGES:

15 to 7500 psi absolute, 1.5 to 10,000 psig, compound to 100 psig

Overpressure: (Varies w/pressure range) up to 2 x Span Proof: Burst: up to 4 x Span

# **ENVIRONMENTAL RATING:**

Basic IP65, NEMA 4X All Welded\* IP67, NEMA 6 (varies with pressure range)

\*(w/o Z/S)

# AGENCY APPROVALS: CE

Non-Incendive - FM/CSA:







#### **H2 PRECISION** PRESSURE TRANSDUCER



ACCURACY: ±0.15, ±0.20% Span

OUTPUT: 4-20mA, 0-5Vdc, 0-10Vdc

#### STANDARD RANGES:

Gauge: 15 psig to 25,000 psig. Vac/15 psig to Vac/300 psig, Absolute: 15 psia to 150 psia

# **ENVIRONMENTAL RATING:**

IP65: ≦300 psi IP67: Ranges >300 psi

#### AGENCY APPROVALS:

CE Compliance: EN61326-1 2006, EN61326-2-3 2006 EU RoHS Compliance



A highly configurable transmitter designed for hazardous location and heavy industrial applications. High performance accuracy and thermal capability over -20/85°C (-4/185°F) with additional option of zero and span pots. 316L SS wetted materials are standard.

The Ashcroft® A2X is ideal for a broad spectrum of pressure sensing applications where explosion/flameproof hazardous location ratings are required. The A2X pressure transmitter offers all 316L SS wetted materials and features excellent accuracy and stability for reliable measurements over the life of the instrument.

The Ashcroft® A4 pressure transmitter is ideal for a broad spectrum of pressure sensing requirements where Intrinsically Safe or Non-Incendive hazardous location ratings are required. Designed / manufactured to provide the user with accurate, reliable, and stable output data using an on-board microprocessor programmed during a unique digital compensation process; providing a product that supplies extremely linear and precise performance. 316L SS wetted materials are standard.

The Ashcroft® H2 precision pressure transducer is ideal for measuring and controlling challenging hydraulic and pneumatic operations. The high accuracy and performance, combined with rugged construction, provides a highly reliable and safe sensor platform.



# T2 HIGH PERFORMANCE PRESSURE TRANSDUCER



ACCURACY: ±0.25% of Span

**OUTPUT:** 4-20mA, 0-5Vdc, 0-10Vdc, 1-5Vdc, 1-6Vdc, 0.5-4.5Vdc (ratiometric)

#### STANDARD RANGES:

Pressure Ranges (Span): 30 to 20,000 psig, compound to 300 psig

Overpressure: (Varies w/pressure range)
Proof: up to 3 x Span
Burst: up to 10 x Span

### ENVIRONMENTAL RATING:

NEMA 4X, IP65

**AGENCY APPROVALS: CE** 



# TYPE G2 OEM PRESSURE TRANSDUCER



#### ACCURACY:

±1% Span: through –20/85°C (–4/185°F) ±1.5% Span: through –40/–20°C and (–40/–4°F) and 85/125°C (185/257°F).

**OUTPUT:** 4-20mA, 0-5Vdc, 0-10Vdc, 1-5Vdc, 1-6Vdc, 0.5-4.5Vdc (ratiometric)

#### **ENVIRONMENTAL RATING:**

NEMA 4X, IP65 and IP67

#### STANDARD RANGES:

Pressure Ranges (Span): 30 to 20,000 psig, compound to 300 psig Overpressure: (Varies w/pressure range)

Proof: up to 3 x Span

Burst: up to 10 x Span

#### AGENCY APPROVALS: CE



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#### KM15 HIGH VOLUME OEM PRESSURE TRANSDUCER



#### ACCURACY:

±0.5% Span, 100 psig and above ±1.0% Span, 75 psig and below

**OUTPUT:** 1-5Vdc, 1-6Vdc, 0.5-4.5Vdc (ratiometric)

#### **ENVIRONMENTAL RATING: IP67**

#### STANDARD RANGES:

Pressure Ranges (Span): 15 to 7500 psig/s, compound to 300 psig
Overpressure (Span): **Proof**Burst

 Overpressure (Span):
 Proof
 Burst

 ≤ 3000 psig
 2 x Span
 5 x Span

 5000 psig
 1.5 x Span
 5 x Span

 7500 tpsig
 1.2 x Span
 5 x Span

#### AGENCY APPROVALS: CE



LOOK FOR THIS MARI

#### K1/K2 SERIES Industrial transducer



ACCURACY: ±0.5%, ±1.0% Span

#### OUTPUT:

K1: 4-20mA, 1,5Vdc, 1-6Vdc, 1-11Vdc K2: 2, 3, 10, 20 mV/V

#### ENVIRONMENTAL RATING:

NEMA 1. NEMA 4X

#### STANDARD RANGES:

Pressure Ranges (Span): 15 to 20,000 psig, compound to 60 psig Overpressure (Span): **Proof Burst** 

Overpressure (Span): **Proof** ≤ 2000 psig 2 x Span 3000 to 5000 psig 1.5 x Span 3 x Span 7500 to 20,000 psig 1.2 x Span 1.5 x Span 1.5 x Span 2.5 x Span 3 x Span 2.5 x Span 3.5 x Span 3.5

#### AGENCY APPROVALS:

Intrinsically Safe – FM (consult factory)



A robust pressure transducer designed for industrial applications featuring Ashcroft's proven polysilicon thin film pressure sensing element. Product features include voltage and current outputs, a variety of pressure ports and electrical terminations to international standards with excellent accuracy and performance over —40 to 125°C, (—40 to 257°F).

A robust pressure transducer designed for OEM applications featuring Ashcroft's proven polysilicon thin film pressure sensing element. Product features include voltage and current outputs, a variety of pressure ports and electrical terminations to international standards with excellent accuracy and performance over -40 to 125°C, (-40 to 257°F).

An economical transducer designed for the high volume OEM. Product features include voltage outputs, a variety of pressure ports and electrical terminations to international standards with excellent accuracy and performance over –30 to 120°C (–25 to 250°F). IP67 ingress rating and 100V/m EMC immunity.

A versatile and proven industrial transducer with an extensive installed base. Wide range of pressure fittings and electrical terminations along with FM hazardous area approvals.



#### **K8 SERIES** TRANSDUCER w/mV SIGNAL



ACCURACY: ±0.5%, ±1.0% Span

OUTPUT: Varies from 6-18 mV/V at Span

#### STANDARD RANGES:

Pressure Ranges (Span): 45 to 20,000 psig Overpressure (Span): Proof ≤ 2000 psig 2 x Span 2 x Span 3000 to 5000 psig 1.5 x Span 3 x Span 7500 to 20,000 psig 1.2 x Span 1.5 x Span

**ENVIRONMENTAL RATING: NEMA 4X** 

#### **KX/KS SERIES SANITARY TRANSDUCERS**



ACCURACY: ±1.0% Span

#### OUTPUT:

KS: 4-20mA, 1-5Vdc, 1-6Vdc; 2, 3, 10, 20 mV/V ratiometric KX: 4-20mA, 1-5Vdc, 1-6Vdc

#### STANDARD RANGES:

Pressure Ranges (Span): KS: 30 to 1000 psig, compound to 100 psig Kx: 100 to 5000 psig

Overpressure (Span): Proof Rurst < 2000 psig 2 x Span 8 x Span 3000 to 5000 psig 3 x Span 1.5 x Span

**ENVIRONMENTAL RATING: NEMA 4X** 

#### **MODEL GC30 ULTRA-COMPACT DIFFERENTIAL** PRESSURE SENSOR



ACCURACY: ±1.5% Span ANALOG OUTPUT: (1-5Vdc)

DISPLAY TYPE: 3½ digit, 10mm LED

STANDARD RANGES (Gauge): 0.25" I.W.C. to 25" I.W.C

STANDARD RANGES (Compound): ±0.25" I.W.C. to ±25" I.W.C.

MEDIA: Clean, dry air/gases compatible with Aluminum, ABS, Čeramic, Silicon, and

#### SWITCH CONTACTS:

(2) NPN or PNP open collector outputs

**ENVIRONMENTAL RATING: IP40** 

AGENCY APPROVALS: CE



TYPE GC52 RANGEABLE WET/WET DIFFERENTIAL PRESSURE TRANSMITTER



ACCURACY: ±0.50% Span (URL)

OUPUT SIGNAL: 4-20mA (2 Wire)

DISPLAY TYPE: 4 digit, 10mm LCD with LED backlight

STANDARD RANGES (Bi-Directional, Inches W.C.): ±4 to ±200 i.w.c.

STANDARD RANGES (Uni-Directional, Inches W.C.): Ò to 4 thru 400 i.w.c.

STANDARD RANGES Static (Line) Pressure:

Pressure Ránge **Proof Burst** 300 psi 800 psi

Static (Line) Pressure Effects:

Pressure Range <u>Effect</u>
≥20′W.C., ±8″ W.C. ±0.3% Span/100psi
8′W.C., ±4″ W.C. ±0.7% Span/100psi
4′W.C. ±1.5% Span/100psi

Single Side (Differential) Limits: Proof 30 psid Pressure Range Burst ≤8″W.C., ±4″W.C. 130 psid ≥20"W.C.. ±8"W.C. 100 psid 130 psid

MEDIA: Fluids and gases compatible with 316SS, Viton and Coramic

**ENVIRONMENTAL RATING:** 

IP65 / NEMA 4X

**AGENCY APPROVALS: CE** 



A pressure transducer for applications that can incorporate an unconditioned mV/V output and require the proven benefits of the polysilicon thin film pressure sensing element. A broad range of pressure fittings allow the user design flexibility in packaging.

For use in sanitary, waste-water, food processing and pharmaceutical applications. The KS Series features a 316L stainless steel electropolished Tri-Clamp style diaphragm while the KX Series features several options designed for harsh applications – flush mounted diaphagm. PMC adapter or weldnuts. The polysilicon thin film pressure sensing element offers proven performance and stability.

Ultra-compact pressure sensor is exceptional when monitoring differential pressures in clean rooms, filters, fan speed control and vacuum/suction pressure sensing & control. Consistent, reliable pressure measurement is provided due to the highly reliable SiGlas™ Sensor. The GC30 offers an analog ouput with two independent, user configurable switches.

Uniquely compact wet/wet differential pressure transmitter, ideal for flow and tank level applications where reliable, low dP measurements are required. This instrument can be adjusted to rearrange the transmitter and offers flow measurement/ square root extraction where the flow rate can be displayed and analog signal can be output. Equipped with the patented SiGlas™ 316 Stainless Steel isolated sensor, it can monitor a wide variety of wet or dry media.



#### **CXLdp SERIES** DIN/PANEL/WALL MOUNT



ACCURACY: 0.8% or 0.4% Span

**OUTPUT SIGNAL:** 

4-20mA, (12-36Vdc) 0-5, 0-010Vdc (24Vac/Vdc)

PRESSURE RANGES (Inches W.C.)

Unidirectional: 0.10 to 0/25 I.W.C. Bidirectional: ±0.10 to ±15 I.W.C.

Overpressure

Proof Pressure 15 psi Burst Pressure: 25 psi

**ENVIRONMENTAL RATING: NEMA 1** 

MOUNTING: DIN rail or panel mount

MEDIA: Clean, dry and non-corrosive gas

NOT FOR USE ON LIQUIDS

**ENVIRONMENTAL RATING: NEMA 1** 

AGENCY APPROVALS: CE



#### **DXLdp SERIES DIN MOUNT**



ACCURACY: 0.25%, 0.50% or 1.00% Span

**OUTPUT SIGNAL:** 

4-20mA, (12-36Vdc), 1-5Vdc, 1-6Vdc, 0-5Vdc, 0-10Vdc

PRESSURE RANGES (Inches W.C.): Unidirectional: 0.10 to 100 I.W.C. Bidirectional: ±0.05 to ±100 I.W.C.

Overpressure

Proof Pressure: Burst Pressure: 25 psi Max. static (line) pressure: 25 psi

MOUNTING: DIN rail mount:

EN50022 EN50035 EN50045

MEDIA

Clean, dry and non-corrosive gas (consult factory for use on other media)

NOT FOR USE ON LIQUIDS

**ENVIRONMENTAL RATING: NEMA 1** 

**AGENCY APPROVALS: CE** 



#### **RXLdp SERIES REDUCED SIZE**



ACCURACY: 1.00% Span

**OUTPUT SIGNAL:** 

4-20mA, (12-36Vdc), 1-5Vdc, 1-6Vdc, 0-5Vdc, 0-10Vdc

PRESSURE RANGES (Inches W.C.):

Unidirectional: 0.10 to 50 I.W.C. Bidirectional: ±0.05 to ±50 I.W.C.

Overpressure

Proof Pressure: Burst Pressure: 25 psi Max. static (line) pressure: 25 psi

Clean, dry and non-corrosive gas (consult factory for use on other media)

NOT FOR USE ON LIQUIDS

**ENVIRONMENTAL RATING: NEMA 1** 

AGENCY APPROVALS: CE (optional)



#### **XLdp SERIES HIGH PERFORMANCEL**



ACCURACY: 0.25% or 0.50% Span

OUTPUT SIGNAL:

4-20mA, (12-36Vdc), 1-5Vdc, 1-6Vdc

PRESSURE RANGES (Inches W.C.): Unidirectional: 0.10 to 100 I.W.C.

Bidirectional: ±0.05 to ±100 I.W.C.

Overpressure

Proof Pressure: 15 psi Burst Pressure: 25 psi Max. static (line) pressure: 25 psi

Clean, dry and non-corrosive gas (consult factory for use on other media)

NOT FOR USE ON LIQUIDS

**ENVIRONMENTAL RATING: NEMA 2** 

AGENCY APPROVALS: CE (optional)



Static or velocity pressure measurement for flow stations, ducts, building pressure, filter efficiency, van boxes or room pressurization. Designed for ease of installation and system calibration, the DXLdp is ideal for pharmaceutical plants and other installations where large numbers of air flow and dp measurements are being monitored.

A compact transmitter for comfort control and other HVAC applications.

High performance dp transmitter with proven reliability and stability. Excellent for air handling applications including fume hood control and room pressurization.



#### **IXLdp SERIES INDUSTRIAL**

**ACCURACY: 0.25% or 0.50% Span** 

OUTPUT SIGNAL:

4-20mA, 1-5Vdc, 1-6Vdc, ±5Vdc, ±2.5Vdc

PRESSURE RANGES (Inches W.C.): Unidirectional: 0.10 to 200 I.W.C. Bidirectional: ±0.05 to ±100 I.W.C.

Overpressure Proof Pressure: Burst Pressure: Max. static (line) pressure: 100 psi

Clean, dry and non-corrosive gas (consult factory for use on other media)

NOT FOR USE ON LIQUIDS

**ENVIRONMENTAL RATING: NEMA 4X** 

AGENCY APPROVALS: FM



#### 2279 DURATRAN PRESSURE TRANSMITTER



ACCURACY: ±0.50% of span **OUTPUT SIGNAL: 4-20mA** 

PRESSURE RANGES:

Vacuum and compound, 12 to 20,000 psi

DIAL SIZE: 41/2" analog

CASE MATERIAL: Phenolic

**SENSING ELEMENT:** Bourdon tube

WETTED MATERIAL: 316 SS, Monel

**AGENCY APPROVALS: FM** 



#### **TYPE DM61 DIGITAL PANEL METER**



ACCURACY: 0.10% of span

DISPLAY: 6 Digit

POWER: 12 or 24 V Power Supply

INPUTS: Field Selectable: 0-20, 4-20mA, ±10 Vdc, 0-5 Vdc, 1-5 Vdc, 0-10 Vdc, Modbus PV (slave)

**BUTTONS/DISPLAY & MIN/MAX VALUES:** User-Programmable and User-Defined

#### ENVIRONMENTAL:

Operating Temperature Range: -40°C to 65°C (-40°F to 149°F) Storage Temperature Range: -40°C to 85°C (-40°F to 185°F) Relative Humidity: 0-90% R.H. non-condensing

ENCLOSURE: 1/8 DIN, high impact plastic,

UL 94V-0

#### CONNECTIONS:

Removable screw terminal blocks accept 12 to 22 AWG wire, RJ45 for external relays, digital I/O, and serial communication adapters

ALARM POINTS: 2 or 4 SPDT (Form C) internal and/or 4 SPST (Form A) external

ALARM DEADBAND: 0-100%, User-Selectable

#### OPTION:

Expansion Modules For Relays, Digital I/O and USB, RS-232 and RS-485 Communications Adapters





#### **TYPE 4080, 4480** PNEUMATIC TRANSMITTER



**OUTPUT RANGES, PSI:** 3-15 & 3-27 (see note below for vacuum application)

#### SUPPLY AIR REQUIREMENTS:

18-20 psi for 3-15 psi range; 30-35 psi for 3-27 psi range

**AIR CONSUMPTION SCFM: 0.1** 

SPEED OF RESPONSE: Time constant of 4 seconds per 500 ft of tubing

AIR CONNECTION: 1/4 NPT Female

ACCESSORIES: See optional features and

accessories

TRANSMISSION DISTANCE: 1000 ft

MOUNTING WEIGHT: Approximate weight 9 lb

**REPEATABILITY % OF SPAN: 0.15** 

**ACTUATION:** Bourdon Tube

INPUT SENSING ELEMENT MATERIAL:

AMBIENT TEMPERATURE EFFECT:

1/2% per 50°F

### PROCESS CONNECTION:

1/2 NPT (ordering code 04L)

Note: Vacuum application: The transmitted air pressure increases as the measured vacuum approaches zero

A rugged low pressure transmitter in cast 300 series stainless steel enclosure. A good choice for dp monitoring in pollution control, combustion control, and other applications where precision sensing is needed in a tough environment.

Product combines a reliable, local, analog pressure indication with 4-20mA transmitter. The wide selection of system materials and corrosion-proof housing meet a variety of demanding applications including those with vibration and pulsation.

The new Digital Panel Meter is a multi-purpose meter used to control and/or monitor transmitter applications involving level, flow or pressure. The user-friendly/ field-programmable device offers a 6 digit LED display, min./max. capability, relay/ alarm functions and password protection; all which complement the expanding Ashcroft transducer line.

The Ashcroft transmitter is a self-nulling motion- balance instrument, using a pneumatic relay operating on the nonbleed force balance principle for converting input pressures into proportional low air pressure signals for transmittal to remote indicators or controllers



**Quick Guide Temperature Instruments** 

#### EI, CI & EL INDUSTRIAL **BIMETAL THERMOMETERS**





#### **ACCURACY**

ASME B 40.3 Grade A (±1% of span)

**DIAL SIZE** EI, CI 2,"3,"5"(EL 3,"5")

#### STEM/BULB DESIGN

Rigid stem 0.250" dia.

#### RECALIBRATOR

(EI, EL external), (CI none)

#### **SEALING DESIGN**

Hermetically sealed; EL liquid filled

#### DAMPENING

Silicone-dampened bimetal coil; EL liquid filled

#### CONNECTION LOCATION

El rear, lower, Everyangle™ mount CI rear, lower EL rear, Everyangle mount

#### **CONNECTION SIZES (NPT)**

1/4 (2" sizes only) 1/2 and 1/2 fixed or union (3,"5" sizes only)

#### STEM LENGTH 21/2"-60"

### **RANGES**

-80°F to 1000°F, -50°C to 500°C EL -40°F to 550°F, -20°C to 300°C

#### CASE/RING MATERIAL

Stainless steel

Stainless steel

El, Cl glass (EL Polycarbonate)

#### **CASE/BULB MATERIAL**

General industrial temperature applications including gases, liquids, and other processes. All stainless steel construction.



#### **ACCURACY**

ASME B 40.3 Grade A (±1% of span)

600A - 4<sup>1</sup>/<sub>2</sub>", 6" 600B - 4<sup>1</sup>/<sub>2</sub>"

#### STEM/BULB DESIGN

Rigid stem 0.375" dia. (600B) Bendable 0.375" dia. (600A)

#### RECALIBRATOR

Adjustable pointer

# Weatherproof

**SEALING DESIGN** 

#### **DAMPENING**

Silicone-encapsulated helical Bourdon tube

#### CONNECTION LOCATION

600A – rear, lower – remote mount 600B – Everyangle – direct mount

#### **CONNECTION SIZES (NPT)**

1/2" fixed or union

#### STEM LENGTH 6"-36" - 600B

# CAPILLARY LENGTH 5′-80′ – 600A

RANGES

-320°F to 1200°F -200°C to 650°C

#### CASE/RING MATERIAL

Stainless steel, aluminum, phenol

#### CASE/BULB MATERIAL

Stainless steel

#### **CAPILLARY MATERIAL**

600A-300 Series stainless steel

#### WINDOW

Glass

Rugged applications including gases, liquids and other processes. Wide temperature ranges including remote monitoring.



## **Ouick Guide Pressure and Temperature Switches**

#### SINGLE SETPOINT **WATERTIGHT ENCLOSURES**



#### **FEATURES**

#### Enclosure:

Watertight epoxy-coated aluminum NEMA 4, 4X, IP66

#### Switch Function:

Single setpoint, fixed deadband, SPDT Single setpoint, fixed deadband, (2) SPDT (DPDT action)

#### Wetted Materials:

Stainless steel and Buna, \*Teflon® or Viton®

All-welded stainless steel (or) All-welded Monel

#### Ranges:

Pressure: vac. thru 3000 psi Temperature: –40°F thru 750°F Differential Pressure: 30 in.H<sub>2</sub>O diff. thru

H-Series Pressure: 1000 - 7500 psi

U.L. and CSA LISTED

\*Registered trademark of E. I. DuPont

LOOK FOR THESE MARKS ON OUR PRODUCTS











#### SINGLE SETPOINT EXPLOSION PROOF ENCLOSURES



#### **FEATURES**

#### Enclosure:

Explosion proof, NEMA 7/9, IP66

**Switch Function:**Single setpoint, fixed deadband, SPDT (or) Single setpoint, fixed deadband, (2) SPDT (DPDT action)

#### **Wetted Materials:**

Stainless steel, Buna, Teflon® or Viton® (or) All-welded stainless steel (or) All-welded Monel

Pressure: vac. thru 3000 psi Temperature: -40°F thru 750°F Differential Pressure: 30 in. $H_2O$  diff. thru 600 psid

U.L. or CSA LISTED, ATEX and IECEx models for Hazardous locations now available

Dual Seal Rating now available

LOOK FOR THESE MARKS ON OUR PRODUCTS











#### **DUAL SETPOINT WATERTIGHT ENCLOSURES**

#### L-SERIES



#### **FEATURES**

Watertight epoxy-coated aluminum NEMA 4, 4X, IP66

#### **Switch Function:**

Single setpoint, fixed deadband, SPDT contacts (or) Single setpoint, fixed deadband,(2) SPDT contacts (DPDT action) (or)
Single setpoint, adjustable deadband, SPDT contacts (or) Dual setpoint, fixed deadband, (2) SPDT contacts, (DPDT action)

#### Wetted Materials:

Stainless steel and Buna, Teflon® or Viton® All-welded stainless steel (or)

All-welded Monel

#### Ranges:

Pressure: vac. thru 3000 psi Temperature: –40°F thru 750°F Differential Pressure: 30 in.H<sub>2</sub>0 diff. thru 400 nsid

U.L. and CSA LISTED

LOOK FOR THESE MARKS ON OUR PRODUCTS









#### **DUAL SETPOINT EXPLOSION** PROOF ENCLOSURES

#### P-SERIES



#### FEATURES

#### Enclosure:

Watertight epoxy-coated aluminum explosion-proof NEMA 7/9, IP66

#### Switch Function:

Single setpoint, fixed deadband, SPDT contacts (or) Single setpoint, fixed deadband (2) SPDT contacts (DPDT action) (or) Single setpoint, adjustáble deadband, SPDT contacts (or)
Dual setpoint, fixed deadband (2) SPDT contacts. (DPDT action)

#### Wetted Materials:

Stainless steel and Buna. Teflon® or Viton® All-welded stainless steel (or) All-welded Monel

#### Ranges:

Pressure: vac. thru 3000 psi Temperature: -40°F thru 750°F Differential Pressure: 30 in.H2O diff. thru 400 psid

U.L. or CSA LISTED

Dual Seal Rating now available







General purpose switches for most industrial and process applications. Models are available for steam and fuel pressure-limit controls on boilers and burners. Ideal for compressors, turbines, filters, blowers, etc.

Ashcroft 700 series has been developed for most applications found in process plants U.L. or CSA LISTED.

All models have similar performance characteristics to the popular Ashcroft B400 Series switch line, which has been used throughout the world's plants and mills for over 25 years. They feature rugged, reliable diaphragm-sealed piston actuators, snap-acting contacts and all-popular wetted materials and process connections. Dual Seal Rating models available. Optional hermetically sealed contacts, Monel or fire-safe actuators and scores of options allow you to choose a model for any application.

Easy-to-use L-Series switches are specifically suited for the OEM seeking more features in a snap-acting switch. Single or dual setpoints and fixed or adjustable deadband models with many wetted materials and electrical ratings are offered. This snap-acting switch also replaces older mercury models and is cost effective.

L-Series switches are ideal for blowers. generators, scrubbers, precipitators, compressors and turbines.

More varieties and more features are available in the highly reliable P-Series switch which is especially suited for process and refinery applications. Dual chamber design allows setpoint changes to be made safely, even with power connected. Features include NEMA 4X/ NEMA 7/9 enclosure, with single or dual setpoints, fixed or adjustable deadbands, with many wetted materials and electrical ratings. Dual Seal Rating models available. Optional, all-welded stainless steel or Monel actuators are ideal for applications requiring NACE or fire-safe conformance. Optional UL listed, hermetically sealed switch contacts improve safety and reliability.



### **Quick Guide Pressure and Temperature Switches**

#### **WATERTIGHT STAINLESS** STEEL ENCLOSURES



#### **FEATURES**

#### Enclosure:

Watertight 316 stainless steel NEMA 4, 4X,

#### **Switch Function:**

Single setpoint, fixed deadband, SPDT contacts (or) Single setpoint, fixed deadband (2) SPDT contacts (DPDT action) (or) Single setpoint, adjustable deadband, SPDT contacts (or) Dual setpoint, fixed deadband (2) SPDT contacts (DPDT action)

#### Wetted Materials:

Stainless steel and Buna. Teflon® or Viton®

All-welded stainless steel (or) All-welded Monel

#### Ranges:

Pressure: vac. thru 3000 psi Temperature: -40°F thru 750°F Differential Pressure: 30 in H<sub>2</sub>O diff. thru 400 psid

U.L. and CSA LISTED

LOOK FOR THESE MARKS ON OUR PRODUCTS









#### COMPACT EXPLOSION PROOF PRESSURE



#### **FEATURES**

**Enclosure** (Body): Explosion-proof, anodized aluminum NEMA 7/9, IP66

#### Switch Function:

Single setpoint, field-adjustable fixed deadband, SPDT contacts (or) Single setpoint, field-adjustable fixed deadband, (2) SPDT contacts (DPDT action)

#### **Wetted Materials:**

316 stainless steel pressure connection and Buna N, Teflon® or Viton® diaphragm and

O-ring (or)
All-welded 316 stainless steel diaphragm

#### Ranges:

Pressure: vac. thru 4000 psi

III and CSA LISTED







#### MINIATURE WATERTIGHT **PRESSURE SWITCHES**



#### **FEATURES**

#### Enclosure:

NEMA 4X watertight, IP67

#### Switch Function:

Single setpoint, fixed deadband, factory set SPDT or DPDT contacts, not field adjustable (or) Single setpoint, fixed deadband, field-ad-justable SPDT or DPDT contacts

#### Wetted Material:

316 stainless steel piston w/Buna N or Viton® or 316 stainless steel welded diaphragm actuator) Single Switch – SPDT
Dual Switch DPDT (not available with "S" actuator) with <100 psi range

#### Ranges:

Vac thru 7500 psi

U.L. and CSA LISTED

SIL 3 capable

LOOK FOR THESE MARKS ON OUR PRODUCTS













#### MINIATURE EXPLOSION **PROOF PRESSURE SWITCHES**

A-SERIES





#### FEATURES

#### Enclosure:

NEMA 7/9 explosion proof, IP66

#### Switch Function:

Single setpoint, fixed deadband, factory set SPDT or DPDT contacts, not field adjustable (or) Single setpoint, fixed deadband, field-adjustable SPDT or DPDT contacts

#### Wetted Material:

Stainless steel (Buna N, Viton® or welded diaphragm actuator) Single Switch - SPDT Dual Switch DPDT (not available with "S" actuator) with <100 psi range

#### Ranges:

Vac thru 7500 psi.

U.L. and CSA LISTED

AM, ATEX, IECE, SIL 3 capable

LOOK FOR THESE MARKS ON OUR PRODUCTS











The stainless steel enclosure offers greater corrosion protection for this high-performance switch in breweries, dairies, chemical and petrochemical plants, offshore rigs and pulp and paper mills. Our standard diaphragm-sealed piston actuators and a variety of wetted materials are available in these pressure, temperature and differential pressure switches.

Compact size facilitates mounting in panels and other installations where space is a premium.

Standard hermetically sealed switch element and sealed conduit connection eliminate the possibility of condensation entering the enclosure from the conduit. Standard 1/2 NPTF pressure connection makes retrofit on existing installations quick and easy

You should consider Ashcroft A-Series pressure switches for use on heavy vehicles, engines and compressors, electronics processing and medical equipment, food and beverage processing equipment, garbage compactors, machine tools, or any equipment where space is a consideration. This series is especially suitable for OEM configuration.

You should consider Ashcroft A-Series pressure switches for use on heavy vehicles, engines and compressors, electronics processing and medical equipment, food and beverage processing equipment, garbage compactors, machine tools, or any equipment where space is a consideration. This series is especially suitable for OEM configuration.



### Quick Guide Pressure and Temperature Switches

# ELECTRONIC PRESSURE SWITCHES

# STANDARD DIFFERENTIAL PRESSURE SWITCH

# ATEX APPROVAL FOR HAZARDOUS LOCATONS

#### U.L. LISTED STEAM LIMIT CONTROL





#### **FEATURES**

#### Enclosure:

NEMA 4X watertight or NEMA 7/9 explosionproof, IP66

#### Switch Function:

Single setpoint with adjustable deadband

#### Wetted Material:

Stainless steel

#### Ranges

60 thru 20,000 psi. Deadbands as low as 0.1% of range.

Optional process and setpoint indication and 4-20mA transmitter ouput now available



Small size and high overpressure capability make our differential pressure switch ideal for most process and industrial applications. Minimum static working pressures of 500 psi allow use on the most difficult filter applications.

We use a unique combination of diaphragm-sealed piston actuators to get our high static pressure performance in 12 ranges.

For inches of water ranges, we use a large diaphragm for sensitivity which results in lower, more conventional working pressure. Consult the factory for application assistance on differential pressure switch selection.



ATEX is a European designation that deals with standards for equipment and protective systems intended for use in potentially explosive atmospheres. This approval is required for switches intended for use in hazardous locations, especially important to OEMs who export to Europe and contractors specifying or purchasing products for European applications.

European applications.
XCN option adds special features to
Ashcroft 700-Series switch enclosures that
meet the requirements for the highest levels
of security and danger, such as:

- Special locking device requiring an Allen wrench to remove cover
- Special vents that blow out should the diaphragm rupture, thus preventing pressure build-up in the enclosure
- Special conduit plug requiring an Allen wrench for removal
- Available on pressure, temperature and d/p models
- Meets explosion class Ex d IIC T6
- IECEx models available
- Dual Seal Rating models available





The Ashcroft steam-limit control switch is designed for use on boilers equipped with electrically operated burners. The limit control is an adjustable pressure-operated switch set to stop burner operation when the recommended safe boiler working pressure is exceeded.

We recommend a stainless steel diaphragm for steam service. A pigtail siphon should also be used to reduce the possibility of high temperature affecting switch performance. This listing is available for setpoints up to 300 psi.



LOOK FOR THIS MARK

The Ashcroft N-Series electronic pressure switch combines the popular K-Series polysilicon thin film pressure transducer sensor and rugged, epoxy-coated enclosures. The result is a highly reliable pressure switch that is ideal for high cycle, high pressure, or difficult deadband applications.

Typical applications include: machine tools, injection molding machines, presses, pumps, hydraulic systems, turbines, and compressors.



**Quick Guide Pressure and Temperature Switches** 

#### **U.L. LISTED PRESSURE LIMIT CONTROL**



The Ashcroft medium-pressure gas and oil limit control switch is designed for use with air, LP gas, natural gas, #1 and #2 fuel oil and #6 oil preheated to 240°F. This limit control is an adjustable pressure-operated switch with a secondary chamber to prevent fuel from entering the switch enclosure in the unlikely event that the diaphragm develops a leak. The control shuts down a fuel pump in high or low pressure conditions



# **DDS-SERIES DIFFERENTIAL** PRESSURE SWITCH DIAPHRAGM SENSING ELEMENT



#### **FEATURES**

Ranges:

0-6 IWD TO 0-150 IWD

Static Pressure Ranges: 250 PSI or 1500 PSI

Rugged:

NEMA 4X & 12 Housing Std. Class I, Div. I, Gr. C & D Available SPDT or **DPDT Contacts** 

**Maximum Ambient Temperature:** 

Minimum Ambient Temperature: -20°F

Pressure Connection:

1/4 NPT Female

**Electrical Connection:** 3/4 NPT Female

Housing:

Cast Aluminum

Deadband:

Fixed

Sensitivity: 1% of range

Drift:

<1% of range (100,000 operations)

Weight:

Approximately 6 lbs.

Contact Ratings: 15A-125, 250, 480 VAC (general purpose other micro switches available)

**Contact Listings:** 

UL Listed

Port Material:

Aluminum or Stainless Steel

Diaphragm Material:

Buna N, Viton or Teflon

Setpoint Adjustment:

Screw type, field adjustable



LOOK FOR THIS MARK

The Ashcroft DDS-Series differential pressure switch is designed to sense low differential pressures between high pressure sources.

# **SASHCROFT**Measurably Better

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