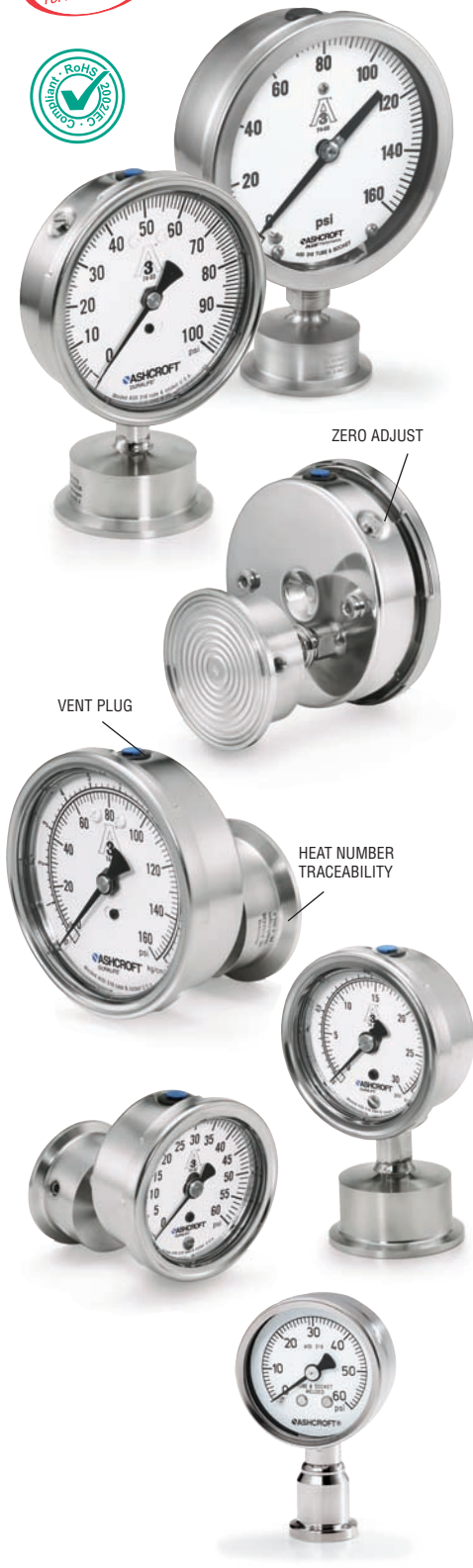


Actual material certificates and certificate of conformance supplied as standard to EN 10204:2004 3.1



## Type 1032 Sanitary Pressure Gauge



### FEATURES

- **PLUS!™ Performance** is available on 2½", 3½", 4½" gauges for liquid filled performance in a dry case gauge.
- **All-welded 316L SS Bourdon tube**
- **Welded 316L SS diaphragm and seal housing**
- **USP grade glycerin (99.5% pure, system fill) standard**
- **3A compliance to standard 74-03**
- **300 SS electropolished case and ring**
- **Electropolished diaphragm & housing**
- **Dry and liquid filled gauge versions<sup>(1)</sup>**
- **Weatherproof and hermetically sealed versions**
- **External Easy Zero™ adjust standard on dry, liquid filled and PLUS!™ 3½" size**
- **Individual calibration certificates provided on request**

Ashcroft® Type 1032 sanitary pressure gauges have specifically been designed to meet the need for sanitary-type pressure gauges in the pharmaceutical, bio-tech, filtration and food and dairy markets. With a quick-connect clamp and diaphragm surface finish that is electropolished to 12-20RA these instruments are also suitable for use in breweries, wineries and citrus juice production plants. Available in dial sizes from 2" thru 4½" and Tri-Clamp® type connections of ¾" thru 2," Ashcroft's selection of sanitary pressure gauges is unsurpassed.

To meet the needs of the markets served, all Ashcroft sanitary gauges, with optional polysulfone window, can be autoclaved or sterilized to temperatures of 300°F (149°C) and can be cleaned or steamed in place. Ashcroft Type 1032 sanitary gauges with dial sizes of 2½" and 3½" are furnished standard with the patented PowerFlex™ movement. Since the PowerFlex movement is suspended from the Bourdon tube, it resists the effects of pulsation and vibration, a primary cause for gauge failure.

### SPECIFICATIONS

- Dial Size:** 2", 2½", 3½", 4½"
- Accuracy:** 2": 3% upscale, up to 5% downscale<sup>(2)</sup>  
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.
- Case & Ring Material:** 300 SS electropolished
- Ring Type:** 2": Stainless steel, friction fit  
2½", 3½", 4½": Bayonet, removable
- Bourdon Tube and Socket Material:** 316L SS
- Diaphragm Material & Surface Finish:** 316 SS, 12 to 20 RA electropolished
- Process Connection:**  
2" dial size: ¾" Tri-Clamp  
2½", 3½" dial size: 1½" or 2" Tri-Clamp  
4½" dial size: 2" Tri-Clamp only
- Connection Location:** 2": Lower  
2½", 3½", 4½": Lower or back
- System Fill:** USP food grade glycerin standard. Other materials available
- Window Material:** 2": Glass  
2½", 3½": Polycarbonate<sup>(3)</sup>  
4½": Glass
- Pointer:** 2": Black-painted aluminum, non-adjustable  
2½": Black-painted aluminum, adjustable  
3½": Black-painted aluminum with ext. adjust  
4½": Black-painted aluminum, adjustable
- Dial:** White with black markings
- Movement:** 2", 2½", 3½": 300 SS, 4½": 400 SS
- Agency Approvals:**  
3A compliance to sanitary standard 74-03
- Ranges:** 2": 30# thru 600#, incl. vac/30 psi lowest  
2½", 3½", 4½": 15# thru 1000#, including compound & vacuum
- Clean or Steam in Place:** (CIP or SIP): Process temperature limit of 280°F (138°C)
- Autoclave or Sterilize:** Ambient temp. limit of 300°F (149°C) when supplied with polysulfone window (3½" dry gauge only).

(1) 2" 1032 not available liquid filled and not available in ranges below 30psi.  
(2) Gasket material and clamp torque tightness may effect gauge accuracy. We use a buna o-ring gasket and 25 inch pounds of clamp force when calibrating. Other gaskets could effect accuracy.  
(3) We recommend a polysulfone window for autoclave/ sterilization. Specify the XPS variation. Available in 3½" dry gauge only.  
Tri-Clamps are not included, Tri-Clamp® is a registered trademark of Alfa Laval Inc.

### HOW TO ORDER (Typical Example)

25 1032 S (L) 15 L X 100#

Dial Size: 2" 2½" 3½" 4½" \_\_\_\_\_

Type: 1032, 316L SS tube/socket \_\_\_\_\_

Diaphragm: 316L SS \_\_\_\_\_

Liquid-Filled Case (optional) \_\_\_\_\_

Process Connection: ¾" (75), 1½" (15), 2" (20) Tri-Clamp® \_\_\_\_\_

Connection Location: lower (L), back (B) \_\_\_\_\_

Optional Features \_\_\_\_\_

Pressure Range: 100 psi \_\_\_\_\_



## Type 1036 In-Line Sanitary Pressure Gauge with Type 1037 Sanitary Instrument Fitting



NOW WITH  
**PLUS!**  
 Performance

### FEATURES

#### Type 1036 Sanitary Gauge

- All-welded stainless steel wetted surfaces
- Field liquid-fillable gauge case
- True Zero™ pointer indication
- PowerFlex™ movement for extended life
- Easy Zero™ external pointer adjustment standard
- Retrofits Anderson Instrument CPM design

#### Type 1037 Fitting

- Pipe O.D. sizes from 1/2" thru 2"
- 316L SS
- Electropolished 12-20RA internal surface finish
- Heat number of wetted materials stamped on each fitting
- Actual material certificates and certificate of conformance supplied as standard to EN 10204:2004 3.1

Designed specifically for the pharmaceutical, biotechnology and food processing markets, the Ashcroft® Type 1036 in-line sanitary pressure gauge and Type 1037 sanitary instrument fitting virtually eliminate process dead-leg. The design of the Type 1036 sanitary gauge and instrument fitting allows for the diaphragm of the gauge to be positioned at the gauge instrument fitting, eliminating the pocket or deadleg that may cause contamination.

The Type 1036 sanitary gauge and Type 1037 instrument fitting utilize a 1 1/2" Tri-Clamp connection. This feature offers flexibility to use the Ashcroft Type 1036 with the Type 1037 instrument fitting on sanitary instrument fittings for pipe sizes from 1/2" thru 2".

The Ashcroft Type 1036 sanitary pressure gauge can be autoclaved or sterilized<sup>(1)</sup>, and cleaned (CIP) or steamed in place (SIP). The gauge comes standard with True Zero pointer indication. Since the Type 1036 has no dial stop pin, the gauge pointer always indicates a true reading.

<sup>(1)</sup> Optional polysulfone window required.

### HOW TO ORDER (Typical example)

35 1036 SD 15 L XXX 100#

Dial Size: 3 1/2" \_\_\_\_\_

Case Type: \_\_\_\_\_

System Mat'l: Stainless Steel \_\_\_\_\_

Fill: Dry \_\_\_\_\_

Connection Size: 1.5" seal \_\_\_\_\_

Connection Location: Lower \_\_\_\_\_

X Variations \_\_\_\_\_

Range \_\_\_\_\_

### HOW TO ORDER

75-1037

- 50 – 1/2" Tri-Clamp connection
- 75 – 3/4" Tri-Clamp connection
- 10 – 1" Tri-Clamp connection
- 15 – 1 1/2" Tri-Clamp connection
- 20 – 2" Tri-Clamp connection

## Type 1036 In-Line Sanitary Pressure Gauge with Type 1037 Sanitary Instrument Fitting

### SPECIFICATIONS - Type 1036

**Dial Size:** 3/2" (only)

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

**Case & Ring Material:** 300 series stainless steel

**Ring Type:** Bayonet, removable

**Bourdon Tube and Socket Material:**  
316L stainless steel

**Diaphragm Material & Surface Finish:**  
316L stainless steel, 12 to 20RA

**Diaphragm O-Ring:** Buna-N<sup>(1)</sup> (standard)  
Viton<sup>®(1)</sup> (XVD), Teflon<sup>(1)</sup> (XTD)

**Connection Location:** Lower

**System Fill:** USP food grade glycerin

**Window Material:** Polycarbonate

**Pointer:** Black-painted aluminum with external zero adjust (Easy Zero™)

**Dial:** white with black markings

**Movement:** 300 series stainless steel

**Agency Approvals:** 3A compliance to sanitary standard 74-03

**Ranges:** 15# thru 600#, including compound & vacuum

**Clean or Steam in Place:** (CIP or SIP):  
Temperature limit of 200°F (138°C)

**Autoclave or Sterilize:** Temperature limit of 300°F (149°C) when supplied with polysulfone window

We recommend a polysulfone window for autoclave/sterilization. Specify the XPS variation.

### SPECIFICATIONS - Type 1037 CODE

316L stainless steel construction std.

Wetted parts electropolished to 12 to 20RA surface finish std.

Heat number stamped on fitting std.

Sizes:

1/2" Tri-Clamp connection 50

3/4" Tri-Clamp connection 75

1" Tri-Clamp connection 10

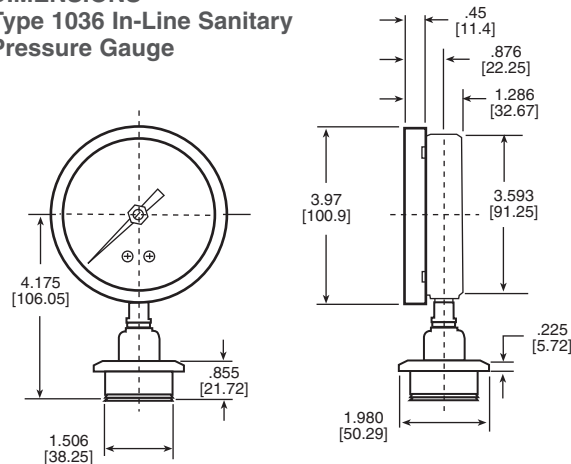
1 1/2" Tri-Clamp connection 15

2" Tri-Clamp connection 20

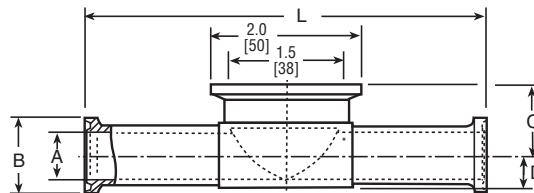
#### (1) To Ensure Cleanliness:

Prior to reinstalling the Type 1036 in to the Type 1037 instrument fitting, we recommend replacing the O-ring (P/N 185A106-75) Buna-N  
185A106-76 Viton  
185A106-77 Teflon

### DIMENSIONS - Type 1036 In-Line Sanitary Pressure Gauge

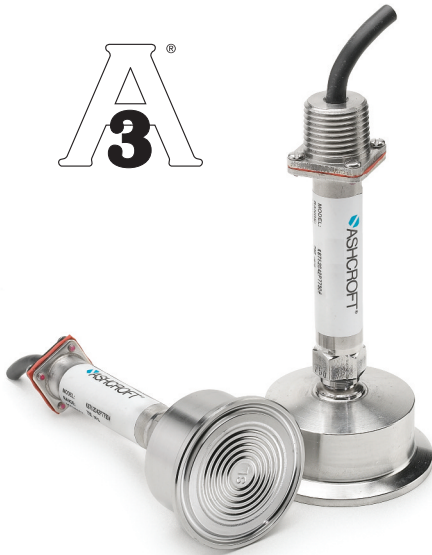


### DIMENSIONS - Type 1037 Instrument Fitting



Inch/mm	A	B	C	D	L
1/2"	.38	.98	.81	.31	5.25
50	(9.6)	(24.9)	(20.6)	(7.9)	(133.4)
3/4"	.63	.98	.93	.43	5.25
75	(15.9)	(24.9)	(23.6)	(10.9)	(133.4)
1"	.87	1.98	1.05	.55	4.75
10	(22.1)	(50.4)	(26.7)	(14.1)	(120.7)
1 1/2"	1.37	1.98	1.31	.81	5.50
15	(34.7)	(50.4)	(33.3)	(20.6)	(139.7)
2"	1.86	2.51	1.56	(1.06)	(7.00)
20	(47.2)	(62.8)	(39.6)	26.9	177.8)

## Model KS Sanitary Transmitter



### APPLICATIONS:

*Dairy, food, pharmaceutical and any 3A sanitary application*

### FEATURES:

- 316L stainless steel electropolished (1½"-2") Tri-Clamp® style diaphragm
- Vac.-1000 psi pressure range
- Stainless steel NEMA 4X enclosure
- Superior long-term stability and repeatability
- Current/voltage/millivolt output
- Wide range of electrical connections available
- All-welded construction

Ashcroft® combines the proven polysilicon thin film technology with its longtime know-how of diaphragm seals to create the KS sanitary pressure transmitter. The all-welded stainless steel construction meets the 3A Sanitary Standard 74-02.

The KS Sanitary Pressure Transmitter features the benefits of polysilicon thin film performance at an affordable price. Modern chemical vapor disposition methods provide simple, stable, molecular bonds between a proven metal diaphragm and polysilicon strain gage bridge. There are no epoxies or bonding agents to contribute to signal instability or drift. The integral metal diaphragm and polysilicon bridge are virtually unaffected by shock, vibration or mounting position.

### PERFORMANCE SPECIFICATIONS

**Accuracy Class (Span):** ±1.0%  
Includes non-linearity, (Terminal Point Method), hysteresis, non-repeatability, zero offset and span setting errors  
**Best fit straight line (BFSL)** ±0.75%  
Includes non-linearity, hysteresis and non-repeatability errors

### ENVIRONMENTAL SPECIFICATIONS

**Temperature**  
Storage -65/+250°F (-54 to +120°C)  
Operating -20/+180°F (-28 to +82°C)  
Compensated +30/+130°F (0 to +50°C)

**Thermal Coefficients: (68°F (20°C) ref.) % Span/°F Standard:**

ZERO ±0.04%  
SPAN ±0.04%

**Humidity:** No performance effect at 95% relative humidity – noncondensing

### FUNCTIONAL SPECIFICATIONS

#### Standard Ranges (psi)

0/30*†	0/300†	vac./30*
0/60*†	0/500	vac./60*
0/100†	0/750	vac./100†
0/150†	0/1000	
0/200†		

Consult factory for nonstandard ranges.

\*T/C multiply by 1.5 times.

†NEMA 4X only with F2 and C1 electrical connections.

#### Overpressure: (F.S.)

Proof 200%  
Burst 800%

**Vibration Sweep:** Less than ±0.1% span effect for 0-2000 Hz at 20 g's in any axis

**Shock:** Less than ±0.05% span effect for 100 g's, 20ms shock in any axis

**Position Effect:** Less than 0.01% span

### ELECTRICAL SPECIFICATIONS

#### Transmitter Output Signal:

4-20mA (2 wire)  
1-5 Vdc (3 wire)  
1-6 Vdc (3 wire)

**Supply Current:** Less than 3mA for voltage output

#### Power Requirements:

10-36 Vdc unregulated

#### Reverse polarity protected

#### Transducer Output Signal:

2m V/V ratiometric  
3m V/V ratiometric  
10m V/V ratiometric  
20m V/V ratiometric

**Power Requirements:** 5-10 Vdc regulated

#### Circuit to Case Insulation Resistance:

100 M ohms @ 50 Vdc

# Model KS Pressure Transducer/Transmitter

## PHYSICAL SPECIFICATIONS

**Enclosure:** NEMA 4X

**Weight:** 13.5 oz (approx. without cable)

### MATERIALS

**Case:** 300 series stainless steel

**Cable:** No. 24 AWG, 36" PVC, shielded, vented, UL approved

**Diaphragm:** 316L SS, 12-20 Ra surface finish

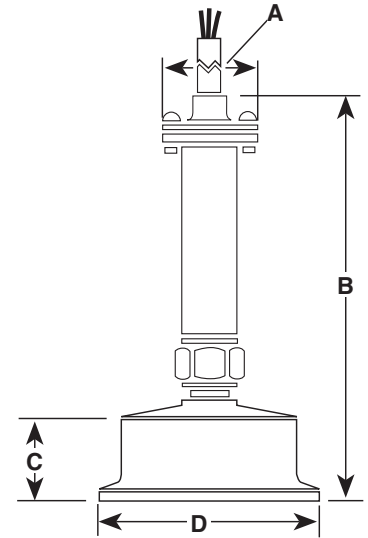
**Standard Process Connections:**  
316L stainless steel electropolished  
Tri-Clamp® style 1½", 2"

**Fill:** USP grade 99.5% glycerin fill, contact factory for other fill fluids

**Consult factory for pricing, availability and required minimums for nonstandard products.**

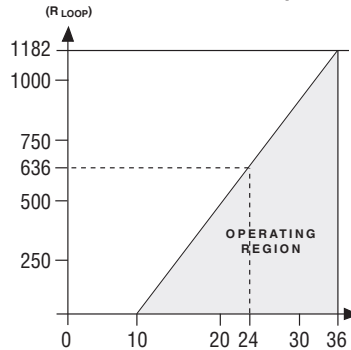
**WARNING! Sensitive Diaphragm!**

## Dimensions



MODEL	A	B	C	D
S15	0.8	4.7	0.9	2.0
S20	0.8	4.7	0.9	2.5

## Load Limitations 4-20mA Output Only



$$V_{\min} = 10V + (.022A \times R_L)$$

$$R_L = R_S + R_W$$

$R_L$  = Loop Resistance (ohms)

$R_S$  = Sense Resistance (ohms)

$R_W$  = Wire Resistance (ohms)

## How To Order

<div style="border: 1px solid black; padding: 2px; display: inline-block;">K S</div> Type Configuration (KS)	<div style="border: 1px solid black; padding: 2px; display: inline-block;">7</div> Accuracy (7) 1.0%, ±0.040%/°F	<div style="border: 1px solid black; padding: 2px; display: inline-block;">  </div> Sanitary Seal (S15) 1½" Sanitary Connection (S20) 2" Sanitary Connection	<div style="border: 1px solid black; padding: 2px; display: inline-block;">  </div> Output Signal (42) 4-20mA (16) 1-6 Vdc (15) 1-5 Vdc (02) 2mV/V (03) 3mV/V (10) 10mV/V (20) 20mV/V	<div style="border: 1px solid black; padding: 2px; display: inline-block;">  </div> Electrical Termination (F2) 36" Cable, Shielded, PVC Sheathing (B6) Bendix 6-pin #PTO2A-10-6P* (B9) WP Bendix 6-pin #PTO2H-10-6P* (B4) Bendix 4-pin #PTO2A-8-4P* (B8) WP Bendix 4-pin #PTO2H-8-4P* (C1) ½ NPT-M Conduit and 36" Cable (HM) Hirschmann Miniature  <small>*Mating connector available as option</small>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">  </div> Pressure Range (30) 30 psi (60) 60 psi (100) 100 psi (150) 150 psi (200) 200 psi (300) 300 psi (500) 500 psi (750) 750 psi (1000) 1000 psi <small>See Standard Ranges under Functional Specifications</small>
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