ASHCROFT®
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1490 Low Pressure Diaphragm Gauge

FEATURES

- FlutterGuard™ option to reduce movement wear and eliminate pointer flutter
- Pointer adjustment screw
- Polycarbonate removable window
- Glass-filled polysulfone case material
- Custom dials

TYPICAL USES

- Vacuum pumps
- Air compressors
- Filters
- Gas measurement; burners and leak detectors
- Vacuum ovens
- Specialized OEM equipment
- Suction regulators and respirators

1490
2½″, 3½″ dial size

SPECIFICATIONS

Accuracy:	±2-1-2% of span (ASME B40.100 Grade A)
Dial Size:	2½″, 3½″
Ranges:	10 in. H_2O through vacuum, compound to 15 psi
Process Connection Location:	Lower, center back, top, 3 o'clock, 9 o'clock
Process Connection Size:	⅛ NPT Male, ¼ NPT Male, ⅛″ Tubing hose barb, 3⁄16″ Tubing hose barb, ¼″ Tubing hose barb, ¼″ O.D. Polytube hose barb, 3⁄32″ Tubing hose barb
Movement:	Brass
Dial:	Aluminum, white background, black figures and intervals
Proof Pressure:	1.5 X Range
Burst Pressure:	Up to 5 psi = 50 psi Greater than 5 psi = 100 psi
Mounting Option:	Stem, Flush U-clamp for panel mounting
Pointer:	Black, aluminum
Dampening:	FlutterGuard™

KEY BENEFITS

- **Case won't rust or dent**
- **Sensitive diaphragm capsule to measure low pressure and vacuum**
- **Case is suitable for intermittent or continuous services on natural gas**

WETTED COMPONENTS

Diaphragm:	Beryllium copper
Process Connection:	Brass

NON-WETTED COMPONENTS

Case:	Black, glass filled polysulfone
Ring/Window:	Threaded polycarbonate, bayonet

MIN/MAX TEMPERATURE LIMITS

Ambient
-40 °F to 180°F (-40 °C to 82 °C)

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ORDERING CODE Example:	35	1490	A	02	B	XUC	10IWC
Dial Size							
25 - 2½″							
35 - 3½″	35						
Model Code							
1490 - Glass filled polysulfone case		1490					
Wetted Material							
A - Beryllium copper brass polysulfone RTV silicone			A				
Process Connection Size							
01 - ⅛ NPT Male (U-clamp is optional)							
02 - ¼ NPT Male (U-clamp is optional)				02			
HD - ⅛″ Tubing hose barb (includes U-clamp/throttle plug not available this OPT.)							
HE - 3⁄16″ Tubing hose barb (includes U-clamp/throttle plug not available this OPT.)							
HF - ¼″ O.D. Polytube hose barb (includes U-clamp/throttle plug not available this OPT.)							
HG - ¼″ Tubing hose barb (includes U-clamp/throttle plug not available this OPT.)							
HH - 3⁄32″ Tubing hose barb (includes U-clamp/throttle plug not available this OPT.)							
Process Connection Location							
B - Center back connection							
D - Connection @ 3 o'clock							
E - Connection @ 9 o'clock							
L - Lower connection							
T - Top connection							
Options (If choosing an option(s) must include an "X")						X__	
AN - 1% Accuracy							
C4- Traceable calibration certificate							
DA - Dial marking							
EO - External adjustment							
NH - Stainless Steel tag							
NN - Paper tag							
TU - Thottle plug (throttle plug must be installed for intermittent or continuous use on natural gas service)							
UC - U-clamp (U-Clamp standard with hose barb connection)						UC	
ZY - FlutterGuard™							
Range (See range table on page 3 for all standard ranges)							
10IWC - 0/10 in. H_2O							10IWC

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STANDARD PRESSURE RANGES			
Range Code	Pressure	Figure Intervals	Minor Graduation
10IW	0/10 in. H_2O	1	0.1
15IW	0/15 in. H_2O	5	0.2
30IW	0/30 in. H_2O	5	0.5
60IW	0/60 in. H_2O	10	1
100IW	0/100 in. H_2O	10	1
160IW	0/160 in. H_2O	20	2
200IW	0/200 in. H_2O	20	2
300IW	0/300 in. H_2O	50	5
10ZSI	0/10 oz./in^2	1	0.1
15ZSI	0/15 oz./in^2	5	0.2
30ZSI	0/30 oz./in^2	5	0.5
60ZSI	0/60 oz./in^2	10	1
100ZSI	0/100 oz./in^2	10	1
160ZSI	0/160 oz./in^2	20	2
250ZSI	0/250 oz./in^2	50	5
3#	0/3 psi	0.5	0.05
5#	0/5 psi	1	0.1
10#	0/10 psi	1	0.1
15#	0/15 psi	5	0.2

STANDARD VACUUM PRESSURE RANGES			
Range Code	Pressure	Figure Intervals	Minor Graduation
15IWV	15/0 in. H_2O	5	0.2
30IWV	30/0 in. H_2O	5	0.5
60IWV	60/0 in. H_2O	10	1
100IWV	100/0 in. H_2O	10	1
200IWV	200/0 in. H_2O	20	2
N15/0ZSI	15/0 oz H_2O	5	0.2
N30/0ZSI	30/0 oz H_2O	5	0.5
N60/0ZSI	60/0 oz H_2O	10	1
N100/0ZSI	100/0 oz H_2O	10	1
Compound			
N30/30IW	-30/30 in. H_2O	10	1
N30/30ZSI	-30/30 oz./in^2	10	1
N10/10IW	-10/10 in. H_2O	2	0.2

STANDARD METRIC PRESSURE RANGES			
Range Code	Pressure	Figure Intervals	Minor Graduation
60CMW	0/60 cm H_2O	10	1
2.5KP	0/2.5 kPa	0.5	0.05
4KP	0/4 kPa	1	0.1
10KP	0/10 kPa	1	0.1
16KP	0/16 kPa	2	0.2
25KP	0/25 kPa	5	0.5
40KP	0/40 kPa	10	1
100KP	0/100 kPa	10	1
Vacuum			
N4KP	4/0 kPa	1	0.1
N16KP	16/0 kPa	2	0.2
N100KP	100/0 kPa	10	1
Compound			
60CM	-10/60 cm H_2O	10	1
80CM	-10/80 cm H_2O	10	1
40CM	-20/40 cm H_2O	10	1
100CM	-10/100 cm H_2O	10	1
120CM	-10/120 cm H_2O	10	1

DUAL SCALE STANDARD PRESSURE RANGES						
Range			Inner Scale		Outer Scale	
Range Code	Inner Scale	Outer Scale	Figure Intervals	Minor Graduation	Figure Intervals	Minor Graduation
97SI/IW	0/9 oz./in^2	15/0 in. H_2O	0.2	0.2	5	0.2
20ZSI/IW	0/20 oz./in^3	35/0 in. H_2O	0.5	0.5	5	0.5
35ZSI/IW	0/35 oz./in^2	60/0 in. H_2O	1	0.5	10	1
60ZSI/IW	0/60 oz./in^2	100/0 in. H_2O	1	1	10	1

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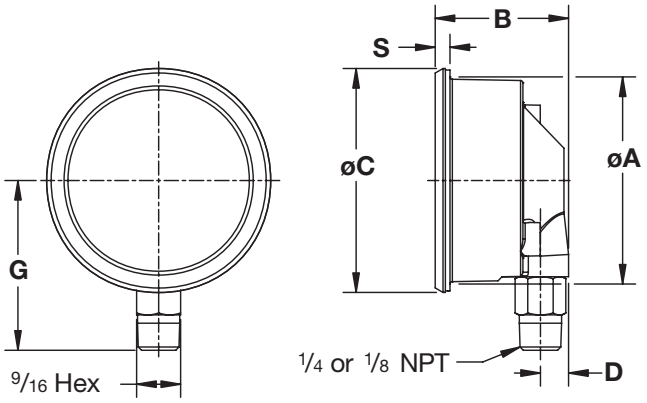
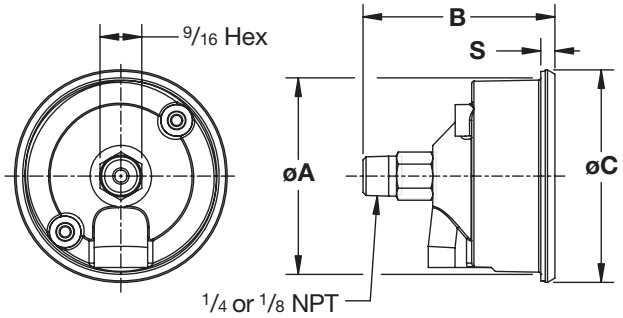
DIMENSIONS in [ ] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

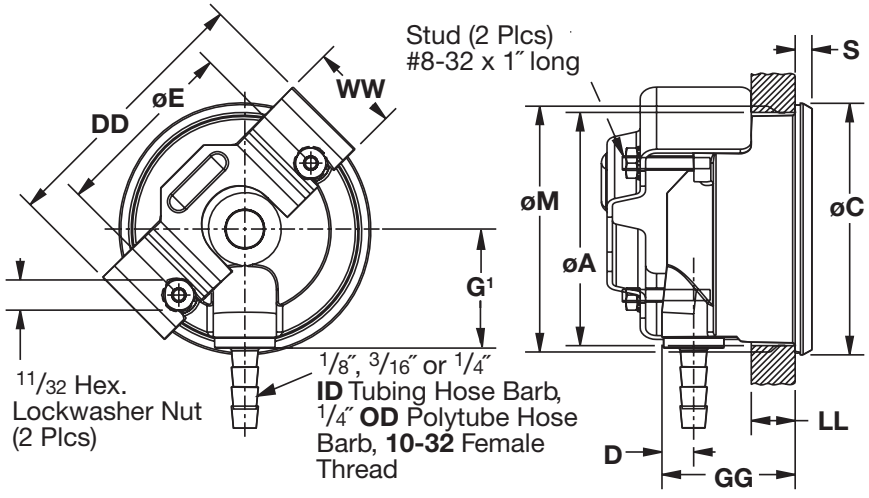
Dial Size (inches)	øA	B	øC	D	G	S
2½	2.59 [66]	1.72 [44]	2.88 [73]	.38 [10]	2.19 [55]	.20 [5]
3½	3.66 [93]	1.69 [43]	3.97 [101]	.38 [10]	2.72 [69]	.20 [5]

Dial Size (inches)	øA	B	øC	S
2½	2.59 [66]	2.59 [66]	2.88 [73]	.20 [5]
3½	3.66 [93]	2.56 [65]	3.97 [101]	.20 [5]





Dial Size (inches)	øA	øC	D	DD	øE	G				G¹	GG	LL Max.	øM	S	WW
						1/8 ID Tubing	3/16 ID Tubing	1/4 ID Tubing	1/4 OD Tubing	10-32 Female					
2½	2.59 [66]	2.88 [73]	.38 [10]	3.06 [78]	2.13 [54]	1.75 [44]	2.13 [54]	2.28 [54]	1.75 [44]	1.34 [34]	1.59 [40]	.50 [13]	2.66 [67]	.20 [5]	1 [25]
3½	3.66 [93]	3.66 [101]	.38 [10]	4.13 [105]	3.38 [67]	2.31 [59]	2.66 [81]	2.81 [54]	2.31 [59]	1.97 [50]	1.53 [39]	.50 [13]	3.75 [95]	.20 [5]	1 [25]



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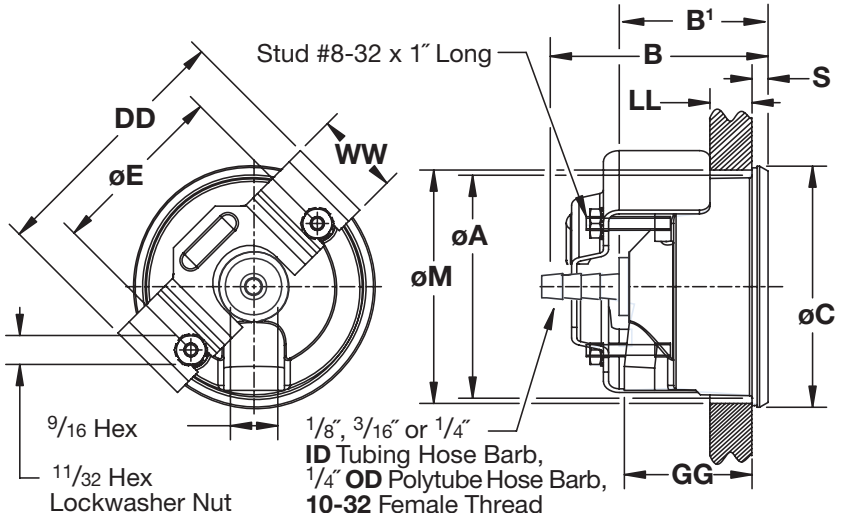
Dial Size (inches)	øA	B				B[1]	øC	DD	øE	GG	LL Max.	øM	S	WW
		⅛ ID Tubing	3⁄16 ID Tubing	¼ ID Tubing	¼ OD Tubing	10-32 Female								
2½	2.59 [66]	2.19 [55]	2.53 [64]	2.69 [68]	2.19 [55]	1.78 [45]	2.88 [73]	3.06 [78]	2.13 [54]	1.59 [40]	.5 [13]	2.66 [67]	.20 [5]	1 [25]
3½	3.66 [93]	2.13 [54]	2.50 [63]	2.97 [67]	2.13 [54]	1.72 [44]	3.97 [101]	4.13 [105]	3.19 [81]	1.53 [39]	.50 [13]	3.75 [95]	.20 [5]	1 [25]



U-CLAMP (OPT.)										
Dial Size (inches)	øA	B	øC	DD	øE	GG	LL Max.	øM	S	WW
2½	2.59 [66]	2.59 [66]	2.88 [73]	3.06 [78]	2.13 [54]	1.59 [40]	.50 [13]	2.66 [67]	.20 [5]	1 [25]
3½	3.66 [93]	2.56 [65]	3.97 [101]	4.13 [105]	3.38 [67]	1.53 [39]	.5 [13]	3.75 [95]	.20 [5]	1 [25]