

## Type 1490 Low Pressure Diaphragm Gauge



- *Glass-filled polysulfone case material, won't rust or dent*
- *Beryllium copper diaphragm*
- *Brass socket*
- *Wetted materials of beryllium copper, brass, polysulfone and RTV silicone*

The Ashcroft® Type 1490 low pressure diaphragm gauge is designed to measure pressure from 10 in. H<sub>2</sub>O to 15 psi, both positive and negative pressures. This gauge uses a very sensitive diaphragm capsule to measure low pressure and vacuum. The gauge is specifically designed for use whenever the pressure medium is a gas that is not corrosive to beryllium copper, brass, polysulfone and RTV silicone. The polysulfone case is suitable for intermittent or continuous service on natural gas provided a .013 throttle plug is installed in the socket. Typical applications are, but not limited to, vacuum pumps, gas leak detectors, air compressors, air filters, gas burners, gas measurement, vacuum ovens, suction regulators and respirators.

### PRODUCT SPECIFICATIONS

<b>Model Number:</b>	1490
<b>Accuracy:</b>	±2-1-2% full scale (Grade A, ASME B40.100)
<b>Ranges:</b>	10 in. H <sub>2</sub> O through 15 psi including vac. and compound
<b>Dial Size:</b>	2½" and 3½" diameter
<b>Case Material:</b>	Black, glass filled polysulfone
<b>Socket Material:</b>	Brass
<b>Movement:</b>	Brass
<b>Sensing Element:</b>	Beryllium copper diaphragm
<b>Wetted Material:</b>	Beryllium copper, brass, polysulfone and RTV silicone
<b>Window:</b>	Polycarbonate, quarter turn bayonet style mounting
<b>Dial:</b>	Aluminum, white background, black figures and intervals.
<b>Pointer:</b>	Black, aluminum, fixed
<b>Connection Size:</b>	1/8 NPT (01) 1/4 NPT (02) 1/8" tubing hose barb (HD) 3/16" tubing hose barb (HE) 1/4" tubing hose barb (HF) 1/4" O.D. polytube hose barb (HG) 10-32 2B female thread (HH)
<b>Connection Location:</b>	Lower (L) Center Back (B) Top (T) 3 o'clock (D) 9 o'clock (E)
<b>Operating Temperature:</b>	-20 to 180°F
<b>Proof Pressure:</b>	150% of range
<b>Burst Pressure:</b>	Up to 5 psi = 50 psi Greater than 5 psi = 100 psi

### OPTIONAL FEATURES

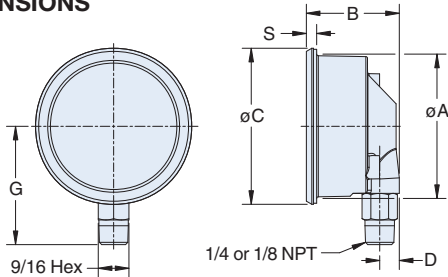
<b>1% Accuracy:</b>	XAN
<b>Dial Marking:</b>	XDA
<b>Stainless Steel Tag:</b>	XNH
<b>Paper Tag:</b>	XNN
<b>Throttle Plug:<sup>(1)(3)</sup></b>	XTU
<b>Throttle Screw:<sup>(4)</sup></b>	XTS
<b>U-clamp:<sup>(2)</sup></b>	XUC
<b>FlutterGuard™:</b>	XZY

- (1) A throttle plug must be installed in the socket whenever the gauge is used for intermittent or continuous service on natural gas.
- (2) U-clamp furnished when hose barb or female thread is specified.
- (3) Throttle plug not available with hose barb or female thread connections.
- (4) .020 throttle screw available with HH connection only.

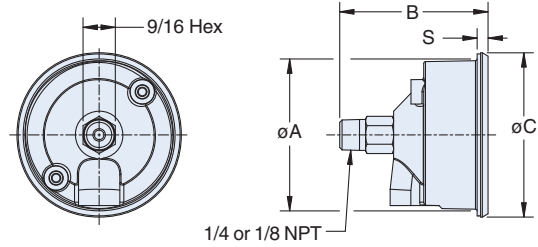


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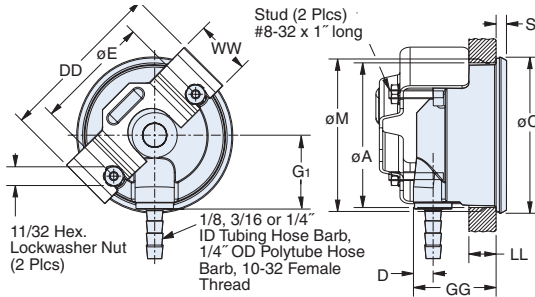
### DIMENSIONS



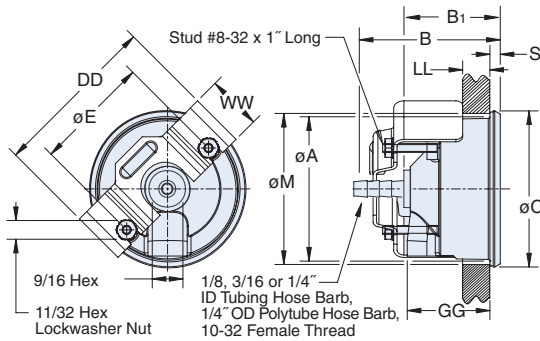
Size	øA	B	øC	D	G	S
25	2 <sup>19</sup> / <sub>32</sub> (66)	1 <sup>23</sup> / <sub>32</sub> (44)	2 <sup>7</sup> / <sub>8</sub> (73)	3 <sup>10</sup> / <sub>16</sub> (10)	2 <sup>3</sup> / <sub>16</sub> (55)	1 <sup>3</sup> / <sub>64</sub> (5)
35	3 <sup>2</sup> / <sub>32</sub> (93)	1 <sup>1</sup> / <sub>16</sub> (43)	3 <sup>3</sup> / <sub>32</sub> (101)	3 <sup>10</sup> / <sub>16</sub> (10)	2 <sup>23</sup> / <sub>32</sub> (69)	1 <sup>3</sup> / <sub>64</sub> (5)



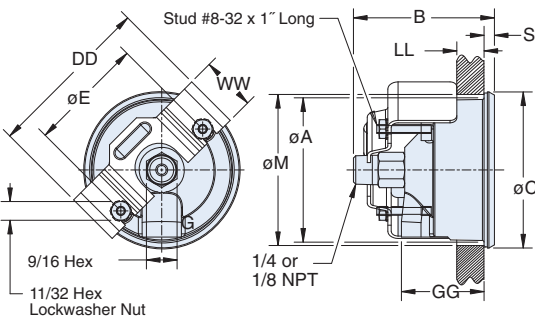
Size	øA	B	øC	S
25	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>7</sup> / <sub>8</sub> (73)	1 <sup>3</sup> / <sub>64</sub> (5)
35	3 <sup>2</sup> / <sub>32</sub> (93)	2 <sup>9</sup> / <sub>16</sub> (65)	3 <sup>3</sup> / <sub>32</sub> (101)	1 <sup>3</sup> / <sub>64</sub> (5)



Size	øA	øC	D	øE	G				10-32 Female	øM	S	DD	GG	LL Max.	WW
					1/8 ID Tubing	3/16 ID Tubing	1/4 ID Tubing	1/4 OD Tubing							
25	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>7</sup> / <sub>8</sub> (73)	3 <sup>10</sup> / <sub>16</sub> (10)	2 <sup>1</sup> / <sub>8</sub> (54)	1 <sup>3</sup> / <sub>4</sub> (44)	2 <sup>1</sup> / <sub>8</sub> (54)	2 <sup>9</sup> / <sub>32</sub> (54)	1 <sup>3</sup> / <sub>4</sub> (44)	1 <sup>11</sup> / <sub>32</sub> (34)	2 <sup>21</sup> / <sub>32</sub> (67)	1 <sup>3</sup> / <sub>64</sub> (5)	3 <sup>1</sup> / <sub>16</sub> (78)	1 <sup>19</sup> / <sub>32</sub> (40)	1/2 (13)	1 (25)
35	3 <sup>2</sup> / <sub>32</sub> (93)	3 <sup>3</sup> / <sub>32</sub> (101)	3 <sup>10</sup> / <sub>16</sub> (10)	3 <sup>3</sup> / <sub>16</sub> (67)	2 <sup>5</sup> / <sub>16</sub> (59)	2 <sup>2</sup> / <sub>16</sub> (81)	2 <sup>19</sup> / <sub>32</sub> (54)	2 <sup>5</sup> / <sub>16</sub> (59)	1 <sup>3</sup> / <sub>32</sub> (50)	3 <sup>3</sup> / <sub>4</sub> (95)	1 <sup>3</sup> / <sub>64</sub> (5)	4 <sup>1</sup> / <sub>8</sub> (105)	1 <sup>17</sup> / <sub>32</sub> (39)	1/2 (13)	1 (25)



Size	øA	B				10-32 Female	øC	øE	øM	S	DD	GG	LL Max.	WW
		1/8 ID Tubing	3/16 ID Tubing	1/4 ID Tubing	1/4 OD Tubing									
25	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>3</sup> / <sub>16</sub> (55)	2 <sup>17</sup> / <sub>32</sub> (64)	2 <sup>1</sup> / <sub>16</sub> (68)	2 <sup>3</sup> / <sub>16</sub> (55)	1 <sup>25</sup> / <sub>32</sub> (45)	2 <sup>7</sup> / <sub>8</sub> (73)	2 <sup>1</sup> / <sub>8</sub> (54)	2 <sup>21</sup> / <sub>32</sub> (67)	1 <sup>3</sup> / <sub>64</sub> (5)	3 <sup>1</sup> / <sub>16</sub> (78)	1 <sup>19</sup> / <sub>32</sub> (40)	1/2 (13)	1 (25)
35	3 <sup>2</sup> / <sub>32</sub> (93)	2 <sup>1</sup> / <sub>8</sub> (54)	2 <sup>1</sup> / <sub>2</sub> (63)	2 <sup>2</sup> / <sub>16</sub> (67)	2 <sup>1</sup> / <sub>8</sub> (54)	1 <sup>23</sup> / <sub>32</sub> (44)	3 <sup>3</sup> / <sub>32</sub> (101)	3 <sup>3</sup> / <sub>16</sub> (81)	3 <sup>3</sup> / <sub>4</sub> (95)	1 <sup>3</sup> / <sub>64</sub> (5)	4 <sup>1</sup> / <sub>8</sub> (105)	1 <sup>17</sup> / <sub>32</sub> (39)	1/2 (13)	1 (25)



### U-clamp Option

Size	øA	B	øC	øE	øM	S	DD	GG	LL MAX	WW
25	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>7</sup> / <sub>8</sub> (73)	2 <sup>1</sup> / <sub>8</sub> (54)	2 <sup>2</sup> / <sub>16</sub> (67)	1 <sup>3</sup> / <sub>64</sub> (5)	3 <sup>1</sup> / <sub>16</sub> (78)	1 <sup>19</sup> / <sub>32</sub> (40)	1/2 (13)	1 (25)
35	3 <sup>2</sup> / <sub>32</sub> (93)	2 <sup>9</sup> / <sub>16</sub> (65)	3 <sup>3</sup> / <sub>32</sub> (101)	3 <sup>3</sup> / <sub>16</sub> (81)	3 <sup>3</sup> / <sub>4</sub> (95)	1 <sup>3</sup> / <sub>64</sub> (5)	4 <sup>1</sup> / <sub>8</sub> (105)	1 <sup>17</sup> / <sub>32</sub> (39)	1/2 (13)	1 (25)