



**Type 1490 Low Pressure  
Diaphragm Gauge**

**Type 1495 Diaphragm  
Receiver Gauge**



ASHCROFT  
Beryllium Copper diaphragm  
Brass socket

**ISO 9001**  
REGISTERED FIRM

**DRESSER INSTRUMENT**

a Halliburton company

## Type 1490 Low Pressure Diaphragm Gauge

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. 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.

## Type 1495 Low Pressure Receiver Gauge

The Ashcroft Type 1495 receiver gauge uses a diaphragm capsule as its sensing element rather than a bourdon tube. The sensitivity of the diaphragm promotes smooth pointer motion that makes minor pressure changes easy to read.

The Type 1495 receiver gauge is the ideal product where the standard Grade A accuracy (2-1-2%) or the optional Grade 1A (1%) accuracy and smaller dial sizes are specified. The long pointer, smooth-operating sensing element, easily removable window and re-zero adjustment screw make specification and installation of this receiver gauge quick and easy.

## 1490 and 1495 Standard Specifications

<b>Type:</b>	<b>1490</b> – low pressure diaphragm gauge <b>1495</b> – diaphragm receiver gauge 3 to 15 psi	<b>Accuracy:</b>	ASME Grade A 2-1-2%
<b>Dial Size:</b>	2½" and 3½"	<b>Zero Adjust:</b>	Recalibration screw on dial
<b>Case Material:</b>	Glass-filled polysulfone	<b>Proof Pressure:</b>	150% of range
<b>Window:</b>	Polycarbonate quarter-turn bayonet style mounting	<b>Burst Pressure:</b>	Up to 5 psi range – 50 psi, 5 psi to 15 psi range – 100 psi
<b>Pointer:</b>	Black aluminum	<b>Operating Temperature:</b>	–20 to 180°F
<b>Dial:</b>	White aluminum with black markings	<b>Storage Temperature:</b>	–45 to 185°F
<b>Movement:</b>	Brass	<b>Table A</b>	
<b>Sensing Element:</b>	Beryllium copper diaphragm	<b>1490/1495 Options</b>	
<b>Wetted Materials:</b>	Beryllium copper, brass, polysulfone and RTV silicone	<b>Code</b>	<b>Description</b>
<b>Sockets:</b>	Brass	XAK	Autoclavable at 275°F for 30 minutes. The unit can be autoclaved five times. Polysulfone window will be supplied.
<b>Connection:</b>	½ and ¼ NPT lower and back. Hose barb ⅛, ⅜ or ¼ lower and back connect	XAN	1% optional accuracy
<b>Ranges:</b>	10 in. H <sub>2</sub> O through 15 psi including vacuum and compound. <b>See chart for 1490 and 1495 Ranges.</b>	XDA	Dial marking
		XNH	Stainless steel tag
		XNN	Paper tag
		XTU	Throttle plug
		XUC <sup>(2)</sup>	U-clamp

**Warning:** All gauge components should be selected considering the medium and ambient operating conditions to prevent misapplication. Improper application can be detrimental to the gauge, and can cause failure and possible personal injury or property damage.

## How To Order

Dial Size		Type		Wetted Material		Connection Size & Type		Connection Location	
Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
25	2½"	1490	Low Pressure Diaphragm Gauge	A	Beryllium Copper	01	1/8 NPT	L	Lower
					Brass Socket	02	1/4 NPT	B	Center Back
35	3½"	1495	Diaphragm Receiver Gauge		Polysulfone	HD	⅛" Hose Barb <sup>(2)</sup>	T	Top
					RTV Silicone	HE	⅜" Hose Barb <sup>(2)</sup>	D	3 O'Clock
						HF	¼" Hose Barb <sup>(2)</sup>	E	9 O'Clock

EXAMPLES: 25 1490A 02L 10 IW XNH

<sup>(2)</sup> U-clamp furnished when hose barb specified.

## 1490 Low Pressure Diaphragm Gauge

### Standard Ranges

Pressure	Figure Intervals	Minor Graduation
0/10 in. H <sub>2</sub> O	1	0.1
0/15 in. H <sub>2</sub> O	5	0.2
0/30 in. H <sub>2</sub> O	5	0.5
0/60 in. H <sub>2</sub> O	10	1
0/100 in. H <sub>2</sub> O	10	1
0/160 in. H <sub>2</sub> O	20	2
0/200 in. H <sub>2</sub> O	20	2
0/300 in. H <sub>2</sub> O	50	5
0/10 oz./in. <sup>2</sup>	1	0.1
0/15 oz./in. <sup>2</sup>	5	0.2
0/30 oz./in. <sup>2</sup>	5	0.5
0/60 oz./in. <sup>2</sup>	10	1
0/100 oz./in. <sup>2</sup>	10	1
0/160 oz./in. <sup>2</sup>	20	2
0/250 oz./in. <sup>2</sup>	50	5
0/3 psi	0.5	0.05
0/5 psi	1	0.1
0/10 psi	1	0.1
0/15 psi	5	0.2
<b>Vacuum</b>		
15/0 in. H <sub>2</sub> O	5	0.2
30/0 in. H <sub>2</sub> O	5	0.5
60/0 in. H <sub>2</sub> O	10	1
100/0 in. H <sub>2</sub> O	10	1
200/0 in. H <sub>2</sub> O	20	2
15/0 oz./in. <sup>2</sup>	5	0.2
30/0 oz./in. <sup>2</sup>	5	0.5
60/0 oz./in. <sup>2</sup>	10	1
100/0 oz./in. <sup>2</sup>	10	1

### Compound

-30/30 in. H <sub>2</sub> O	10	1
-30/30 oz./in. <sup>2</sup>	10	1
-10/10 in. H <sub>2</sub> O	2	0.2

### Standard Metric Ranges

Pressure	Figure Intervals	Minor Graduation
0/60 cm. H <sub>2</sub> O	10	1
0/2.5 kPa	0.5	0.05
0/4 kPa	1	0.1
0/10 kPa	1	0.1
0/16 kPa	2	0.2
0/25 kPa	5	0.5
0/40 kPa	10	1
0/100 kPa	10	1

### Vacuum

2.5/0 kPa	0.5	0.05
4/0 kPa	1	0.1
10/0 kPa	1	0.1
16/0 kPa	2	0.2
25/0 kPa	5	0.5
40/0 kPa	10	1
100/0 kPa	10	1

### Compound

-10/60 cm H <sub>2</sub> O	10	1
-10/80 cm H <sub>2</sub> O	10	1
-20/40 cm H <sub>2</sub> O	10	1
-10/100 cm H <sub>2</sub> O	10	1
-10/120 cm H <sub>2</sub> O	20	2

### Dual Scale

Range	Graduations				
	Inner Scale		Outer Scale		
Inner Scale	Outer Scale	Figure	Minor	Figure	Minor
0/9 oz./in. <sup>2</sup>	0/15 in. H <sub>2</sub> O	1	0.2	5	0.2
0/20 oz./in. <sup>2</sup>	0/35 in. H <sub>2</sub> O	5	0.5	5	0.5
0/35 oz./in. <sup>2</sup>	0/60 in. H <sub>2</sub> O	5	0.5	10	1
0/60 oz./in. <sup>2</sup>	0/100 in. H <sub>2</sub> O	10	1	10	1

Other ranges available on request. Consult factory

## 1495 Diaphragm Receiver Gauge

### Standard Ranges

Pressure	Figure Intervals	Minor Graduation
0-100%	10	1
0-10 square root	1	0.1
0-10 sq rt/0-100 Linear <sup>1</sup>		

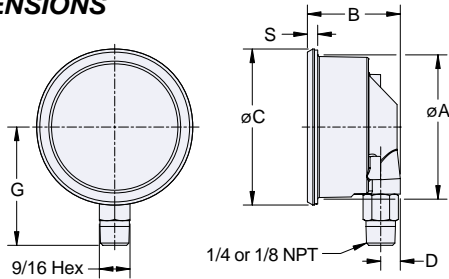
1. This dial is standard and will be supplied unless otherwise ordered. Figure/minor intervals same as single scale.



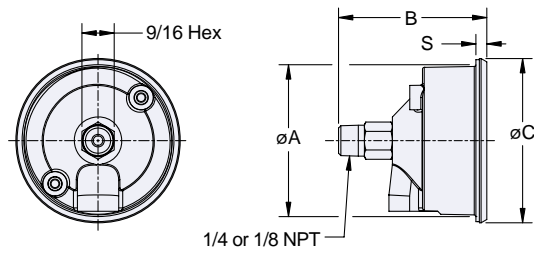
Ranges		Optional Features	
Code	Description	Code	Description
10 IW	0 to 10 in. H <sub>2</sub> O  See chart above for entire list of ranges	XNH	Stainless Steel Tag  See Table A for entire list of options

ASHCROFT®  
Beryllium Copper diaphragm  
Brass socket

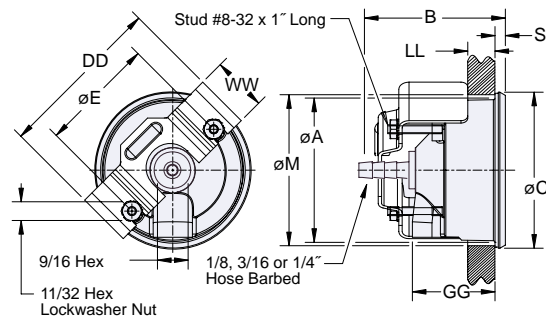
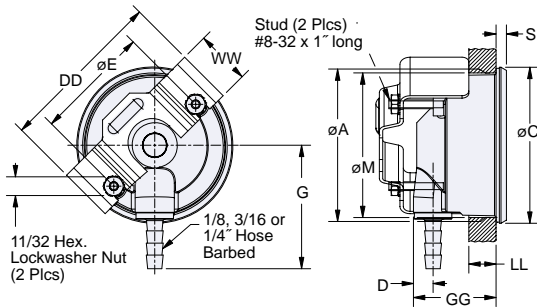
**DIMENSIONS**



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>8</sup> / <sub>10</sub> (55)	2 <sup>3</sup> / <sub>16</sub> (69)	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>8</sup> / <sub>10</sub> (69)	2 <sup>2</sup> / <sub>32</sub> (69)	1 <sup>3</sup> / <sub>64</sub> (5)

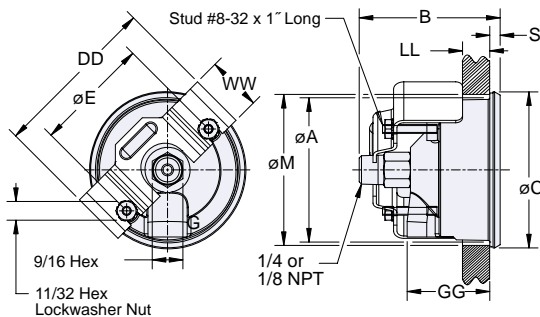


Size	øA	B	øC	S
25	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>7</sup> / <sub>8</sub> (73)	1 <sup>3</sup> / <sub>64</sub> (5)
35	3 <sup>2</sup> / <sub>32</sub> (93)	2 <sup>9</sup> / <sub>16</sub> (65)	3 <sup>3</sup> / <sub>32</sub> (101)	1 <sup>3</sup> / <sub>64</sub>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



Size	øA	øC	D	øE	G			øM	S	DD	GG	LL MAX	WW
					1/8	3/16	1/4						
25	2 <sup>19</sup> / <sub>32</sub> (66)	2 <sup>7</sup> / <sub>8</sub> (73)	3 <sup>8</sup> / <sub>10</sub> (54)	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)	2 <sup>2</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>8</sup> / <sub>10</sub> (67)	3 <sup>3</sup> / <sub>16</sub> (67)	2 <sup>5</sup> / <sub>16</sub> (59)	2 <sup>2</sup> / <sub>32</sub> (81)	2 <sup>1</sup> / <sub>32</sub> (54)	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			øC	øE	øM	S	DD	GG	LL MAX	WW
		1/8	3/16	1/4								
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>11</sup> / <sub>16</sub> (68)	2 <sup>7</sup> / <sub>8</sub> (73)	2 <sup>1</sup> / <sub>8</sub> (54)	2 <sup>2</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>32</sub> (67)	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>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>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)

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