

## Low Pressure Diaphragm Gauge Series 1490, ASME B 40.1 Grade A ( $\pm 2-1-2\%$ of span)

- 2½" and 3½" dial size
- 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
- Exclusive autoclavable feature

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 pres-

ures. 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.



### SELECTION TABLE

DIAL SIZE		TYPE		WETTED MATERIAL		CONN. SIZE & TYPE		CONNECTION LOCATION		RANGES		OPTIONAL FEATURES	
Code	Desc.	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
25	2½"	1490	Low Pressure Diaphragm Gauge	A	Beryllium Copper Brass Polysulfone RTV Silicone	01	⅛ NPT	L	Lower	10 IW	0 to 10 in.H <sub>2</sub> O	XAK	Autoclavable <sup>(4)</sup>
35	3½"					02	¼ NPT	B	Center Back			XAN	1% Opt. Accuracy
						HD	⅛" I.D. Tubing Hose Barb <sup>(2,3)</sup>	T	Top			XDA	Dial Marking
						HE	⅜" I.D. Tubing Hose Barb <sup>(2,3)</sup>	D	3 O'Clock			XNH	Stain. Steel Tag
						HF	¼" I.D. Tubing Hose Barb <sup>(2,3)</sup>	E	9 O'Clock			XNN	Paper Tag
						HG	¼" O.D. Polytube Hose Barb <sup>(2,3)</sup>					XTU <sup>(1,3)</sup>	Throttle Plug
						HH	10-32-2B Female Thread <sup>(2,3,5)</sup>					XTS <sup>(5)</sup>	Throttle Screw
						XUC <sup>(2)</sup>	U-clamp						
						ZXY	FlutterGuard™						

(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) Autoclavable at 275° for 30 minutes up to 5 times. Polysulfone window will be supplied.

(5) .020 throttle screw available with HH connection only.

EXAMPLES: 25 1490A 02L 10 IW XNH

### 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

### STANDARD RANGES (Cont.)

Vacuum	Figure Intervals	Minor Graduation			
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			
<b>Compound</b>					
-30/30 in.H <sub>2</sub> O	10	1			
-30/30 in.oz./in. <sup>2</sup>	10	1			
-10/10 in.H <sub>2</sub> O	2	0.2			
<b>Dual Scale</b>					
Range	Graduations				
	Inner Scale		Outer Scale		
Inner Scale	Outer Scale	Figure Intervals	Minor Grad.	Figure Intervals	Minor Grad.
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.

### 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
<b>Vacuum</b>		
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
<b>Compound</b>		
-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

### TO ORDER THESE LOW PRESSURE DIAPHRAGM GAUGES:

Select: 25 1490 A 02L XXX 10 IW

1. Dial size – 2½ (25), 3½ (35) \_\_\_\_\_

2. Case type \_\_\_\_\_

3. Wetted material \_\_\_\_\_

4. Connection size – ¼ (02), ⅛ (01) \_\_\_\_\_

5. Connection location – Lower (L), Back (B) \_\_\_\_\_

6. Optional features – see page 249 \_\_\_\_\_

7. Standard pressure range – 10 in.H<sub>2</sub>O \_\_\_\_\_

Consult factory for guidance in product selection  
Phone (203) 385-0217, Fax (203) 385-0602 or  
visit our web site at [www.ashcroft.com](http://www.ashcroft.com)