



**Type 1490 Low Pressure
Diaphragm Gauge**

**Type 1495 Diaphragm
Receiver Gauge**



ASHCROFT
Beryllium Copper diaphragm
Brass socket

ISO 9001
REGISTERED FIRM



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. H₂O 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

| | | | |
|--------------------------|--|-------------------------------|---|
| Type: | 1490 – low pressure diaphragm gauge 1495 – diaphragm receiver gauge 3 to 15 psi | Accuracy: | ASME Grade A 2-1-2% |
| Dial Size: | 2½" and 3½" | Zero Adjust: | Recalibration screw on dial |
| Case Material: | Glass-filled polysulfone | Proof Pressure: | 150% of range |
| Window: | Polycarbonate quarter-turn bayonet style mounting | Burst Pressure: | Up to 5 psi range – 50 psi, 5 psi to 15 psi range – 100 psi |
| Pointer: | Black aluminum | Operating Temperature: | –20 to 180°F |
| Dial: | White aluminum with black markings | Storage Temperature: | –45 to 185°F |
| Movement: | Brass | Table A | |
| Sensing Element: | Beryllium copper diaphragm | 1490/1495 Options | |
| Wetted Materials: | Beryllium copper, brass, polysulfone and RTV silicone | Code | Description |
| Sockets: | Brass | XAK | Autoclavable at 275°F for 30 minutes. The unit can be autoclaved five times. Polysulfone window will be supplied. |
| Connection: | ½ and ¼ NPT lower and back. Hose barb ⅛, ⅜ or ¼ lower and back connect | XAN | 1% optional accuracy |
| Ranges: | 10 in. H ₂ O through 15 psi including vacuum and compound. See chart for 1490 and 1495 Ranges. | XDA | Dial marking |
| | | XNH | Stainless steel tag |
| | | XNN | Paper tag |
| | | XTU | Throttle plug |
| | | XUC ⁽²⁾ | 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 ⁽²⁾ | T | Top |
| | | | | | RTV Silicone | HE | ⅜" Hose Barb ⁽²⁾ | D | 3 O'Clock |
| | | | | | | HF | ¼" Hose Barb ⁽²⁾ | E | 9 O'Clock |

EXAMPLES: 25 1490A 02L 10 IW XNH

⁽²⁾ U-clamp furnished when hose barb specified.

1490 Low Pressure Diaphragm Gauge

Standard Ranges

| Pressure | Figure Intervals | Minor Graduation |
|----------------------------|------------------|------------------|
| 0/10 in. H ₂ O | 1 | 0.1 |
| 0/15 in. H ₂ O | 5 | 0.2 |
| 0/30 in. H ₂ O | 5 | 0.5 |
| 0/60 in. H ₂ O | 10 | 1 |
| 0/100 in. H ₂ O | 10 | 1 |
| 0/160 in. H ₂ O | 20 | 2 |
| 0/200 in. H ₂ O | 20 | 2 |
| 0/300 in. H ₂ O | 50 | 5 |
| 0/10 oz./in. ² | 1 | 0.1 |
| 0/15 oz./in. ² | 5 | 0.2 |
| 0/30 oz./in. ² | 5 | 0.5 |
| 0/60 oz./in. ² | 10 | 1 |
| 0/100 oz./in. ² | 10 | 1 |
| 0/160 oz./in. ² | 20 | 2 |
| 0/250 oz./in. ² | 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 |
| Vacuum | | |
| 15/0 in. H ₂ O | 5 | 0.2 |
| 30/0 in. H ₂ O | 5 | 0.5 |
| 60/0 in. H ₂ O | 10 | 1 |
| 100/0 in. H ₂ O | 10 | 1 |
| 200/0 in. H ₂ O | 20 | 2 |
| 15/0 oz./in. ² | 5 | 0.2 |
| 30/0 oz./in. ² | 5 | 0.5 |
| 60/0 oz./in. ² | 10 | 1 |
| 100/0 oz./in. ² | 10 | 1 |

Compound

| | | |
|-----------------------------|----|-----|
| -30/30 in. H ₂ O | 10 | 1 |
| -30/30 oz./in. ² | 10 | 1 |
| -10/10 in. H ₂ O | 2 | 0.2 |

Standard Metric Ranges

| Pressure | Figure Intervals | Minor Graduation |
|---------------------------|------------------|------------------|
| 0/60 cm. H ₂ 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 ₂ O | 10 | 1 |
| -10/80 cm H ₂ O | 10 | 1 |
| -20/40 cm H ₂ O | 10 | 1 |
| -10/100 cm H ₂ O | 10 | 1 |
| -10/120 cm H ₂ O | 20 | 2 |

Dual Scale

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

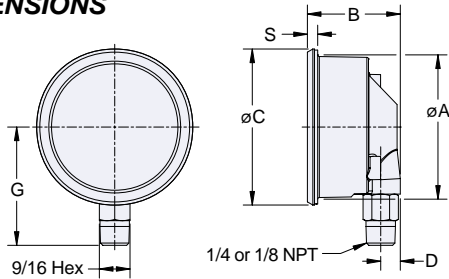
1. This dial is standard and will be supplied unless otherwise ordered. Figure/minor intervals same as single scale.



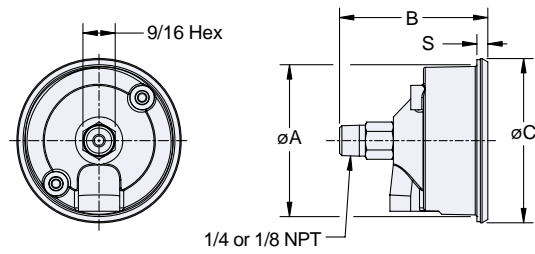
| Ranges | | Optional Features | |
|--------|---|-------------------|---|
| Code | Description | Code | Description |
| 10 IW | 0 to 10 in. H ₂ O See chart above for entire list of ranges | XNH | Stainless Steel Tag See Table A for entire list of options |

ASHCROFT®
Beryllium Copper diaphragm
Brass socket

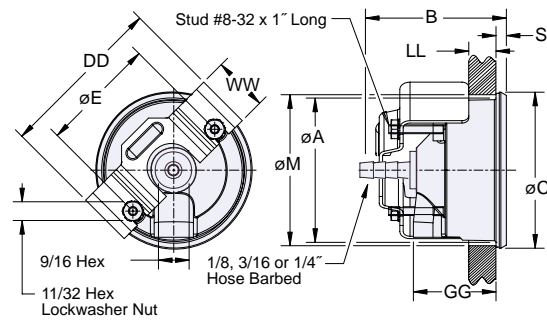
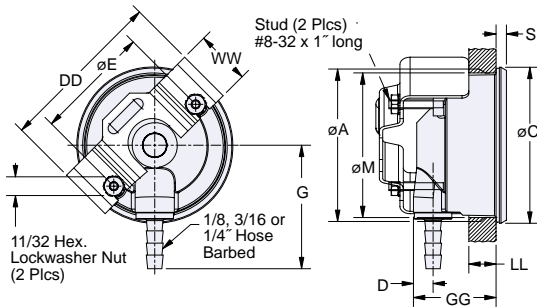
DIMENSIONS



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

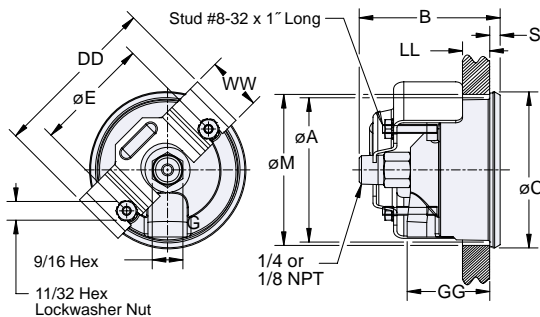


| Size | øA | B | øC | S |
|------|---|---|---|---------------------------------------|
| 25 | 2 ¹⁹ / ₃₂ (66) | 2 ¹⁹ / ₃₂ (66) | 2 ⁷ / ₈ (73) | 1 ³ / ₆₄ (5) |
| 35 | 3 ² / ₃₂ (93) | 2 ⁹ / ₁₆ (65) | 3 ³ / ₃₂ (101) | 1 ³ / ₆₄ (5) |



| Size | øA | øC | D | øE | G | | | øM | S | DD | GG | LL MAX | WW |
|------|---|---|--|--|--|--|---|--|---------------------------------------|--|---|-------------|-----------|
| | | | | | 1/8 | 3/16 | 1/4 | | | | | | |
| 25 | 2 ¹⁹ / ₃₂ (66) | 2 ⁷ / ₈ (73) | 3 ⁸ / ₁₀ (54) | 2 ¹ / ₈ (54) | 1 ³ / ₄ (44) | 2 ¹ / ₈ (54) | 2 ⁹ / ₃₂ (54) | 2 ² / ₃₂ (67) | 1 ³ / ₆₄ (5) | 3 ¹ / ₁₆ (78) | 1 ¹⁹ / ₃₂ (40) | 1/2 (13) | 1 (25) |
| 35 | 3 ² / ₃₂ (93) | 3 ³ / ₃₂ (101) | 3 ⁸ / ₁₀ (67) | 3 ³ / ₁₆ (59) | 2 ⁵ / ₁₆ (81) | 2 ² / ₃₂ (54) | 2 ¹³ / ₁₆ (95) | 3 ³ / ₄ (5) | 1 ³ / ₆₄ (5) | 4 ¹ / ₈ (105) | 1 ¹⁷ / ₃₂ (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 ¹⁹ / ₃₂ (66) | 2 ³ / ₁₆ (55) | 2 ¹⁷ / ₃₂ (64) | 2 ¹¹ / ₁₆ (68) | 2 ⁷ / ₈ (73) | 2 ¹ / ₈ (54) | 2 ² / ₃₂ (67) | 1 ³ / ₆₄ (5) | 3 ¹ / ₁₆ (78) | 1 ¹⁹ / ₃₂ (40) | 1/2 (13) | 1 (25) |
| 35 | 3 ² / ₃₂ (93) | 2 ¹ / ₈ (54) | 2 ¹ / ₂ (63) | 2 ² / ₃₂ (67) | 3 ³ / ₃₂ (101) | 3 ³ / ₁₆ (81) | 3 ³ / ₄ (95) | 1 ³ / ₆₄ (5) | 4 ¹ / ₈ (105) | 1 ¹⁷ / ₃₂ (39) | 1/2 (13) | 1 (25) |



U-clamp Option

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

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