

## Type 1009 4½" & 6" Stainless Steel Gauge



- 4½" and 6" stainless steel gauges
- Dry and liquid-filled versions
- Micrometer adjustable pointer
- Variety of Bourdon tube materials
- ASME Grade 1A, ±1% of span accuracy
- New PLUS!™ Performance Option:
  - Liquid-filled performance in a dry gauge
  - Fights vibration and pulsations with out liquid-fill headaches
  - Order as option XLL

The 4½" and 6" Ashcroft® Type 1009 gauges are suitable where ambient corrosion is a major concern. Its attractive stainless steel case and ring provides excellent resistance to chemical, weather and corrosion attack. This 1009 has many optional features that allow a user to develop a basic or special product specification. The 1009 is part of the extensive line of Ashcroft stainless steel pressure gauges.

The gauge is available dry, liquid-filled weatherproof or hermetically sealed and now with PLUS!™ Performance option.

### PRODUCT SPECIFICATIONS

|                                 |   |
|---------------------------------|---|
| <b>Model Number:</b>            | 1009  |
| <b>Accuracy:</b>                | 1% full scale (Grade A, ASME B40.100)   |
| <b>Ranges:</b>                  | Vacuum – 30,000 psi   |
| <b>Dial Size:</b>               | 4½" and 6" diameter   |
| <b>Case:</b>                    | Open front  |
| <b>Case Material:</b>           | 304 SS  |
| <b>Weather Protection:</b>      | Dry Case: IP54<br>Liquid filled or hermetically sealed case: IP 65                                      |
| <b>Ring Type:</b>               | 304 SS, bayonet   |
| <b>Window:</b>                  | Glass   |
| <b>Dial:</b>                    | Aluminum, white background, black figures and graduations.  |
| <b>Pointer:</b>                 | Micrometer adjustable   |
| <b>Movement:</b>                | 400 SS (conventional)   |
| <b>Bourdon Tube and Socket:</b> | Bronze/Brass (A) <sup>(1)</sup><br>316L SS/316L SS (S) <sup>(2)</sup><br>Monel/Monel (P) <sup>(2)</sup> |
| <b>Connection Size:</b>         | ¼", ½" NPT  |
| <b>Connection Location:</b>     | Lower and back  |

### PRODUCT OPTIONS

|                                    |   |
|------------------------------------|---|
| <b>PLUS! Performance:</b>          | XLL   |
| <b>Fill:</b>                       | L-Glycerin-Standard<br>XGV-Silicone-Optional<br>XGX-Halocarbon-Optional |
| <b>Weatherproof Hermetic Seal:</b> | XLJ   |
| <b>Panel Mount Front Flange:</b>   | XFF   |
| <b>Panel Mount U-Clamp:</b>        | XUC   |
| <b>Surface Mount:</b>              | XBF   |
| <b>Oxygen Clean:</b>               | X6B   |
| <b>Window</b>                      |   |
| <b>Acrylic:</b>                    | XPD   |
| <b>Shatterproof</b>                |   |
| <b>Glass:</b>                      | XSG   |

(1) Joints silver brazed  
(2) Joints welded

### TEMPERATURE LIMITS

|               | Ambient                 | Process                                 | Storage                  |
|---------------|-------------------------|---|--------------------------|
| Dry           | -20/200°F<br>(-29/93°C) | -20/250°F <sup>(1)</sup><br>(-29/121°C) | -40/250°F<br>(-40/121°C) |
| LF (glycerin) | 20/150°F<br>(7/66°C)    | 20/200°F<br>(7/93°C)                    | 0/150°F<br>(-18/66°C)    |
| (silicone)    | -40/150°F<br>(-40/66°C) | -40/200°F<br>(-40/93°C)                 | -40/150°F<br>(-40/66°C)  |
| (halocarbon)  | -40/150°F<br>(-40/66°C) | -40/200°F<br>(-40/93°C)                 | -40/150°F<br>(-40/66°C)  |

**Note:** Other than discoloration of the dial and hardening of the gasketing that may occur as ambient or process temperatures exceeds 150°F, non-liquid-filled gauges with standard glass windows, can withstand continuous operating temperatures up to 250°F (121°C). Liquid-filled gauges can withstand 200°F (93°C) but glycerin fill and acrylic window will tend to yellow. Accuracy at temperatures above or below the reference ambient temperature of 68°F will be affected by approximately .4% per 25°F. Gauges with welded joints will withstand 750°F (450°F (232°C) with silver brazed joints) for short times without rupture, although other parts of the gauge will be destroyed and calibration will be lost. For continuous use and for process or ambient temperatures above 250°F (121°C), a diaphragm seal or capillary or siphon is recommended.

### 45/60 1009 GAUGE PRODUCT CODING

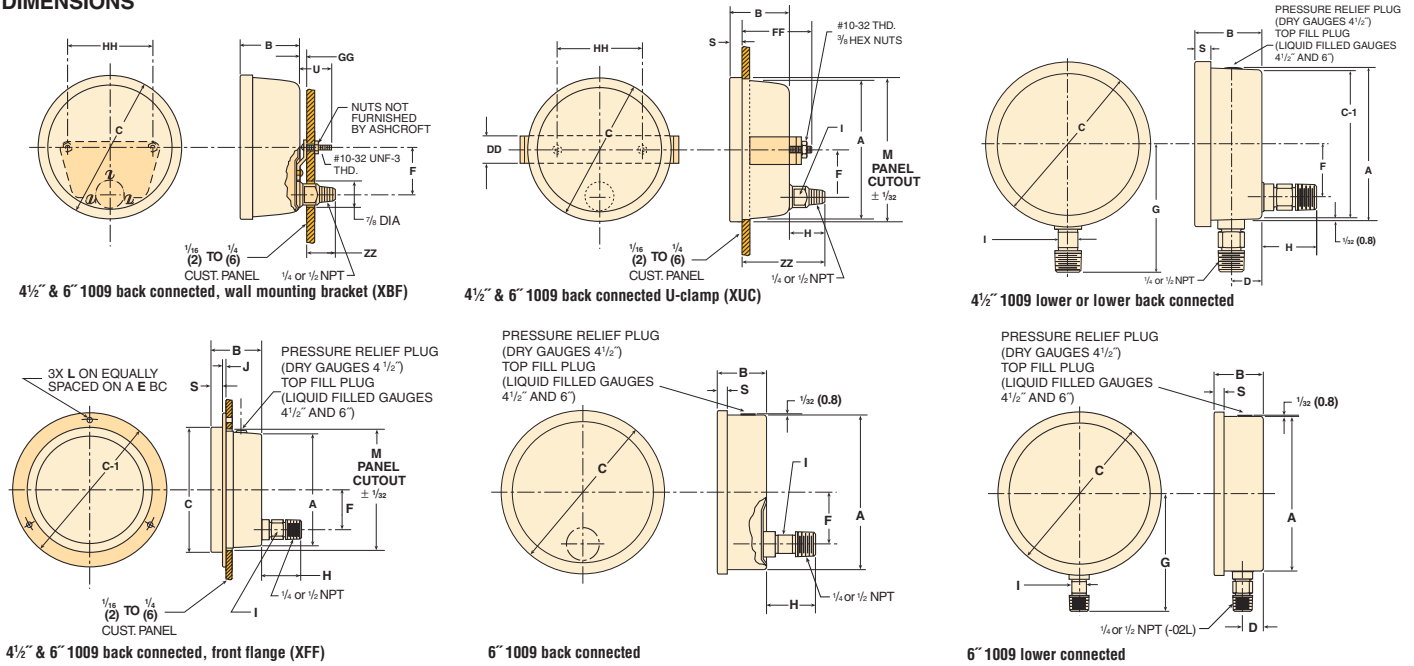
Typical Code:

| 45                | 1009        | S   | L                                      | 04                                     | L   | XSG   | 100#   |  |  |
|-------------------|-------------|---|--|--|---|---|--|--|--|
| SIZE              | TYPE NUMBER | SYSTEM (Tube & Socket)  |  | CASE DESIGN                            | PROCESS CONN. SIZE  | CONNECTION LOCATION   | VARIATIONS   | RANGE  | ENGINEERING UNITS <sup>(1)</sup>   |
| (45) 4½<br>(60) 6 | 1009        | Code (A) Phos Brz <sup>(1)</sup><br>(S) AISI 316SS <sup>(2)</sup><br>(P) K Monel <sup>(2)</sup> | Socket (S) AISI 316SS<br>(P) Monel 400 | Code (L) Liquid Filled (glycerin std.) | Code (02) ¼ Male <sup>(1)</sup><br>(04) ½ Male <sup>(1)</sup><br>(09) ¾-18 UNF-2B Aminco (standard for high pressure >20,000 psi<br>(1) Max Pressure 20,000 psi | Code (L) Lower<br>(B) Back<br>(D) Side Conn.<br>(E) Side Conn.<br>(T) Top | (GV) Silicone Case Fill<br>(GX) Halocarbon Case Fill<br>(NH) SS Wired Tag<br>(TS) Throttle Screw <sup>(1)</sup><br>(6B) Oxygen Service<br>(PD) Acrylic Window <sup>(1)</sup><br>(SG) Safety Glass<br>(L) Hermetically Sealed<br>(LI) Liquid Filled (IP65)<br>(EP) Maximum Pointer, Adjustable<br>(SH) Red Set Hand, Stationary<br>(LL) PLUS! Performance<br>(56) Flush Mounting Ring<br>(C4) Individual Calibration Chart<br>(1) Standard with hermetically sealed or liquid filled gauge. | 15<br>30<br>60<br>100<br>160<br>200<br>300<br>400<br>600<br>1000<br>1500<br>2000<br>3000<br>5000<br>6000<br>10,000<br>20,000<br>30,000 | (#) PSI<br>(BR) Bar<br>(KG) Kilograms/<br>CM <sup>2</sup><br>(KP) Kilopascal<br>(IMV) Inches of Mercury<br>(1) See website for more units of measure |



## Type 1009 4½" & 6" Stainless Steel Gauge

### DIMENSIONS



| Gauge Size | A                               | B                              | C                               | C-1                            | D                              | DD   | E                               | F                             | FF                             | G                               | GG                             | H                             | HH                            | I                              | J                              | L                               | M                              | S                               | U                              | ZZ                             | Weight |        |
|------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|--------------------------------|------|---------------------------------|-------------------------------|--------------------------------|---------------------------------|--------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|--------------------------------|--------|--------|
|            | (100)                           | (120)                          | (129)                           | (160)                          | (24)                           | (25) | (144)                           | (41)                          | (59)                           | (100)                           | (5)                            | (41)                          | (76)                          | (16)                           | (4)                            | (6)                             | (122)                          | (12)                            | (37)                           | (83)                           | 1.75#  | 2.40#  |
| 4½         | 4 <sup>23</sup> / <sub>32</sub> | 2 <sup>1</sup> / <sub>16</sub> | 5 <sup>3</sup> / <sub>32</sub>  | 6 <sup>9</sup> / <sub>32</sub> | 1 <sup>5</sup> / <sub>16</sub> | 1    | 5 <sup>11</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>8</sub> | 2 <sup>5</sup> / <sub>16</sub> | 3 <sup>15</sup> / <sub>16</sub> | 3 <sup>1</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>8</sub> | 3                             | 5 <sup>5</sup> / <sub>32</sub> | 5 <sup>3</sup> / <sub>32</sub> | 4 <sup>13</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>32</sub> | 1 <sup>7</sup> / <sub>16</sub>  | 3 <sup>9</sup> / <sub>32</sub> |                                |        |        |
| 6          | 6 <sup>5</sup> / <sub>16</sub>  | 2                              | 6 <sup>21</sup> / <sub>32</sub> | 7 <sup>5</sup> / <sub>8</sub>  | 2 <sup>7</sup> / <sub>32</sub> | 1    | 7 <sup>1</sup> / <sub>32</sub>  | 1 <sup>5</sup> / <sub>8</sub> | 2 <sup>5</sup> / <sub>8</sub>  | 4 <sup>13</sup> / <sub>16</sub> | 3 <sup>1</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>8</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5 <sup>5</sup> / <sub>32</sub> | 1 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>4</sub>   | 6 <sup>7</sup> / <sub>16</sub> | 1 <sup>13</sup> / <sub>32</sub> | 1 <sup>7</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 2.25#  | 4.12#  |
| (160)      | (160)                           | (51)                           | (169)                           | (194)                          | (22)                           | (25) | (179)                           | (41)                          | (67)                           | (122)                           | (5)                            | (41)                          | (114)                         | (16)                           | (2)                            | (7)                             | (163)                          | (10)                            | (37)                           | (81)                           | 1kg    | 1.85kg |

Note: Dimensions in brackets ( ) are millimeters.

### Standard Ranges (Metric equivalents available)

| Pressure – psi |                 |                  |  |
|----------------|-----------------|------------------|--|
| Range          | Figure Interval | Minor Graduation |  |
| 0/15           | 1               | 0.1              |  |
| 0/30           | 5               | 0.2              |  |
| 0/60           | 5               | 0.5              |  |
| 0/100          | 10              | 1                |  |
| 0/160          | 20              | 2                |  |
| 0/200          | 20              | 2                |  |
| 0/300          | 50              | 2                |  |
| 0/400          | 50              | 5                |  |
| 0/600          | 50              | 5                |  |
| 0/800          | 100             | 10               |  |
| 0/1000         | 100             | 10               |  |
| 0/1500         | 200             | 20               |  |
| 0/2000         | 200             | 20               |  |
| 0/3000         | 500             | 20               |  |
| 0/5000         | 500             | 50               |  |
| 0/6000         | 500             | 50               |  |
| 0/10,000       | 1000            | 100              |  |
| 0/20,000       | 2000            | 200              |  |
| 0/30,000       | 5000            | 200              |  |

| Compound       |                 |     |             |     |
|----------------|-----------------|-----|-------------|-----|
| Range          | Figure Interval |     | Minor Grads |     |
|                | in Hg           | psi | in Hg       | psi |
| 30" Hg/15 psi  | 5               | 3   | 0.5         | 0.2 |
| 30" Hg/30 psi  | 10              | 5   | 1           | 0.5 |
| 30" Hg/60 psi  | 10              | 10  | 1           | 1   |
| 30" Hg/100 psi | 10              | 10  | 2           | 1   |
| 30" Hg/150 psi | 10              | 20  | 5           | 2   |
| 30" Hg/200 psi | 30              | 20  | 5           | 2   |
| 30" Hg/300 psi | 30              | 50  | 5           | 2   |

| Vacuum                   |                 |             |
|--------------------------|-----------------|-------------|
| Range                    | Figure Interval | Minor Grads |
| 30/0 in. Hg              | 5 in            | 0.2 in      |
| 34/0 ft H <sub>2</sub> O | 5 ft            | 0.5 ft      |