

## Data Sheet

# HPX High Purity Pressure Gauge

50 mm and 63 mm Dial Sizes

### FEATURES

- 316L Stainless steel wetted parts
- Helium leak tested to  $1 \times 10^{-8}$  atm cc/s
- Cleaned in class 10,000/100 clean room
- Polyethylene-sealed after nitrogen gas flushing

### TYPICAL USES

- High purity gas delivery systems
- Gas sticks
- Process gas analyzers
- Semiconductor



### SPECIFICATIONS

|                         |   |
|-------------------------|---|
| Accuracy:               | ±1.6% of span (63 mm)<br>±1.6% of span (50 mm)  |
| Dial Sizes:             | 50 mm, 63 mm  |
| Ranges:                 | Vacuum to 15 psi, vacuum to 300 psi<br>0 to 60 psi, 0 to 3,000 psi  |
| Surface Finish:         | Tube and fitting < 1.6 µm Ra  |
| Process Connection:     | 50 mm:<br>¼ -18 UNF Male or Female Connection<br>(Compatible with ¼ VCR®)<br>63 mm:<br>G ¼ B Male, R ¼ Male, ¼ NPT Male,<br>¼ -18 UNF Male Connection<br>(Compatible with ¼ VCR®) |
| Process Conn. Location: | 50 mm: Lower, center back<br>63 mm: Lower, lower back   |
| Movement:               | 400 Stainless steel   |
| Window Material:        | Glass (63 mm)<br>Polycarbonate (50 mm)  |
| Dial:                   | White face, aluminum  |
| Pointer                 | Black, aluminum   |
| Approvals:              | RoHs  |
| Weight:                 | 50 mm: Aprox. 100 g<br>63 mm: Aprox. 200 g  |

### WETTED COMPONENTS

| Bourdon Tube | Gland/Socket | Joints           |
|--------------|--------------|------------------|
| 316L SS      | 316L SS      | Argon Arc Welded |

### NON-WETTED COMPONENTS

| Case                | Ring                |
|---------------------|---------------------|
| 304 Stainless steel | 304 Stainless steel |

### HPX

50 mm & 63 mm dial size



### KEY BENEFITS

- Ultraclean design & packaging
- 100% Helium leak tested
- Serialized dial (7 digit)

### MIN/MAX TEMPERATURE LIMITS

| Ambient                             | Process                             | Storage                             |
|-------------------------------------|-------------------------------------|-------------------------------------|
| 23 °F to 113 °F<br>(-5 °C to 45 °C) | 23 °F to 113 °F<br>(-5 °C to 45 °C) | 23 °F to 113 °F<br>(-5 °C to 45 °C) |

## Data Sheet

### HPX High Purity Pressure Gauge

50 mm and 63 mm Dial Sizes

| ORDERING CODE  | Example: | 50 | H | PXG | MVS | B | V/150# |
|--|----------|----|---|-----|-----|---|--------|
| <b>Size</b>  |          |    |   |     |     |   |        |
| 50 - 50 mm   |          | 50 |   |     |     |   |        |
| 63 - 63 mm   |          |    |   |     |     |   |        |
| <b>Gauge Family</b>  |          |    |   |     |     |   |        |
| H - High Purity Gauge  |          |    | H |     |     |   |        |
| <b>Purity Level</b>  |          |    |   |     |     |   |        |
| PXG - Class 100 (63 mm) / Class 10000 (50 mm)  |          |    |   | PXG |     |   |        |
| <b>Process Connection</b>  |          |    |   |     |     |   |        |
| MVF - Male $\frac{1}{16}$ -18 UNF (Compatible with $\frac{1}{4}$ VCR®) (63 mm only)          |          |    |   |     |     |   |        |
| MGF - G $\frac{1}{4}$ B Male (63 mm only)  |          |    |   |     |     |   |        |
| MRF - R $\frac{1}{4}$ Male (63 mm only)  |          |    |   |     |     |   |        |
| MNF - $\frac{1}{4}$ NPT Male (63 mm only)  |          |    |   |     |     |   |        |
| MVS - Male Swivel $\frac{1}{16}$ -18 UNF (Compatible with $\frac{1}{4}$ VCR®) (50 mm only)   |          |    |   |     | MVS |   |        |
| FVS - Female Swivel $\frac{1}{16}$ -18 UNF (Compatible with $\frac{1}{4}$ VCR®) (50 mm only) |          |    |   |     |     |   |        |
| <b>Process Connection Location</b>   |          |    |   |     |     |   |        |
| L - Lower  |          |    |   |     |     |   |        |
| B - Back (50 mm: center back, 63 mm: lower back)   |          |    |   |     |     | B |        |
| <b>Range</b>   |          |    |   |     |     |   |        |
| # - PSI  |          |    |   |     |     |   |        |
| V/# - Inches of Mercury Vacuum and PSI   |          |    |   |     |     |   | V/150# |
| BR - Bar   |          |    |   |     |     |   |        |
| KP - Kilopascals   |          |    |   |     |     |   |        |
| MP - Megapascals   |          |    |   |     |     |   |        |

## Data Sheet

### HPX High Purity Pressure Gauge

50 mm and 63 mm Dial Sizes

| STANDARD RANGES |         |            |          |
|-----------------|---------|------------|----------|
| psi             | bar     | kPa        | MPa      |
| V/15#           | N1/1BR  | N100/100KP | NP1/P1MP |
| V/30#           | N1/2BR  | N100/200KP | NP1/P2MP |
| V/45#           | N1/3BR  | N100/300KP | NP1/P3MP |
| V/60#           | N1/4BR  | N100/400KP | NP1/P4MP |
| -               | N1/6BR  | N1/600KP   | NP1/P6MP |
| V/150#          | N1/10BR | N1/1000KP  | NP1/1MP  |
| V/200#          | N1/15BR | N1/1500KP  | NP1/1PMP |
| V/300#          | N1/20BR | N1/2000KP  | NP1/2MP  |
| 60#             | 4BR     | 400KP      | P4MP     |
| -               | 6BR     | 600KP      | P6MP     |
| 100#            | -       | -          | -        |
| 150#            | 10BR    | 1000KP     | 1MP      |
| 200#            | -       | -          | -        |
| -               | 16BR    | 1600KP     | 1P6MP    |
| 300#            | -       | -          | -        |
| -               | 25BR    | 2500KP     | 2P5MP    |
| 500#            | -       | -          | -        |
| 600#            | 40BR    | -          | 4MP      |
| -               | 60BR    | -          | 6MP      |
| 1000#           | 70BR    | -          | 7MP      |
| 1500#           | 100BR   | -          | 10MP     |
| 2000#           | -       | -          | 15MP     |
| -               | 160BR   | -          | 16MP     |
| 3000#           | -       | -          | 20MP     |
| -               | 250BR   | -          | 25MP     |

**Data Sheet**

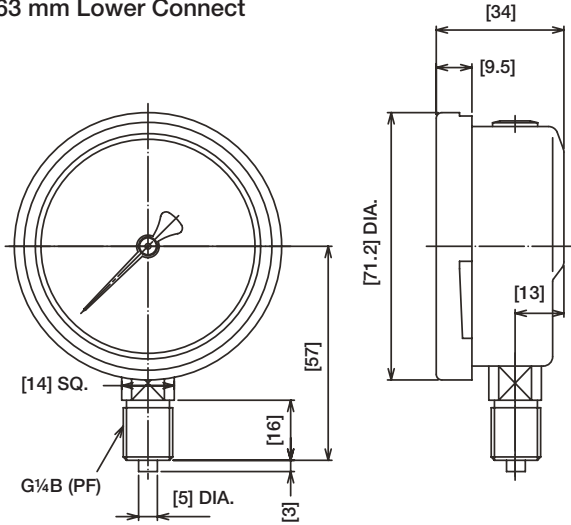
**HPX High Purity Pressure Gauge**

50 mm and 63 mm Dial Sizes

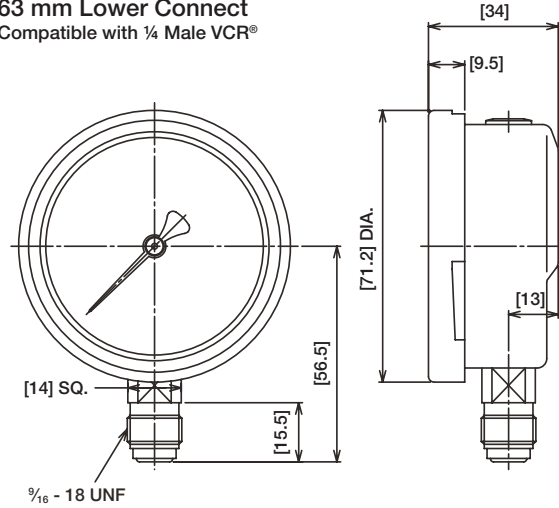
**DIMENSIONS** in millimeters

For reference only, consult Ashcroft for specific dimensional drawings

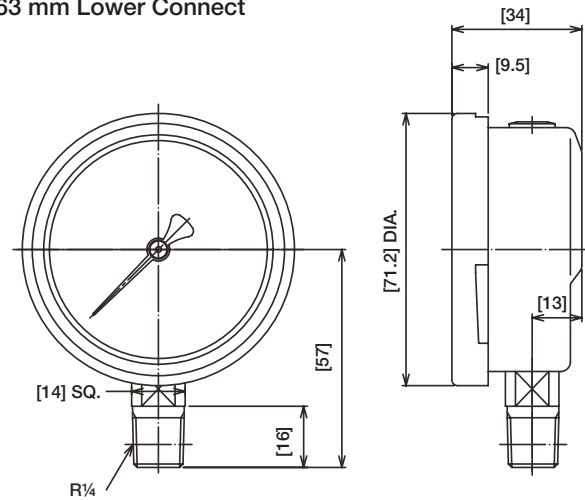
63 mm Lower Connect



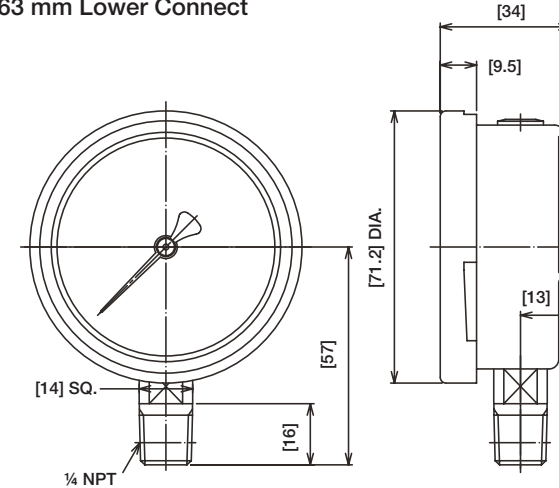
63 mm Lower Connect  
Compatible with 1/4 Male VCR®



63 mm Lower Connect



63 mm Lower Connect



**Data Sheet**

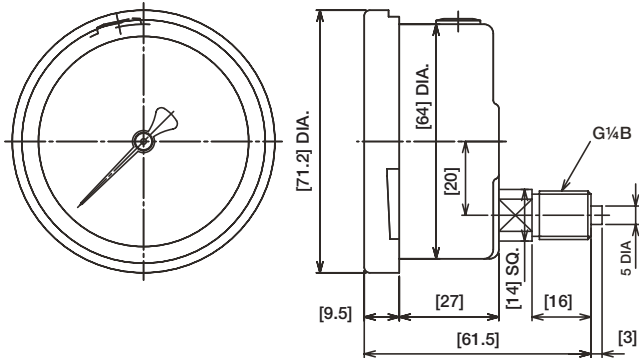
**HPX High Purity Pressure Gauge**

50 mm and 63 mm Dial Sizes

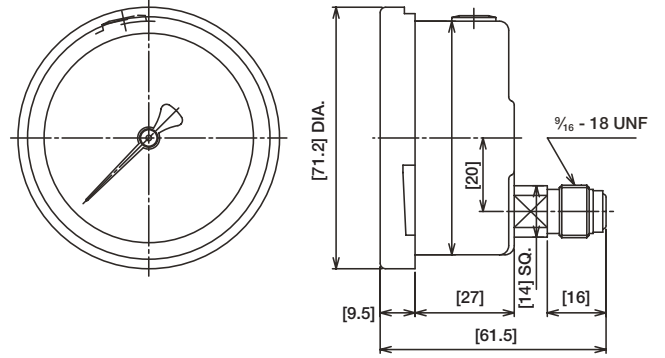
**DIMENSIONS** in millimeters

For reference only, consult Ashcroft for specific dimensional drawings

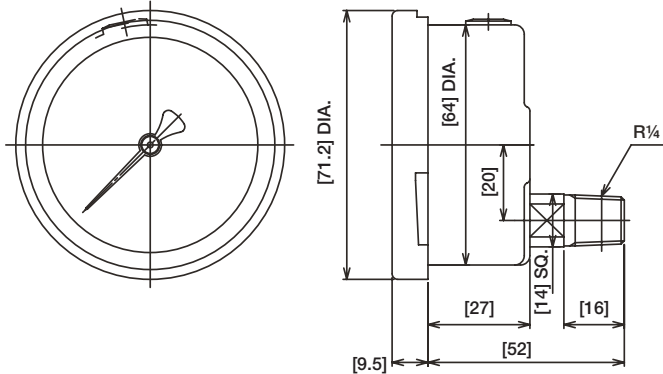
63mm Back Connect



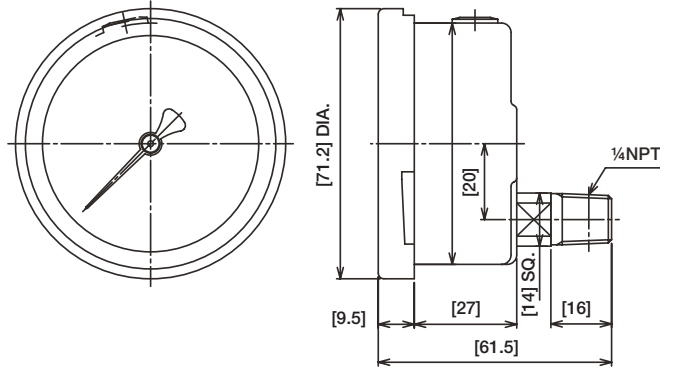
63mm Back Connect  
Compatible with 1/4 Male VCR®



63mm Back Connect



63mm Back Connect



**Data Sheet**

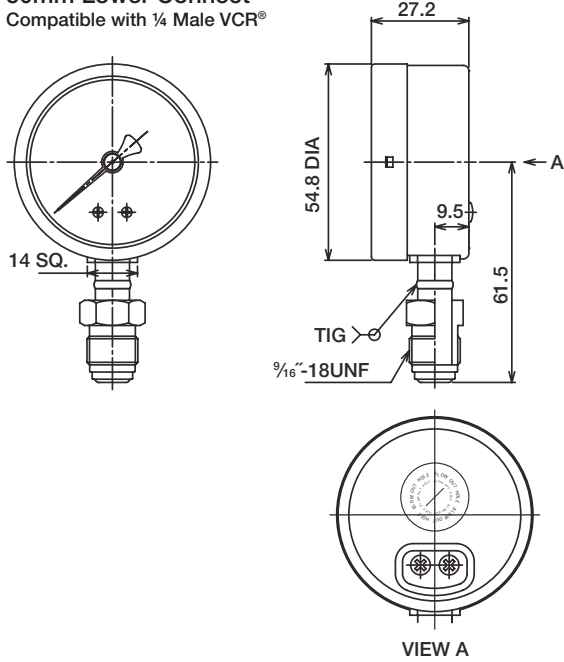
**HPX High Purity Pressure Gauge**

50 mm and 63 mm Dial Sizes

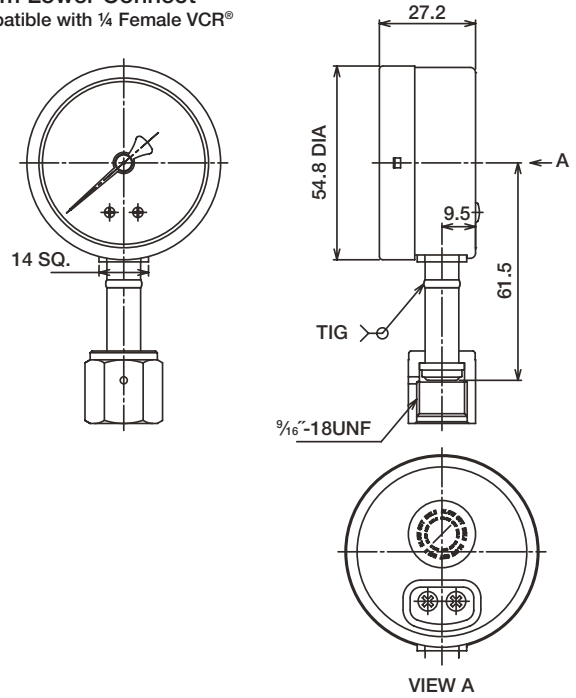
**DIMENSIONS in millimeters**

For reference only, consult Ashcroft for specific dimensional drawings

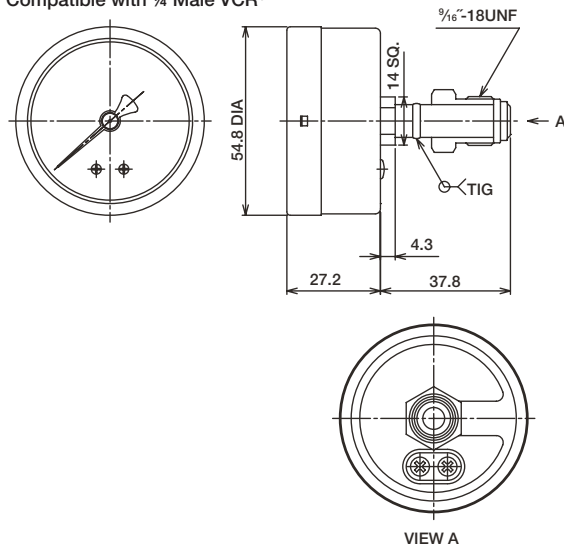
**50mm Lower Connect**  
Compatible with ¼ Male VCR®



**50mm Lower Connect**  
Compatible with ¼ Female VCR®



**50mm Back Connect**  
Compatible with ¼ Male VCR®



**50mm Back Connect**  
Compatible with ¼ Female VCR®

