

## Data Sheet

# HPS High Purity Pressure Gauge with Reed Switch

50 mm Dial Size

### FEATURES

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

### TYPICAL USES

- High purity gas delivery systems
- Gas sticks
- Process gas analyzers
- Semiconductor
- Cylinder Cabinet
- Exhaust gas for CVD and etching equipment



**HPS**  
50 mm dial size



### SPECIFICATIONS

|                         |   |
|-------------------------|---|
| Accuracy:               | ±1.6% of span   |
| Setting Accuracy:       | ±5.0% of span   |
| Dial Sizes:             | 50 mm   |
| Ranges:                 | 0 to 60 psi, 0 to 3,000 psi   |
| Surface Finish:         | Tube and fitting < .38 $\mu$ m Ra                                     |
| Process Connection:     | 50 mm:<br>¼ Male or female VCR type (¼-18UNF)<br>R ¼ Male, ¼ NPT Male |
| Process Conn. Location: | Lower   |
| Window Material:        | Polycarbonate   |
| Dial:                   | White face, aluminum  |
| Pointer                 | Black, aluminum   |
| Approvals:              | RoHS  |

### WETTED COMPONENTS

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

### NON-WETTED COMPONENTS

| Case   | Window        |
|--------|---------------|
| 304 SS | Polycarbonate |

### KEY BENEFITS

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

### MIN/MAX TEMPERATURE LIMITS

#### PROCESS

-4 °F to 140 °F (-20 °C to 60 °C)

### REED SWITCH SPECIFICATIONS

Power: 10 W

Maximum Voltage: 30V AC/DC

Maximum Current: 0.5A DC

Dead Band: Within 10% of span

## Data Sheet

### HPS High Purity Pressure Gauge with Reed Switch

50 mm Dial Size

| ORDERING CODE  | Example: | 50 | HPS | G | MVS | L | 60# |
|--|----------|----|-----|---|-----|---|-----|
| <b>Size</b>  |          |    |     |   |     |   |     |
| 50 - 50 mm   |          | 50 |     |   |     |   |     |
| <b>Gauge Family</b>  |          |    |     |   |     |   |     |
| HPS - High purity gauge (with reed switch)                       |          |    | HPS |   |     |   |     |
| <b>Purity Level</b>  |          |    |     |   |     |   |     |
| G - Class 10,000   |          |    |     | G |     |   |     |
| <b>Process Connection</b>  |          |    |     |   |     |   |     |
| MVS - ¼ Male swivel VCR type (¼ <sup>-18</sup> UNF male)         |          |    |     |   | MVS |   |     |
| MRF - R ¼ Male   |          |    |     |   |     |   |     |
| MNF - ¼ NPT Male   |          |    |     |   |     |   |     |
| FVS - ¼ Female swivel VCR type (¼ <sup>-18</sup> UNF female)     |          |    |     |   |     |   |     |
| <b>Process Connection Location</b>                               |          |    |     |   |     |   |     |
| L - Lower  |          |    |     |   |     | L |     |
| <b>Range (See range table on page 3 for all standard ranges)</b> |          |    |     |   |     |   |     |
| # - psi  |          |    |     |   |     |   | 60# |
| BR - Bar   |          |    |     |   |     |   |     |
| KP - Kilopascals   |          |    |     |   |     |   |     |
| MP - Megapascals   |          |    |     |   |     |   |     |

## Data Sheet

### HPS High Purity Pressure Gauge with Reed Switch

50 mm Dial Size

| STANDARD RANGES |         |           |
|-----------------|---------|-----------|
| psi             | bar     | MPa       |
| V/60#           | N1/4BR  | NP1/P4MP  |
| -               | N1/6BR  | NP1/P6MP  |
| V/150#          | N1/10BR | NP1/1MP   |
| V/200#          | -       | -         |
| -               | N1/15BR | -         |
| -               | -       | NP1/1P6MP |
| V/300#          | N1/20BR | -         |
| -               | -       | NP1/2P5MP |
| 60#             | 4BR     | P4MP      |
| -               | 6BR     | P6MP      |
| 100#            | -       | -         |
| 150#            | 10BR    | 1MP       |
| 200#            | -       | -         |
| -               | 16BR    | 1P6MP     |
| 300#            | -       | -         |
| -               | 25BR    | 2P5MP     |
| 500#            | -       | -         |
| 600#            | 40BR    | 4MP       |
| -               | 60BR    | 6MP       |
| 1000#           | -       | -         |
| 1500#           | 100BR   | 10MP      |
| 2000#           | -       | -         |
| -               | 160BR   | 16MP      |
| 3000#           | -       | -         |
| -               | 250BR   | 25MP      |

**Data Sheet**

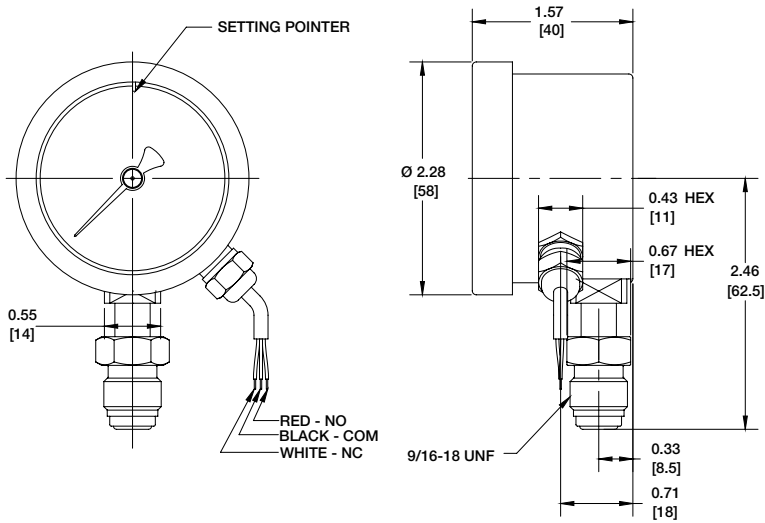
**HPS High Purity Pressure Gauge with Reed Switch**

50 mm Dial Size

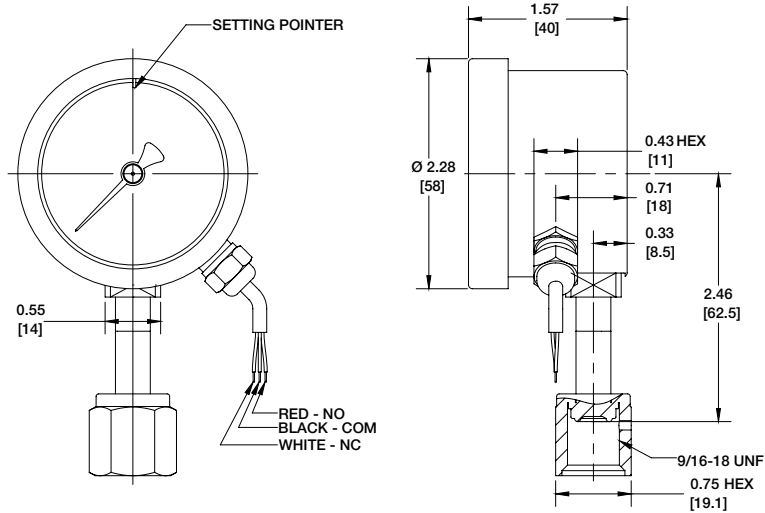
**DIMENSIONS** in [ ] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

**VCR Male Process Connection**



**VCR Female Process Connection**



**Wiring Diagram**

