



- 30 Inches Hg Vacuum to 10 Bar (150 PSIG)
- 6 Set Points Adjustable Over Entire Range
- Each Setpoint Drives an Independent Relay
- SPDT Contacts Rated 3 A @ 115 or 220 VAC
- Output For Computers, PLCs or Data Systems
- Not Affected By Changes in Gas Composition
- ATEX Certified Transducers Also Available
- Class 1, Div. 1, UL, CSA, FM Approved

Designed for pressure quench heat treat furnaces, this Diaphragm Vacuum and Pressure Gauge covers the entire range from 30 inches Hg vacuum to 150 PSIG.

The instrument includes 6 independent set points which are adjustable over the entire range and each set point drives a separate relay. Each of the six relays has SPDT contacts rated for 3 amps @ 115 or 220 VAC non-inductive.

In addition to the six on/off outputs, this gauge also provides a linear analog output for interface with PLCs, P.C.s, or recorders. This output is negative 300 millivolts at 30 in. Hg to zero at atmosphere to 1.5 volts at 150 PSIG (10 mV/PSIG). Unlike thermal or ionization type gauges these instruments are not affected by changes in gas composition. Enclosures are available for transducers located in hazardous areas including Class I, Groups C and D, Division 1.

Specifications

Pressure Range: 30 in. Hg vacuum to 10 Bar (150 PSIG) pressure. Transducer can withstand overpressure to 200 PSIG.

Response Time: Less than 400 msec. for response to a step change.

Calibration: For any gas compatible with diaphragm material.

Resolution: 0.1 in. Hg for vacuum; 0.1 PSIG for positive pressures.

Accuracy: 1% of reading or 0.1 PSIG.

Analog Output: Minus 300 millivolts to 0.0 volts at atmosphere; 0 to 1.50 volts D.C. from atmosphere to 10 Bar (150 PSIG).

Transducers: Select silicon diaphragm with 1/8 in. NPT male thread port, or 316 stainless steel diaphragm with 1/4 in. NPT male thread.

Set Point Range: Full Scale, 30 in. Hg to 10 Bar (150 PSIG).

Set Point Repeatability: ± 0.2 in. Hg; ± 0.2 PSIG.

Line Power: 115 VAC, 50/60 Hz; 230 VAC optional at no additional cost.

Line Regulation: $\pm 20\%$ change in line voltage produces less than 1% change in reading.

Wattage: Less than 2 Watts.

Temperature Effects: Changes in ambient temperature between 0°C and 50°C change the reading less than 0.33% per °C.

Bakeout Temperature: Transducer can be baked to 100 °C (212°F) at pressure or vacuum.

Dimensions: Panel 96 mm X 192 mm; 180 mm F to B.

Mounting: Bench mount enclosure is standard. Panel mount hardware is included. Cutout required is 92 mm X 184 mm. Transducer Cables: 10 ft. (3m) attached.

Transducer Extension Cables: Change transducer cable length without recalibration. Extensions to 250 ft. (75 m) can be used.

Line Cord: 3 wire, 65 inch (170 cm) attached. Net Weight: 5 lb. (2.3 kg)

Shipping Weight: 8 lb. (3.6 kg)

Ordering Information Specify 115 or 230 V, 50/60 Hz Power When Ordering

Six Set Point Controller With Backlit Digital Display in 1/2 DIN enclosure suitable for bench or panel mounting. Panel mounting hardware and power and transducer cable included. Transducer not included.

P/N: 902090\$1,974

Calibrator for 30" Hg - 10 Bar (150 PSIG) Instruments

Compact, easy to use electronic calibrator allows adjustment of both zero and full scale without the use of a vacuum system and without any electronics training. See latest VRC Gauge Catalog for more information. P/N: 912021\$327

Standard Silicon Diaphragm Transducer for 30 Inches Hg to 10 Bar (150 PSIG) instruments. Diaphragm is silicon, all other parts are 304 stainless steel. 1/8 in. NPT male thread. P/N: 912065.....\$337

Standard Stainless Steel Diaphragm Transducer for 30 Inches Hg to 10 Bar (150 PSIG) instruments. Diaphragm and all wetted parts are 316 stainless steel, all other parts are 304 stainless steel. 1/4 in. NPT male thread. P/N: 912093.....\$526

Transducer Extension Cable

Up to 500 ft. (150 meters) maximum with 2 connectors
P/N: 912063.....\$28. plus \$1.00/ft
Longer cable built into a new instrument, P/N: V122195.....\$7.00/ft

Transducer Dust Baffle

For applications where extreme dust and dirt may affect transducer life. External and internal parts are all 300 series stainless steel. Inlet and outlet are 1/8 inch NPT. P/N: 912007 . . see latest VRC Gauge Catalog.