APPLICATION

The Model 494 Electronic Vacuum / Pressure Regulator is designed to accept an analog control signal input for vacuum setpoint adjustment. The analog control signal can be supplied from the user’s control system or an auxiliary potentiometer, or the on-board multi-turn potentiometer. Several pressure sensor options are available which allow a user the choice of vacuum and pressure range in either absolute or differential pressure reference options. Alternatively the differential sensor can be connected via hose to some another pressure of interest other than atmosphere. A flow sensor provides an analog signal calibrated to indicate flow. The regulator is a self-relieving design, which means that it will vent excess vacuum or pressure to reach the setpoint when the control signal is reduced.

FEATURES

The differential pressure sensor allows a unit to be configured to regulate vacuum or pressure by installing hose connections to either a vacuum or pressure source along with the appropriate sensor port connection.

Scalable pressure sensor range allows maximum control resolution at vacuum or pressure ranges that are less than the full scale sensor range.

Analog output of vacuum or pressure sensor reading.

Analog output of the flow sensor is available for feedback to a user’s control system.

Two option port connections can be factory programmed for user desired control such as push-button increase/decrease adjustment or alternate control functions or to select different modes of operation.
Model 494 Electronic Vacuum / Pressure Regulator with Flow Sensor

SPECIFICATIONS

Vacuum/Pressure Range:
- XXX -001 sensor 0 to 3 in Hg (41 in-water)
- XXX -002 sensor 0 to 29.5 in Hg (749 mm-Hg)
- XXX -003 sensor 0 to 100 psi
- XXX -004 sensor 0 to 15 psia (776 mm-Hg absolute)

Flow Capacity:
- Y -1 valve size, 5 SCFH (2.3 l/min) open flow 0.01 in orifice dia.
- Y -6 valve size, 25 SCFH (11.5 l/min) open flow 0.05 in orifice dia.

Part Number:
494-XXX-Y (fill in XXX and Y value for sensor and valve configuration desired)

Resolution:
Approximately 1 part in 1,000 of full scale span

Port Size:
1/8-in hose barb connections

Power Supply:
15 to 26 VDC, 180 mA maximum current

Analog Control Signal:
0-5 VDC

Analog Output:
0-5 VDC vacuum / pressure and flow rate

Weight:
0.61 pounds (278 g)