

Model 868 D/P Sensor Control

Recommended mounting location is close to tank within 10 feet of connection. A compressed air supply connection is required.

- 1-1. Mount control in the position shown. Disposable filter element should remain accessible for later replacement (recommended every 12 months). Allow adequate clearance beneath control.
- 1-2. Route compressed air supply line to control location. Installing a shut-off valve is recommended for future serving of control.

Compressed Air Supply Pressure

A sub-micron instrument grade coalescing filter should be installed upstream of the supply line to the control. Oil and/or water contamination of air supply may lead to component failure. Compressed air supply must be filtered and dry enough to prevent condensation or freeze-up in the control.

Minimum: 20 psi greater than anticipated liquid head pressure - or 35 psig, whichever is greater.

Maximum: Do not exceed 150 psig.

Sensor and Control Unit Installation

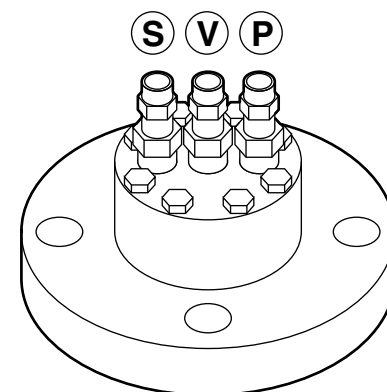
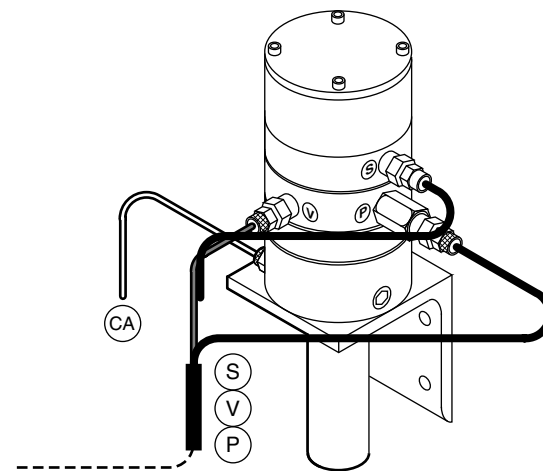
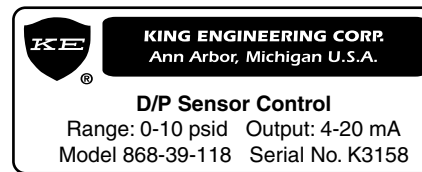
The D/P Sensor Control is a combination pneumatic air regulator and electronic pressure transmitter. This unit is used in conjunction with a KING-GAGE pneumatic diaphragm sensor mounted at the tank. The D/P Sensor Control generates a 4-20 mA dc output signal proportional to liquid depth pressure.

- 2-1. Tubing interconnecting the tank sensor to the D/P Sensor Control must be leak-tight. (Some KING-GAGE sensors include 3-tube bundled cable for pneumatic connections - refer to separate installation instructions for the specific sensor model.
- 2-2. Power for the D/P Sensor Control (transmitter) is supplied through the signal wiring from the receiver device. Typically this is +24 Vdc.
- 2-3. Recommended - Two conductor unshielded cable (20~22 AWG); Twisted pair, stranded conductors.

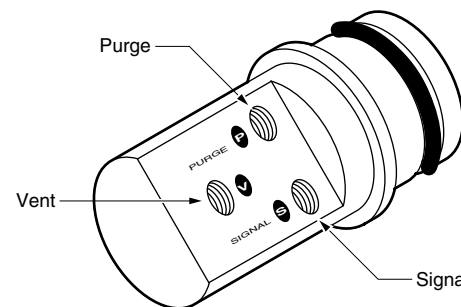
Final Tubing Connections

1/4" tubing is recommended for the interconnections between the D/P Sensor Control and diaphragm sensor. Tube fittings, if supplied, correspond to tube sizes listed below. Do not "tee" into lines for any equipment that consumes air or is not specifically leaktight.

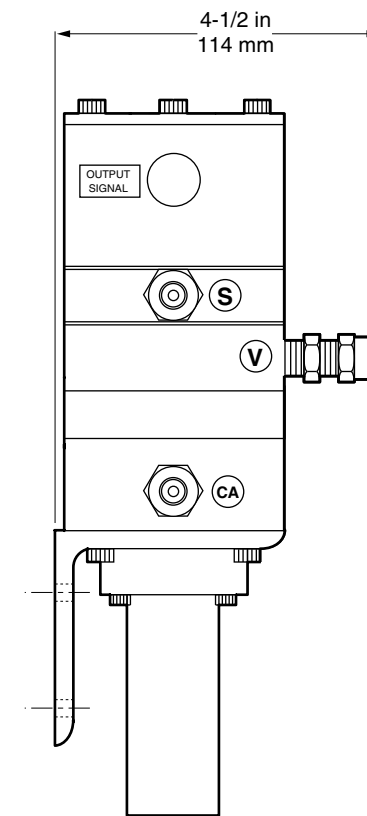
Designation	Connection	Tube Size
P - Purge	1/4 NPT	1/4" tube
V - Vent	1/4 NPT	1/4" tube
S - Signal	1/4 NPT	1/4" tube
CA - Air Supply	1/4 NPT	1/4" tube



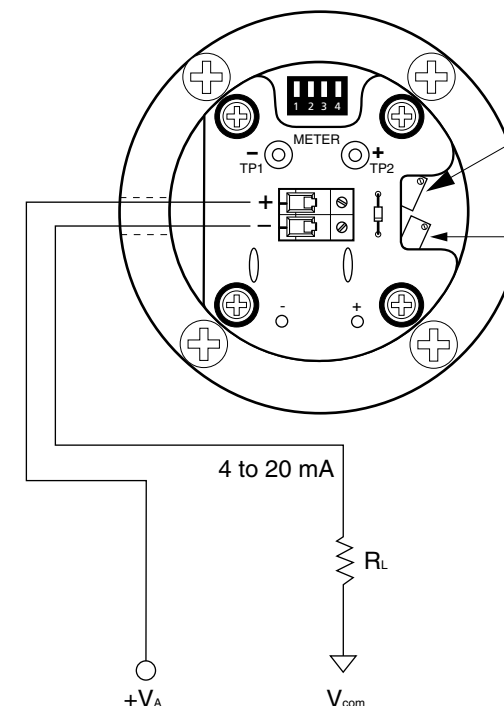
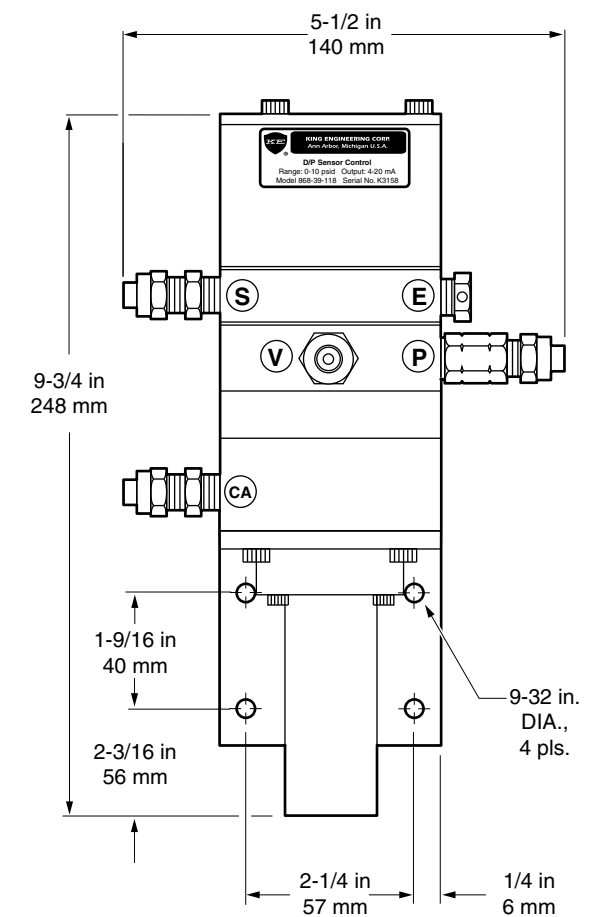
Tank Sensor Tubing Connections



Left Side View



Front View



Note: Refer to instruction manual EX-1673-2 for details on electrical signal connections and power requirements.

INSTALLATION INSTRUCTIONS

D/P Sensor Control Model 868 (Air Supply and Sensor Connections)

		DATE	09/25/02
B	9/02	Revised w/ new format	DRAWN BY M. Song
A	2/87	Released	APPROVED



DWG. NO. K-1090-1-868	REV. B
SHEET 1 OF 1	