## Tank Top Fitting & Downpipe

Fitting Threads onto end of 3/4" pipe and suspends it from tank top. Mates to 1-1/2" NPT coupling or outlet. Distance from end of pipe to lowest point in tank should be accurately noted for indicator scaling purposes. If practical during installation, make final trim on pipe length to achieve 1" to 2" gap from tank bottom.

- 1-1. Pipe should have standard tapered 3/4" NPT thread on one end. Check that threads are clean and not damaged.
- 1-2. Thread fitting onto end of pipe use thread sealer to ensure leaktight fit.
- 1-3. Insert pipe with fitting into tank opening. For tank connection other than 1-1/2" NPT, use bushing or adapter.

# Model 788 D/P Purge Control

Recommended mounting location is close to tank at a height equal to or higher than tank top fitting/downpipe connection. A compressed air supply connection is required.

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

Minimum: 20 psi greater than anticipated liquid head pressure - or 35 psig, whichever is greater. Maximum: Do not exceed 150 psig.

**Note:** DO NOT locate D/P Purge Control in areas where freezing temperatures (below 32°F/ 0°C) may be encountered.

#### **Final Tubing Connections**

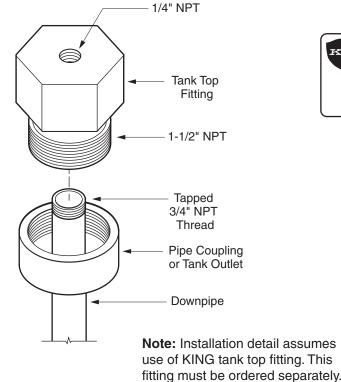
3/8" tubing is recommended for the air purge line to the tank top fitting/downpipe. Tube fittings, if supplied, correspond to tube sizes listed below. Do not "tee" into lines for any equipment that consumes air or is not specifically leaktight.

Designation	Connection	Tube Size
<b>P</b> - Purge	1/4 NPT	3/8" tube
E - Equalizer (low pressu	re) 1/4 NPT	Vent Plug*
CA - Air Supply	1/4 NPT	1/4" tube

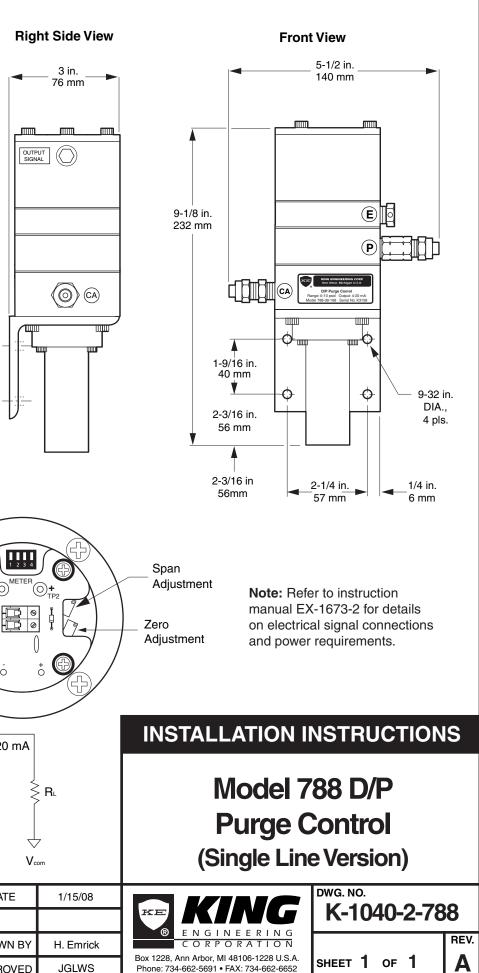
\*Equalizer port (E) is the low pressure input for the D/P transmitter and is normally supplied with a vent plug. Closed or non-vented tanks may require that the void pressure (above the tank liquid) be applied to this low pressure port. (The purging of the downpipe creates the high pressure input to the D/P transmitter.)

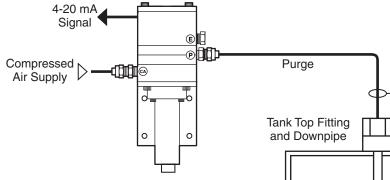
#### 4-20 mA Signal Loop Connections

Signal outlet is 1/2" NPT for conduit or cable compression type fitting. Excitation voltage to transmitter is supplied through signal loop from external Vdc power supply. Cabling used should be twisted pair, shielded, 20 AWG.

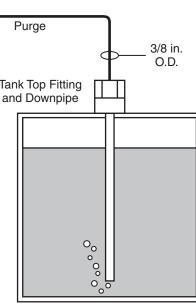


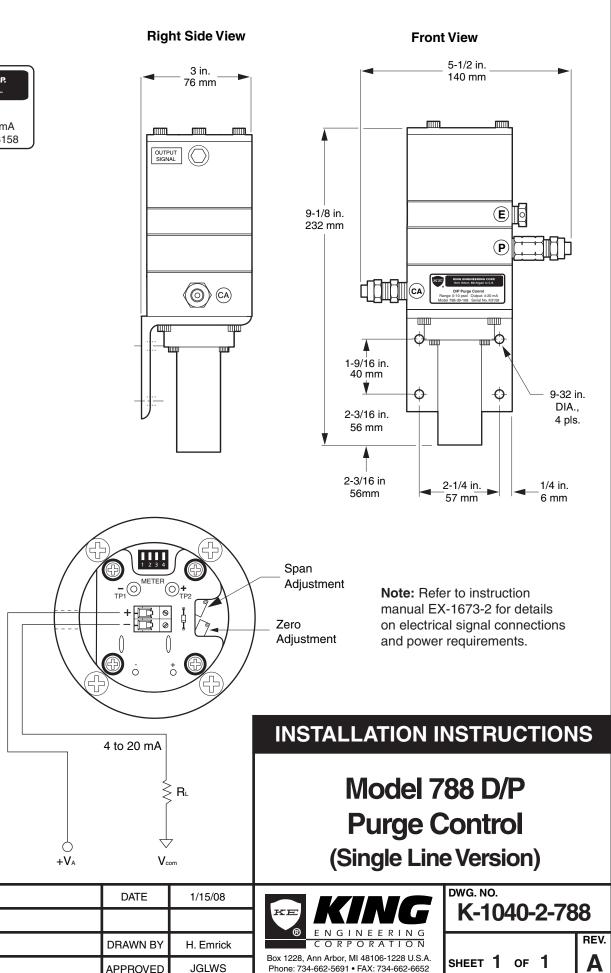






**Typical One Line** System





			DATE	1/15/08
			DRAWN BY	H. Emrick
А	1/08	Released	APPROVED	JGLWS