

# Balance Valve-Readout Procedure Installation & Operation Instructions

**NOTE:** BALANCE VALVES ARE NOT DESIGNED TO OPERATE IN A FULL OPEN POSITION Be sure that the balance valve is installed in an appropriate location per the following: For optimum operation as a balance device measuring differential pressure, it is required that a distance of 10 pipe diameters straight pipe be installed upstream of the BV and 5 times the pipe diameter downstream. The balance valve should be closed at least 10% for proper operation. The valve cannot be installed with the stem pointing downward. The stem must point upward to avoid premature failure.

1. Attached the hoses from the readout meter kit to the port on the inlet and outlet of the balance valve Be sure to vent any air from the hoses and meter kit
2. Close both valves on the meter kit, and close the balance valve to a desired starting point.
3. Open the valve attached to the hose on the inlet side of the balance valve. Note this gauge reading, this is the inlet reading before the valve.
4. Close inlet valve and Open the valve attached to the hose on the discharge side of the balance valve. Note this gauge reading, this is the outlet reading after pressure drop across the valve.
5. Deduct the reading in Step 4 from the reading in Step 3, this is your pressure differential across the valve Example:

$$\begin{array}{rcl}
 \text{Step 3 reading} & = & 25 \text{ psi} \\
 \text{Step 4 reading} & = & 20 \text{ psi} \\
 \text{Differential} & = & 5 \text{ psi}
 \end{array}$$

6. Identify the correct curve applying to the valve and valve size.
7. Read differential pressure on left side vertical axis of curve, follow this point across the chart until it intersects the point corresponding to the setting of the valve, draw a line to the bottom of the chart and read flow in GPM at this setting. See page 2 example: 5 psid (differential) at 3 full rotations= 30 gpm
8. Readjust balance valve setting and repeat above as necessary.

JOB NAME _____
LOCATION _____
CONTRACTOR _____
CONTRACTOR P.O. NO. _____

ITEMS	QUANTITY
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____



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