KIMRAY, Inc. **12 PD PRESSURE DIFFERENTIAL PILOT** Okla. City, OK

APPLICATIONS:

Indication or control of flow in low pressure meter runs (where the static pressure is reasonably constant), including prevention of back-flow.

High multiplication and volume boosting of pneumatic signal (70:1 ratio).

With atmospheric pressure as a reference, the 12 PD can be used as an inches of water pressure sensing pilot (2.5 lb. output signal per inch of water pressure

DESCRIPTION:

The 12 PD is a simple but limited differential pilot with high sensitivity and low hysteresis characteristics.

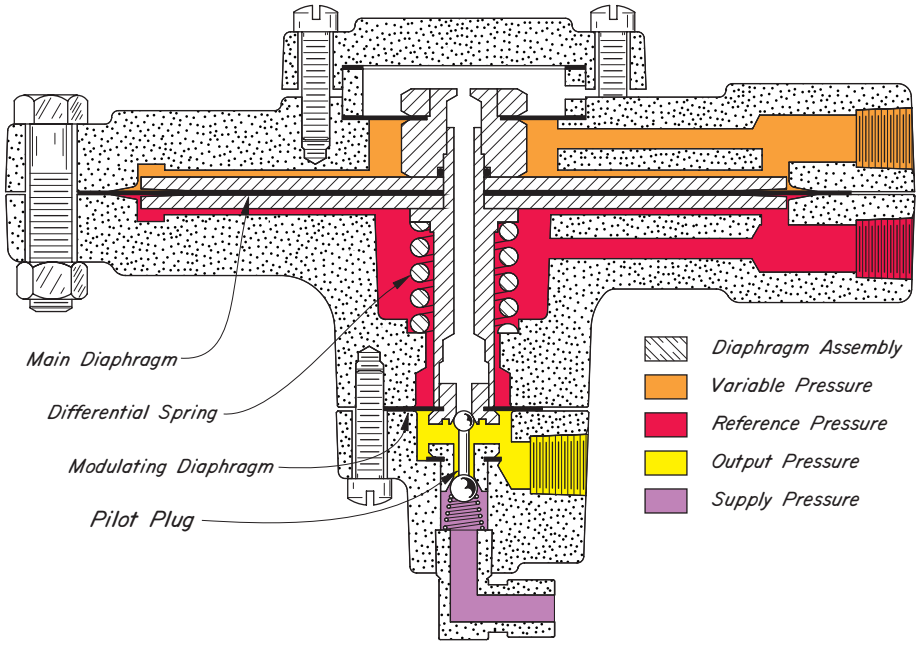
Designed to indicate or control small set differentials in pressures up to 120 psi., full pressure may be applied to either side of the differential diaphragm without damage. Supply and output signal pressures can be as high as 120 psi. The standard differential varies from 1.5 to 0 psi between reference pressures of 0 and 105 psi.

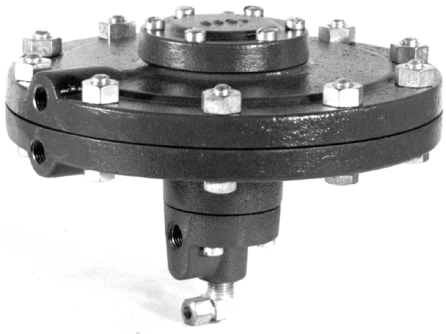
OPERATION:

The Diaphragm Assembly is suspended within the housing on a MAIN DIAPHRAGM and MODULATING DIAPHRAGM. A differential control or indication can be achieved between a reasonably constant Reference Pressure (Red) and a Variable Pressure (Orange).

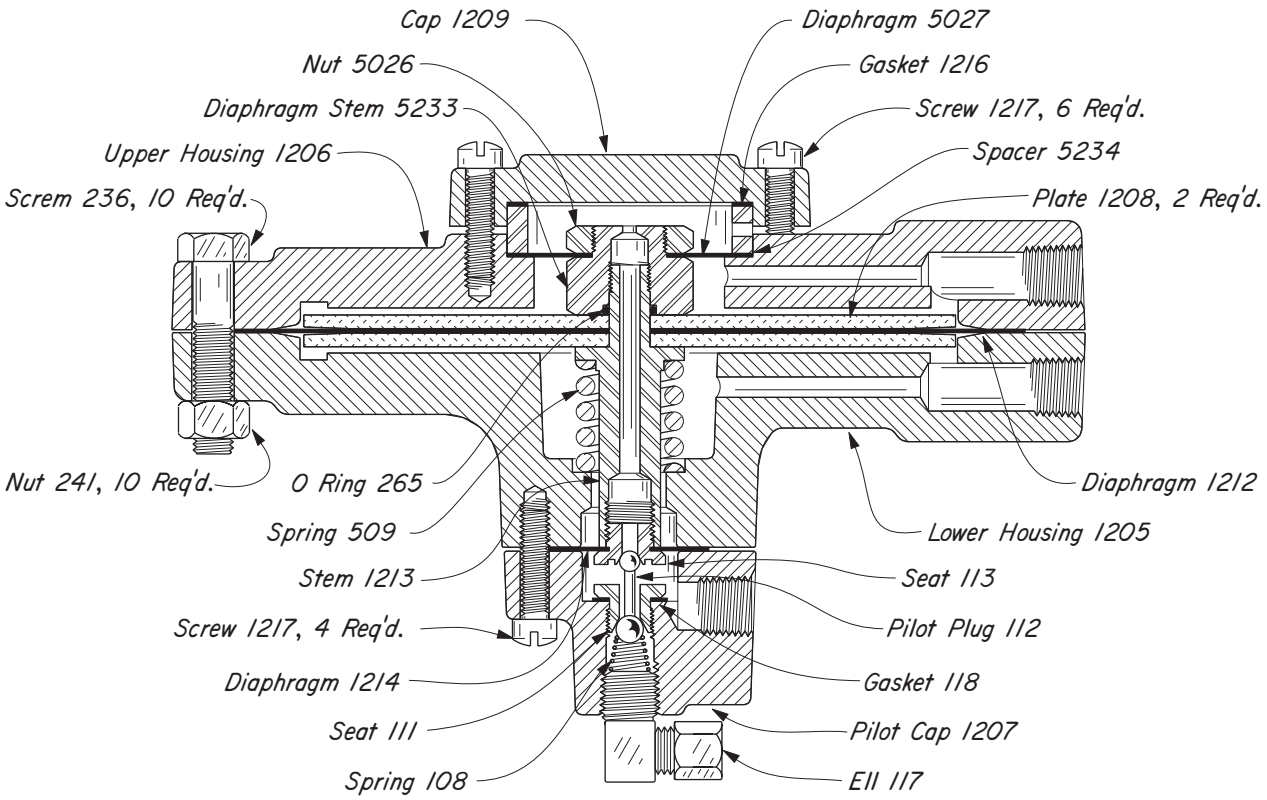
Changes in Variable Pressure (Orange) acting against the DIFFERENTIAL SPRING and Reference Pressure (Red) is the actuating force within the pilot.

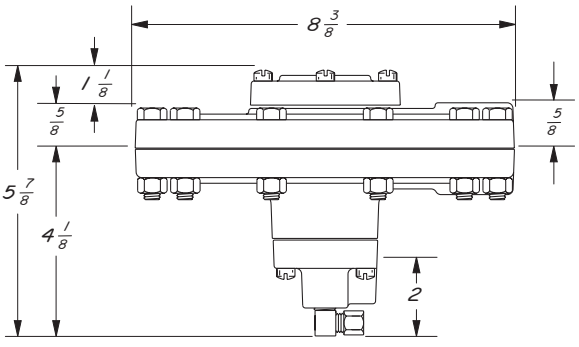
As variable Pressure (Orange) increases, the Diaphragm Assembly moves downward and opens the lower seat (Violet to Yellow). The reaction of the increased Output Pressure (Yellow) on the MODULATING DIAPHRAGM balances the added Variable Pressure (Orange) to re-position the Diaphragm assembly. If Variable Pressure (Orange) decreases below the equilibrium point, the Diaphragm assembly moves upward and Output Pressure (Yellow) is vented sufficiently to return the Diaphragm Assembly to the equilibrium position.





12 PD DIFFERENTIAL PILOT
CAST IRON
120 lbs. W.P.





PILOT
DIMENSIONS

PILOTS AVAILABLE: CAST IRON

CAT. NO.	PILOT	MATERIAL	DES. PRESS.	OPER. PRESS.
YAE4	12PD	CAST IRON	175	120