

APPLICATIONS:

Pilot may be installed remotely from the motor valve (see Motor Valves shown in Sections E1 and E2). This pilot is used for maintaining a constant pressure drop across meter systems or to produce a pneumatic output signal when the differential pressure of a system falls below the set differential pressure. (see Motor Valves shown in Section B)

FEATURES:

- Single Adjustment
- Filtered gas supply
- Accurate control
- Intermittent vent pilot construction
- Remote installation

SUPPLY PRESSURE:

0-300 psig, (60% or more of upstream pressure recommended for operating motor valves.)

PRESSURE RANGE:

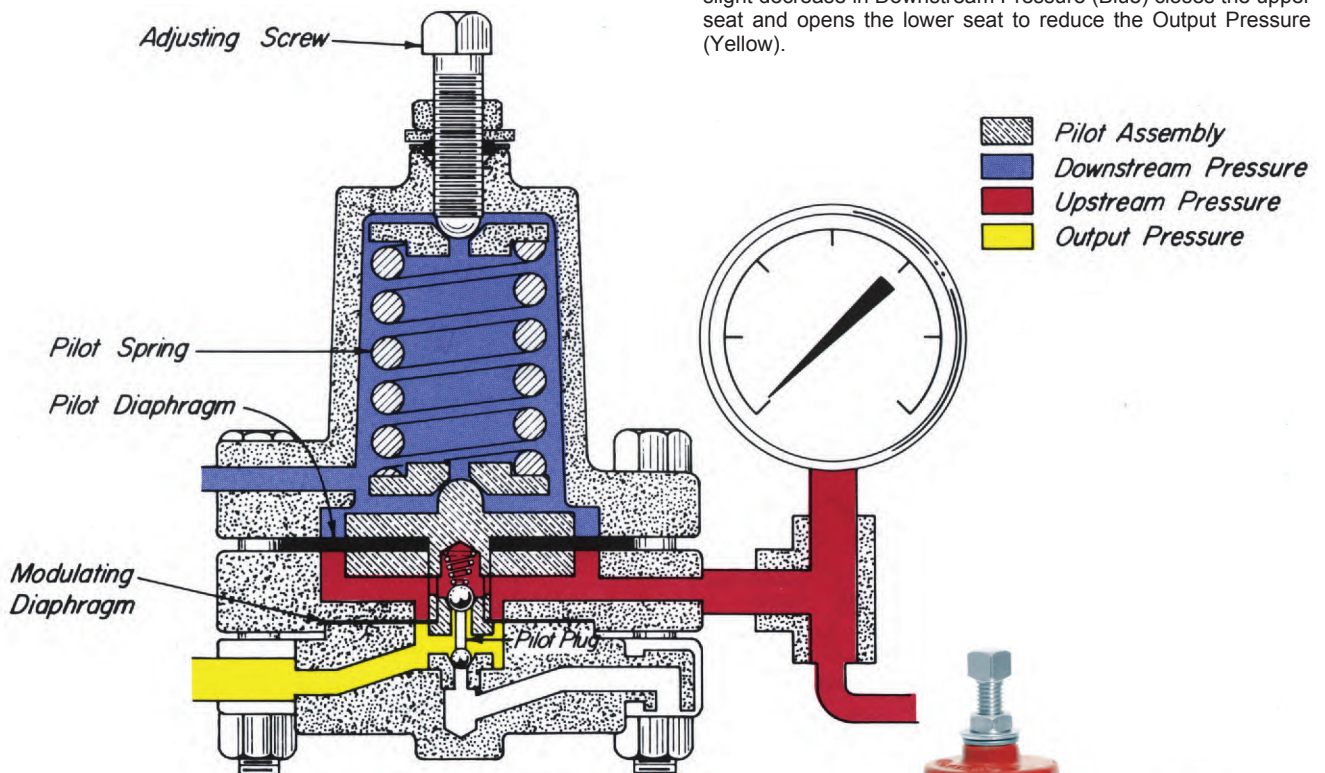
- 5 psig to 125 psig
- 10 psig to 300 psig

OPERATION:

The Pilot Assembly, which moves as a unit without friction within the housing, is supported by the PILOT DIAPHRAGM and the MODULATING DIAPHRAGM. The PILOT SPRING and Downstream Pressure (Blue) loads the upper side of the Pilot Assembly and is opposed on the underside by the Upstream Pressure (Red) acting on the PILOT and MODULATING DIAPHRAGMS (Area of PILOT DIAPHRAGM minus area of MODULATING DIAPHRAGM).

The 12 PG PD Pilot can be considered as an inverse multiplier. Each 1 psig change in Differential pressure, Upstream Pressure (Red) minus Downstream Pressure (Blue), results in a change in Output Pressure (Yellow) of 12 psig. The 30 PG PD-D/S Pilot changes at a rate of 8:1.

With a slight decrease in Upstream Pressure (Red) or a slight increase in Downstream Pressure (Blue) the PILOT ASSEMBLY is forced downward by the PILOT SPRING. The lower seat for the PILOT PLUG (Yellow to Atmosphere) is closed and the upper seat for the PILOT PLUG (Red to Yellow) is opened. This results in an increased Output Pressure (Yellow) under the MODULATING DIAPHRAGM which opposes the change. The PILOT ASSEMBLY returns to a position at which both the upper and lower seats are closed when the Differential Pressure is re-established. A slight increase in Upstream Pressure (Red) or slight decrease in Downstream Pressure (Blue) closes the upper seat and opens the lower seat to reduce the Output Pressure (Yellow).



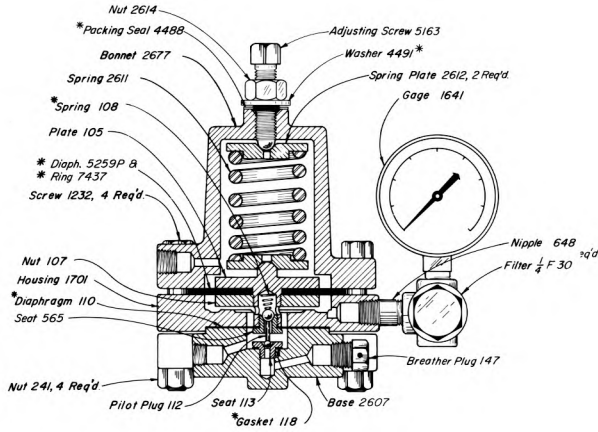
Kimray is an ISO 9001- certified manufacturer.

PILOTS AND ACCESSORIES

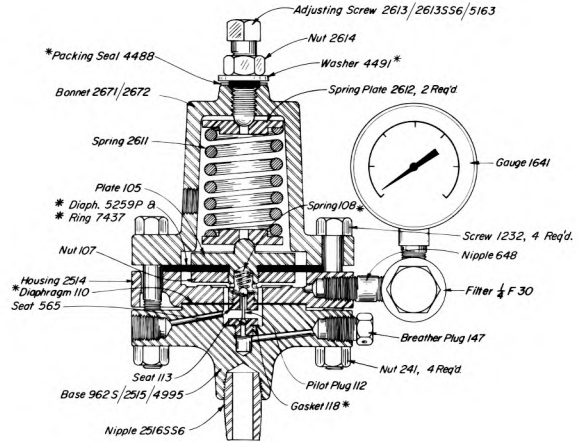


PRESSURE DIFFERENTIAL PILOTS CAST IRON / DUCTILE / STEEL

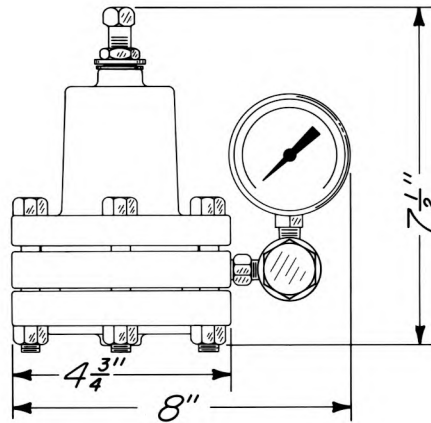
30 PG PD-D
DUCTILE



30 PG PD-S
STEEL



PILOT DIMENSIONS



PILOTS AVAILABLE:

CAT. NO.	PILOT	MAX W.P.	OPER. PRES.	KIT
AFT	30 PG PD-D	300	300	RBL
AHT	30 PG PD-S	300	300	RBL

NOTES:

All openings are tapped 1/4" NPT.

*These are recommended spare parts and are stocked as repair kits.

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