

APPLICATIONS:

Used to produce a proportional pneumatic output signal when the monitored vacuum becomes weaker than the set point. The pneumatic signal source is isolated from the monitored pressure. Used coupled with a motor valve in the regulation of inlet vacuum to gas compressors, or in vapor recovery systems to prevent excessive system vacuum due to compressor suction by by-passing part of the gas from the compressor discharge to suction.

SUPPLY PRESSURE:

Depending on the requirements of the motor valve, up to 125 psig. max.





VACUUM RANGE:

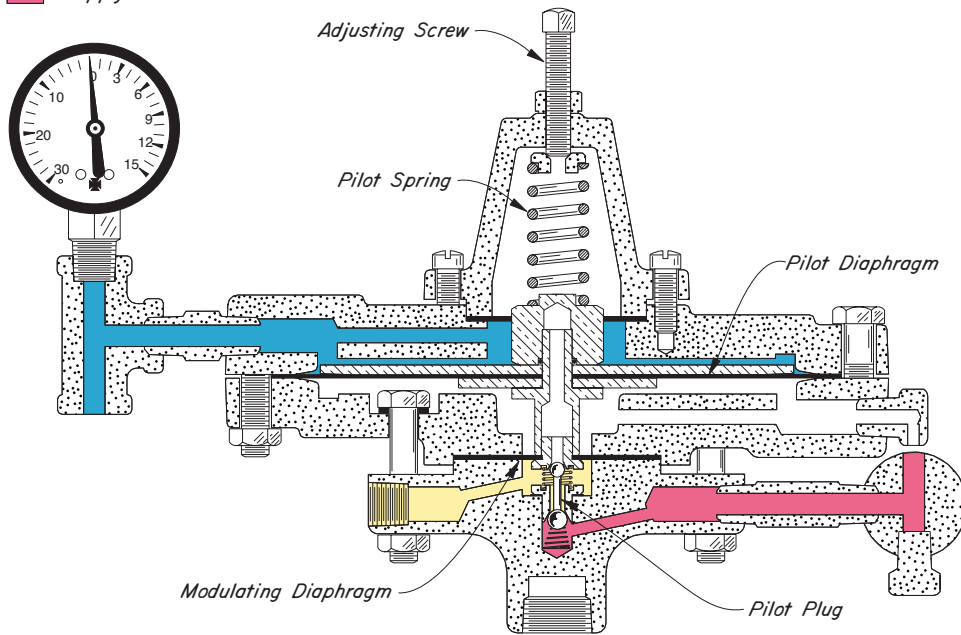
1 in. to 5 in. Hg
 Optional sprigs provide maximum set point of 10 in. Hg or 30 in. Hg.

OPERATION:

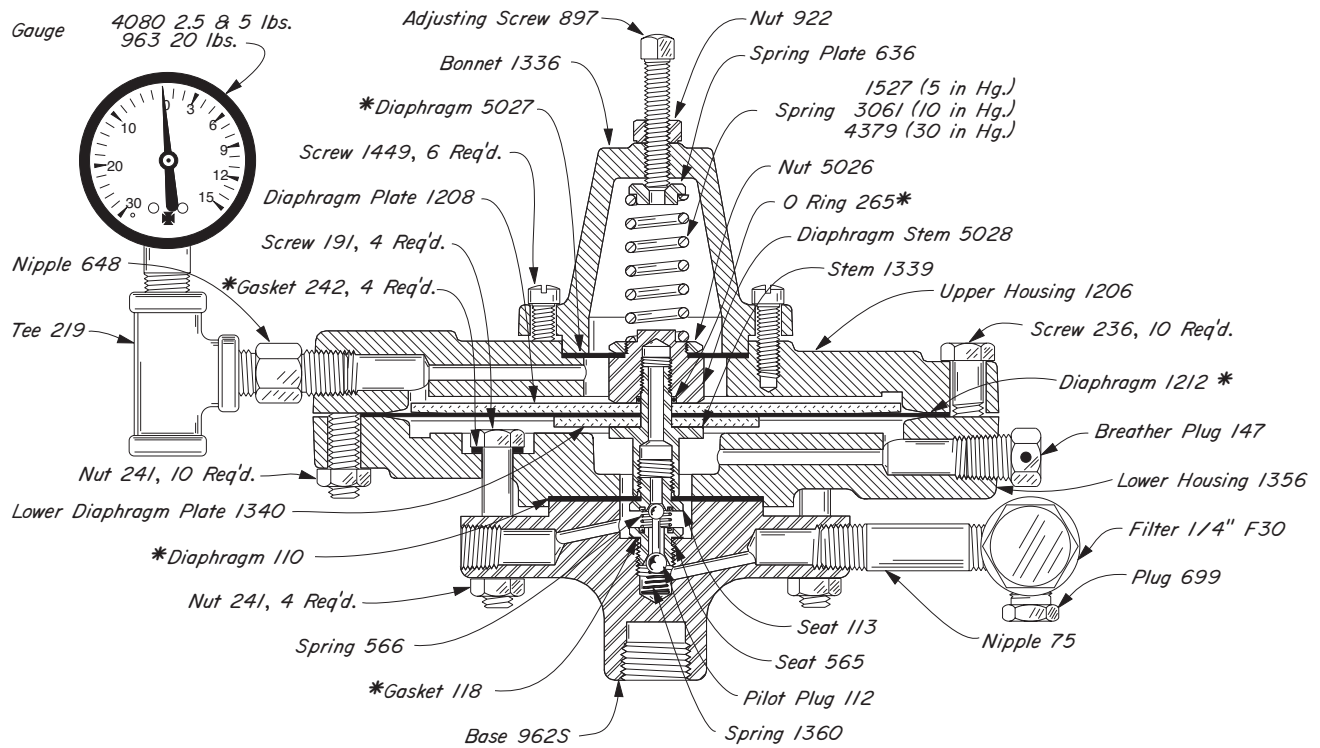
The Pilot Assembly, which moves as a unit without friction within the housing, is supported by the PILOT DIAPHRAGM and the MODULATING DIAPHRAGM. The PILOT SPRING loads the upper side of the Pilot Assembly and is opposed on the underside by Controlled Vacuum (Blue) acting on the net area of the PILOT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

With a slight decrease in Controlled Vacuum (Blue) the Pilot Assembly is forced downward by the PILOT SPRING. The upper seat of the PILOT PLUG (Yellow to Atmosphere) is closed and the lower seat of the PILOT PLUG (Red to Yellow) is opened. This results in an increased Output Pressure (Yellow) is opened. This results in an increased Output Pressure (Yellow) under the MODULATING DIAPHRAGM which balances the lost upward force due to the slight decrease of Controlled vacuum (Blue). The Pilot Assembly returns to a position at which both the upper and lower seats are closed. A slight increase in Controlled Vacuum (Blue) opens the upper seat and closes the lower seat to reduce the Output Pressure (Yellow)

-  Pilot Assembly
-  Output Pressure
-  Controlled Pressure
-  Supply Pressure



0.5 PG OPRV
 CAST IRON
 5, 10, 30 in. Hg Vac



PILOTS AVAILABLE:

CAT. NO.	PILOT	DES. PRESS.	OPER. PRESS.
AHL-2.5	0.2 PG OPRV	175	5 in. Hg Vac
AHL-5	0.5 PG OPRV	175	10 in. Hg Vac
AHL-20	2 PG OPRV	175	30 in. Hg Vac

*These are recommended spare parts and are stocked as repair kits. To order repair kit, specify: "0.5 PG OPRV Repair Kit, RWP".