

### LIQUID DIFFERENTIAL PRESSURE PILOT

### APPLICATION:

The 30 PG LDP-D sends a pneumatic signal when the differential pressure between two wet or dry pressures is less the the desired setting. The signal vents when the difference is higher than the setting.

Pilot may be installed remotely to operate a diaphragm operated motor valve as a liquid differential pressure regulator.

### **FEATURES:**

Single adjustment Filtered gas supply Accurate control Intermittent vent pilot Remote installation

### PRESSURE RANGE:

5 psig to 300 psig

### SUPPLY PRESSURE:

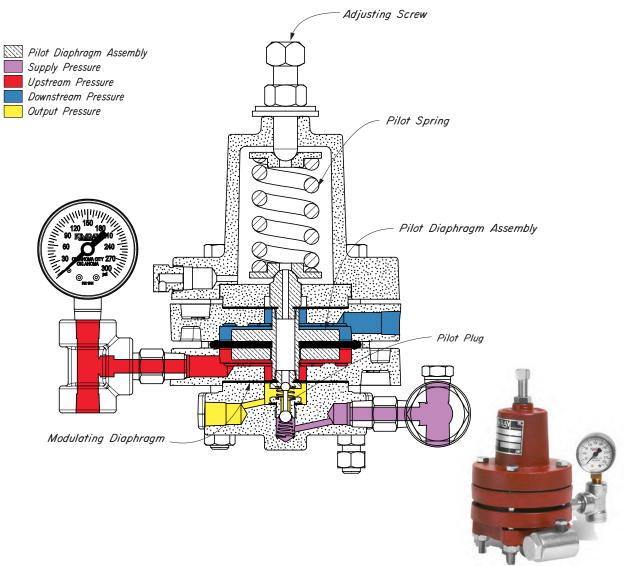
0-300 psig (60% or more of upstream pressure recommended for operating a motor valve)

### **OPERATION:**

The LDP Pilot consists of a PILOT DIAPHRAGM ASSEMBLY which moves without friction to operate a 3 way PILOT PLUG. The Pilot Assembly is supported by the PILOT DIAPHRAGM ASSEMBLY and the MODULATING DIAPHRAGM. The PILOT SPRING and Downstream Pressure (Blue) load the upper side of the Pilot Assembly and is opposed on the underside by the Upstream Pressure (Red) acting on the PILOT DIAPHRAGM ASSEMBLY.

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

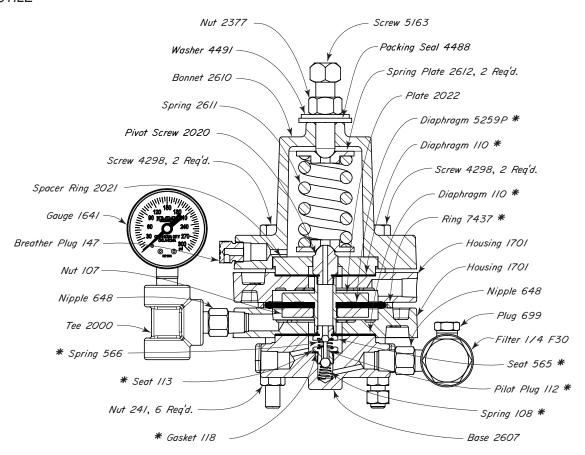
A slight decrease in Downstream Pressure (Blue) or a slight increase in Upstream Pressure (Red) closes the lower seat and opens the upper seat to reduce the Output Pressure (Yellow).



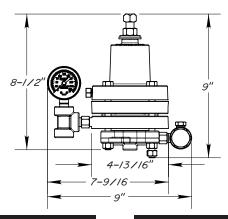
Kimray is an ISO 9001- certified manufacturer.

# KIMRAY \*

# LIQUID DIFFERENTIAL PRESSURE PILOT DUCTILE



# PILOT DIMENSIONS



## PILOTS AVAILABLE:

CAT. NO.	PILOT	MAX W.P.	OPER. PRES.	KIT
AHP	30 PG LDP-D	300	300	RSR

# NOTES:

All openings are tapped ¼" N.P.T.

\*These are recommended spare parts and are stocked as repair