

APPLICATIONS:

Used on 3" HPMV's
 Used for field automation where electrical signals are used to position valve for on-off or precision flow control.

FEATURES:

- Low current consumption
- Valve travel indicator on open yoke design
- Easy field repair
- 1/2" Electrical conduit connection
- Open and Closed valve position contacts

SUPPLY PRESSURE:





30 psig maximum

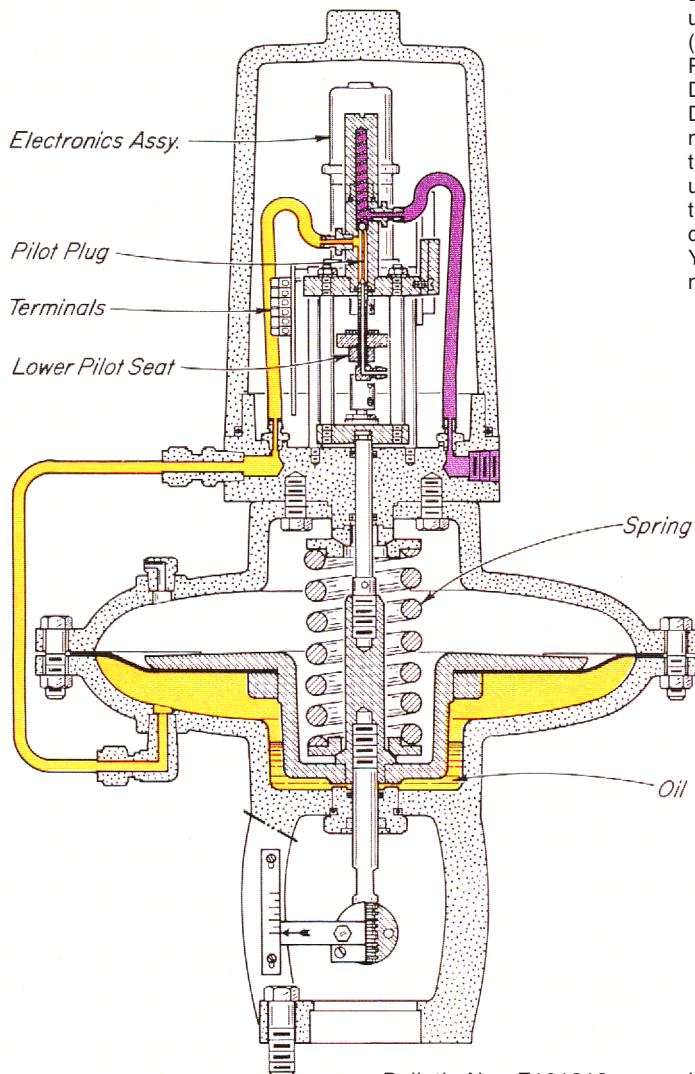
CONTROL VOLTAGE:

±8 to 12 VDC at 200 ma

STEM TRAVEL:

1 3/8" maximum

-  Pilot, Diaphragm and Stem Assembly
-  Lower Pilot Seat
-  Modulated Diaphragm Pressure
-  Supply Pressure

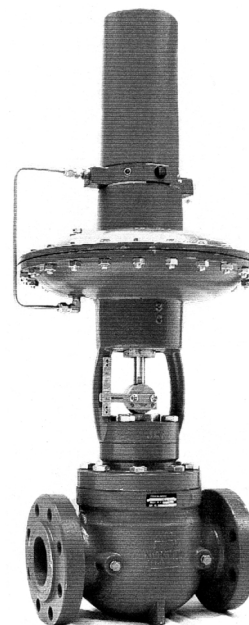


OPERATION:

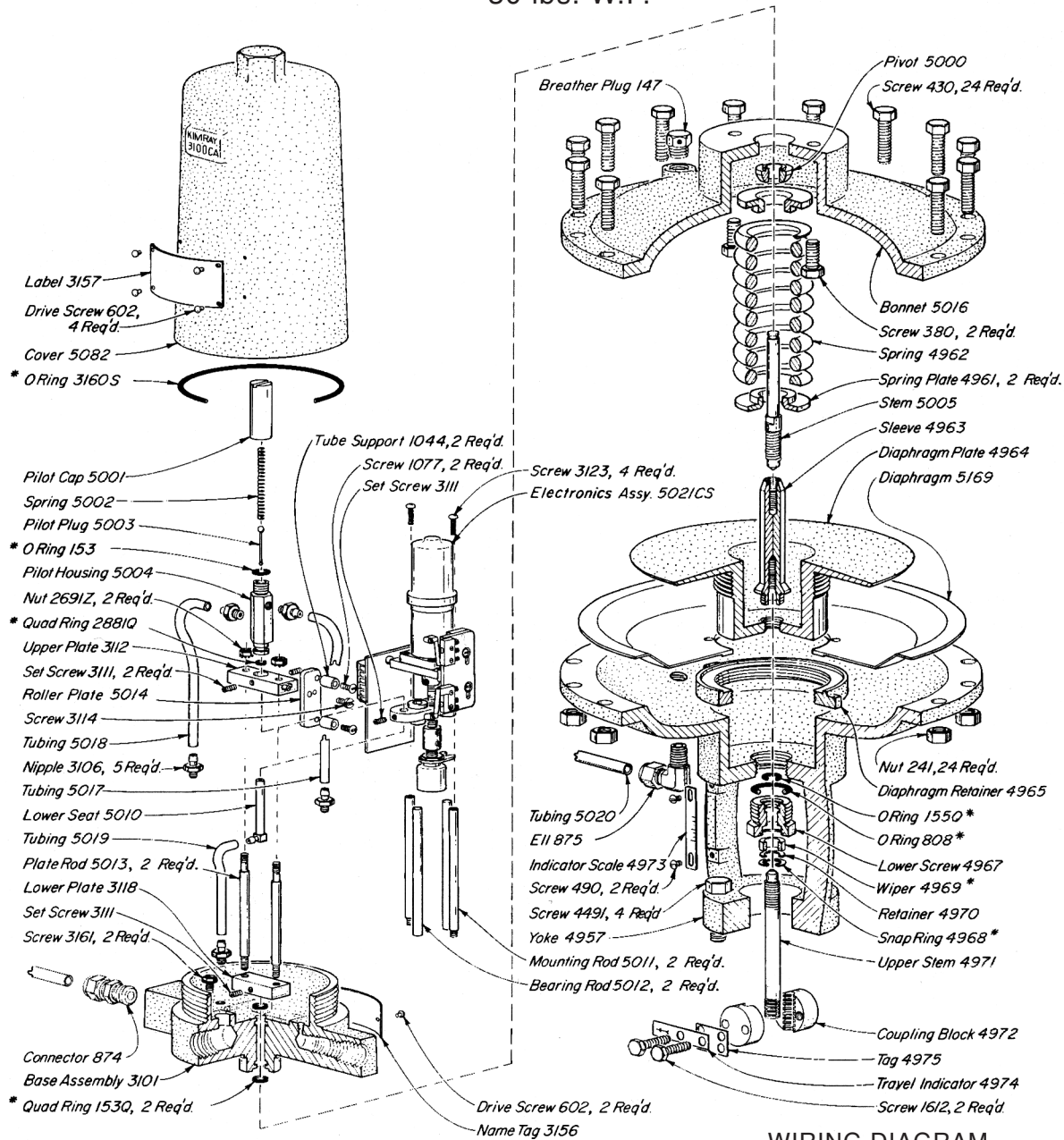
The EPVP consists of a KIMRAY 3" HPMV Topworks fitted with a special bonnet which holds the electro-pneumatic controller. The ELECTRONICS ASSEMBLY positions the LOWER PILOT SEAT (Crosshatched) which actuates the pneumatic pilot on the PILOT, DIAPHRAGM AND STEM ASSEMBLY (Crosshatched). The PILOT PLUG consists of two stainless balls rigidly connected together. The upper seat for the PILOT PLUG is the SUPPLY PRESSURE inlet to the MODULATED DIAPHRAGM PRESSURE (Violet to Yellow). The lower seat for the PILOT PLUG is the MODULATED DIAPHRAGM PRESSURE vent (Yellow to Atmosphere). MODULATED DIAPHRAGM PRESSURE (Yellow) opposes the SPRING to open the valve.

Assume the valve is closed and a positive control voltage is applied, +12 VDC to terminal 4 and ground lead to terminal 5. The ELECTRONICS ASSEMBLY moves the LOWER PILOT SEAT upward to first close the lower seat for the PILOT PLUG (Yellow to Atmosphere), then open the upper seat of the PILOT PLUG (Violet to Yellow). As MODULATED DIAPHRAGM PRESSURE (Yellow) increases, the PILOT, DIAPHRAGM AND STEM ASSEMBLY moves upward to match the movement of the LOWER PILOT SEAT and open the motor valve. When the positive control voltage is removed upward travel of the LOWER PILOT SEAT stops. Upward travel of the PILOT, DIAPHRAGM AND STEM ASSEMBLY continues until the upper seat of the PILOT PLUG (Violet to Yellow) is closed. The valve will stay in this position until a new control voltage is applied.

When a negative, or reversed control voltage is applied, +12 VDC to terminal 4 and ground lead to terminal 5. The ELECTRONICS ASSEMBLY moves the LOWER PILOT SEAT upward to first close the lower seat for the PILOT PLUG (Yellow to Atmosphere), then open the upper seat of the PILOT PLUG (Violet to Yellow). As MODULATED DIAPHRAGM PRESSURE (Yellow) increases, the PILOT, DIAPHRAGM AND STEM ASSEMBLY moves upward to match the movement of the LOWER PILOT SEAT and open the motor valve. When the positive control voltage is removed upward travel of the LOWER PILOT SEAT stops. Upward travel of the PILOT, DIAPHRAGM AND STEM ASSEMBLY continues until the upper seat of the PILOT PLUG (Violet to Yellow) is closed. The valve will stay in this position until a new control voltage is applied.



33 EPVP
DUCTILE
30 lbs. W.P.



WIRING DIAGRAM

ELECTROPNEUMATIC VALVE POSITIONER
AVAILABLE: DUCTILE IRON

CAT. NO.	TOPWORKS	DES. PRESS.	OPER. PRESS.	CONTROL VOLTAGE
EFW	33 EPVP	30	30	±8-12

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

TO OPEN VALVE:
Apply +12 VDC to terminal 4,
and Ground to terminal 5

TO CLOSE VALVE:
Apply +12 VDC to terminal 5,
and Ground to terminal 4.

Terminal 1:
+11-16 VDC

Terminal 2:
Analog Out 1-5V DC

Terminal 3:
Ground

Terminal 6 & 7:
Valve Closed Contacts.

Terminal 7 & 8:
Valve Open Contacts.

