

# VALVES

## Hydraulic

## Pump Mounted

### 3-WAY/2-POSITION MANUAL VALVES

**Applications** – Single-acting cylinders. **Actuation** – Lever operated.

**Functions** – Cylinder piston “advance”, “hold” and “return”.

**Used on these pumps** – P460, PE17, PE21, PE30, PE46, PE55, PE84, PE90, and PE120 series.

**No. 9582** – 3-way/2-position manual valve. Wt. 2.5 lbs.

**No. 9584** – Same as 9582, but has “flipper” control. Wt., 1.8 lbs.

### 3-WAY/2-POSITION, PILOT OPERATED AUTOMATIC VALVE

**Application** – Single-acting cylinders. Actuation: Pilot oil.

**Functions** – When pump is started, pilot oil automatically closes valve and directs oil to cylinder; when pump is stopped, valve automatically opens and oil returns to reservoir. **Used on these pumps** – Furnished with pilot lines and adapters for PA55, PA90, PE30, PE55, PE90 and PE120 series.

**No. 9610** – 3-way/2-position pilot operated automatic valve. Wt., 4.2 lbs.

### 2/3-WAY/2-POSITION MANUAL/PILOT OPERATED AUTOMATIC VALVE

**Application** – Manual operation for load lifting and holding with single-acting cylinders; automatic “dump” for operating hydraulic tools. **Actuation** – Flipper lever/pilot oil. **Functions** – With lever in closed position, valve will hold the load. When lever is “open”, valve functions as a true automatic “dump” valve. **Used on these pumps** – Furnished with pilot lines and adapters for PA55, PA90, PE30, PE55, PE90 and PE120 series. For application on other pumps, consult factory.

**No. 9610A** – 2/3-way/2-position manual/pilot operated automatic valve. Wt., 4.4 lbs.

### 2-WAY/2-POSITION MANUAL VALVE

**Application** – Single-acting cylinders. **Actuation** – Flipper lever operated.

**Functions** – Cylinder piston “advance”, “hold” and “retract”.

**Used on these pumps** – PE172, PA172 and PE84 series.

**No. 9517** – 2-way/2-position manual valve. Wt., 3.2 lbs.

### 3/4-WAY/2-POSITION MANUAL VALVE

**Application** – Single- or double-acting cylinders. **Actuation** – Lever operated, detent positioned. **Functions** – Pos. 1 – Oil is directed to “advance” side of cylinder, oil from “retract” side goes to reservoir; cylinder “holds” with pump shut off. Pos. 2 – Oil goes to “retract” side of cylinder; cylinder “holds” with pump shut off. When using as a 3-way valve for single-acting cylinders, port “A” or “B” is plugged. See note on page 124 regarding plugging of ports and resulting heat build-up.

**Used on these pumps** – P460, PA6D, PA17, PA46, PA55, PA60, PE17, PE21, PE30, PE46, PE55, PE84, PE90, PE120, PE200, PE400, PQ60 and PQ120 series.

**No. 9504** – 3/4-way/2-position manual valve. Wt., 4.2 lbs.

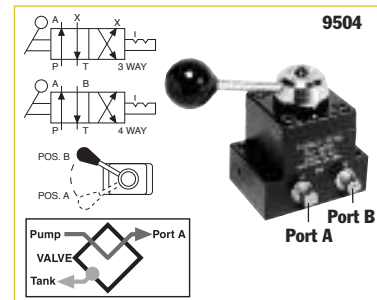
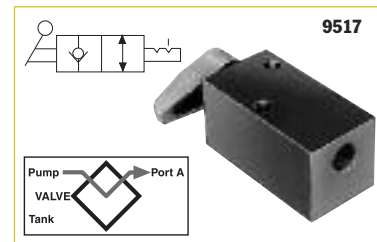
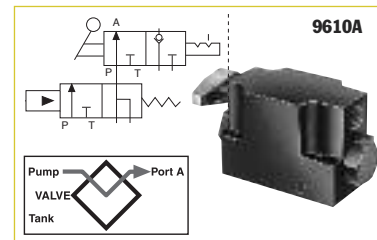
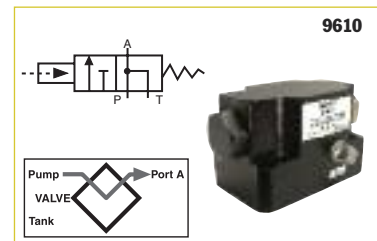
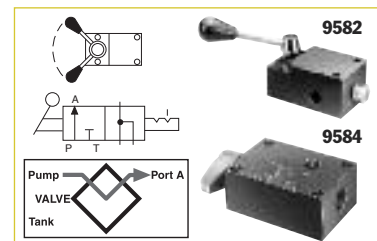
**NOTE:** 9504 can be remote mounted with a 9510 subplate (see page 95).

**NOTE:** A pressure switch and/or gauge may be attached to any valve on this page. (refer to pages 131, 110-111)

**CAUTION:** To prevent sudden, uncontrolled descent of a load as it is being lowered, use a No. 9596 Load Lowering Valve or No. 9720 Counter Balance Valve (see page 118) in conjunction with the directional valve used in your application.

**IMPORTANT:** Conversion kit 251528 must be used when mounting any of the valves on this page on PA17 or PE17 pumps.

**IMPORTANT:** When ordering any valve for a PE30 or PG30 series pump, 1/2" longer mounting screws are required. For valves 9504, 9584, 9610 and 9610A, order four 12001 cap screws. For valve 9582, order two 12001 and two 10856 cap screws.



ACCESSORIES

