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. 1.13 kg.
No. 9584 – Same as 9582, but has “flipper” control. Wt., 0.8 kg.

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

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., 1.9 kg.

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.

Wt., 2 kg.

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., 1.45 kg.

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 “hols” 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 52 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., 1.9 kg.

NOTE: 9504 can be remote mounted with a 9510 subplate (see page 107).

700 bar, 3/8” ports, 19 l/min max flow rate.

NOTE: A pressure switch and/or gauge may be attached to any valve on this page. (refer to pages 117, 124-125)

⚠️ CAUTION: To prevent sudden, uncontrolled descent of a load as it is being lowered, use a No. 9586 Load Lowering Valve or No. 9720 Counter Balance Valve (see page 132) in conjunction with the directional valve used in your application.

IMPORTANT: Conversion kit 251538 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.
Valves

HYDRAULIC PUMP MOUNTED

3 Way/3 Position
Manual

700 bar, 3/8” ports, 19 l/min max flow rate.

3-WAY/3-POSITION (CLOSED CENTER) NON-INTERFLOW MANUAl VALVE WITH “POSI-CHECK®”

Application – Single-acting cylinders.
Actuation – Lever operated, detent positioned.
Functions – Pos. 1 – Oil is directed from pump to cylinder and “holds” with pump shut off; line to reservoir is blocked. Pos. 2 – All oil is open to reservoir through tank line.
Center pos. – Cylinder pressure is held; pump should be shut off.
Used on these pumps – P460, PA17, PA46, PA55, PA60, PE17, PE21, PE30, PE46, PE55, PE84, PE90, PE120, PE200, PE400, PG30, PG55, PG120 and PG400 series.
NOTE: A pressure switch and/or gauge may be attached if desired (see pages 124-125, 117). Also, the 9502 can be remote mounted if a 9510 subplate is used (see page 117).
No. 9502 – 3-way/3-position (closed center) manual valve. Wt., 1.9 kg.

3-WAY/3-POSITION (TANDEM CENTER) MANUAl VALVE WITH “POSI-CHECK®”

Application – Single-acting cylinders.
Actuation – Lever operated, detent positioned.
Functions – “Advance” “hold” and “return”. When shifted to “return” position, pump and cylinder return oil through their own separate return lines, allowing faster retraction of piston. The “Posi-Check®” feature guards against pressure loss when shifting from “advance” to “hold” position.
Used on these pumps – P460, PA17, PA46, PA55, PE17, PE21, PE30, PE46, PE55, PE84, PE90, PE120, PQ60, PQ120, PE200, PE400, PG30, PG55, PG120 and PG400 series.
No. 9520 – 3-way/3-position (tandem center) manual valve. Wt., 2.3 kg.

3-WAY/3-POSITION (TANDEM CENTER) METERING VALVE

Application – Single-acting cylinders.
Actuation – Lever operated.
Functions – Cylinder piston metered “advance”, “hold” and metered “return”.
Used on these pumps – PA17, PA46, PA55, PE17, PE21, PE30, PE46, PE55, PE84, PE90, PE120, PQ60, PQ120, PE200, PE400, PG30, PG55, PG120 and PG400 series.
NOTE: A pressure switch and/or gauge may be attached if desired see pages 124-125, 117). Also, the 9576 can be remote mounted with a 9510 subplate (see page 117).
No. 9576 – 3-way/3-position (tandem center) metering valve. Wt., 3.9 kg.

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 132) in conjunction with the directional valve used in your application.
NOTE: Valves 9501, 9502, 9504 and 9507 can have a port blocked or have a closed center position. When a port is blocked and the valve is shifted to the blocked port, the pump will generate excessive heat. An electric or rotary air pump can either be turned off manually or with a pressure switch. Reciprocating air pumps may be adjusted to stall out and stop.
NOTE: Gauge ports monitor pump pressure only, not pressure to the hydraulic cylinder(s).
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 9502 and 9520, order four 12001 cap screws. For valve 9576, order four 17428 cap screws.
4-WAY/3-POSITION (TANDEM CENTER) VALVE WITH “POSI-CHECK®”

Application – Double-acting cylinders.
Actuation – Lever operated, detent positioned.
Functions – “Advance”, “hold” and “return”. The “Posi-Check®” feature guards against pressure loss when shifting from “advance” to “hold” position.

Used on these pumps – P460, PA6D, PA17, PA46, PA55, PE17, PE21, PE30, PE46, PE55, PE84, PE90, PE120, PE200, PE400, PED, PG30, PG55, PG120, PG400, PQ60 and PQ120 series

No. 9506 – 4-way/3-position (tandem center) manual valve. Wt., 2.3 kg.

4-WAY/3-POSITION (TANDEM CENTER) AND (OPEN-CENTER) MANUAL VALVES

Application – Single- or double-acting cylinders.
Actuation – Lever operated, detent positioned.
Functions – The 9500 provides “advance”, “hold” and “return”. The 9511 (open center) valve can be used if holding is not a requirement, as when running two separate hydraulic tools. Provides “advance” and “return” only.

Used on these pumps – P460, PA17, PA46, PA55, PE17*, PE21, PE30, PE46, PE55, PE84, PE90, PE120, PE200, PE400, PG30, PG55, PG120, PG400, PQ60 and PQ120 series.  *Does not mount without 251528

No. 9500 – 4-way/3-position (tandem center) manual valve. Wt., 1.9 kg.
No. 9511 – Same as 9500, except has an open center.

4-WAY/3-POSITION (CLOSED CENTER) MANUAL VALVE WITH “POSI-CHECK®”

Application – Single- or double-acting cylinders.
Actuation – Lever operated, detent positioned.
Functions – Similar to 9506, but is a closed center valve with “Posi-Check®”. Generally used to operate multiple cylinders with a single pump. Provides “advance”, “hold” and “return”. The “Posi-Check®” feature guards against pressure loss when shifting from the “advance” to “hold” position. See note on page 46 regarding plugging of ports and resulting heat build-up.

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

No. 9507 – 4-way/3-position (closed center) manual valve. Wt., 2.3 kg.

4-WAY/3-POSITION (CLOSED CENTER) MANUAL VALVE

Application – Single- or double-acting cylinders.
Actuation – Lever operated, detent positioned.
Functions – “Advance”, “hold” and “return”. Closed center design makes valve suitable for operating multiple cylinders from a single pump. See note on page 52 regarding plugging of ports and resulting heat build-up.

Used on these pumps – P460, PA17, PA46, PA55, PA60, PE17, PE21, PE30, PE46, PE55, PE84, PE90, PE120, PE200, PE400, PQ60 and P120 series.

No. 9501 – 4-way/3-position (closed center) valve. Wt., 1.9 kg.

NOTE: A pressure switch and/or gauge may be attached to valves 9500, 9501, 9506, 9511 if desired (see pages 124-125, 117). Also, all valves on this page may be remote mounted with a 9510 subplate (see page 117).