

Directional Valves

Hydraulic symbols use letters for port identification while pneumatic symbols use numbers.

Description	Explanation	Symbol
2/2 NO - Two port, two position, solenoid control with spring return	2 distinct positions, 2 active full flow ports, spring offset, pressure port is open to work port in the at-rest position for normally open (NO) operation, solenoid actuated.	
3/2 NC - Three port, two position, electrical control with spring return	2 distinct positions (either power P to port A or port A to tank port), 3 active full flow ports, spring offset to normally closed (NC) from P to A in the at-rest position, solenoid actuated.	
4/2 NC - Four port, two position, electrical control with spring return	2 distinct positions, 4 active full flow ports, spring offset to normally closed (NC) in the at-rest position, solenoid actuated.	
4/3 Closed center - Four port, three position, direct solenoid controlled with spring centering	3 distinct positions, 4 active full flow ports, spring centered to a closed center in the at-rest position, solenoid actuated.	
4/3 Float center - Four port, three position	Same as above, except work ports A and B are open to exhaust port T in the neutral position.	
4/3 Open center - Four port, three position	Same as 4/3 Closed center, except all the ports are open to exhaust port T in the neutral position.	
4/3 Tandem center - Four port, three position	Same as 4/3 Closed center, except only the pressure P port is open to exhaust port T in the neutral position, ports A and B are blocked.	
4/3 Closed center, with dual proportional electrical controls	Same as 4/3 Closed center, except the arrows through the solenoids indicate proportional control, providing infinite positioning as indicated by the two parallel lines along the length of the symbol.	