

Logic Function	Truth Table	Logic Graphical Symbols	Pneumatic Symbols	Electrical Symbols															
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MEMORY (Flip-Flop)																			

Operation of Valves

Manual Operation	Mechanical	Pneumatic	Electrical
General symbol	Plunger	Spring button valve	Pneumatic
Push button or knob	Roller tappet	Ball valve	Electrical
Lever	Roller and lever	Throttle valve	Electrical, hand-assisted, Pivot operation, automatic control
Pedal	Spring	Line throttle valve	Electrical, external control
	Detent, maintains specified position	Pneumatic Spring	Electrical, spring centred
		Pneumatic and mechanical Springs	

Compressed air production and conditioning	Flow valves	Pressure valves	Stop (check) valves
Air pressure source	Flow control valve, adjustable	Pressure regulator valve	Check valve, Spring loaded
Air service unit	Flow control valve with direct exhaust	Pressure relief valve	Non-return check valve, lockable
Filter	Throttle check valve, adjustable	Pressure switch	Twin pressure valve (logical AND)
Filter with water trap			Shuttle valve (logical OR)
Filter with automatic water trap			Rapid exhaust valve
Mist Lubricator			

Control valves	Cylinder	Other Symbols
2/2 Control valve	Single-acting cylinder, spring return	Silencer
3/2 Control valve, Neutral position closed	Double-acting cylinder with singlepiston rod	Pressure indicator
3/2 Control valve, Flow-through in neutral position	Double-acting cylinder with non-contact signal source	Pressure gauge
4/2 Control valve	Double-acting cylinder with adjustable stroke cushioning at both ends	Differential pressure gauge
5/2 Control valve, Flow-through possible in both directions	Double-acting cylinder with non-contact signal source and end cushioning	Air receiver
5/3 Control valve, Mid position closed	Double-acting cylinder with double-ended piston rod	Stop (check) valve
	Double-acting cylinder without piston rod	Direct air exhaust
		Separate air exhaust
		Rotary drive