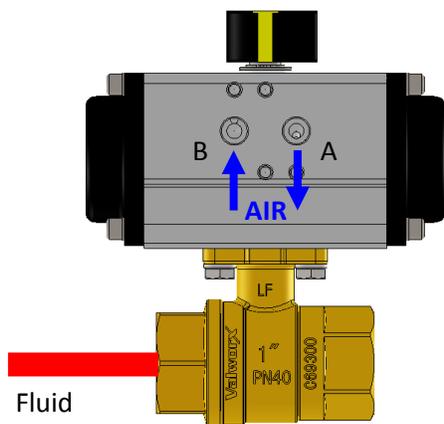


How Does it Work?

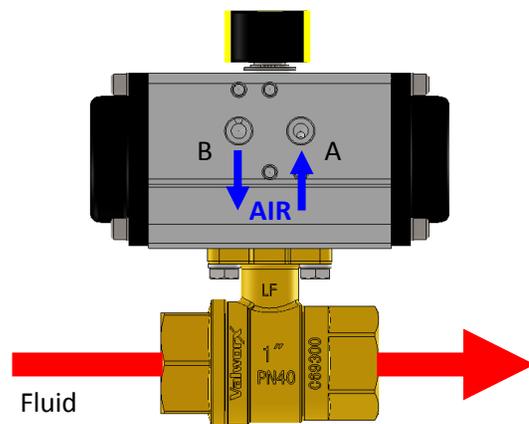
Double Acting vs. Spring Return Air Actuated Valves

This document explains the functional difference between Valworx double acting and spring return air actuated valves. Double acting (DA) actuators need air pressure to open and air pressure to close the valve. DA actuators are typically controlled by a 4-way 2-position pilot solenoid valve. Spring return (SR) actuators need air pressure to open, but use mechanical springs to close the valve when pilot pressure is exhausted (failsafe). SR actuators are typically controlled by a 3-way NC, 2-position pilot solenoid valve. For convenience, Namur pilot solenoid valves can be direct mounted to the side of the actuator.

Double Acting

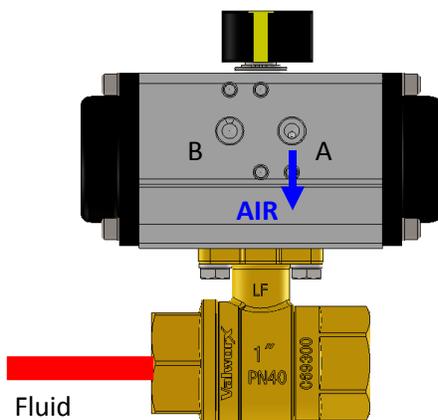


Valve CLOSED when pilot air pressure is supplied to port 'B' and port 'A' exhausted

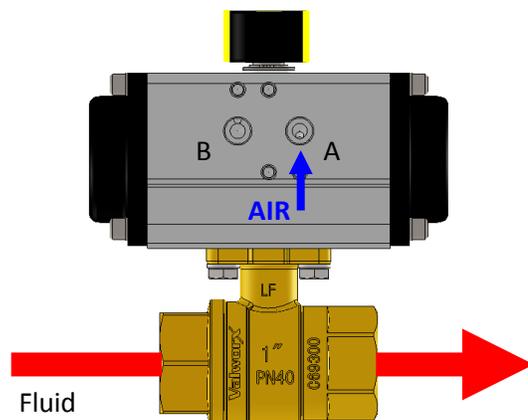


Valve OPEN when pilot air pressure is supplied to port 'A' and port 'B' exhausted

Spring Return



Valve CLOSED by springs when port 'A' pilot air is exhausted



Valve OPEN when pilot air pressure is supplied to port 'A'

Notes: Standard 2-way air actuated spring return valves are setup to fail closed with loss of pilot pressure. As an option, valves can also be setup to fail open with loss of pilot pressure. Actuator port 'B' is provided, but not used with spring return actuators (do not plug).