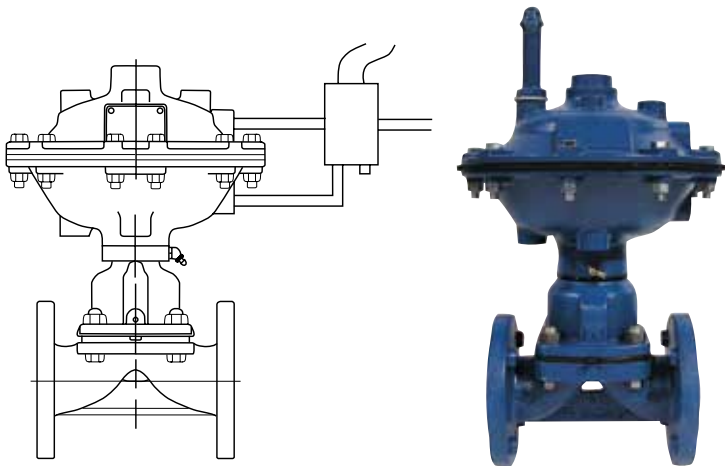


# Actuator Series

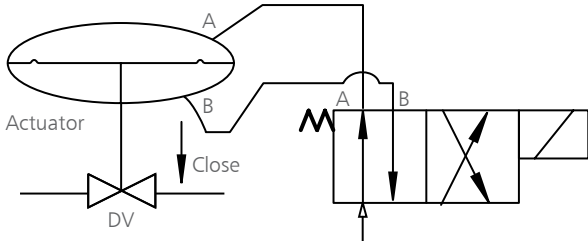
## 3300 Series

### Double Acting (Air-to-Close, Air-to-Open)

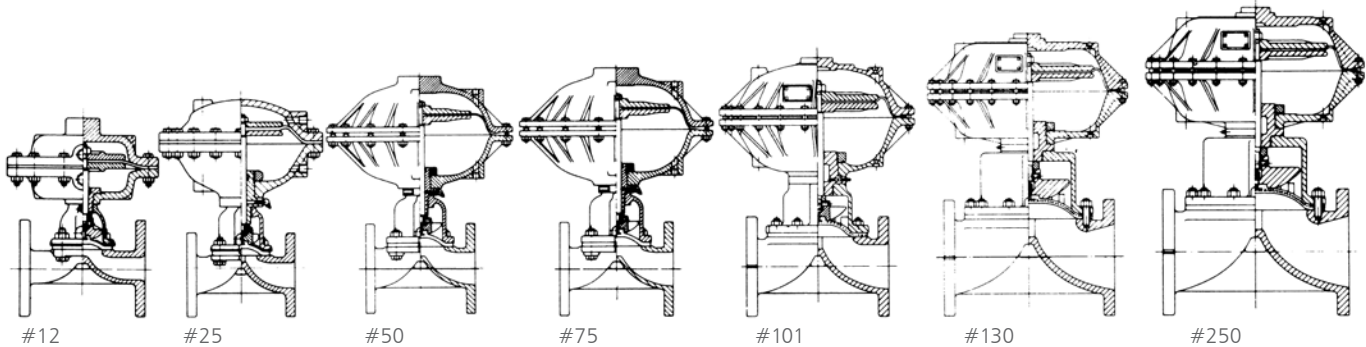
This type of actuator is similar in functionality as a double acting piston cylinder. Operation is via a 4 way, 2 position (4/2) solenoid valve. Standard set-up is valve closed when solenoid valve is de-energized and opens when energized. There is no fail position unless provided with an auxiliary source of air supply. Note that diaphragm valves will tend to open when line pressure is present.



Piping Schematic  
for 4/2 Solenoid Valve



Double-acting (air-to-close, air-to-open) Dia-Flo® actuators are available in seven diaphragm sizes: #12, #25, #50, #75, #101, #130 and #250.



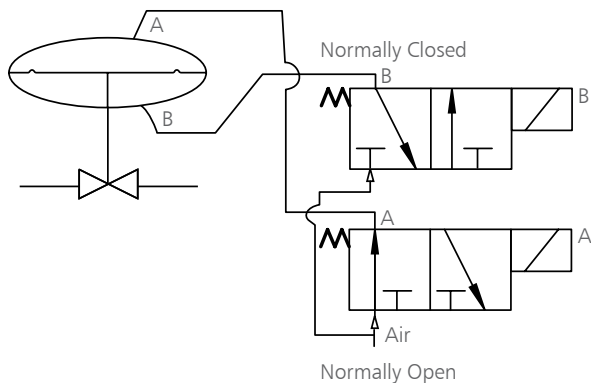
# Actuator Series

## 3300 Series

### Double Acting (Air-to-Close, Air-to-Open)

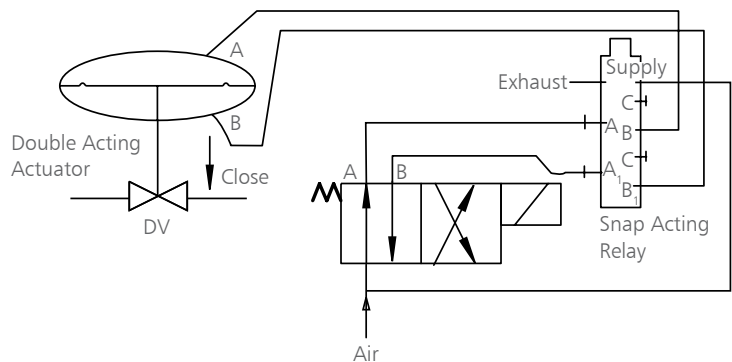
Alternatively, the valve can be controlled by means of two 3 way, 2 position (3/2) solenoid valves in lieu of one 4 way, 2 position (4/2) solenoid valve. In this arrangement, one solenoid valve is allowing air to one side of actuator chamber and the other solenoid valve is venting trapped air from the other chamber via the exhaust port.

### Piping Schematic for Two (2) 3/2 Solenoid Valves



### Piping Schematic for 4/2 Solenoid Valve with Auxiliary Air Pressure

In this schematic, snap acting relay is added to the control circuit and utilizing the normal air supply for pilot pressure source. This arrangement can be used to lock the actuator in its last position in the event of loss of pilot pressure but the auxiliary air source port will be plugged.



Note: We recommend use of dedicated air filter-regulator for each valve assembly because of different supply air pressure requirements.

This will extend valve diaphragm service life and keep speed of operation of valve unaffected by the fluctuating of supply air pressure.