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Assembly and Disassembly Procedures for Manual and Air Actuated Valves

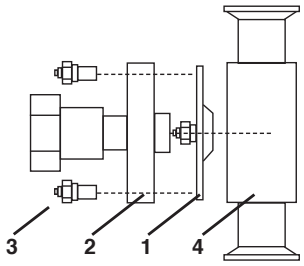
Manual Valve Assembly & Disassembly

1. Rotate knob counterclockwise until valve is in the full open position. A yellow band will be visible.
2. Remove the four socket head screws (3) that secure the actuator housing (2) to the valve body (4). Remove the actuator with diaphragm (1) from the valve body.
3. Rotate knob clockwise until the yellow band is no longer visible. Unthread diaphragm from actuator shaft. Hold outer edge of diaphragm while unthreading so the diaphragm does not become contaminated with foreign material.
4. To reassemble, hold the outer edge of the diaphragm and thread it into the extended actuator shaft by rotating the diaphragm clockwise until snug.

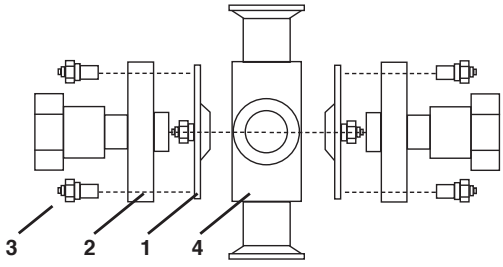
DO NOT OVERTIGHTEN. It is important there be no visible gap between the end of the actuator shaft and the diaphragm. Caution: Be sure the actuator shaft has not been extended beyond its housing. The shaft must remain captured by the housing so as not to rotate.

5. Rotate knob counterclockwise until yellow band is visible. Mount manual actuator with diaphragm onto the valve body, being careful to place the diaphragm in the diaphragm seat. The diaphragm should fit very snugly in the valve body recess. Tighten mounting screws in an alternating pattern until snug, then tighten screws to the final torque specified below.

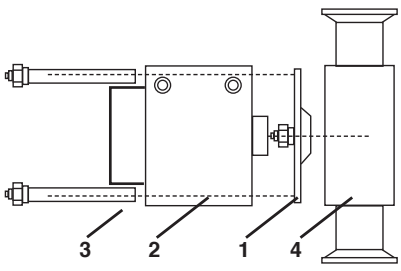
Item	2-way qty	3-way qty	Description	Valve size/part number				
				1/4″, 1/2″	3/4″	1″	1 1/2″	2″
1	1	2	Teflon diaphragm	570006	570110	570016	570120	570498
1	1	2	EPDM diaphragm	570268	570288	570290	570292	Ø
2	1	2	Manual actuator	50MA	75MA	100MA	150MA	200MA
3	4	8	Screws/ Torque	10-32x5/8″ 35 in-lbs	1/4-20x5/8″ 75 ft-lbs	5/16-18x1 3/4″ 17 ft-lbs	3/8-16x1 3/4″ 22 ft-lbs	3/8-16x1 3/4″ 22 ft-lbs
4	1	1	Valve body	As per valve body code				



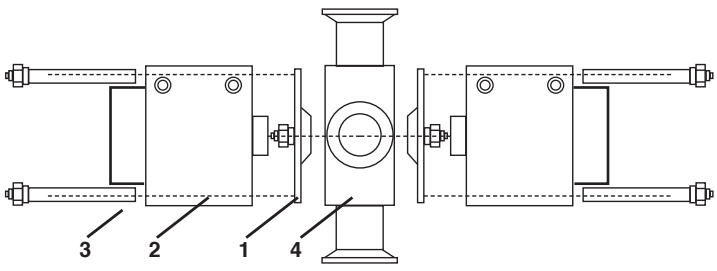
Two-way manual valve



Three-way manual valve



Two-way pneumatic valve



Three-way pneumatic valve

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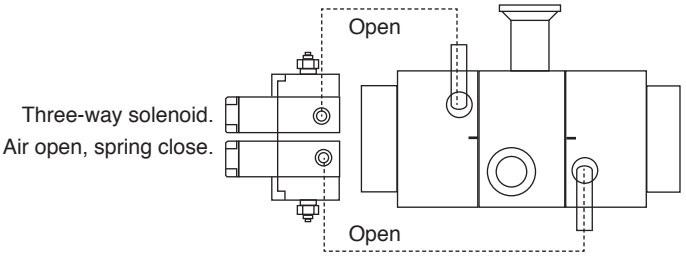
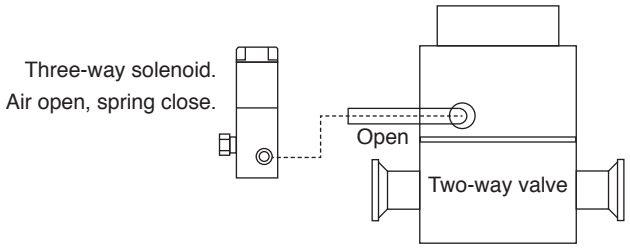
Pneumatic Valve Assembly & Disassembly

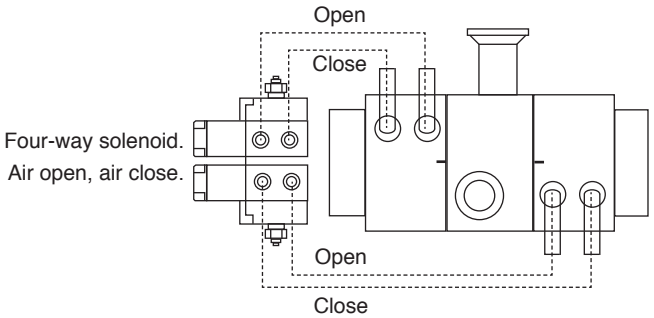
1. Do not remove air lines from the pneumatic actuator.
2. The diaphragm is under spring pressure when closed, therefore, the air line must be kept under pressure to hold the valve in the open position while removing the actuator housing. Remove the four socket head screws (3) that secure the actuator housing (2) to the valve body (4). Remove actuator with diaphragm (1) from the valve body.
3. Release air pressure so actuator is in relaxed position. Unthread diaphragm from actuator shaft. Hold outer edge of diaphragm while unthreading so that the diaphragm does not become contaminated with foreign material.
4. To reassemble, hold the outer edge of the diaphragm and thread it into the extended actuator shaft by rotating the diaphragm clockwise until snug. **DO NOT OVERTIGHTEN**. It is important there be no visible gap between the end of the actuator shaft and the diaphragm.
5. Be sure the air line is connected and under pressure to hold the valve shaft in the open position. Mount pneumatic actuator with diaphragm onto the valve body, being careful to place the diaphragm in the diaphragm seat. The diaphragm should fit very snugly in the valve body recess. Tighten mounting screws in an alternating pattern until snug, then tighten screws to the final torque specified below.

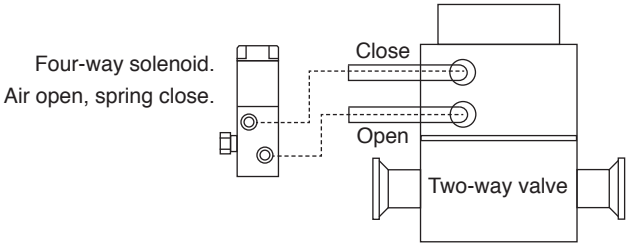
Item	2-way qty	3-way qty	Description	Valve size/part number				
				1/4″, 1/2″	3/4″	1″	1 1/2″	2″
1	1	2	Teflon diaphragm	570006	570110	570016	570120	570498
1	1	2	EPDM diaphragm	570268	570288	570290	570292	Ø
2	1	2	Air actuator	50AA	75AA	100AA	150AA	200AA
3	4	8	Screws/ Torque	10-32x1 3/4″ 35 in-lbs	1/4-20x2″ 75 ft-lbs	5/16-18x3″ 17 ft-lbs	3/8-16x3″ 22 ft-lbs	3/8-16x3″ 22 ft-lbs
4	1	1	Valve body	As per valve body code				
Pneumatic requirements*			Port size	1/8 NPT	1/8 NPT	1/4 NPT	1/4 NPT	1/4 NPT
			CFM open	.375 in^3	1.40 in^3	3.00 in^3	6.00 in^3	9.40 in^3
			CFM close	.550 in^3	2.90 in^3	5.45 in^3	13.0 in^3	17.8 in^3

*Required air supply 80 psi. Multiported valves require a solenoid operating valve for each actuator.









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