



# Pneumatically-Operated Packless Valves

## APPLICATIONS:

- Fail safe operation for either open or close position.
- Automated instrument and process systems.
- For inaccessible areas where manual operation is not possible.
- Hazardous gas or liquid handling where remote control is mandatory.

## TECHNICAL DATA:

Maximum Ambient Temperature	
with Neoprene diaphragm	165°F, 75°C
with Silicone diaphragm	350°F, 175°C
Actuating Pressure Range	18 to 100 PSIG
Effective Diaphragm Area	4.5 sq. inches
Air Port	1/8" NPT Female

## MATERIALS OF CONSTRUCTION

Diaphragm	Neoprene or Silicone
Housing	Aluminum
Piston Rod	Brass
Mounting Nut	Brass

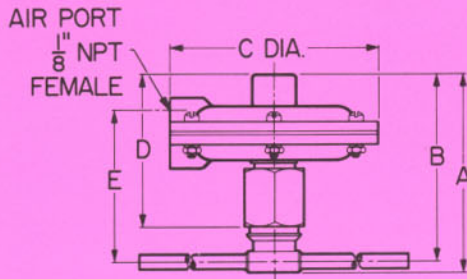
## ORDER BY MODEL NUMBER

Connections	Flow Pattern	Brass	Monel	Cv Factor
1/4 NPT Female	straight	4551F2B	—	.21
1/4 O.D. tube extensions	straight	—	4551Q4M	.21
1/4 O.D. tube extensions	straight	4551Q4B	—	.23
1/4 O.D. tube extensions	angle	—	4561Q4M	.23
1/4 O.D. tube extensions	tee	—	4581Q4M	.23
3/8 O.D. tube extension	straight	—	4551Q6M	.70

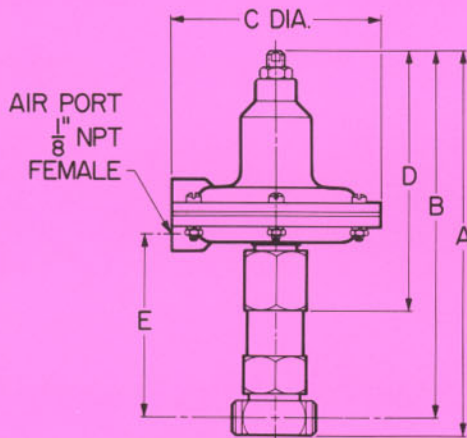
Please see packless valve catalog for complete details.  
See page 13 for 4212 and 4251 series valves.

## DIMENSIONS

Operator Type	Operator Number	A	B	C	D	E
Air to Open	0467A4G 0467C4J 0467A4J 0467C4H	6 1/32	6 3/32	3 29/32	4 3/32	3 1/32
	0467A4H 0467A4H4	4 7/8	4 11/16	3 29/32	4 3/32	2
Air to Close	0477C4G 0477A4G	5 1/16	4 3/4	3 29/32	2 13/16	4 1/32
	0477A4H	3 19/32	3 13/32	3 29/32	2 13/16	2 1/16



**ACTUATOR 0477A4H  
WITH VALVE 4551Q4B**



**ACTUATOR 0467A4J  
WITH VALVE 4251F4Y**

## ORDER BY MODEL NUMBER

AIR TO OPEN		AIR TO CLOSE		PRESSURE TO OPEN OR CLOSE VALVE	FOR USE WITH VALVE SERIES
Neoprene Diaphragm	Silicone Diaphragm	Neoprene Diaphragm	Silicon Diaphragm		
0467A4J	0467C4J	—	—	60	4212 & 4251 Bellows Valves
—	—	0477A4G	0477C4G	35*	
0467A4H	0467C4H	—	—	18	4500 Series
—	—	0477A4H**	0477C4H**	25	4500 Series
0467A4H4	—	—	—	20	4551Q6M

\* For soft seated valves only. Metal seated valves limited to 400 psi system pressure. Up to 100 psi actuator pressure can be safely used.

\*\* System pressure must be more than 10 psi to fully open valve.



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## TECHNICAL DATA:

Actuating Pressure Range  
at 70°F ..... 45 to 120 PSIG

Temperature Range of  
Actuating Media ..... - 40° to 160 °F,  
- 40 °C to 70 °C

Piston Stroke ..... 0.130"

Effective Diaphragm Area ... 5.50 sq. inches

Weight (Approx.) ..... 5 lbs.

Connections ..... 1/4" NPT Female (Air to Open)  
1/8" NPT Female (Air to Close)

### MATERIALS OF CONSTRUCTION

Diaphragm & O-Ring	Buna-N
Housing	Aluminum
Piston Rod	303 SS
Yoke	Cast iron cadmium plated

		ORDER BY MODEL NUMBER			
Inlet & Outlet Connections		316 Stainless Heavy Wall Bellows	Cv Factor	Operating Pressure (PSI)	Temperature Range
Pipe Ended Models	1/8" NPT Female	4251F2Y	.36	500 @ 350°F	-65° to 350°F
	1/4" NPT Female	4212F4Y	.33	2000 @ 600°F	-320° to 600°F
	Gasket Sealed	4251F4Y	.36	500 @ 350°F	-65° to 350°F
Gyrolok	1/4" Gyrolok tube fitting	4251G4Y	.36	500 @ 350°F	-65° to 350°F
		4212G4Y	.33	2000 @ 600°F	-320° to 600°F
Socket Welded Models	3/8" OD Socket Weld	4251N6Y	.36	500 @ 350°F	-65° to 350°F
		4212N6Y	.33	2000 @ 600°F	-320° to 600°F
3" Tube Ext. Socket Welded To Body	3/8" OD 3" tube extension	4213Q6Y	.33	2000 @ 600°F 400 @ 900°F	-320° to 900°F
	Socket welded to body	4235Q6Y	.33	2000 @ 600°F 250 @ 1200°F	-320° to 1200°F

Please see packless valve catalog for complete details.

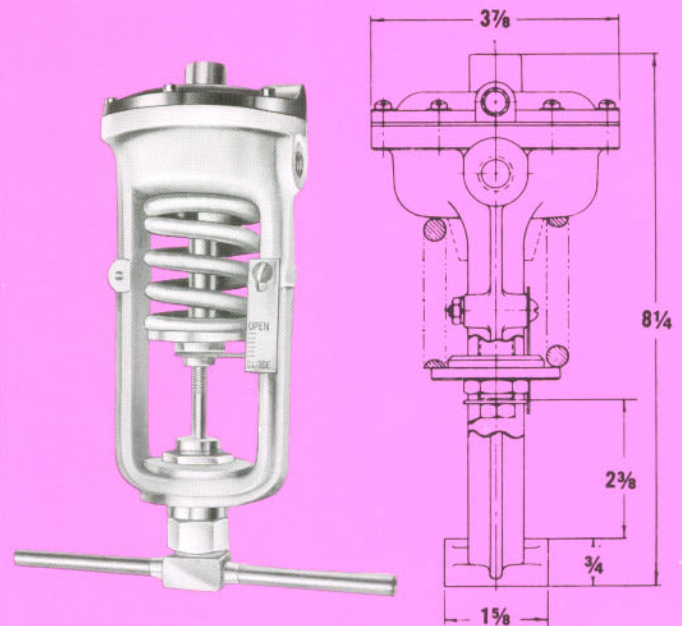
ORDER BY MODEL NUMBER			
Air to Open	Air to Close	For Use With Valve Series	Mounting Kit No.
0467A5B	0477A4B	4212/4213/4251	0400K4200
0467A5A	0477A4A	4235	0400K5

## HOW TO ORDER

To order a valve-actuator combination, specify the valve model number followed by the actuator number.

Example: Valve 4251F2Y with Actuator 0467A5B.

Note: This valve/actuator combination cannot be field assembled.

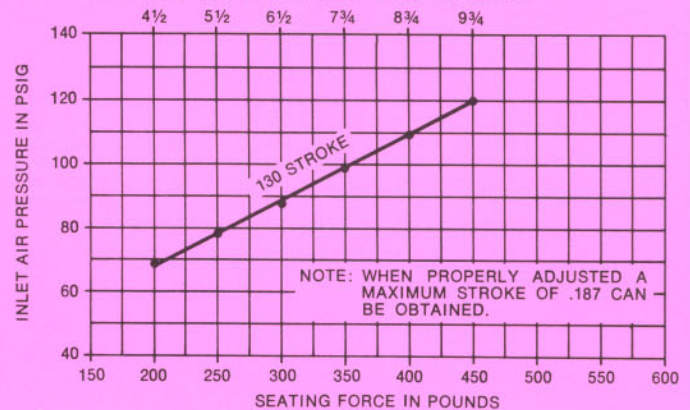


**ACTUATOR 0467A5A  
WITH VALVE 4235Q6Y**

## Air to open (spring to close)

### Inlet Air Pressure vs. Seating Force

NUMBER OF TURNS REQUIRED FOR COMPRESSION



## Air to close (spring to open)

### Inlet Air Pressure vs. Seating Force

