



1-Pc. and 3-Pc. Polypropylene Bolted Ball Valves

Fiberglass-reinforced bolted valves for heavy-duty industrial applications. PTFE seats allow free movement of self-aligning, diamond-tuned polypropylene ball for precise alignment. Self-lubricating PTFE stem, bushings, and ball seats won't stick or bind. With FKM seals. FNPT connections. For use in fluid-handling applications with fertilizer, herbicides, and insecticides, as well as with industrial acids, solvents, liquid waste, wastewater, and cooling water.

2-WAY

- Max. temp.: 150°F
- 3-pc. valve structure

3-WAY

- Max. pressure: 100 psi
- Temp. range: -20° to 150°F
- 1-pc. valve structure

Full-port, right or left directional flow valves. Bottom-load valves can be turned off to stop flow. Side-load valves cannot be turned off.

Pipe Size	Port	Max. Pressure	Item No.	2-Way	3-Way Bottom Load	3-Way Side Load
				Max. Pressure	Max. Pressure	Max. Pressure
1/2"	Standard	150 psi CWP	1MKK1	—	150 psi CWP	100 psi CWP
3/4"	Full	—	—	—	3DTF3	3DTF8
1"	Standard	150 psi CWP	1MKK2	—	150 psi CWP	100 psi CWP
1 1/4"	Full	150 psi CWP	1MKK3	—	3DTF4	3DTF9
1 1/2"	Standard	150 psi CWP	1MKK4	—	3DTF5	3DTG1
2"	Full	150 psi CWP	1MKK5	—	3DTF6	3DTG2
2 1/2"	Standard	150 psi CWP	1MKK6	—	—	—
3"	Full	150 psi CWP	1MKK7	—	100 psi CWP	3DTG3
3 1/2"	Standard	150 psi CWP	1MKK8	—	—	—
4"	Full	100 psi CWP	1MKK9	—	—	—
4 1/2"	Standard	75 psi CWP	—	—	—	—



Actuated Ball Valves

- Valve temp. range: -20° to 400°F
- Compact, direct-mount valves provide accurate alignment.
- Anticorrosive coating. RTFE seats.
- 3-way models are ideal for diverter-type applications; 3-pc. models permit easy in-line maintenance. All valves have NEMA 4X enclosures.

PNEUMATIC

- Actuator inlet pressure: 80 psi or greater
- Actuator temp. range: -4° to 176°F
- Excellent for continuous rapid cycling or hazardous conditions. Hard anodized aluminum housing. Integral 120VAC, 60 Hz, NAMUR-mount solenoid with three 1/4" NPT ports.

ELECTRONIC

- Actuator temp. range: -15° to 140°F
- Feature reversible motors, terminal strip, manual override, and a hardened precision gear train. 1/2" to 2" can be wired in parallel. 50% duty cycle. 3" have 2 extra SPDT limit switches, 30% duty cycle. General cycle times: 2 1/2 sec. for 1/2" to 1"; 6 1/2 to 15 sec. for 2"; 15 to 22 sec. for 3". The 12-24VAC/VDC models do not have a manual override.

Pneumatic Actuated Ball Valve					
Pipe Size	Max. Pressure	Double Acting Item No.	Spring Return Item No.	Spring Return - Fail Close Item No.	
316 Stainless Steel, Full Port, 2-Piece, Inline, FNPT					
1/2 in	1000 psi CWP	—	4TL09	—	
1/2 in		4TL06	4TL10	—	
3/4 in		4TL07	4TL11	—	
1 in		4TL08	4TL12	—	
1 1/2 in		4YM64	4YM66	—	
2 in		4YM65	4YM67	—	
Brass, Standard L Port, 1-Piece, Three-Way, FNPT					
1/2 in	400 psi CWP	—	—	1AWK9	
3/4 in		—	—	1AWL1	
1 in		1AWK2	—	1AWL2	
1 3/4 in		—	—	1AWL3	
1 1/2 in		—	—	1AWL4	
2 in		1AWK5	—	1AWL5	
3 in	1AWK6	—	—	—	
Bronze, Full Port, 3-Piece, Inline, FNPT					
1/2 in	600 psi CWP	3TPH3	—	3TPJ2	
3/4 in		3TPH4	3TPJ3	—	
1 in		3TPH5	3TPJ4	—	
1 1/2 in		—	3TPJ6	—	
2 in		3TPH8	3TPJ7	—	
Forged Brass, Full Port, 2-Piece, Inline, FNPT					
1/2 in	600 psi CWP	6CX04	6CX10	—	
3/4 in		6CX05	6CX11	—	
1 in		6CX06	—	6CX12	
1 1/4 in		6CX07	6CX13	—	
1 1/2 in		6CX08	6CX14	—	
Lead Free Brass, Full Port, 2-Piece, Inline, FNPT					
1/2 in	600 psi CWP	46Z612	46Z617	—	
3/4 in		46Z613	46Z618	—	
1 in		46Z614	46Z619	—	
1 1/4 in		46Z615	—	—	
1 1/2 in		46Z616	46Z621	—	
2 in		6CX09	6CX15	—	
3 in	1AWJ5	—	1AWJ6	—	
Stainless Steel, Full Port, 3-Piece, Inline, FNPT					
1/4 in	1000 psi CWP	1AWP1	—	1AWR1	
3/8 in		1AWP2	—	1AWR2	
1/2 in		1AWP3	—	1AWR3	
3/4 in		1AWP4	—	1AWR4	
1 in		1AWP5	—	1AWR5	
1 1/4 in		1AWP6	—	1AWR6	
1 1/2 in		1AWP7	—	1AWR7	
2 in		1AWP8	—	1AWR8	
3 in		1AWP9	—	1AWR9	
Stainless Steel, Standard L Port, 1-Piece, Three-Way, FNPT					
1/2 in	1000 psi CWP	1AWL9	—	1AWN5	
3/4 in		1AWN1	—	1AWN6	
1 in		1AWN2	—	1AWN7	
1 1/2 in		1AWN3	—	—	
2 in		1AWN4	—	1AWN9	
125 psi Steam					
1 in	800 psi CWP	1AWN2	—	1AWN7	
1 1/2 in		1AWN3	—	—	
2 in		1AWN4	—	1AWN9	
125 psi Steam					
1 in		800 psi CWP	1AWN2	—	1AWN7
1 1/2 in	1AWN3		—	—	
2 in	1AWN4		—	1AWN9	

Electronic Actuated Ball Valve			
Pipe Size	Max. Pressure	120V AC Item No.	12-24V AC/V DC Item No.
316 Stainless Steel, Full Port, 2-Piece, 2-Way, FNPT x FNPT			
1/4 in	1000 psi CWP	4TL01	1AWF7
1/2 in		4TL02	1AWF8
3/4 in		4TL03	1AWF9
1 in		4TL04	1AWG1
1 1/2 in		4YM62	1AWG2
2 in	—	4YM63	—
3 in	—	1AWF6	—
316 Stainless Steel, Full Port, 3-Piece, 2-Way, FNPT x FNPT			
1/4 in	1000 psi CWP	1AWH2	—
1/2 in		1AWH4	—
3/4 in		1AWH5	—
1 in		1AWH6	—
1 1/4 in		1AWH7	—
1 1/2 in	—	1AWC1	—
2 in	—	1AWC2	—
3 in	—	1AWC3	—
Brass, Full Port, 2-Piece, 2-Way, FNPT x FNPT			
1/2 in	600 psi CWP	6CX16	1AWD4
3/4 in		6CX17	1AWD5
1 in		6CX18	1AWD6
1 1/4 in		6CX19	1AWD7
1 1/2 in		6CX20	1AWD8
2 in	—	6CX21	1AWD9
3 in	—	1AWD3	—
Brass, Standard L Port, 2-Piece, 3-Way, FNPT x FNPT x FNPT			
1/4 in	400 psi CWP	—	1AWE8
3/8 in		—	1AWE9
1/2 in		1AWE3	1AWF1
3/4 in		1AWE4	1AWF2
1 in		1AWE5	1AWF3
1 1/4 in	—	1AWE6	1AWF4
1 1/2 in	—	1AWE7	1AWF5
2 in	—	1AWB8	—
3 in	—	1AWB9	—
Bronze, Full Port, 3-Piece, 2-Way, FNPT x FNPT			
1/2 in	600 psi CWP	3TPF5	—
3/4 in		3TPF6	—
1 in		3TPF7	—
1 1/4 in		3TPF8	—
1 1/2 in		3TPF9	—
2 in	—	3TPG1	—
Lead Free Brass, Full Port, 2-Piece, 2-Way, FNPT x FNPT			
1/2 in	600 psi CWP	46Z622	46Z627
3/4 in		46Z623	46Z628
1 in		46Z624	46Z629
1 1/4 in		46Z625	46Z630
1 1/2 in		46Z626	46Z631

Item	Includes	Item No.
Valve Position Limit Switch Kit	Mounting Hardware, Valve Position Limit Switch	44F209
Solenoid Pilot Valve, 115VAC	Ready-to-Mount Pilot Solenoid	44F197
Solenoid Pilot Valve, 24VAC	Replacement Pilot Solenoid, Screws (4)	44F207

SOLENOID AIR CONTROL VALVES

Standard NAMUR direct-mounted pilot solenoids can provide electronic control of the inlet air. Solenoids efficiently pressurize and exhaust the pneumatic actuator piston compartments allowing the actuator to cycle.



Pilot Port Size	Pressure Range	Ambient Temp. Range	Valve Actuator / Return	Voltage	Item No.
1/4 in NPT	37 to 150 psi	14° to 122°F	Solenoid / Spring	12V DC	46Z648
1/4 in NPT	22 to 116 psi	23° to 140°F	Solenoid / Spring	24V DC	46Z647