

Automated Valves and Actuators



Bus Control System For Cost Effective Multiple Automated Valve Installation

Features

- Works with electric or pneumatic actuators
- Controls multiple valve actuators through a PLC with a single pair of wires
- Lowers installation costs
- Lowers maintenance costs
- Compatible with all communications protocols



The **pneumatic bus module** (mounted atop butterfly valve at far left) is housed in a transparent, screw-on Lexan® housing that is rated NEMA 4, 4X and IP67.

The **electric bus module** (in yellow circle at near left) mounts directly into the actuator housing and is completely contained within the housing.

Solenoid Valves, 1/4" to 1", PVC and Corzan® CPVC



Features

- True Union design
- Continuous or 100% duty applications
- Corrosion-resistant polyester coil
- No pressure differential required for operation
- Both 1/2" conduit or SJ-type cord electrical connection
- 110 VAC is standard

Optional Voltages

12 VAC, 24 VAC, 220 VAC, 12 VDC, 24 VDC

C _v Factors			
Size	Value	Size	Value
1/4"	1.3	3/4"	3.2
1/2"	2.2	1"	3.8

Operating Parameters

For optimum valve performance, inlet pressure must not exceed 120 psi. Flow rate should not exceed 5 ft. per second.

Selection Chart

Size	Material	End Connection	Seals	Pressure Rating
1/4", 1/2", 3/4", 1" (10, 20, 25, 32 mm)	CPVC or PVC *	Socket or Threaded	FPM or EPDM	150 psi @ 70°F non-shock

* 1/4" not available in PVC

Series EA Electrically Actuated True Union Ball Valves, 1/2" to 2", PVC Low Cost, Full Featured Valve and Actuator Combination



Valve Features

- All-plastic PVC construction
- Rated to 225 psi
- EPDM seals
- PTFE seats
- Full port design
- Fully serviceable
- Double O-ring stem seal

Actuator Features

- All-plastic NEMA 4X enclosure
- Thermal overload protection
- Permanently lubricated gear train
- Actuator brake
- No need for manual adjustments

C _v Factors			
Size	Value	Size	Value
1/2"	8.0	1-1/4"	75
3/4"	16	1-1/2"	90
1"	30	2"	150

Selection Chart

Size	Material	End Conn.	Seal	Pressure Rating
1/2" - 2" (20 mm - 63 mm)	PVC	Socket and Threaded	EPDM	225 psi @ 70°F

Automated Valves and Actuators

Series PCD/PCS Pneumatic Actuators, For All Sizes of Ball and Butterfly Valves



Features

- Four-piston rack and pinion design
- Manual override
- Compact, lightweight
- Position indicator
- Namur style solenoid mounting
- Adjustable travel stops
- ISO 5211 mounting base

Options

- Air-to-spring, fail-safe operation
- Solenoid valves
- Positioners
- Auxiliary limit switches
- Cycle speed controls

Technical Specifications

Housing:Epoxy-coated aluminum

Output Shaft:Plated steel

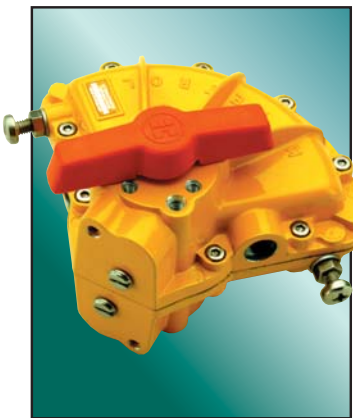
Minimum Air Pressure: ..80 psi

Maximum Air Pressure: ..120 psi

Cycle Time:Less than one second—typical

Air Port Connections:1/4" NPT

Series PKD/PKS Pneumatic Actuators For All Size Ball Valves and 1-1/2" to 8" Butterfly Valves



Features

- Rugged vane design
- Epoxy coated zinc/ titanium alloy housing
- Manual override
- Position indicator

Options

- Air-to-spring fail-safe operation
- Direct-mount solenoid valves with speed control
- Voltage options
- Positioners
- Limit switches

Technical Specifications

Housing:Epoxy-coated alloy

Output Shaft:Stainless steel

Minimum Air Pressure: ..80 psi

Maximum Air Pressure: ..100 psi

Cycle Time:Less than one second—typical

Air Port Connections:1/8" PKD/PKS 2.3 and 5, 1/4" PKD/PKS 7

Series PAD/PAS Plastic Pneumatic Actuators For 1/4" Through 2" Ball Valves



Features

- Reliable vane design
- All-plastic, corrosion-resistant body
- Manual override
- Position indicator
- Very light weight

Options

- Air-to-spring fail-safe operation
- Solenoid valves
- Voltage options
- Limit switches
- Cycle speed controls
- Position stop

Technical Specifications

Housing:Plastic

Output Shaft:Stainless steel

Minimum Air Pressure: ..80 psi

Maximum Air Pressure: ..100 psi

Cycle Time:Less than one second—typical

Air Port Connections:1/8" PKD/PKS 2.3 and 5, 1/4" PKD/PKS 7

Automated Valves and Actuators

Series PMD/PMS Pneumatic Actuators, For 1/4" Through 2" Ball Valves



Features

- Choice of air-to-air or air-to-spring operation
- Corrosion-resistant plastic housing
- Two-piston rack & pinion design
- Manual override, position indicator
- Permanent lubrication
- Light weight
- Stainless steel output shaft
- Namur-style mounting

Options

- Solenoid valves
- Solenoid voltages
- Limit switch
- Cycle speed controls

Technical Specifications

Housing:Polyarylamide plastic
Output Shaft:Stainless steel
Minimum Air Pressure:80 psi
Maximum Air Pressure:120 psi
Seals:Nitrile
Cycle Time:1/2 Second - Typical
Air Port Connections:1/4" NPT

Series EJM Actuators for Ball and Butterfly Valves up to 24"



Features

- 2 Auxiliary limit switches
- Heater and thermostat
- NEMA 4/4X housing
- Position indication
- Manual override
- Self-locking gear train
- Permanently lubricated
- Thermal overload protection
- CE approved
- ISO 5211 mounting base

Options

- Positioners
- Voltage options
- 3-Phase motors
- Feedback potentiometer
- Control stations

Technical Specifications

Operation: Reversing
Conduit Size: .. 1/2"
Duty Cycle: ... 25%
Cycle Times: .. 8 to 46 seconds—
 depending on model
Enclosure: NEMA 4/4X
Voltage:120VAC
Thermal Overload Protection
Brake:Self-locking Gear Train
Override:Manual
Housing:Aluminum Alloy Dry Power Coated

Series EVS/EVT Electric Actuators, For Ball and Butterfly Valves up to 12"



Features

- Sizes for all ball and butterfly valves to 12"
- Multi-option availability
- On/off or modulating applications
- Position indicator

Options

- Limit switches
- Positioners
- Voltage options
- Fail-safe operation
- Feedback potentiometer
- Heater and thermostat
- NEMA 4/4X/7/9 enclosure
- CSA certification
- Mechanical brake

Technical Specifications

Operation:Reversing
Conduit Size:1/2"
Duty Cycle:75%
Cycle Times:5 to 45 seconds
 depending on model
Enclosure:NEMA 4/4X
Voltage:120 VAC
Thermal Overload Protection
Brake:Mechanical brake standard for butterfly valves
Override: ..Manual
Housing: ...Epoxy-coated with aluminum alloy base

Automated Valves and Actuators

Series EAU Electric Actuators, For 1/4" Through 2" Ball Valves



Features

- Corrosion-resistant plastic housing
- Inexpensive
- Lightweight and compact
- On/Off service applications

Options

- Voltage options of 12, 24 or 220 VAC, and 12 or 24 VDC

Technical Specifications

Operation:Unidirectional	Voltage:120 VAC
Conduit Size:1/2"	Thermal Overload Protection
Duty Cycle:25%	Mechanical Brake
Cycle Times:2-1/2 seconds, 90° rotation; 5 seconds, 180° rotation	Motor:UL listed
Enclosure:NEMA 4/4X	Auxiliary Limit
	Switches:One

Series EVR Electric Actuators, For All Sizes of Ball Valves and 1-1/2" through 4" Butterfly Valves



Features

- Position indicator
- Manual override
- On/Off service applications
- Mechanical brake

Options

- Heater and thermostat
- Voltage options
- Timer

Technical Specifications

Operation:Reversing	Thermal Overload Protection
Conduit Size: ...1/2"	Brake:Mechanical brake standard for butterfly valves
Duty Cycle:25%	Base:Epoxy coated aluminum with plastic cover
Cycle Time:5 - 13 seconds depending on model	Motor:UL certified
Enclosure:NEMA 4/4X	
Voltage:120 VAC	

Electric Actuator Control Station



Control stations permit direct operation of electric actuators while providing information regarding the valve's position. **Manual switches** control the actuator's operation (open/stop/closed). **Colored indicator lights** show the valve's position (green=open, red=close).

Features

- Corrosion-resistant plastic enclosure
- Remote and/or local actuator control
- Mounts to actuator or, remotely, to a wall or panel
- Easily installed in the field
- Visual indication of valve position
- Rugged, heavy-duty construction
- NEMA 4X

Options

- Keyed selector switches for added security
- Built in 4-20mA generator for modular applications

Automated Valves and Actuators

Universal Control Panel, Cost Effective Control for up to 25 Automated Valves



Features

- Easy installation and maintenance
- Works with electrically- or pneumatically-actuated valves
- Programmable relays serve as timers, counters, clocks and relays
- User-friendly LCD display panel shows circuit diagrams and function updates
- Easily programmed
- NEMA 4X

Now you can control, sequence and monitor automated valves and eliminate the confusing maze of wires associated with hard-wired relays.