

Valvcon V Series Electric Actuator

The Valvcon V-Series is a compact, rugged (NEMA 4,4X,7&9) electric actuator designed for quarter-turn valve and damper applications.

Standard V-Series features include all hardened steel gears and standard ISO5211 mounting interfaces, full access to cams and switches, 75% duty cycle, fuse protection for inputs and outputs, thermal overload protection, and manual override.



The V Series PN# 2075 plug-in board option for modulating applications incorporates features such as simple push button set-up, auto calibration, selectable input control signal, position feedback signal, and signal fail position selection. Other standard features include local push button control, adjustable dead band, adjustable speed control, and locked output stall protection. The V-Series can be easily set for reverse acting and split ranging control without any wiring changes.

For Network control applications, the V Series options include plug-in boards for AS-I and LonWorks. In addition, the V Series PN# 2065 plug-in board provides isolation, position feedback, jogging or latching modes, supervisory push button control and serves as the interface to DeviceNet, Foundation Fieldbus, and Modbus network control modules.

Other V Series options and accessories include, locking brake, heater, feedback potentiometer, and fully adjustable switches. All options are designed for easy field installation. The V-Series is available with CSA certification for valve and damper service up to 3000 inch pounds of torque.

V SERIES NEMA 4/4X/7/9 (Reversing Operation, 75% duty cycle)

Torque (in lbs)	Base Model	Board Options	Option Part #	Other Options	Order Code	Voltage
150	VW150	Control Board	#2075	Brake	K	115VAC
300	VW300	ISO Feedback Board	#2065	(kit p/n 99715)		230VAC
600	VW600	AS-I Network	#2041	2 Extra Limit Switches	S2	
1000	LVW1000	LonWorks Network	#2040	(kit p/n 99000)		
1500	LVW1500	Modbus	#2335	Heater / Thermostat	T	
2000	LVW2000	DeviceNet	#2325	(115A kit p/n 99515)		
2500	LVW2500	Foundation Fieldbus	#2345	(230A kit p/n 99523)		
3000	LVW3000					

V Series Options and Specifications

V SERIES Option Kits

Option	Part Number
Feedback Potentiometer	99200
Handwheel (LV)	9098
Handwheel (SV)	9097
Aluminum Cover (LV)	9301

All Standard V Series actuators are provided with the position indicator, extended duty cycle and dual conduit openings as standard features. The Control Board accepts 4-20mA or 0-10VDC input, and provides speed control and position re-transmit.

“Other Options” are available as field-installable kits, or as factory installed. All V Series NEMA 4/4X actuators 1000 inch pounds and above are supplied with a PVC composite cover (aluminum cover optional). Smaller actuators and all NEMA 4/4X/7/9 actuators are supplied with an aluminum cover. CSA certification is available on Standard V series actuators. To For CSA units, all options must be factory installed.

Temperature Range	32° F to 150°F (without heater and thermostat) -40°F to 150°F (with heater and thermostat)
Conduit Connections	(2) 1/2" NPT in sizes up to 600 inch pounds (2) 3/4" NPT in sizes 1000 inch pounds and above
Output And Mounting Flange	150 to 600 in lbs: ISO 5211 F05 and F07 bolt circles, 3/4" inch female square 1000 in lbs and above: ISO 5211 F07 and F10 bolt circles, with 1" inch female square
Duty Cycle	AC applications: The actuator may run continuously at temperatures below 104° F for up to 15 minutes. After that 15 minutes, the actuators may run up to 75% duty cycle (between each full cycle), the actuator must rest for 1/3 of the 90 degree cycle time. NOTE: At 50 Hz, the duty cycle is 60% @ 104° F.
Voltage	115VAC: 95 to 130VAC, 50 or 60 Hz 230VAC: 190 to 260VAC, 50 or 60 Hz
Limit Switches	(2) Single pole, double throw switches rated for 1/3 HP, 10 amps @ 125/230VAC, CSA certified, fuse protected. Two standard switches are used for end of travel control, and for pilot or position indication at terminal 5 and terminal 6. Indication outputs are protected by 0.25AMP permanent auto reset polyfuses – reset time approximately 3 mins.
Motor	AC Applications: Split phase, capacitor driven motor with Class B or better insulation; sub-fractional horsepower
Lubrication	Permanently lubricated gear train and bearings
Gear Train	Hardened steel spur gears
Approximate Weight	17 lbs for sizes up to 600 inch pounds 31 lbs for sizes 1000 inch pounds and above (21 pounds in NEMA 4/4X applications)
Enclosure	Base: die cast aluminum Cover (up to 600 in lbs): die cast aluminum Cover (1000 in lbs and above, NEMA 4/4X): PVC w/UV inhibitors Cover (1000 in lbs and above, NEMA 4/4X/7/9): cast aluminum