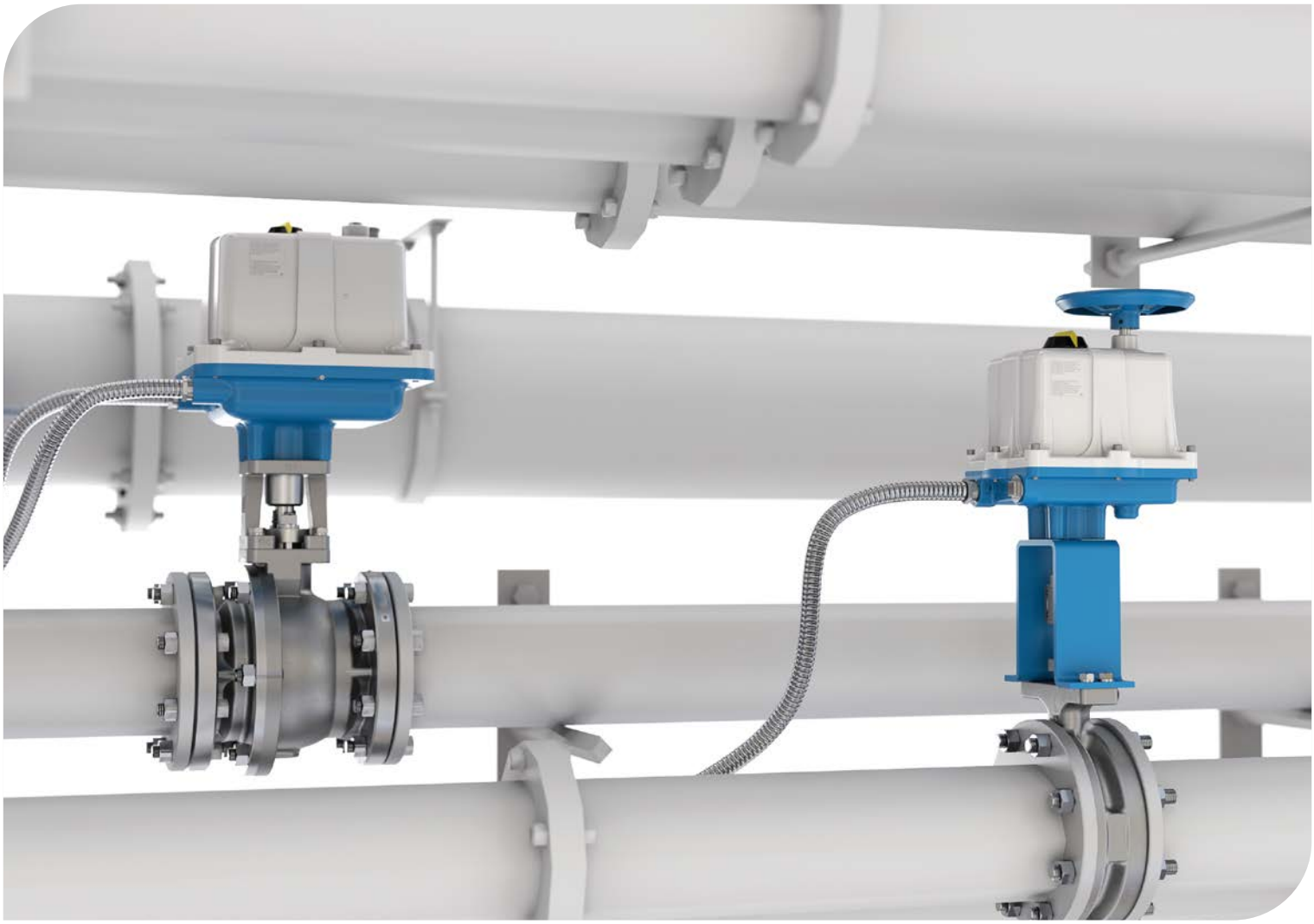
Hardworking and versatile electric actuators

Valvcon™ innovations for valves and dampers



A tradition of innovation

Valmet is a leading designer and provider of compact, reliable, electronically controlled electric actuators for valves and dampers.

We have developed and introduced the industry's most innovative products, including simple "set and go" calibration, intelligent processor-based digital electronics, "plug-in" accessory boards, "fail-safe" actuators, as well as electric actuators designed for remote, solar-powered applications and two-wire network applications. We have built our reputation and success on the ability to envision, implement, and deliver innovative actuator technology products and services to support emerging market requirements. As emerging technologies and market needs continue to evolve, we will lead the way with high-quality Valvcon actuators that exceed industry expectations and further refine the valve actuation process.

We offer a complete line of Valvcon electric actuators for accurate positioning of dampers and valves in the aerospace, automotive, consumer services, discrete manufacturing, energy, environmental, oil/pipeline, petrochemical, power/utilities, process, recreation, transportation, and water/wastewater industries.

We offer a complete line of electric actuators for valves and dampers.

Valvcon™ electric actuator solutions

Our electronically controlled electric actuators deliver compact, rugged, and reliable performance for precise valve and damper positioning across a wide range of industries, including aerospace, energy, water/wastewater, and more. Available configurations include on/off, positioning, automatic cycling, and battery back-up as well as mechanical spring back-up.

Quarter-turn valve and damper applications

Continuous duty, universal power, and universal control

The **Valvcon™ ADC-series** actuators with optional back-up power are field settable for "fail clockwise" or "fail counter clockwise". It's a continuous-duty, and extremely versatile brushless DC electric actuator for quarter-turn valve and damper applications. It can be used for both On/Off or PositionControl applications, especially when frequent cycling is required.

Demanding process applications

The **Valvcon V-series** with on/off control or automatic cycling applications means no maintenance required. These electric actuators are compact, rugged and reliable, making them especially suitable when space constraints exist. They are well suited for a wide range of applications and come readily equipped with all available approvals as standard.

Continuous duty, integrated mechanical spring back-up power

The **Valvcon™ Quarterback™ QB-series** is a highly versatile, quarter-turn electric actuator featuring integrated mechanical spring back-up power for dependable, continuous duty performance. The compact and lightweight unit is well-suited for use in On/Off and Position Control applications, especially when space is limited and frequent cycling is required.

Valvcon product mapping

	Rotary valve action		
	ADC-series	**V-series**	**QB-series**
For more information see bulletins	V201-1 V201-2	V200-1	V208-1
Torque output			
17-339 Nm (150-3000 lb-in)	●	●	
68-136 Nm (600-1200 lb-in)			●
Temperature range			
-40 to 130ºF (-40 to 55ºC)			●
-40 to 150ºF (-40 to 66ºC) Max. temp. 55ºC/130ºF with lead acid battery	●	●	
Available voltages	**Universal power**	**AC (1PH)**	**Multi-voltage**
115 VAC	●	●	●
230 VAC	●	●	●
24 VAC	●		
12 VDC	●		
24 VDC	●		●
Available rotation capabilities			
90-degree operation	●	●	●
180-degree operation	●	●	
270-degree operation	●	●	
Duty cycle			
Continuous/100% up to 40ºC/104ºF (75% at max temp)	●		
75% up to 40ºC/104ºF (varies w/ torque at max temp)		●	
Continuous/100% up to 55ºC/130ºF			●
Control type			
On/Off	●	●	●
Analog Control	●		●
Automatic cycling/Cycle rate regulation		●	
MODBUS (optional)	●		●
Housing construction			
A380 aluminum with baked-on powder coat	●	●	●
Certifications/Approval/Ratings			
cCSAus	●	●	●
ATEX: Ex db	●	●	
IECEx	●	●	
Ingress Protection IP66 (enclosure)	●	●	●
Visual position indication			
Yellow and black mechanical dial	●	●	●
Position feedback			
4-20 mA transmitter	●		●
SPDT end-of-travel indication switches	●	●	●
Calibration			
Manual via “set & go” user interface	●	●	●

Valvcon ADC-series

The Valvcon™ ADC-series is a continuous-duty, and extremely versatile brushless DC electric actuator designed for quarter-turn valve and damper applications and is available in both NEMA 4/4X and NEMA 4/4X/7&9 configurations.

Notable standard features of the Valvcon ADC-series include universal power and control, holding brake, heater, and CSA (C US) certification, CE compliance and ATEX and IECEx approvals (WX models).

More information in bulletins **V201-1, V201-2**

Feature	Benefit
Universal voltage input	May be used for standard AC or DC application; reduces stocking requirements
Universal control inputs	May be used for On/Off or Position Control applications accepting a variety of inputs
Continuous duty cycle	May be used in applications where frequent cycling is required
Many standard features	Smaller number of units/variations; reduces stocking requirements
Optional battery back-up power	Provides for driving to a selectable position after loss of external power

Technical specifications

Torque range	17-68 Nm, 150-600 lb-in, 12-50 lb-ft, Series ADC; 113-339 Nm, 1000-3000 lb-in, 83-250 lb-ft, Series LADC
Duty cycle	100% at +40ºC / +104ºF; duty is reduced to 75% at maximum temperature
Operation	90-degree reversing; 180-degree and 270-degree options available
Enclosure	NEMA 4/4X or NEMA 4/4X/7&9
Temperature range	-40ºC to +66ºC / -40ºF to +150º; ATEX temperature range -20ºC to +66ºC / -4ºF to +150ºF (Units with sealed lead acid battery are only rated to a maximum of +55ºC / +130ºF, are not CE compliant, and are not available with ATEX and IECEx certification.)
Available voltages	24VAC 50/60 Hz (1PH), 115VAC 50/60 Hz (1PH), 230VAC 50/60 Hz (1PH), 12VDC, 24VDC
Certifications	CSA (C US) certification and CE compliance is standard; NEMA 4/4X/7&9 models are Class I, Div. 1, Gr. C & D; Class II, Div.1, Gr. E, F & G; Class III; and also certified to ATEX Directive 2014/34/EU: Ex db IIB T6 Gb, IECEx CSA 14.0057X.

Valvcon V-series

The Valvcon V-series electric actuators are compact, rugged, and reliable. They are available in a variety of control configurations from on/off to automatic cycling. A host of standard features are available including voltage of 115 VAC and 230 VAC, making this series extremely well-suited to a multitude of demanding process applications while providing several levels of protection against overloads and overheating.

More information in bulletin **V200-1**

Feature	Benefit
Compact and lightweight	Suitable for applications where space constraints exist; reduces the need for increased support on the assembly
Easy to use electronics with clearly labeled terminals and coded option connectors	Reduces chance of miswiring; easy to set up
High standard duty cycle	Suited to a variety of applications
Agency approvals are standard	No need to select certification; all available approvals are provided as standard
Wide range of options for various methods of control	Versatile for interfacing with multiple valve types

Technical specifications

Torque range	17-68 Nm, 150-600 lb-in, 12-50 lb-ft, series V; 113-339 Nm, 1000-3000 lb-in, 83-250 lb-ft, series LV
Duty cycle	75% at +40ºC / +104ºF; maximum is 55% for 3000 lb-in models; duty cycle varies with actuator torque at maximum temperature
Operation	90-degree reversing; may also be set for 180-degree or 270-degree operation
Enclosure	NEMA 4/4X or NEMA 4/4X/7&9
Temperature range	-40ºC to +66ºC / -40ºF to +150º; ATEX temperature range -20ºC to +66ºC / -4ºF to +150ºF
Available voltages	115 VAC; 230 VAC
Certifications	CSA (C US) certification and CE compliance is standard; NEMA 4/4X/7&9 models are Class I, Div. 1, Gr. C & D; Class II, Div.1, Gr. E, F & G; Class III; and also certified to ATEX Directive 2014/34/EU: Ex db IIB T6 Gb, IECEx CSA 14.0057X.

Valvcon QB-series

The Valvcon™ Quarterback QB-series is an extremely versatile, quarter-turn electric actuator with integrated mechanical spring back-up power. Designed for a wide variety of valve and damper applications, the actuator includes a brushless DC motor for reliable, continuous-duty performance and is available in both NEMA 4/4X and NEMA 4/4X/7&9 configurations.

Notable standard features of the Valvcon QB-series include multiple power and control options, integrated mechanical spring back-up power, holding brake, heater/thermostat, and CSA (C US) certification.

More information in bulletin **V208-1**

Feature	Benefit
Multi-voltage input	May be used for AC and DC applications; reduces stocking requirements
Universal control inputs	May be used for On/Off or Position Control applications accepting a variety of inputs
Continuous duty cycle	May be used in applications where frequent cycling is required
Many standard features	Smaller number of units/variations; reduces stocking requirements
Internal mechanical spring back-up power	Provides for driving to "safe" position after loss of external power
Field-reversible spring-release direction	Can easily be re-configured for fail to CW or fail to CCW in the field; reduces stocking requirements
Compact and lightweight	Suitable for applications where space constraints exist; reduces the need for increased support on the assembly

Technical specifications

Torque range	68 Nm, 600 lb-in, 50 lb-ft; or 136 Nm, 1200 lb-in, 100 lb-ft
Duty cycle	Continuous: 100% up to 55ºC
Operation	90-degree reversing
Enclosure	NEMA 4/4X or NEMA 4/4X/7&9
Temperature range	-40ºC to +55ºC / -40ºF to +130º
Available voltages	115VAC 50/60 Hz (1PH), 230VAC 50/60 Hz (1PH), 24VDC
Certifications	CSA (C US) certification is standard; NEMA 4/4X/7&9 models are Class I, Div. 1, Gr. C & D; Class II, Div.1, Gr. E, F & G; Class III

Valmet's professionals around the world work close to our customers and are committed to moving our customers' performance forward – every day.

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