

Potable water valve, 2-way, Press fit

- For potable water applications
- NSF/ANSI 372 Lead Free
- NSF/ANSI 61 Water Quality CLD 23









Technical data

Functional data

Valve size [mm]	1" [25]
Potable water certificate	NSF/ANSI 61 NSF/ANSI 372
Fluid	Potable water
Fluid temperature	-4.0212°F [-20100°C]
Body Pressure Rating	250 psi CWP
Close-off pressure Δps	200 psi
Differential pressure Δpmax	30psi
Leakage rate	0%
Angle of rotation	90°
Pipe connection	Press fit
Installation orientation	upright to horizontal (in relation to the stem)
Servicing	maintenance-free
Flow Pattern	2-way
Cv	66
Valve body	Lead free and dezincification resistant bronze (CW511L)
Stem	Lead free and dezincification resistant bronze (CW511L)
Seat	PTFE

Materials

Valve body	Lead free and dezincification resistant bronze (CW511L)
Stem	Lead free and dezincification resistant bronze (CW511L)
Seat	PTFE
O-ring	EPDM
Ball	Chrome plated lead free brass
Non Fail-Safe	LRB(X)
Spring	LF

Suitable actuators

Safety notes



- The ball valve has to be exercised at least once a week, so that the quality of potable water as well as the functionality are not affected.
- The valve has been designed for use in stationary potable water systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- The valve does not contain any parts that can be replaced or repaired by the user.

Product features

Operating mode

The on/off ball valve is adjusted by a rotary actuator. The rotary actuator is connected by an on/off signal. Open the ball valve counterclockwise and close it clockwise.



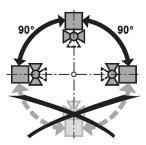
Installation notes

Notes

The ball valve is a regulating device. To fulfil this control task in the long term, the circuit must be kept free from particle debris (e.g. welding beads during installation work).

Permissible installation orientation

The ball valve can be installed upright to horizontal. The ball valve may not be installed in a hanging position, i.e. with the stem pointing downwards.



Servicing

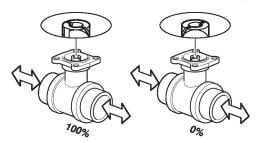
Ball valves and rotary actuators are maintenance-free.

Before any service work on the control element is carried out, it is essential to isolate the rotary actuator from the power supply (by unplugging the electrical cable if necessary). Any pumps in the part of the piping system concerned must also be switched off and the appropriate slide valves closed (allow all components to cool down first if necessary and always reduce the system pressure to ambient pressure level).

The system must not be returned to service until the ball valve and the rotary actuator have been correctly reassembled in accordance with the instructions and the pipeline has been refilled by professionally trained personnel.

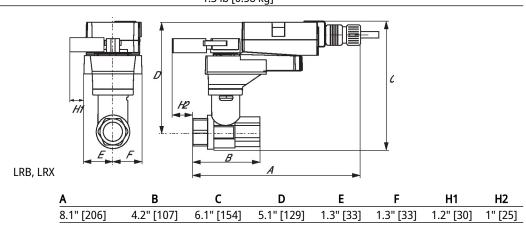
Flow direction

Please also ensure that the ball is in the correct position (marking on the shaft).



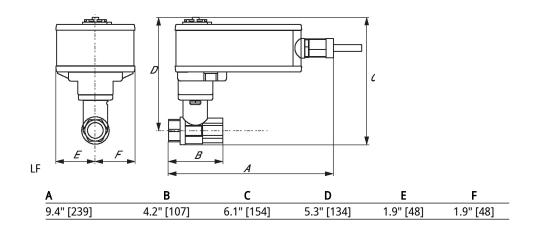
Dimensions

DN	Weight
25	1 3 lb [0 58 kg]





Dimensions





On/Off, Floating point, Non fail-safe, 24 V







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Nominal voltage	AC/DC 24 V
Nominal voltage frequency	50/60 Hz
Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
Power consumption in operation	1.5 W
Power consumption in rest position	0.2 W
Transformer sizing	2.5 VA
Auxiliary switch	1x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, adjustable 0100%
Switching capacity auxiliary switch	3 A resistive (0.5 A inductive) @ AC 250 V
Electrical Connection	18 GA plenum cable, 1 m, 3 m, or 5 m with 1/2" NPT conduit connector, degree of protection NEMA 2 / IP54
Overload Protection	electronic thoughout 090° rotation
Electrical Protection	actuators are double insulated
Direction of motion motor	selectable with switch 0/1

Functional data

Direction of motion motor	selectable with switch 0/1
Manual override	external push button
Angle of rotation	90°
Angle of rotation note	adjustable with mechanical stop
Running Time (Motor)	90 s / 90°
Running time motor variable	150, 90, 45, 35 s
Noise level, motor	35 dB(A)
Position indication	Mechanical, pluggable
Power source III	Class 2 Supply

Safety data

Power source UL	Class 2 Supply
Degree of protection IEC/EN	IP54
Degree of protection NEMA/UL	NEMA 2
Enclosure	UL Enclosure Type 2
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU
Quality Standard	ISO 9001
UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
Ambient humidity	Max. 95% RH, non-condensing
Ambient temperature	-22122°F [-3050°C]
Storage temperature	-40176°F [-4080°C]
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P5000A GR



Technical data Safety data Weight Weight Housing material Servicing maintenance-free 1.2 lb [0.56 kg] Galvanized steel and plastic housing

Accessories

Electrical accessories	Description	Туре
	Battery backup system, for non-spring return models	NSV24 US
	Battery, 12 V, 1.2 Ah (two required)	NSV-BAT
	Auxiliary switch 1x SPDT add-on	S1A
	Auxiliary switch 2x SPDT add-on	S2A
	Feedback potentiometer 140 Ω add-on, grey	P140A GR
	Feedback potentiometer 1 kΩ add-on, grey	P1000A GR
	Feedback potentiometer 10 kΩ add-on, grey	P10000A GR
	Feedback potentiometer 2.8 kΩ add-on, grey	P2800A GR
	Feedback potentiometer 500 Ω add-on, grev	P500A GR

†Rated Impulse Voltage 800V, Type action 1, Control Pollution Degree 3.

Electrical installation

INSTALLATION NOTES

Footnotes

 Λ Provide overload protection and disconnect as required.

Feedback potentiometer 5 k Ω add-on, grey

Actuators may be connected in parallel. Power consumption and input impedance must be observed.

 \triangle Actuators may also be powered by DC 24 V.

Actuators Hot wire must be connected to the control board common. Only connect common to neg. (-) leg of control circuits. Terminal models (-T) have no-feedback.

Actuators with plenum cable do not have numbers; use color codes instead.

One built-in auxiliary switch (1x SPDT), for end position indication, interlock control, fan startup, etc.

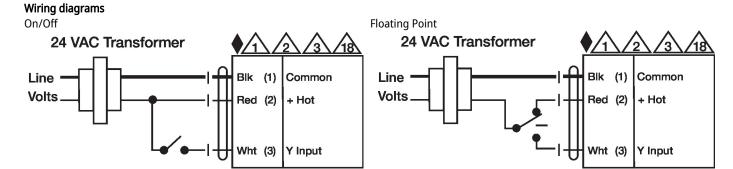
Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches.

Mixed or combined operation of line voltage/safety extra low voltage is not allowed.

Meets cULus requirements without the need of an electrical ground connection.

Warning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.





Electrical installation

Wiring diagrams

Floating Point - Triac Source

24 VAC Transformer

Line
Volts

Hot

Com

Blk (1) Common

Red (2) + Hot

Wht (3) Y Input

Floating Point - Triac Sink

24 VAC Transformer

Line
Volts

Hot

Com

Blik (1) Common

Red (2) + Hot

Wht (3) Y Input

