

Ball Valve (VS), DN 1 1/2" [40], 2-way, Cv 84



2-year warranty



Picture may differ from product

Type overview

Type	DN
B239VS	1 1/2" [40]

Technical data

Functional data	Valve size [mm]	1.5" [40]
	Fluid	chilled or hot water, up to 60% glycol, steam
	Fluid Temp Range (water)	-22...280°F [-30...138°C]
	Body Pressure Rating	600 psig WOG psi
	Close-off pressure Δps	600 psi
	Flow characteristic	modified equal percentage
	Leakage rate	ANSI Class VI
	Pipe connection	Internal thread NPT (female)
	Max Differential Pressure (Steam)	35 psi
	Flow Pattern	2-way
	Controllable flow range	90° rotation
	Cv	84
	Maximum Inlet Pressure (Steam)	35 psi [241 kPa]
	Materials	Valve body
Housing seal		PTFE
Stem		316 stainless steel
Stem seal		RPTFE
Seat		RPTFE
Lock nut		stainless steel
Retainer		B584-C84400 bronze
Ball		316 stainless steel
Suitable actuators	Non Fail-Safe	GMB(X) PRB(X) GRCB(X) GRB(X)
	Spring	AF
	Electronic fail-safe	PKRB(X)

Safety notes


- **WARNING:** This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

Product features

Application This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV Box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.

This valve is designed with MFT functionality which facilitates the use of various control input.

Up to 35 psi steam

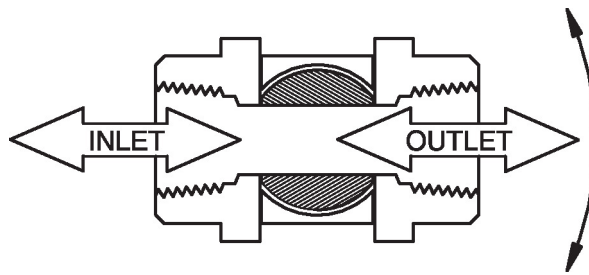
1/2" - 2" 600 PSIG WOG, Cold Non-Shock

Federal Specification: WW-V-35C, Type II

Composition: BZ

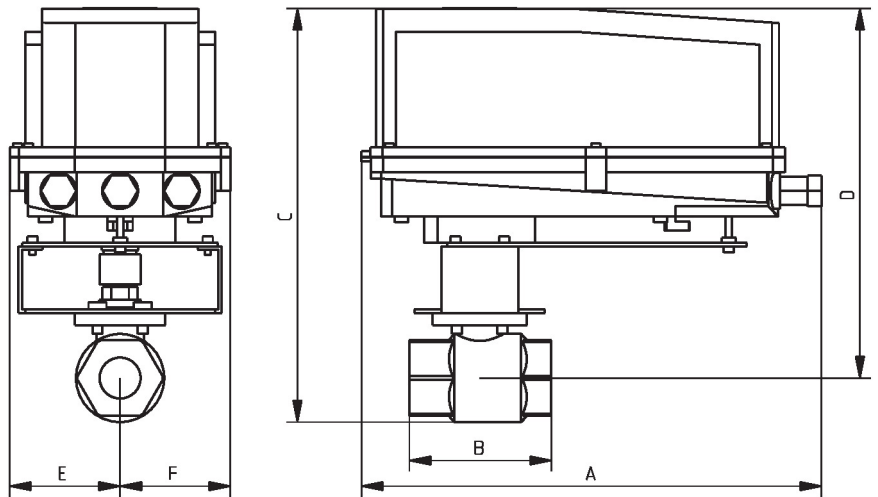
Style: 3

Flow/Mounting details



Dimensions

Type	DN	Weight
B239VS	1 1/2" [40]	4.5 lb [2.1 kg]



B239VS+GRC..N4

A	B	C	D	E	F
11.7" [297.5]	4.4" [112]	9.7" [247]	7.7" [196]	2.3" [58]	2.3" [58]

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



5-year warranty


Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption in operation	4 W
	Power consumption in rest position	2 W
	Transformer sizing	11 VA
	Electrical Connection	Terminal blocks
	Overload Protection	electronic throughout 0...95° rotation
Functional data	Direction of motion motor	selectable with switch 0/1
	Manual override	under cover
	Angle of rotation	90°
	Angle of rotation note	adjustable with mechanical stop
	Running Time (Motor)	150 s / 90°
	Running time motor note	constant, independent of load
	Noise level, motor	45 dB(A)
	Position indication	Mechanical, 30...65 mm stroke
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP66/67
	Degree of protection NEMA/UL	NEMA 4X
	Housing	UL Enclosure Type 4X
	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
	Ambient humidity	Max. 100% RH
	Ambient temperature	-22...122°F [-30...50°C]
	Ambient temperature note	-40...50°C [104...122°F] for actuator with integrated heating
	Storage temperature	-40...176°F [-40...80°C]
	Servicing	maintenance-free
Weight	Weight	4.5 lb [2.1 kg]

Materials Housing material Die cast aluminium and plastic casing

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

Accessories

Electrical accessories	Description	Type
	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, grey	P500A GR
	Feedback potentiometer 5 kΩ add-on, grey	P5000A GR
Factory add-on option only	Description	Type
	Heater, with adjustable thermostat	ACT_PACK_H

Electrical installation

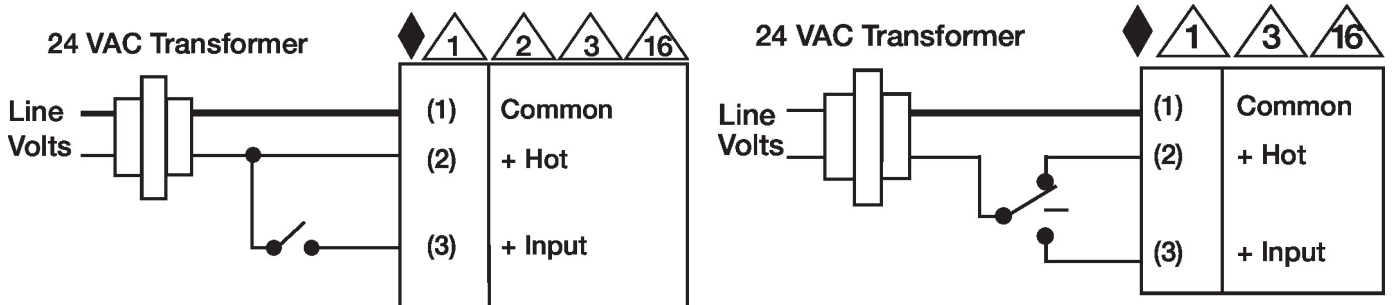
✂ INSTALLATION NOTES

- ⚠₁ Provide overload protection and disconnect as required.
- ⚠₂ Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- ⚠₃ Actuators may also be powered by DC 24 V.
- ⚠₆ 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.
- ⚠₁₆ Actuators are provided with a numbered screw terminal strip instead of a cable.
- ◆ 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.

Wiring diagrams

On/Off

Floating Point

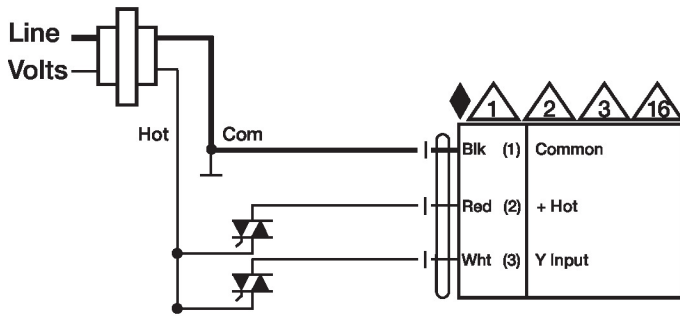


Electrical installation

Wiring diagrams

Floating Point - Triac Source

24 VAC Transformer



Floating Point - Triac Sink

24 VAC Transformer

