

## **Technical data sheet**

## B232VS





## Type overview

Туре	DN
B232VS	32

## **Technical data**

Functional data	Valve size [mm]	1.25" [32]		
	Fluid	chilled or hot water, up to 60% glycol, steam		
	Fluid Temp Range (water)	-22280°F [-30138°C]		
	Body Pressure Rating	600 psig WOG psi		
	Close-off pressure Δps	600 psi		
	Flow characteristic	modified equal percentage		
	Max Differential Pressure (Steam)	35 psi		
	Flow Pattern	2-way		
	Leakage rate	ANSI Class VI		
	Controllable flow range	90° rotation		
	Cv	48		
	Maximum Inlet Pressure (Steam)	35 psi [241 kPa]		
	Maximum Velocity	15 FPS		
Materials	Valve body	Bronze B584-C84400		
	Housing seal	PTFE		
	Spindle	316 stainless steel		
	Spindle seal	RPTFE		
	Seat	RPTFE		
	Lock nut	stainless steel		
	Pipe connection	NPT female ends		
	Retainer	B584-C84400 bronze		
	Ball	316 stainless steel		
Suitable actuators	Non-Spring	AMB(X)		
		GRCB(X)		
		GRB(X)		
	Spring	AF		

## 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

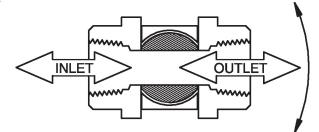


ApplicationThis valve is typically used in air handling units on heating or cooling coils, and fan coil unit<br/>heating or cooling coils. Some other common applications include Unit Ventilators, VAV Box re-<br/>heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.<br/>This valve is designed with MFT functionally which facilitates the use of various control input.<br/>Up to 35 psi steam

1/2" - 2" 600 PSIG WOG, Cold Non-Shock Federal Specification: WW-V-35C, Type II Composition: BZ

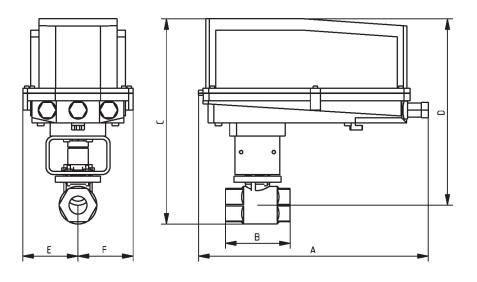
Style: 3

#### Flow/Mounting details



# Dimensions

Туре	DN
B232VS	32



#### B232VS+GRC..N4

Α	В	С	D	Е	F
14.1" [358]	4.0" [101]	12.6" [320]	11.4" [290]	3.4" [86]	3.4" [86]



Non-Spring Return, 24 V

Technical data sheet

GRX24-3-T N4





### **Technical data**

Electrical data	Nominal voltage	AC/DC 24 V		
	Nominal voltage frequency	50/60 Hz		
	Power consumption in operation	4 W		
	Power consumption in rest position	2 W		
	Transformer sizing	11 VA (class 2 power source)		
	Electrical Connection	Terminal blocks		
	Overload Protection	electronic throughout 095° 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	Mechanically, 3065 mm stroke		
Safety data	Degree of protection IEC/EN	IP66/67		
	Degree of protection NEMA/UL	NEMA 4X		
	Enclosure	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 temperature	-22122°F [-3050°C]		
	Ambient temperature note	-4050°C for actuator with integrated heating		
	Storage temperature	-40176°F [-4080°C]		
	Ambient humidity	Max. 100% RH		
	Servicing	maintenance-free		
Materials	Housing material	Die cast aluminium and plastic casing		

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



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 1 x SPDT add-on	S1A
	Auxiliary switch 2 x SPDT add-on	S2A
	Feedback potentiometer 140 $\Omega$ add-on, grey	P140A GR
	Feedback potentiometer 1 k $\Omega$ add-on, grey	P1000A GR
	Feedback potentiometer 10 k $\Omega$ add-on, grey	P10000A GR
	Feedback potentiometer 2.8 k $\Omega$ add-on, grey	P2800A GR
	Feedback potentiometer 500 $\Omega$ add-on, grey	P500A GR
	Feedback potentiometer 5 k $\Omega$ add-on, grey	P5000A GR
Factory add-on option only	Description	Туре
	Heater, with adjustable thermostat	N4 Heater Add-o
		24V (-H)

### **Electrical installation**

### X INSTALLATION NOTES

 $\bigwedge$  Provide overload protection and disconnect as required.

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

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.

 $\int_{16}^{1}$  Actuators are provided with a numbered screw terminal strip instead of a cable.

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

# Marning! 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

