





Type overview	
Туре	DN
B219VSS	20

#### Technical data

Functional data	Valve size [mm]	0.75" [20]		
	Fluid	chilled or hot water, up to 60% glycol, steam		
	Fluid Temp Range (water)	-22298°F [-30148°C]		
	Body Pressure Rating	1500 psig WOG		
	Close-off pressure Δps	1000 psi		
	Flow characteristic	modified equal percentage		
	Max Differential Pressure (Steam)	50 psi		
	Flow Pattern	2-way		
	Leakage rate	ANSI Class VI		
	Controllable flow range	90° rotation, A – AB open ccw, B – AB open cw		
	Cv	30		
	Maximum Inlet Pressure (Steam)	50 psi		
	Maximum Velocity	15 FPS		
Materials	Valve body	Stainless steel A351-CF8M 316		
	Housing seal	PTFE		
	Stem	316 stainless steel		
	Stem seal	RPTFE		
	Seat	RPTFE		
	Lock nut	stainless steel		
	Pipe connection	SAE NPT (female connections)		
	Ball	316 stainless steel		
Suitable actuators	Non-Spring	NMB(X)		
	. 2	GRCB(X)		
		GRB(X)		
	Spring	NFB(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

These threaded valves are designed to provide modulating or two position control of hot or chilled water and saturated steam systems under 50 psi.

Typical applications include reheat coils, VAV terminal control, unit ventilators, and air handlers, especially in areas which have minimum profile requirements.

Up to 50 psi steam

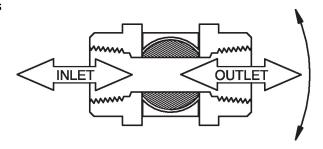
1/2" - 2000 PSIG WOG, Cold Non-Shock

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

Composition: SS

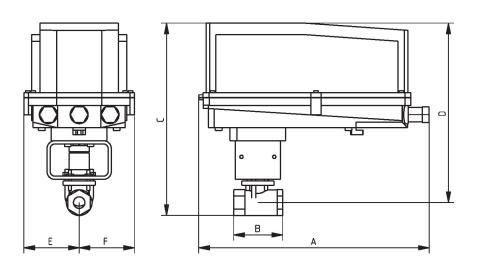
Style: 3

#### Flow/Mounting details



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Туре	DN	Weight
B219VSS	20	1.32 lb [0.60 kg]



## B219VSS+GRC..N4

Α	В	С	D	E	F
14.1" [358]	3.0" [76]	11.8" [300]	11.0" [279]	3.4" [86]	3.4" [86]









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Electrical data	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	6 W
	Power consumption in rest position	2.5 W
	Transformer sizing	8.5 VA
	Electrical Connection	18 GA appliance cable, 1 m, with 1/2" NPT conduit connector
	Overload Protection	electronic throughout 095° rotation
Functional data	Torque motor	10 Nm
	Direction of motion motor	selectable by ccw/cw mounting
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Manual override	5 mm hex crank (3/16" Allen), supplied
	Angle of rotation	90°
	Angle of rotation note	adjustable with mechanical stop
	Running Time (Motor)	75 s / 90°
	Running time fail-safe	<20 s @ -4122°F [-2050°C], <60 s @ -22°F [-30°C]
	Noise level, motor	50 dB(A)
	Noise level, fail-safe	62 dB(A)
	Position indication	Mechanical
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]
	Servicing	maintenance-free
Weight	Weight	4.5 lb [2.0 kg]
Materials	Housing material	Galvanized steel and plastic housing



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

#### **Electrical installation**



#### 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.

# INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

Provide overload protection and disconnect as required.

Actuators may also be powered by DC 24 V.

Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.

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

# Wiring diagrams

On/Off

