

2-year warranty

Type overview

Type	DN
B2050VSS-15	15

Technical data

<b>Functional data</b>	Valve size [mm]	0.5" [15]
	Fluid	chilled or hot water, up to 60% glycol, steam
	Fluid Temp Range (water)	-22...298°F [-30...148°C]
	Body Pressure Rating	2000 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	15
	Maximum Inlet Pressure (Steam)	50 psi
	Maximum Velocity	15 FPS
<b>Materials</b>	Valve body	Stainless steel A351-CF8M 316
	Housing seal	PTFE
	Spindle	316 stainless steel
	Spindle seal	RPTFE
	Seat	RPTFE
	Lock nut	stainless steel
	Pipe connection	SAE NPT (female connections)
	Ball	316 stainless steel
<b>Suitable actuators</b>	Non-Spring	LMB(X) GRCB(X) GRB(X)
	Spring	LF

Safety notes

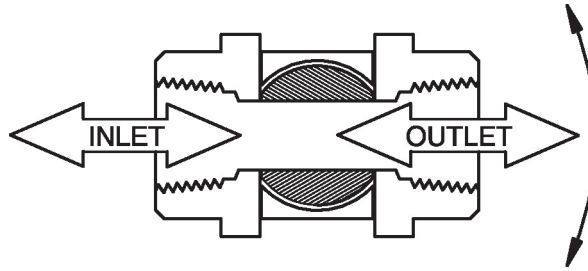


- WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

Product features

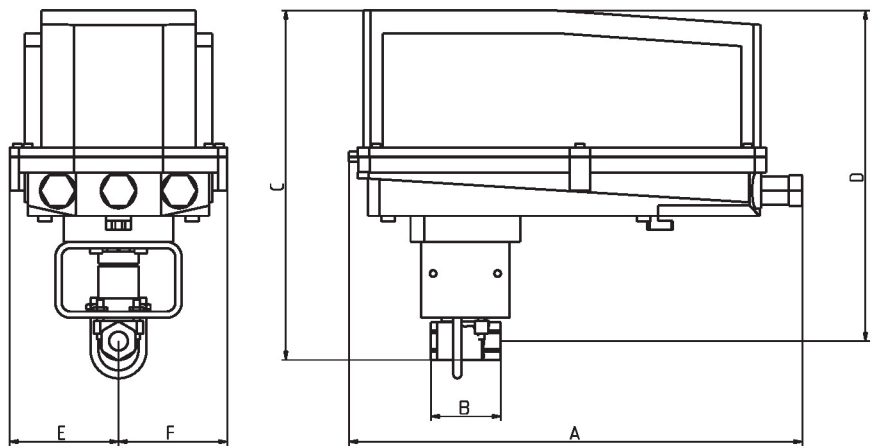
**Application** These threaded valves are designed to provide modulating or two position control of hot or chilled water and saturated steam systems under 50 psi.  
 Typical applications include reheat coils, VAV terminal control, unit ventilators, and air handlers, especially in areas which have minimum 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



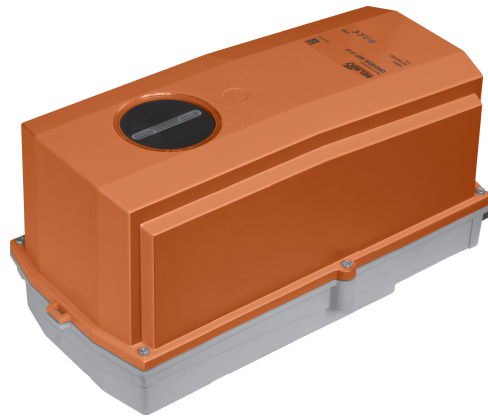
Dimensions

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B2050VS..+GRC..N4

A	B	C	D	E	F
14.1" [358]	2.2" [56]	10.8" [274.5]	10.3" [262]	3.4" [86]	3.4" [86]



5-year warranty



Technical data

<b>Electrical data</b>	Nominal voltage	AC 100...240 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	6 W
	Power consumption in rest position	2 W
	Transformer sizing	11 VA (class 2 power source)
	Electrical Connection	18 GA appliance cable, 3 ft [1 m], with 1/2" conduit connector
	Overload Protection	electronic throughout 0...90° rotation
<b>Functional data</b>	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)	35 s / 90°
	Running time motor note	constant, independent of load
	Noise level, motor	45 dB(A)
Position indication	Mechanically, 5...20 mm stroke	
<b>Safety data</b>	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	-22...122°F [-30...50°C]
	Ambient temperature note	-40...50°C for actuator with integrated heating
	Storage temperature	-40...176°F [-40...80°C]
Ambient humidity	Max. 100% RH	
Servicing	maintenance-free	
<b>Materials</b>	Housing material	Die cast aluminium and plastic casing
<b>Footnotes</b>	†Rated Impulse Voltage 2.5kV, Type of Action 1.AA, Control Pollution Degree 3.	

Accessories

Factory add-on option only	Description	Type
	Heater, with adjustable thermostat	N4 Heater Add-on 24V (-H)
	Heater, with adjustable thermostat	N4 Heater Add-on 230V (-Y)

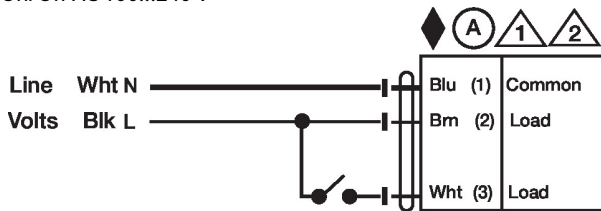
Electrical installation

**✂ INSTALLATION NOTES**

- (A)** Actuators with appliance cables are numbered.
- 1** Provide overload protection and disconnect as required.
- 2** Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- ◆** Meets cULus requirements without the need of an electrical ground connection.
- 1** **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 AC 100...240 V



Floating Point AC 100...240 V

