

3-way Mixing/Diverting, Characterized Control Valve, Stainless Steel Ball and Stem







Type overview

Туре	DN
B338	40

Technical data

Functional data	Valve size [mm]	1.5" [40]		
	Fluid	chilled or hot water, up to 60% glycol		
	Fluid Temp Range (water)	0250°F [-18120°C]		
	Body Pressure Rating	400 psi		
	Close-off pressure Δps	200 psi		
	Flow	A-port: as stated in chart B-port: 70% of A – AB Cv		
	Flow characteristic	A-port equal percentage, B-port modified for constant common port flow		
	Leakage rate	0% for A – AB, <2.0% for B – AB		
	Pipe connection	Internal thread NPT (female)		
	Servicing	maintenance-free		
	Flow Pattern	3-way Mixing/Diverting		
	Controllable flow range	75°		
	Cv	19		
Materials	Valve body	Nickel-plated brass body		
	Stem	stainless steel		
	Stem seal	EPDM (lubricated)		
	Seat	PTFE		
	Characterized disc	stainless steel		
	O-ring	EPDM (lubricated)		
	Ball	stainless steel		
Suitable actuators	Non Fail-Safe	ARB(X) ARQB(X) ARB(X) N4		
	Spring	AFRB(X)		



Safety notes

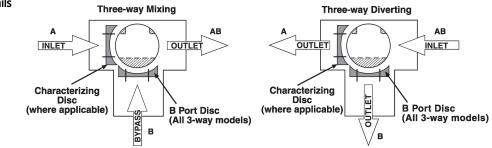


• WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

Product features

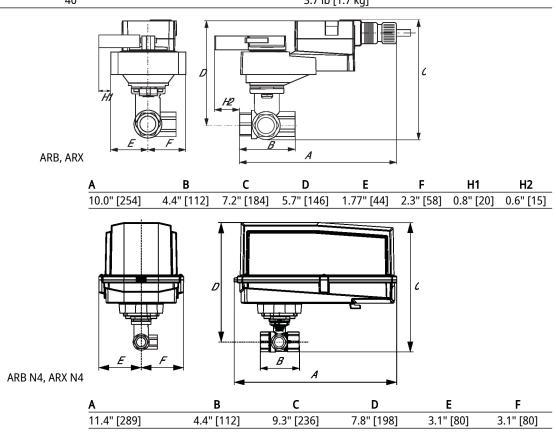
Application This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable or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

Flow/Mounting details

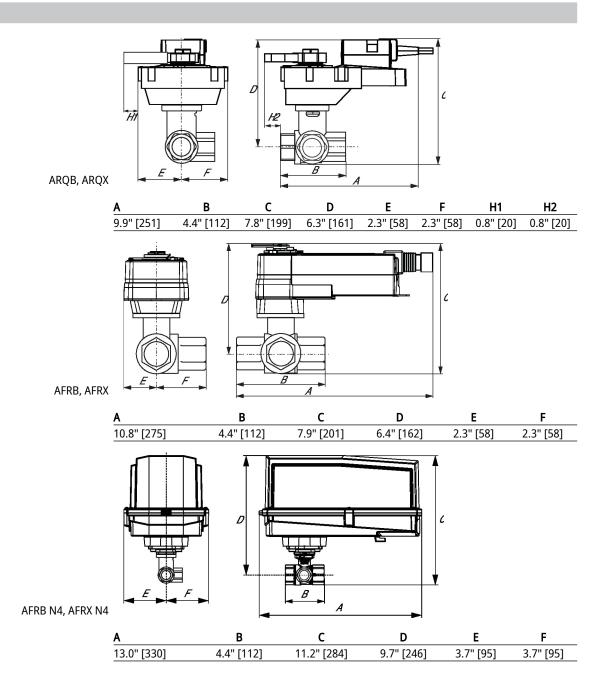


Dimensions

Туре	DN	Weight	
B338	40	3.7 lb [1.7 kg]	









On/Off, Spring return, 24...240 V





Electrical data	Nominal voltage	AC 24240 V / DC 24125 V		
	Nominal voltage frequency	50/60 Hz		
	Nominal voltage range	AC 19.2264 V / DC 21.6137.5 V		
	Power consumption in operation	7 W		
	Power consumption in rest position	3.5 W		
	Transformer sizing	18 VA		
	Electrical Connection	18 GA appliance cable, 3 ft [1 m], with 1/2" NPT conduit connector		
	Overload Protection	electronic throughout 095° rotation		
Functional data	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°		
	Running Time (Motor)	75 s / 90°		
	Running time fail-safe	<20 s		
	Noise level, motor	45 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	5.4 lb [2.4 kg]		
Materials	Housing material	Galvanized steel and plastic housing		



Technical data

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

Electrical installation

X INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

(UP) Universal Power Supply (UP) models can be supplied with AC 24...240 V, or DC 24...125 V.

 \bigwedge Provide overload protection and disconnect as required.

🔬 Actuators may be powered in parallel. Power consumption must be observed.

A Parallel wiring required for piggy-back applications.

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						
24	to 24	40 VAC		· ~	\sim	
Line			┉╢	Wht	(1)	Neutral
Volts	Blk	L	─เ₽	Blk	(2)	Load