

3-way Changeover/ Diverting, Chrome Plated Brass Ball and Nickel Plated Brass Stem



2-year warranty

Picture may differ from product

## Type overview

Type	DN
B350L	2" [50]

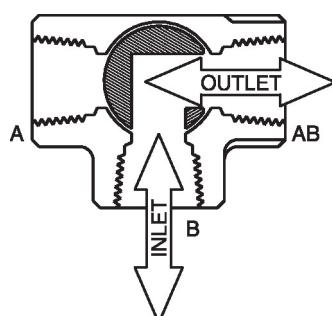
## Technical data

	Functional data	Valve size [mm]	2" [50]
Fluid		chilled or hot water, up to 60% glycol	
Fluid Temp Range (water)		0...250°F [-18...120°C]	
Body Pressure Rating		400 psi	
Close-off pressure $\Delta$ ps		200 psi	
Flow characteristic		modified linear	
Leakage rate		0%	
Pipe connection		Internal thread NPT (female)	
Servicing		maintenance-free	
Flow Pattern		3-way Changeover/ Diverting	
Controllable flow range		75°	
Cv		87	
	Materials	Valve body	Nickel-plated brass body
	Stem		nickel-plated brass
	Seat		PTFE
	Ball		chrome plated brass
	Suitable actuators	Non Fail-Safe	ARB(X)
	Spring		AFRB(X)

## Product features

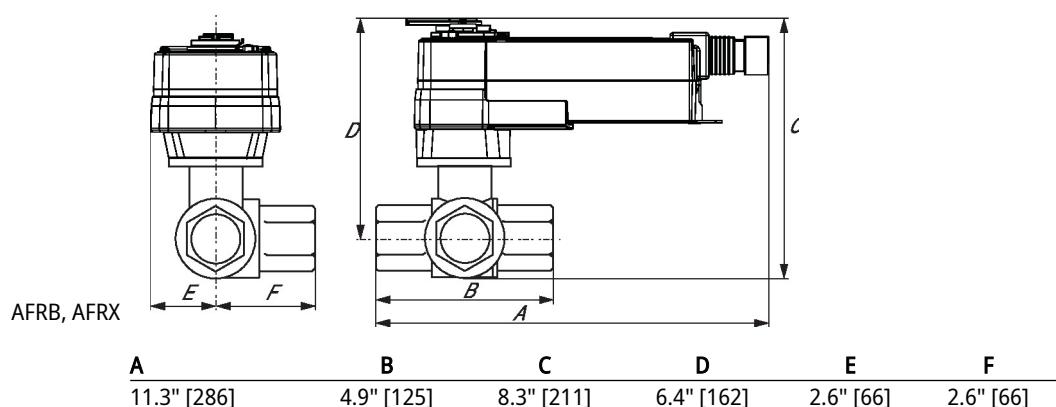
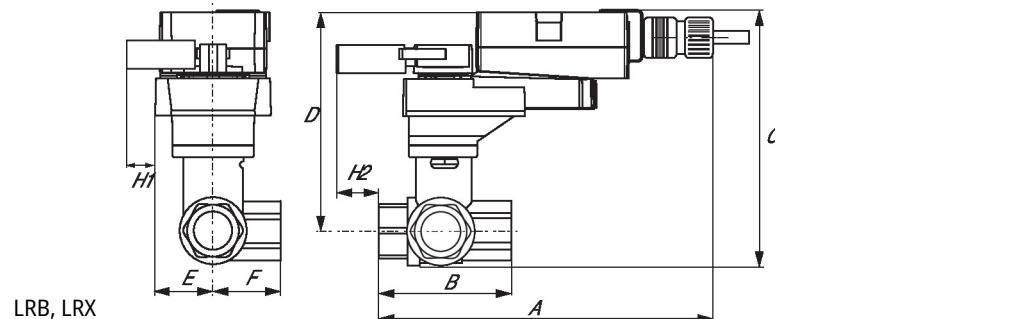
**Application** This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use as diverting or change over valve.

## Flow/Mounting details



## Dimensions

Type	DN	Weight
B350L	2" [50]	5.7 lb [2.6 kg]



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



5-year warranty



## Technical data

Electrical data	
Nominal voltage	AC 24...240 V / DC 24...125 V
Nominal voltage frequency	50/60 Hz
Nominal voltage range	AC 19.2...264 V / DC 21.6...137.5 V
Power consumption in operation	7 W
Power consumption in rest position	3.5 W
Auxiliary switch	2x SPDT, 1 mA...3 A (0.5 A inductive), DC 5 V...AC 250 V, 1x 10% / 1x 11...90%
Switching capacity auxiliary switch	1 mA...3 A (0.5 A inductive), DC 5 V...AC 250 V
Electrical Connection	(2) 18 AWG appliance cables, 1 m, with 1/2" NPT conduit connectors
Overload Protection	electronic throughout 0...95° 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	IP66
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]

<b>Safety data</b>	Servicing	maintenance-free
<b>Weight</b>	Weight	10 lb [4.5 kg]
<b>Materials</b>	Housing material	Die cast aluminium and plastic casing

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

## Accessories

Factory add-on option only	Description	Type
	Heater, with adjustable thermostat	ACT_PACK_H
	Heater, with adjustable thermostat	ACT_PACK_Y

## Electrical installation

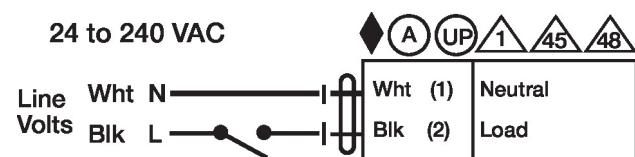
### ☒ INSTALLATION NOTES

- Ⓐ 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.
- 1 Provide overload protection and disconnect as required.
- 4 Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.
- 45 Actuators may be powered in parallel. Power consumption must be observed.
- 48 Parallel wiring required for piggy-back applications.
- ⚡ Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.
- ◆ 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



Auxiliary Switches

