



5-year warranty

## Type overview

Type	DN
B6300S-110	80

## Technical data

	Functional data	
	Valve size [mm]	3" [80]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	0...250°F [-18...120°C]
	Body Pressure Rating	ANSI Class 125, standard class B
	Close-off pressure $\Delta p_s$	175 psi
	Flow characteristic	equal percentage
	Pipe connection type	Flange for use with ASME/ANSI class 125
	Servicing	maintenance-free
	Flow Pattern	2-way
	Leakage rate	0% for A – AB
	Controllable flow range	75°
	Cv	110
	Materials	
	Valve body	Cast iron - GG 25
	Stem	stainless steel
	Stem seal	EPDM (lubricated)
	Seat	PTFE
	Characterized disc	stainless steel
	O-ring	EPDM (lubricated)
	Ball	stainless steel
	Suitable actuators	
	Non-Spring	ARB(X)
	Spring	AFRB(X)

## Safety notes

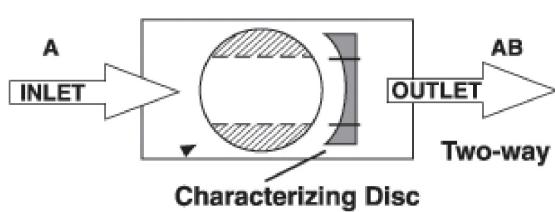


- WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

## Product features

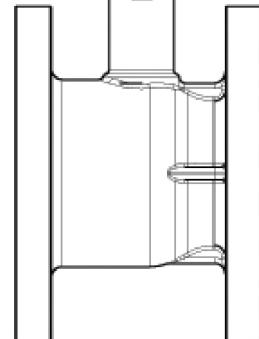
Application	This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box reheat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.

## Flow/Mounting details



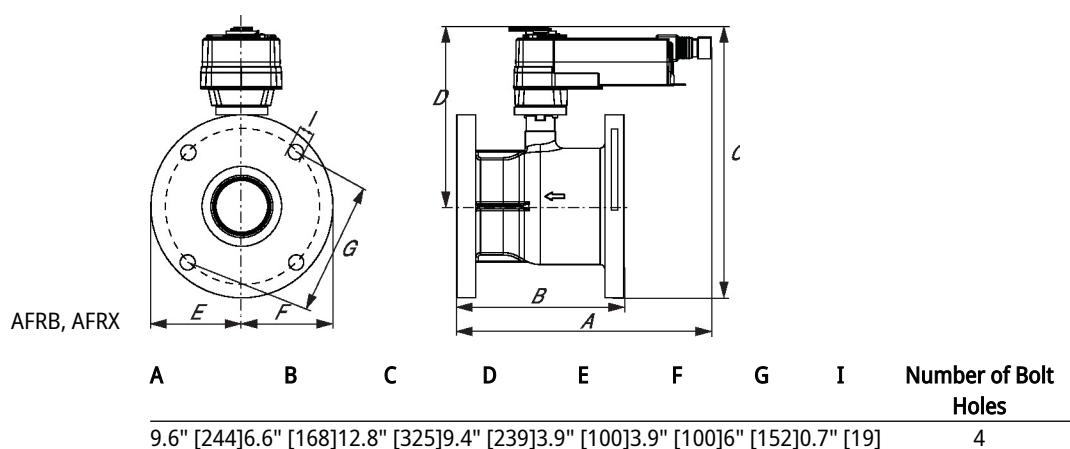
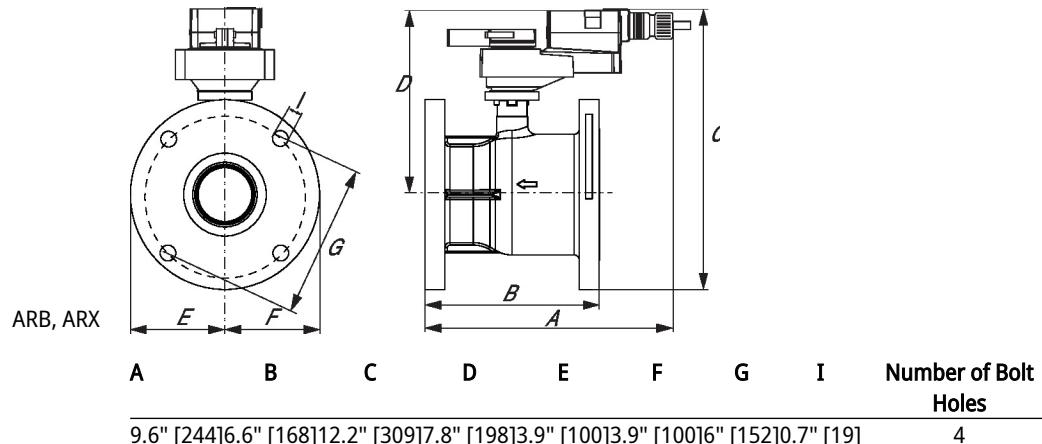
Upstream A  
Downstream AB

Flow Direction



## Dimensions

Type	DN	Weight
B6300S-110	80	32 lb [15 kg]



ARX	A	B	C	D	E	F	G	I	Number of Bolt Holes
	13.3" [338]	6.6" [168]	15.0" [380]	10.5" [267]	3.9" [100]	3.9" [100]	6" [152]	0.7" [19]	4
AFRX	A	B	C	D	E	F	G	I	Number of Bolt Holes
	16.0" [406]	6.6" [168]	16.6" [422]	11.9" [302]	3.9" [100]	3.9" [100]	6" [152]	0.7" [19]	4

On/Off, Spring return, 24 V



5-year warranty



## Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption in operation	5 W
	Power consumption in rest position	2.5 W
	Transformer sizing	7.5 VA
	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

<b>Safety data</b>	Storage temperature	-40...176°F [-40...80°C]
	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

## Electrical installation

## INSTALLATION NOTES

- A** Actuators with appliance cables are numbered.
  - 1** Provide overload protection and disconnect as required.
  - 3** Actuators may also be powered by DC 24 V.
  - 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.
  - 49** 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.
  - 50** Meets cULus requirements without the need of an electrical ground connection.

## Wiring diagrams

On/Off

## Auxiliary Switches

