



ISO 9001

VB30A, VB34A, VB35A Two-Way Ball Valve Assemblies

SPECIFICATION DATA

The VB30A two-way Ball Valve Assemblies are used in heating, ventilating and air conditioning (HVAC) systems for two-position or modulating control of low-pressure steam, water, or glycol solutions. These valve assemblies can be ordered with or without a factory-mounted direct coupled actuator (DCA). The VB34A is a VB30A with a non-spring return actuator. The VB35A is a VB30A with a spring return actuator.

SPECIFICATIONS

Ratings

Body Style:

- Two-way, bi-directional flow.

Body Size:

- 1/2 to 2 in. NPT.

Body Rating:

- 600 psi.

Flow Characteristic:

- Equal Percentage.

Environmental Rating:

- NEMA 1.
- VB30A: Plenum rated materials.
- Valve bodies 100% tested air under water per MSS SP-72.

Valve Design Life:

- 200,000 full cycles (refer to actuator literature for actuator life rating).

Controlled Medium:

- Water, or glycol solutions (to 50 percent).
- Not suitable for combustible gases.
- Saturated low-pressure steam.

FEATURES

- Exclusive stem and packing design eliminates packing adjustment for the life of the valve.
- Designed for use with building automation systems.
- Sizes from 1/2 to 2 in. NPT.
- Tight shutoff (0.01 percent of C_V).
- C_V ratings from 1 to 177.
- Stainless steel ball and stem standard.
- Field-configurable for normally open or normally closed fail-safe position.

Medium Temperature Range:

- 35 to 250°F (2 to 121°C).

Medium Pressure Range:

- Up to 250 psig (1724 kPa).

Maximum Differential Pressure:

- 150 psid (1034 kPa).

Materials

Body:

- Bronze.

Ball and Stem:

- Stainless steel.

Seats:

- Carbon-filled Teflon.

Packing:

- Carbon filled Teflon and EPDM O-ring.

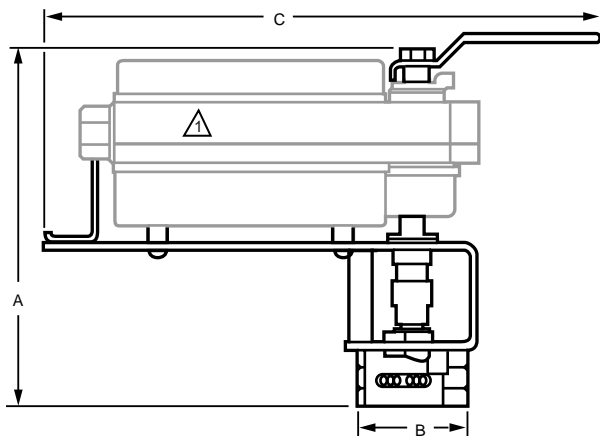
Table 1. Valid Two-Way Ball Valve/Actuator Combinations.

Valve/Bracket OS Number	Size (NPT) (in.)	Valve C_V (K_V) ^a	Torque Required (lb-in.)		Dimensions (in.)					
					B	A		C ^b		Weight
			NSR	SR	NSR	SR	NSR	SR	(lb.) ^c	
VB30A1005	1/2 RP	1 (.86)	35 ^d , 70 ^e	—	2.18	6.78	—	8.32	—	1.2
VB30A1161	1/2 RP	1 (.86)	—	50 ^e	2.18	—	7.32	—	11.44	2.6
VB30A1013	1/2 RP	2 (1.73)	35 ^d , 70 ^e	—	2.18	6.78	—	8.32	—	1.2
VB30A1179	1/2 RP	2 (1.73)	—	50 ^e	2.18	—	7.32	—	11.44	2.6
VB30A1021	1/2 RP	4 (3.46)	35 ^d , 70 ^e	—	2.18	6.78	—	8.32	—	1.2
VB30A1187	1/2 RP	4 (3.46)	—	50 ^e	2.18	—	7.32	—	11.44	2.6
VB30A1039	1/2 FP	15 (13)	35 ^d , 70 ^e	—	2.18	6.78	—	8.32	—	1.2
VB30A1195	1/2 FP	15 (13)	—	50 ^e	2.18	—	7.32	—	11.44	2.6
VB30A1047	3/4 RP	30 (26)	70 ^e	—	2.96	7.16	—	9.22	—	2
VB30A1203	3/4 RP	30 (26)	—	50 ^d	2.96	—	7.7	—	12.84	3.5
VB30A1054	3/4 FP	51 (44)	70 ^d	—	3.12	7.41	—	9.22	—	3.7

Continued



Capacity/Dimensions/Weight:



▲ REFERENCE ACTUATOR SPECIFICATION DATA SHEET FOR ACTUATOR DIMENSIONS.

M14229

TYPICAL SPECIFICATION

Ball valves designed for manual operation only are unacceptable. Ball valves 2 in. and smaller shall have internal NPT threaded connections. Ball valves shall be compatible with low-pressure steam, water, and glycol solutions up to 50% concentration. All ball valve and actuator manufacturing shall occur at an ISO 9001 Compliant facility.

All ball valves shall conform to the following specifications:

System pressure rating: up to 250 psig (15 psig steam).

System temperature range: 35°F to 250°F.

Close-off pressure rating: 150 psid for all valve and actuator combinations.

2-way body ratings: 600 psig.

Bronze bodies, stainless-steel balls and stems, Multifill Carbon/Teflon seats, and EPDM O-rings.

Permanently fixed packing nut for maintenance free operation; adjustable packing is unacceptable.

Manual override levers that can be removed or attached without affecting valve operation.

Integral position indicators that provide easy determination of valve position while installed.

Assembly hardware must be designed to prevent side loads on the valve stem. Actuators shall be direct coupled type, available in modulating, floating, or 2-position control types. Non-spring return actuators must have an integral manual override (declutch) that allows manual valve positioning with the actuator mounted and powered with cover attached. Ball valves shall be manufactured by Honeywell.

Table 1. Valid Two-Way Ball Valve/Actuator Combinations (Continued).

Valve/Bracket OS Number	Size (NPT) (in.)	Valve C _v (K _v) ^a	Torque Required (lb.-in.)		Dimensions (in.)					
			NSR	SR	B	A		C ^b		Weight (lb.) ^c
						NSR	SR	NSR	SR	
VB30A1211	3/4 FP	51 (44)	150 ^e	142 ^e	3.12	7.29	7.29	12.84	12.84	3.8
VB30A1062	1 RP	43 (37)	150 ^e	142 ^e	3.34	7.61	7.29	12.85	12.84	3.7
VB30A1070	1 FP	68 (59)	150 ^d	—	3.61	8.05	—	15.85	—	5.9
VB30A1260	1 FP	68 (59)	300 ^e	—	3.61	8.05	—	15.85	—	6
VB30A1294 ^f	1 FP	68 (59)	—	284 ^e	3.61	—	10.8	—	19.49	6
VB30A1088	1-1/4 RP	48 (42)	150 ^d	142 ^e	3.96	8.11	8.11	15.73	15.73	6.2
VB30A1278	1-1/4 RP	48 (42)	300 ^e	—	3.96	8.11	—	15.73	15.73	6.3
VB30A1096	1-1/4 FP	125 (108)	300 ^d	—	4.25	8.55	—	15.73	—	7.9
VB30A1286	1-1/2 RP	84 (73)	300 ^e	—	4.28	8.45	—	15.73	—	7.5
VB30A1302 ^f	1-1/2 RP	84 (73)	—	284 ^e	4.28	—	11.21	—	19.49	7.5
VB30A1112	1-1/2 FP	177 (153)	300 ^d	—	4.74	8.9	—	15.28	—	10.1
VB30A1120	2 RP	108 (93)	300 ^d	—	4.66	8.85	—	15.73	—	8.5

RP = reduced port, FP = full port

^aC_v (K_v) for valve body alone; if pipe reducers are used, the rating will be decreased.

^bDimension with handle attached. Handle is easily removable.

^cWeight does not include packaging, or actuator.

^dValid combination for frequent use (more than one cycle per month). Can require manual operation at start-up or after long periods of inactivity.

^eHigh torque valid combination. Recommended for applications that can require higher than normal breakaway torque due to infrequent valve operation (less than one cycle per month), such as seasonal changeover. Also valid for frequent use.

^fThe bracket on this valve accomodates tandem-mounted actuators.

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