

Stainless steel ball valves with electric actuator 1/2" up to 2" Series 8E003



Design type	Electric geared motor with additional manual override, Actuator heater and Torque monitoring
Connection	RP1/2"...RP2" according to ISO7/1
Materials Standard version	Actuator: Polymer housing PA6 or rather PA66 Ball valve: Body and ball stainless steel 1.4401, Ball seal PTFE, Spindle seal PTFE/FKM
Application range	gaseous and liquid media that do not attack the materials used
Medium temperature	0...+100°C
Ambient temperature	-20...+55°C
Operating pressure	0bar up to Operating pressure according to table and pressure-temperature diagram, not suitable for vacuum
Mounting type	Installation in rigid piping system
Mounting position	any, except hanging downward

Electrical data:

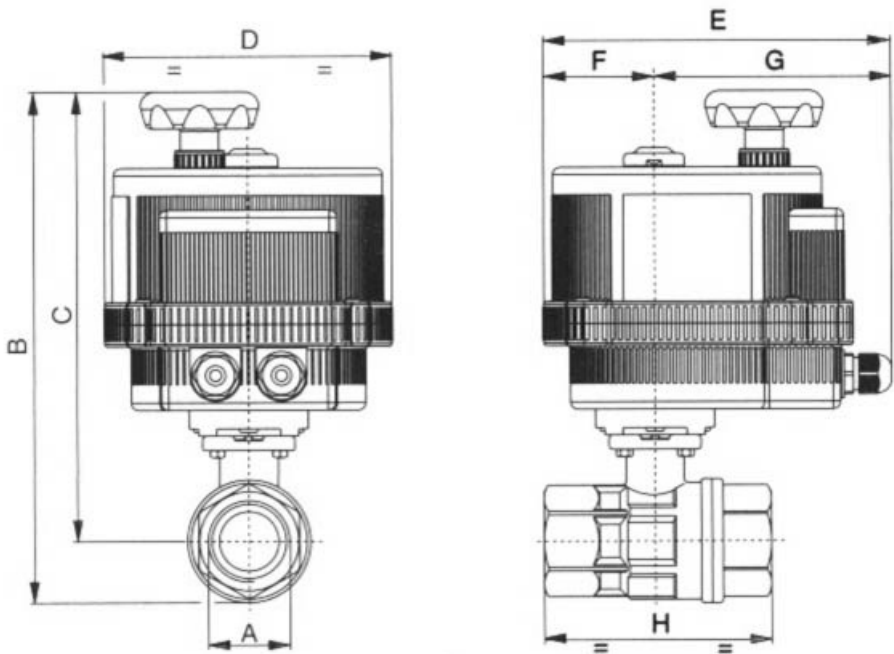
Voltage type	AC and DC voltage
Standard voltage	see table "Electrical data"
Permissible voltage fluctuation	± 10%
Electrical Connection	via cable gland PG11
End position shut-off	via built-in limit switches
Duty cycle	see table "Electrical data", however max. 100 switching cycles per day
Degree of protection	
Special version	higher medium temperatures, Battery pack for safety position, Positioner
Ordering note	When ordering, please also specify the operating medium, operating pressure and operating temperature.
Application note	The pressure and temperature specifications are maximum values for normal conditions, for lubricating or non-degreasing media. Degreasing media in particular reduce the specified values and increase the required torque. For these special cases, we recommend prior consultation.



Order code

	8E003	001 - 1/2"	
	12V/50-60Hz/12VDC	001	
	24V/50-60Hz/24VDC	002	
Voltage	100-240V/50-60Hz	004	
Connection	RP1/2"	1/2"	
	RP3/4"	3/4"	
	RP1"	1"	
	RP11/4"	11/4"	
	RP11/2"	11/2"	
	RP2"	2"	

Dimensions

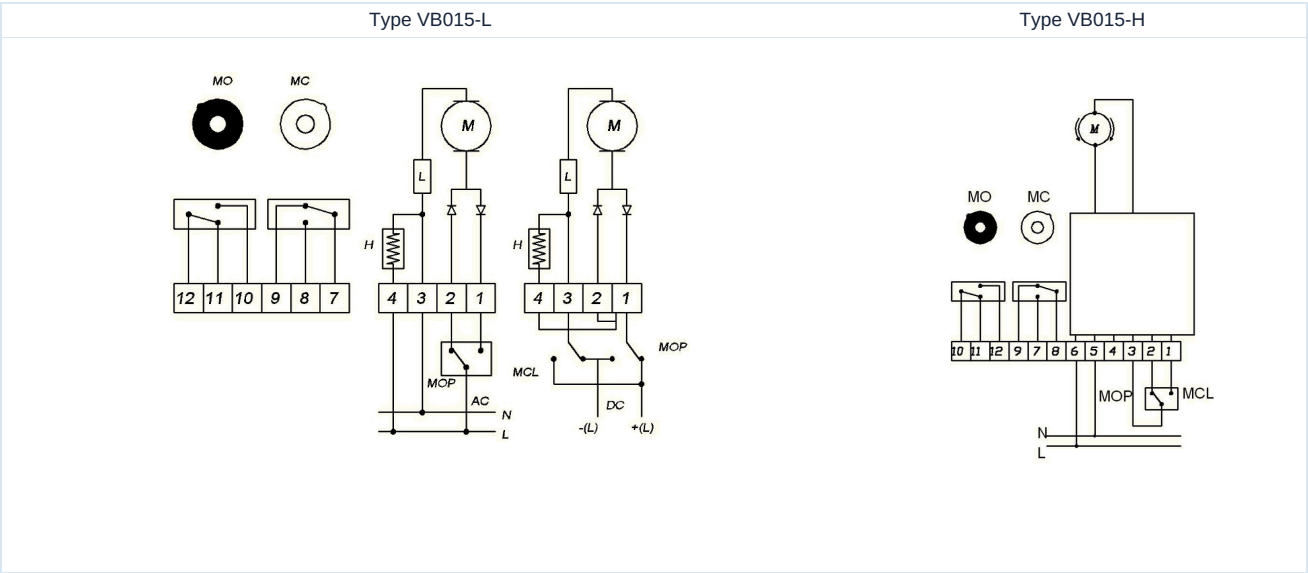


Connection A	Nominal size DN[mm]	max. Operating pressure [bar]	B	C	D	E	F	G	H	Kv value [m³/h]	Weight [approx. kg]	Actuator type	Type
RP1/2"	15	64	192	175	123	164	43	121	67	16,3	1,8	VB015	8E003...-1/2"
RP3/4"	20	64	198	177	123	164	43	121	78	29,5	1,8	VB015	8E003...-3/4"
RP1"	25	64	213	187	123	164	43	121	90	43	2,2	VB015	8E003...-1"
RP11/4"	32	64	223	190	123	164	43	121	100	89	2,5	VB015	8E003...-11/4"
RP11/2"	40	64	290	251	157	191	61	130	112	230	4,1	VB030	8E003...11/2"
RP2"	50	64	309	261	157	191	61	130	135	265	5,3	VB030	8E003...-2"

Electrical data

Type	Voltage	Current consumption [A]	Rated torque [Nm]	Duty cycle (S3)	Actuation time [Sek.]
VB015 -L-12	12V/50-60Hz/12VDC	1,2	15	AC 50% / DC 75%	10
VB015-L-24	24V/50-60Hz/24VDC	0,6	15	AC 50% / DC 75%	10
VB015-H	100-240V/50-60Hz	0,3-0,19	15	75%	10
VB030-L-12	12V/50-60Hz/12VDC	AC 2,2 / DC 1,8	30	50%	8
VB030-L	24V/50-60Hz/24VDC	AC 1,0 / DC 0,7	30	75%	8
VB030-H	100-240V/50-60Hz	0,4-0,2	30	75%	8

Electrical connection example VB015



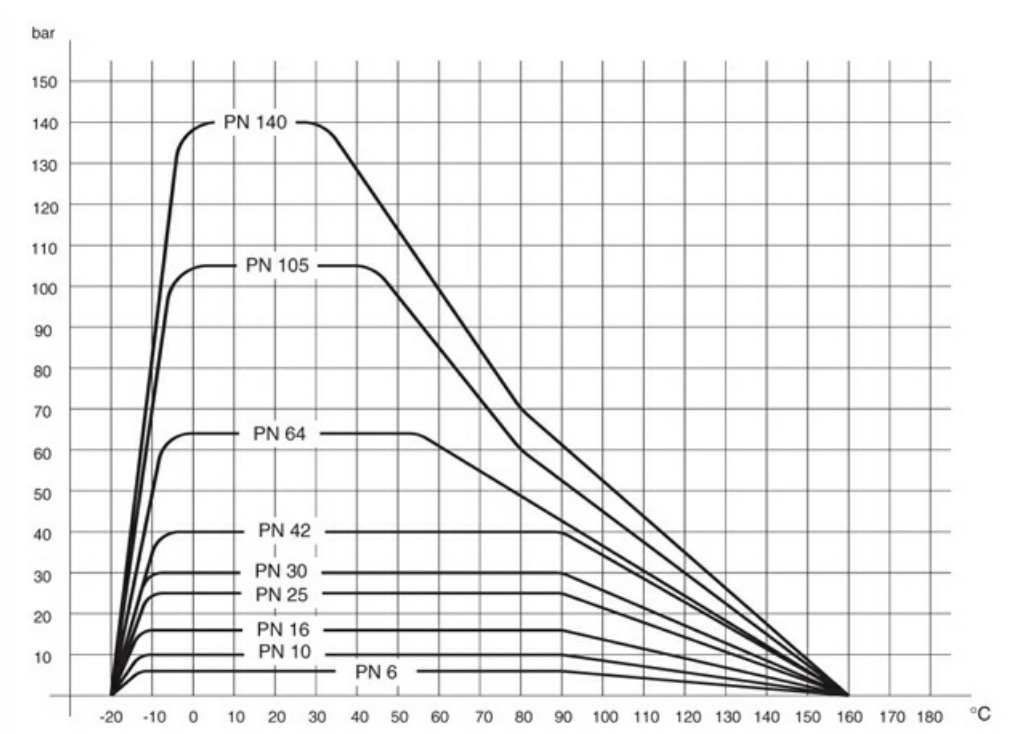
Position	Description	Note
H	Heater	Standard
L	Torque limiter	Standard
MC	End position feedback signals CLOSED	Standard max. 1A/250VAC-1A/30VDC
MO	End position feedback signals ON	Standard max. 1A/250VAC-1A/30VDC
MCL	Actuator CLOSED	
MOP	Actuator OPEN	

The diagram illustrates a control circuit for a motor (M1). The main power supply consists of three lines: PE (Protective Earth), L (+) (Line), and N (-) (Neutral). A fuse (F1) is connected to the L (+) line. The circuit is divided into three main sections: X:F (Main Power Distribution), X:G (Control Circuit), and X:R (Motor Control). The X:F section contains a contactor (X:F) with terminals 1, 2, and 3. The X:G section contains two relays (S1 and S2) and a stop button (S3). The X:R section contains a contactor (X:R) with terminals J and K, and a resistor (R1) connected to terminals 4, 5, and 6. The motor (M1) is connected to the X:R section. The control circuit is connected to the L (+) line through the fuse (F1) and the X:F contactor. The control circuit includes the X:G relays and the X:R contactor, which controls the motor (M1). The resistor (R1) is connected to the X:R contactor and the N (-) line.

2-Point control or 3-point control by changing the electrical connection



Pressure-temperature diagram



Illustrations non-binding
Design, dimensional and material changes reserved

Armatures / Ball valves - automatically operated / Ball valves - electrically operated / Ball valve with electrical actuator Series 8E003