

Stainless steel ball valves with electric actuator 1/4" up to 4" Series 8E002



Design type	Electric geared motor with additional manual override, Actuator heater and Torque monitoring
Connection	RP1/4"...RP4" 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	-20...+160°C
Ambient temperature	-20...+55°C
Operating pressure	0bar up to Operating pressure according to table and pressure-temperature diagram, suitable for rough vacuum
Mounting type	Installation in rigid piping system
Mounting position	any, except hanging downward

Electrical data:

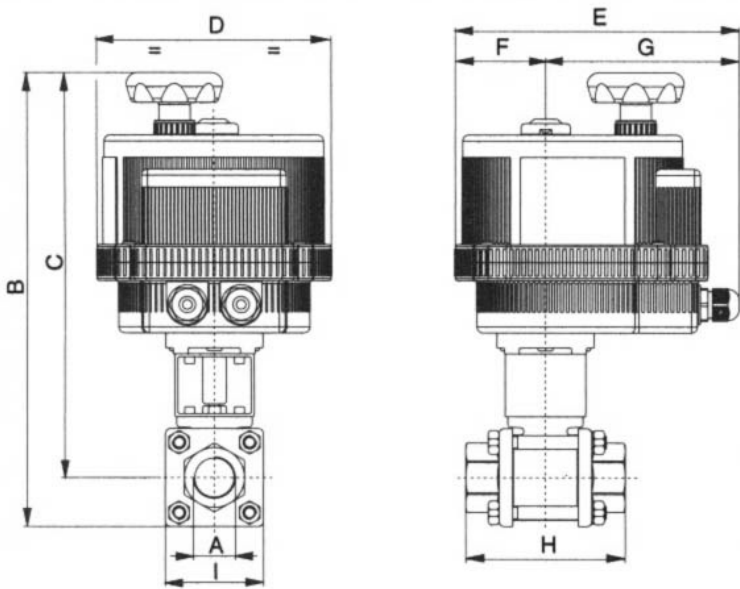
Voltage type	AC and DC voltage
Standard voltage	see table "Electrical data"
Permissible voltage fluctuation	± 10%
Electrical Connection	via cable gland PG11
End position shut-off	via built-in limit switches
Duty cycle	VB015 50% ED VB030, VB060 and VB110 75% ED (S3), however max. 100 switching cycles per day
Degree of protection	VB015 IP65 or rather all other sizes IP67 according to EN 60529 with properly installed cable entry (protection against dust ingress and splashing water)
Special version	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

8E002 001 - 1/4"		
	12V/50-60Hz/12VDC	001
	24V/50-60Hz/24VDC	002
Voltage	100-240V/50-60Hz	004
Connection	RP1/4"	1/4"
	RP3/8"	3/8"
	RP1/2"	1/2"
	RP3/4"	3/4"
	RP1"	1"
	RP11/4"	11/4"
	RP11/2"	11/2"
	RP2"	2"
	RP21/2"	21/2"
	RP3"	3"
	RP4"	4"

Dimensions

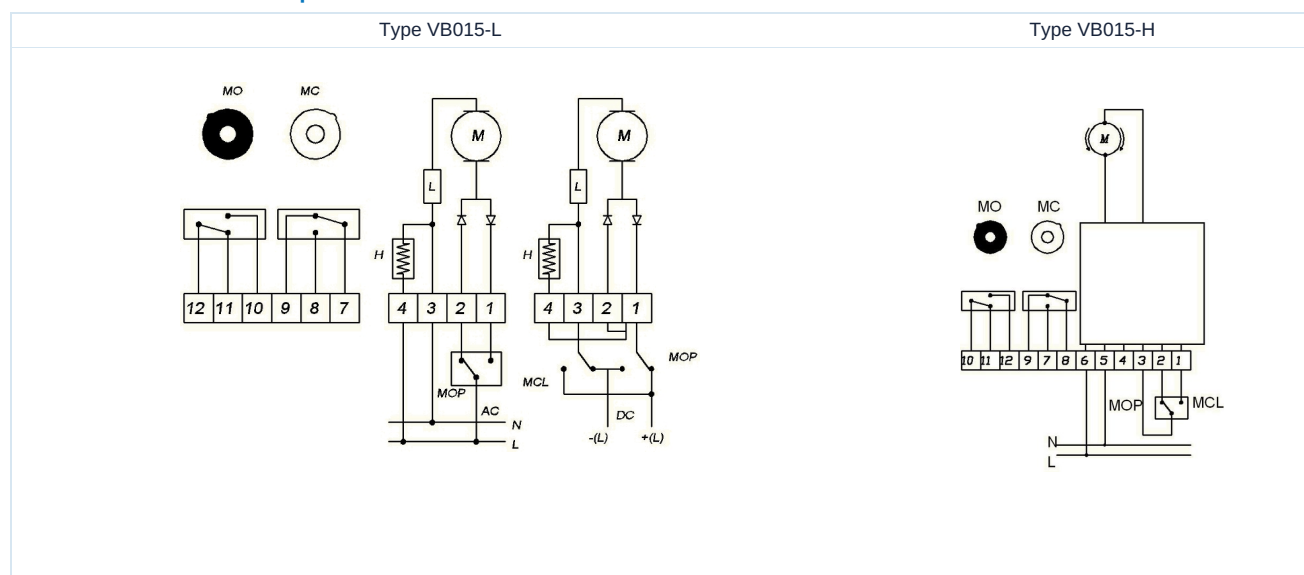


Connection A	Nominal size DN[mm]	max. Operating pressure [bar]	B	C	D	E	F	G	H	I	Kv value [m³/h]	Weight [approx. kg]	Actuator type	Type
RP1/4"	8	64	205	188	123	164	43	121	57	33	5,4	1,7	VB015	8E002...-1/4"
RP3/8"	10	64	205	188	123	164	43	121	57	33	6	1,7	VB015	8E002...-3/8"
RP1/2"	15	64	211	192	123	164	43	121	65	38	16,3	1,8	VB015	8E002...-1/2"
RP3/4"	20	40	252	229	123	164	43	121	76	47	29,5	2,0	VB015	8E002...-3/4"
RP1"	25	40	309	280	157	191	61	130	92	58	43	3,4	VB030	8E002...-1"
RP11/4"	32	25	317	283	157	191	61	130	107	67	89	3,8	VB030	8E002...-11/4"
RP11/2"	40	25	368	330	185	215	68	147	116	76	230	5,4	VB060	8E002...11/2"
RP2"	50	25	382	337	185	215	68	147	136	90	265	6,5	VB060	8E002...-2"
RP21/2"	65	16	434	367	211	237	84	153	154	134	540	13,1	VB110	8E002...-21/2"
RP3"	80	16	459	379	211	237	84	153	180	161	873	17,7	VB110	8E002...-3"
RP4"	100	16	510	415	211	237	84	153	217	190	1390	26,4	VB190	8E002...-4"

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
VB060-L-12	12V/50-60Hz/12VDC	AC 3,8 / DC 2,85	60	50%	9
VB060-L	24V/50-60Hz/24VDC	AC 1,8 / DC 1,2	60	75%	9
VB060-H	100-240V/50-60Hz	0,6-0,3	60	75%	9
VB110-L-12	12V/50-60Hz/12VDC	AC 2,2 / DC 1,8	110	50%	27
VB110-L	24V/50-60Hz/24VDC	AC 1 / DC 0,7	110	75%	27
VB110-H	100-240V/50-60Hz	0,4-0,2	110	75%	27
VB190-L-12	12V/50-60Hz/12VDC	AC 3,8 / DC 2,85	190	50%	27
VB190-L	24V/50-60Hz/24VDC	AC 1,8 / DC 1,2	190	75%	27
VB190-H	100-240V/50-60Hz	0,6-0,3	190	75%	27

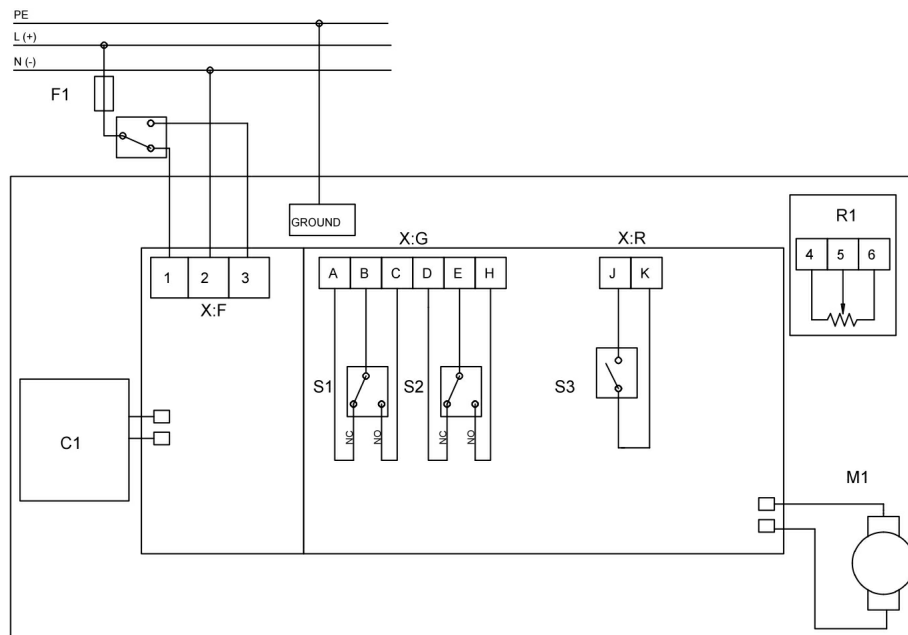
Electrical connection example VB015



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	

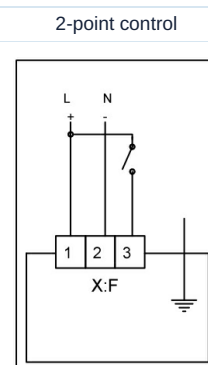
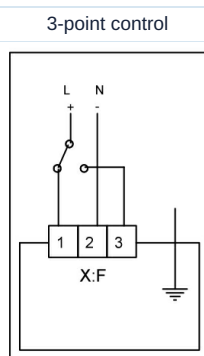


Electrical connection example VB030 - VB190

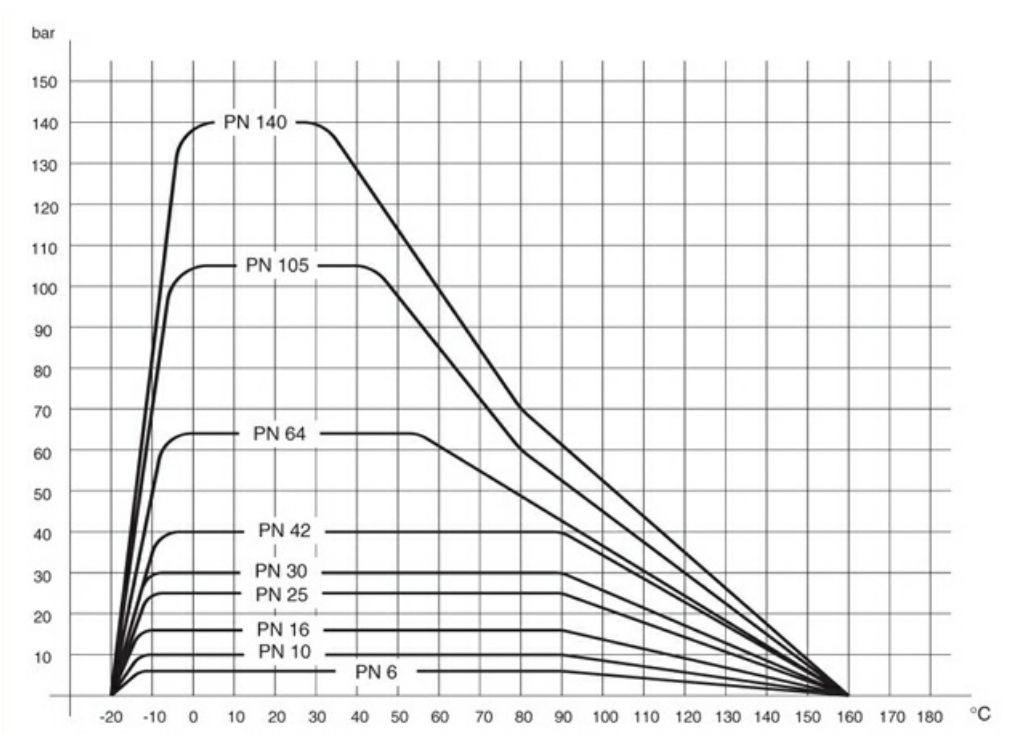


Position	Description	Note
C1	Battery pack for safety position	optional available
R1	Potentiometer 5 K Ω /1W	optional available
S1	End position feedback signals CLOSED	Standard max. 2A/250VAC-2A/30VDC
S2	End position feedback signals ON	Standard max. 2A/250VAC-2A/30VDC
S3	Fault message	Standard max. 1A/120VAC-2A/24VDC
X:F:1	Connection terminal	Actuator CLOSED
X:F:2	Connection terminal	
X:F:3	Connection terminal	Actuator OPEN

2-Point control or 3-point control by changing the electrical connection VB030 - VB190



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 8E002