

Stainless steel flanged ball valves with electric actuator DN15 up to DN150 Series 8E005



Design type	Electric geared motor with additional manual override, Actuator heater and Torque monitoring
Connection	Flanges DN15...DN150 according to EN1092-1 PN16
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. For steam applications we recommend using special steam valves.
Medium temperature	-20...+160°C
Ambient temperature	-20...+55°C
Operating pressure	Vacuum max. 10 ⁻³ Torr up to Operating pressure according to table and pressure-temperature diagram
Mounting type	Installation in rigid piping system
Mounting position	any, except hanging downward

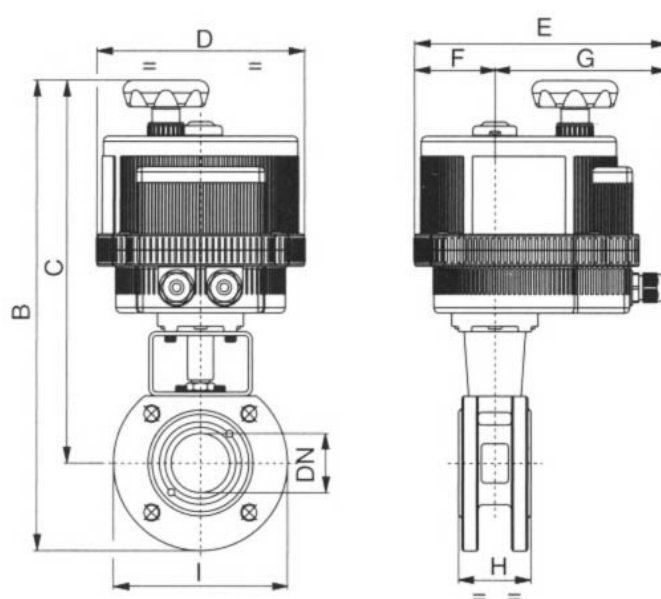
Electrical data:

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	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

	8E005	001 - 15		
	12V/50-60Hz/12VDC	001		
	24V/50-60Hz/24VDC	002		
Voltage	100-240V/50-60Hz	004		
Nominal size	DN 15	15		
	DN 20	20		
	DN 25	25		
	DN 32	32		
	DN 40	40		
	DN 50	50		
	DN 65	65		
	DN 80	80		
	DN 100	100		
	DN 125	125		
	DN 150	150		



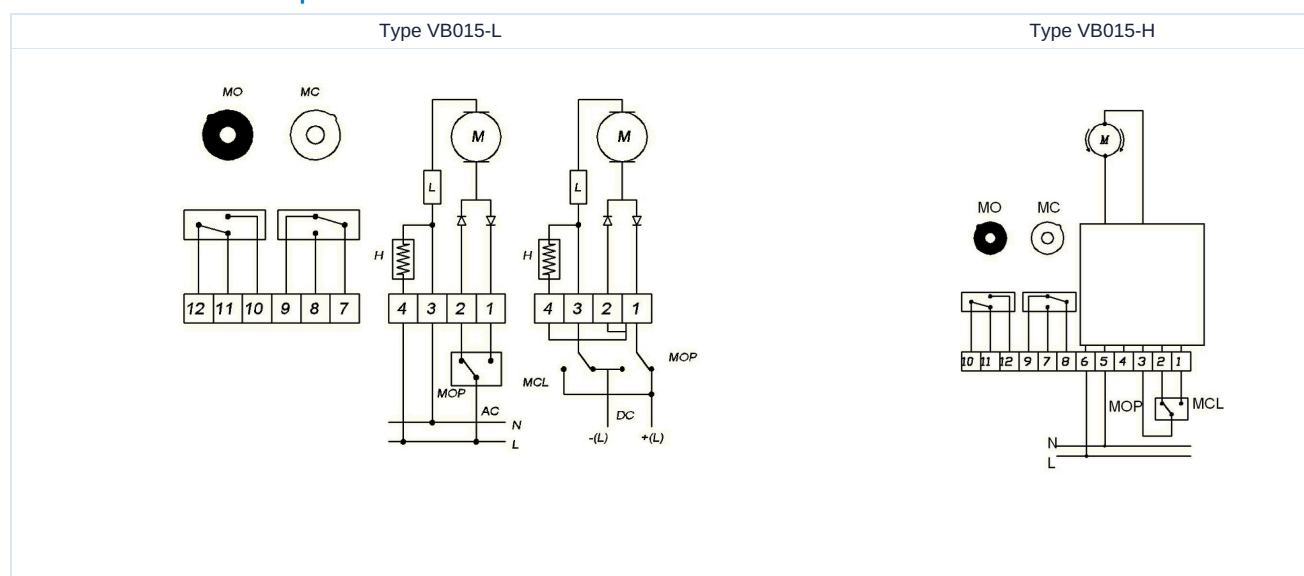
Nominal size DN[mm]	max. Operating pressure [bar]	B	C	D	E	F	G	H	I	Kv value [m³/h]	Weight [approx. kg]	Actuator type	Type
15	16	269	224	123	164	43	121	35	90	19,2	2,6	VB015	8E005...15
20	16	278	228	123	164	34	121	40	100	35	3,2	VB015	8E005...20
25	16	335	280	157	191	61	130	46	110	64,5	5,5	VB030	8E005...25
32	16	351	286	157	191	61	130	54	130	103,8	6,1	VB030	8E005...32
40	16	404	329	185	215	68	147	64	150	174	8,9	VB060	8E005...40
50	16	420	337	185	215	68	147	82	165	301,3	14	VB060	8E005...50
65	16	461	369	211	237	84	153	103	185	545,7	19	VB110	8E005...65
80	16	479	379	211	237	84	153	122	200	872,5	26,5	VB110	8E005...80
100	16	524	415	211	237	84	153	152	220	1363	48,2	VB190	8E005...100
125	16	562	437	211	237	84	153	196	250	2360	72,2	VB190	8E005...125
150	16	607	464	222	247	77	170	232	285	3671	123	VB350	8E005...150



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
VB30-L-12	12V/50-60Hz/12VDC	AC 2,2 / DC 1,8	30	50%	8
VB30-L	24V/50-60Hz/24VDC	AC 1 / DC 0,7	30	75%	8
VB30-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
VB60-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
VB350-L-12	12V/50-60Hz/12VDC	AC 4,75 / DC 3,65	350	50%	50
VB350-L	24V/50-60Hz/24VDC	AC 1,895 / DC 1,65	350	75%	50
VB350-H	100-240V/50-60Hz	0,75-0,4	350	75%	50

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	

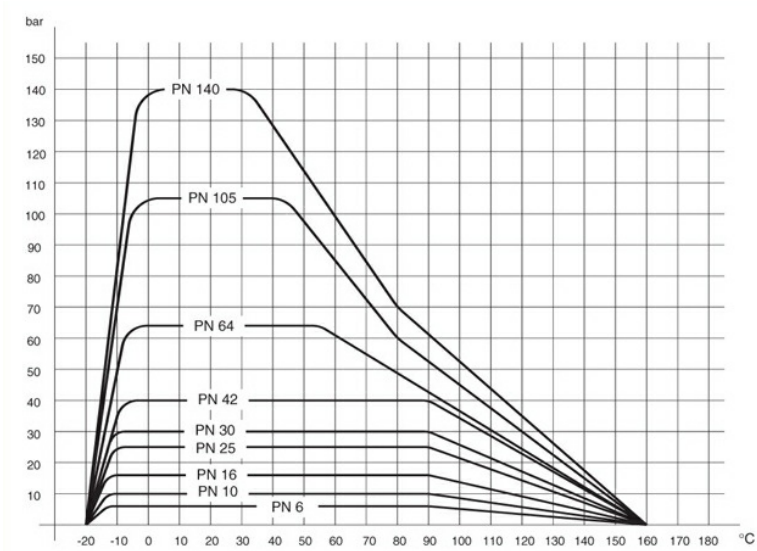


The diagram illustrates a control circuit for a motor (M1). The power supply consists of three lines: PE (Protective Earth), L (+) (Live), and N (-) (Neutral). A fuse (F1) is connected to the L (+) line. The circuit is divided into three main sections: X:F, X:G, and X:R. Section X:F contains a capacitor (C1) and a relay (X:F) with terminals 1, 2, and 3. Section X:G contains two relays (X:G) with terminals A, B, C, D, E, and H, and two switches (S1 and S2) with NC (Normally Closed) and NO (Normally Open) contacts. Section X:R contains a relay (X:R) with terminals J and K, and a switch (S3) with NO contacts. A resistor (R1) is connected to the L (+) line and the X:R section. The motor (M1) is connected to the X:R section and the N (-) line.

2-Point control or 3-point control by changing the electrical connection VB030 - VB350



Pressure-temperature diagram



Illustrations non-binding
Design, dimensional and material changes reserved

Armatures / Ball valves - automatically operated / Flanged ball valves - electrically operated / Flanged ball valve with electrical actuator Series 8E005