

Steel flanged ball valves with electric actuator DN15 up to DN150 Series 8E054



Design type	Flanged ball valve with Electric geared motor, additional manual override, Actuator heater and Torque monitoring, Face-to-face length according to EN558-1 R27
Connection	Flanges DN15...DN150 according to EN1092-1
Materials Standard version	Actuator: Polymer housing PA6 or rather PA66 Ball valve: Housing Zinc-plated steel, Ball stainless steel 1.4301, 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:

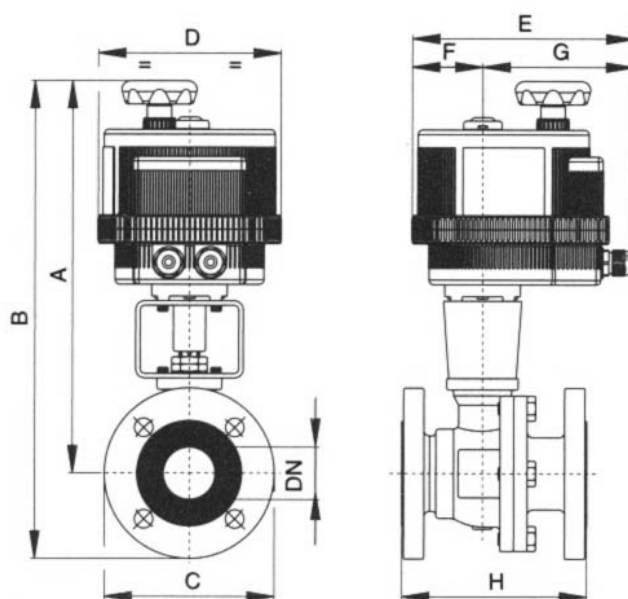
Voltage type	AC and DC voltage
Standard voltage	see table "Electrical data"
Permissible voltage fluctuation	± 10%
Electrical Connection	via cable gland PG11
End position shut-off	via built-in limit switches
Duty cycle	see table "Electrical data", however max. 100 switching cycles per day
Degree of protection	VB015 IP65 or rather all other sizes IP67 according to EN 60529 with properly installed cable entry (protection against dust ingress and splashing water)
Approvals	Ball valve ATEX, FireSafe, TA-Luft
Special version	oil-, grease- and silicone-free for oxygen, 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

		8E054 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	

Dimensions



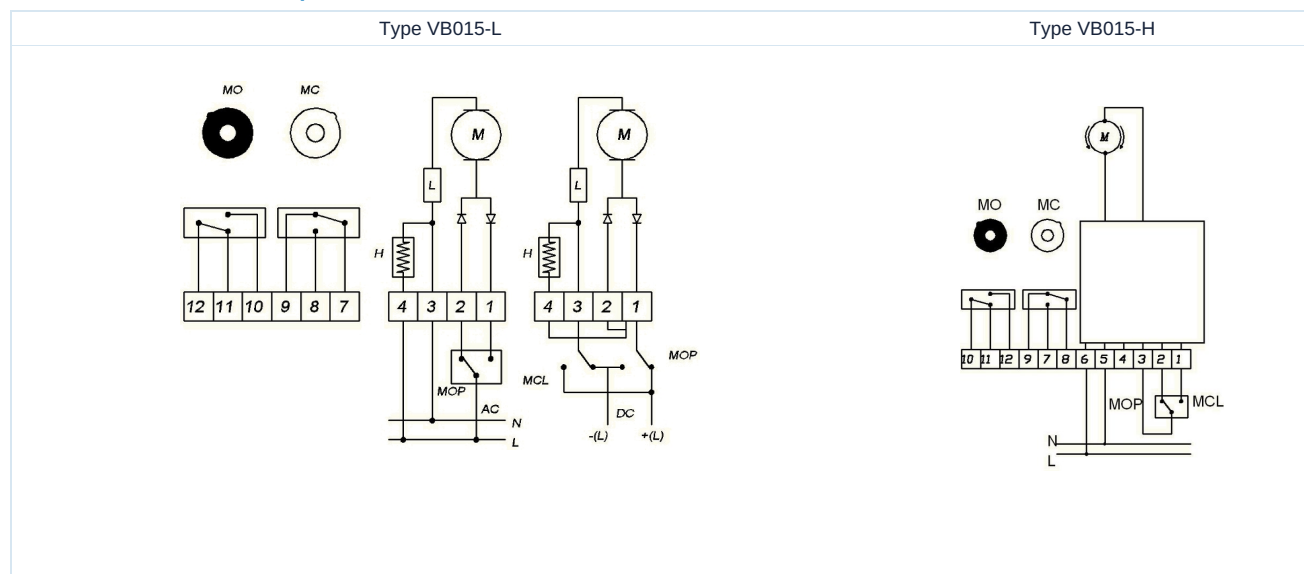
Nominal size DN[mm]	max. Operating pressure [bar]	A	B	C	D	E	F	G	H	Kv value [m³/h]	Weight [approx. kg]	Actuator type	Type
15	40	225	272	95	123	164	43	121	115	19,2	4,2	VB015	8E054...-15
20	40	227	279	105	123	164	43	121	20	35	4,9	VB015	8E054...-20
25	40	294	351	115	157	191	61	130	125	64,5	7,1	VB030	8E054...-25
32	40	324	394	140	185	215	68	147	130	64,5	9,4	VB060	8E054...-32
40	40	351	426	150	185	215	68	147	140	103,8	11,7	VB060	8E054...-40
50	40	359	441	165	185	215	68	147	150	174	15	VB060	8E054...-50
65	16	386	478	185	211	237	84	153	170	301,3	20,6	VB110	8E054...-65
80	16	521	421	200	211	237	84	153	180	545,7	25,7	VB110	8E054...-80
100	16	435	544	220	211	237	84	153	190	872,5	32	VB190	8E054...-100
125	16	459	584	250	222	247	77	170	325	1363	56,8	VB270	8E054...-125
150	16	491	634	285	222	247	77	170	350	3671	82	VB350	8E054...-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
VB270-L-12	12V/50-60Hz/12VDC	AC 3,8 / DC 2,85	270	50%	50
VB270-L	24V/50-60Hz/24VDC	AC 1,8 / DC 1,2	270	75%	50
VB270-H	100-240V/50-60Hz	0,6-0,3	270	75%	50
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	

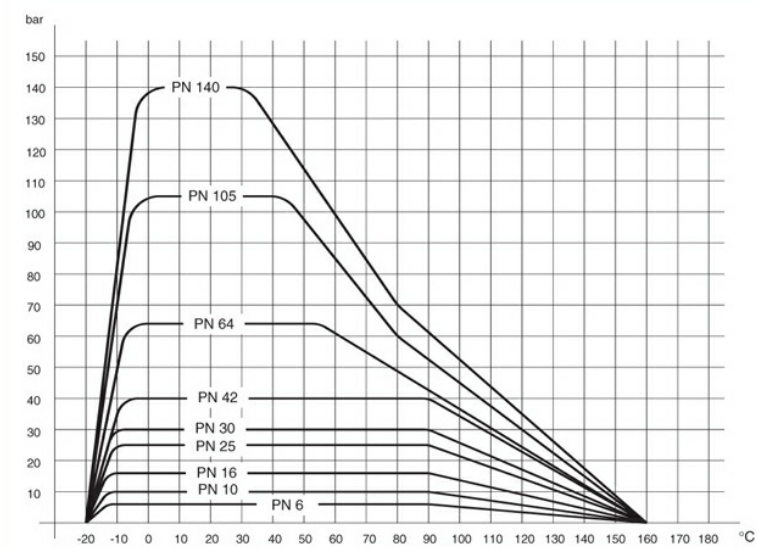


The diagram illustrates a control circuit for a motor (M1). The main power supply consists of three lines: PE (Protective Earth), L (+) (Line), and N (-) (Neutral). A fuse (F1) is connected to the L (+) line. The circuit is divided into three main sections: X:F (Main Power Distribution), X:G (Motor Control), and X:R (Resistor Control). The X:F section contains a contactor (X:F) with three main contacts (1, 2, 3) and a thermal relay (C1). The X:G section contains two relays (S1, S2) and a contactor (X:G) with six main contacts (A, B, C, D, E, H). The X:R section contains a relay (S3) and a contactor (X:R) with two main contacts (J, K). The motor (M1) is connected to the X:G section. A resistor (R1) is connected to the X:R section. The circuit is grounded to a common GROUND point.

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 8E054