

Brass ball valves with electric actuator Series 8E014



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 Brass CW617N nickel-plated, Ball Brass CW617N hard chrome-plated, Seals PTFE/FKM
Application range	Gases and liquids of Group 2 in accordance with PED 2014/68/EU 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:

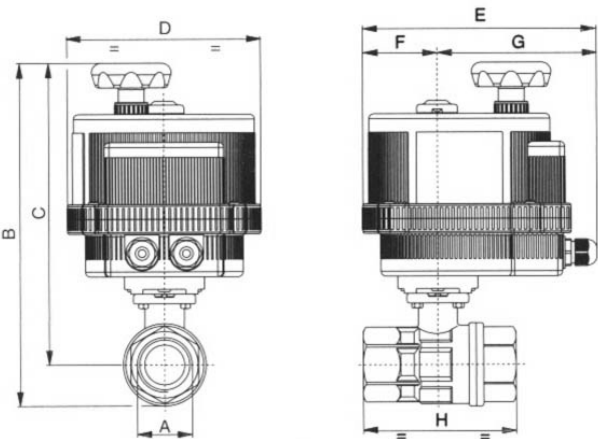
Voltage type	AC and DC voltage
Standard voltage	see table "Electrical data"
Permissible voltage fluctuation	± 10%
Electrical Connection	via cable gland PG11
End position shut-off	via built-in limit switches
Duty cycle	see table "Electrical data", however max. 100 switching cycles per day
Degree of protection	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	higher medium temperatures, Battery pack for safety position, Positioner, ATEX
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

8E014 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"

Dimensions

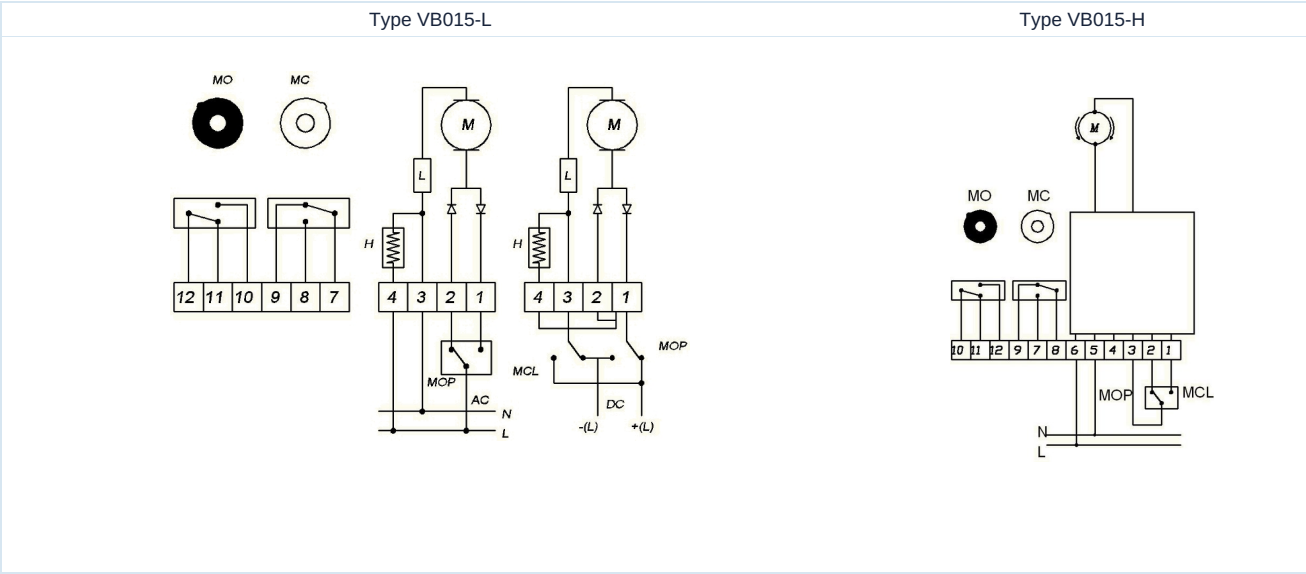


Connection A	Nominal size DN[mm]	max. Operating pressure [bar]	B	C	D	E	F	G	H	Kv value [m³/h]	Weight [approx. kg]	Actuator type	Type
RP1/4"	8	40	192	175	123	164	43	121	67	5,4	1,8	VB015	8E014...-1/4"
RP3/8"	10	40	192	175	123	164	43	121	67	6	1,8	VB015	8E014...-3/8"
RP1/2"	15	40	192	175	123	164	43	121	67	16,3	1,8	VB015	8E014...-1/2"
RP3/4"	20	40	197	177	123	164	43	121	76	29,5	1,8	VB015	8E014...-3/4"
RP1"	25	40	213	188	123	164	43	121	90	43	2,2	VB015	8E014...-1"
RP11/4"	32	40	221	191	123	164	43	121	102	89	2,5	VB015	8E014...-11/4"
RP11/2"	40	40	289	252	157	191	61	130	114	230	4,1	VB030	8E014...11/2"
RP2"	50	40	308	262	157	191	61	130	138	265	5,1	VB030	8E014...-2"
RP21/2"	65	25	360	303	185	215	68	147	157	540	7,3	VB060	8E014...-21/2"
RP3"	80	16	382	314	185	215	68	147	188	873	9,6	VB060	8E014...-3"
RP4"	100	16	435	352	211	237	84	153	225	1390	15,0	VB110	8E014...-4"

Electrical data

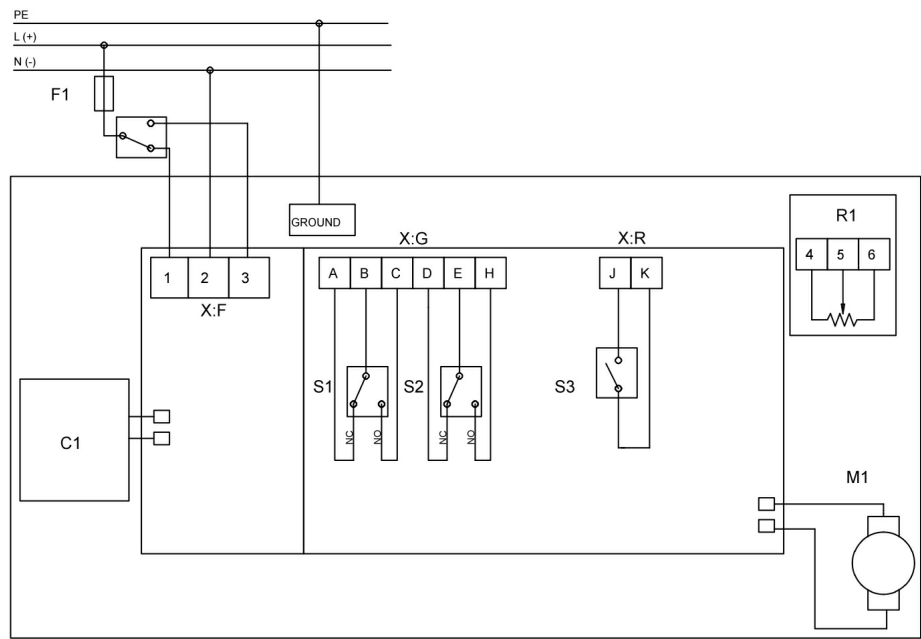
Type	Voltage	Current consumption [A]	Rated torque [Nm]	Duty cycle (S3)	Actuation time [Sek.]
VB015 -L-12	12V/50-60Hz/12VDC	1,2	15	AC 50% / DC75%	10
VB015-L-24	24V/50-60Hz/24VDC	0,6	15	AC 50% / DC75%	10
VB015-H	100-240V/50-60Hz	0,3-0,19	15	75%	10
VB030-L-12	12V/50-60Hz/12VDC	AC 2,2 / DC 1,8	30	50%	8
VB030-L	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

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	

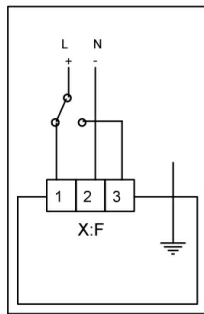
Electrical connection example VB030 - VB110



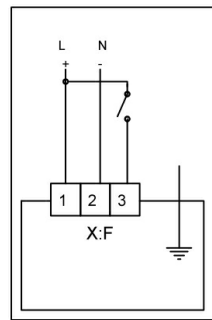
Position	Description	Note
C1	Battery pack for safety position	optional available
R1	Potentiometer 5 K Ω /1W	optional available
S1	End position feedback signals CLOSED	Standard max. 2A/250VAC-2A/30VDC
S2	End position feedback signals ON	Standard max. 2A/250VAC-2A/30VDC
S3	Fault message	Standard max. 1A/120VAC-2A/24VDC
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 - VB110

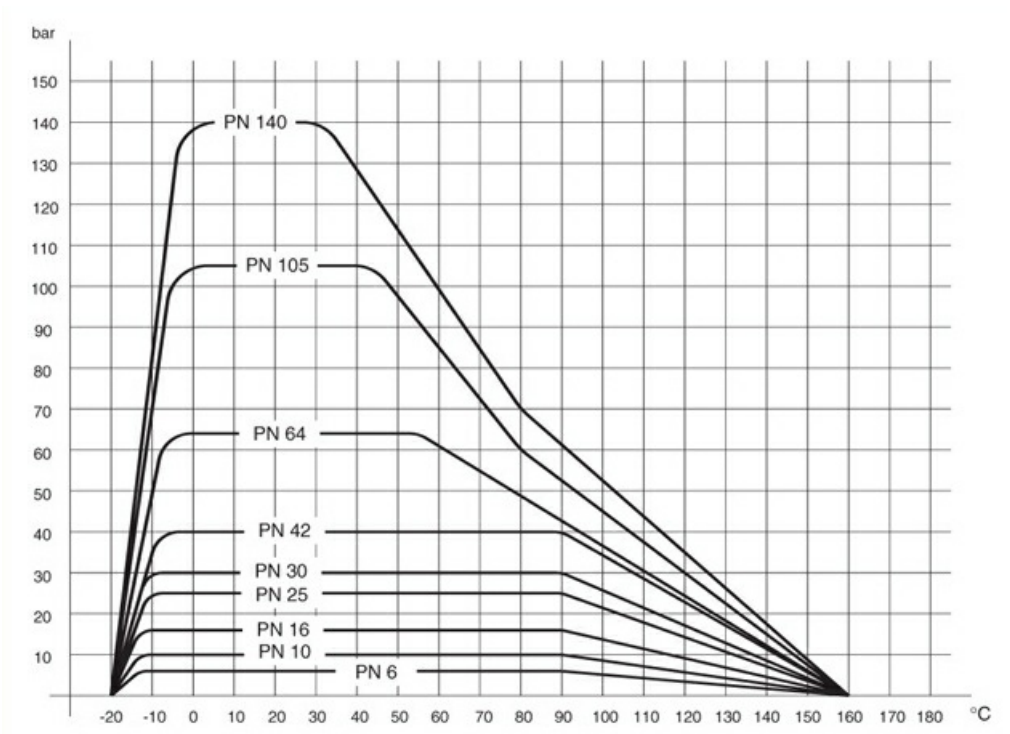
3-point control



2-point control



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 8E014