

Motorized 2-, 3-port proportional control ball valve

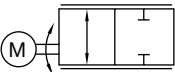
MXBC2/MXGC2 Series

● Port size: Rc3/8 to Rc1

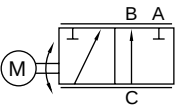


JIS symbol

● MXBC2



● MXGC2



Common specifications

Item	MXBC2	MXGC2
Working fluid	Water	
Working pressure MPa	0 (≈0 psi, 0 bar) to 1.0 (≈150 psi, 10 bar)	
Proof pressure (water pressure) MPa	2.0 (≈290 psi, 20 bar)	
Fluid temperature °C	0 (32°F) to 80 (176°F) (no freezing)	
Ambient temperature °C	-10 (14°F) to 50 (122°F)	
Ambient humidity %	95 or less	
Mounting orientation	From vertical direction with the actuator on the top to horizontal direction. (Refer to page 784.)	
Pressurization direction	Arbitrary	Port C pressurization only
Degree of protection	IPX3 "rainproof"	

Electrical specifications

Item	MXBC2	MXGC2
Rated voltage *1	24 VDC	
Current consumption (average) mA	750±100	
Input signal	0 (4) to 20 mA DC, internal impedance 240 Ω (when fully closed: 0 mA)	
Response time sec	Fully open - fully closed	8 A-C path - B-C path 8
Resolution	1.3% or less	

*1: Use the product within ±5% of the rated voltage.

Individual specifications

Item	2-port valve				3-port valve		
	MXBC2-10	MXBC2-15	MXBC2-20	MXBC2-25	MXGC2-15	MXGC2-20	MXGC2-25
Port size	Rc3/8	Rc1/2	Rc3/4	Rc1	Rc1/2	Rc3/4	Rc1
Orifice size mm	10	10	15	20	10	14	19
Cv	10	6	16	29	3	6	11
Motor load hour rate *3	Active for 3 sec./off for 5 sec.						
Weight kg	2.0	2.0	2.2	2.3	2.2	2.3	2.5

*3 : Refer to Control methods (page 786) for cautions about the motor load hour rate.

How to order

Model No. **MXBC2-15-E-3**

A Number of ports

B Port size

C Body/seat material

D Voltage

Code	Description	Remarks
A Number of ports		
B	2-port	
G	3-port	Multi-fluid
B Port size		
10	Rc3/8	Only MXBC2 (2-port valve) is available.
15	Rc1/2	
20	Rc3/4	
25	Rc1	
C Body/seat material		
O	Body - bronze/seat - PTFE	
E	Body - stainless steel/seat - PTFE	
D Voltage		
3	24 VDC	

[Example of model No.]

MXBC2-15-E-3

Model: MXBC2

- A** Number of ports : 2-port valve
- B** Port size : Rc1/2
- C** Body/seat material : Body - stainless steel/valve seat - PTFE
- D** Voltage : 24 VDC

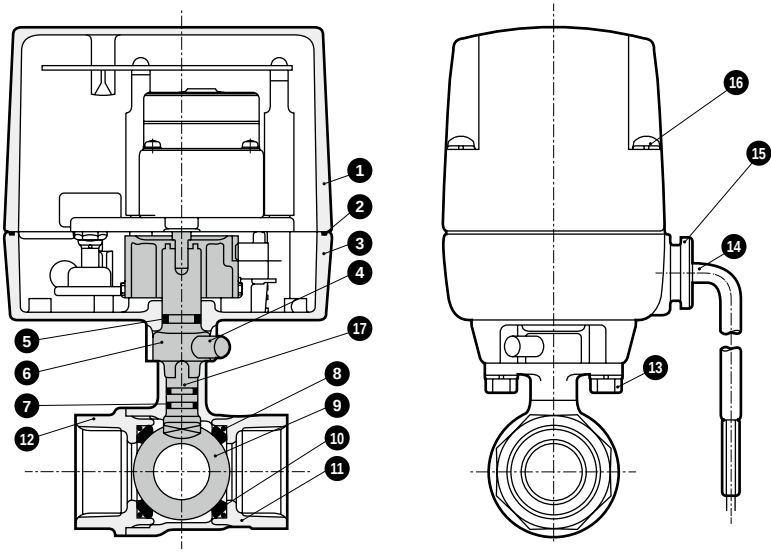
EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S [◇] B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combus
Auto- Water
Outdoor
SpecFld
Custom
Ending

MXBC2/MXGC2 Series

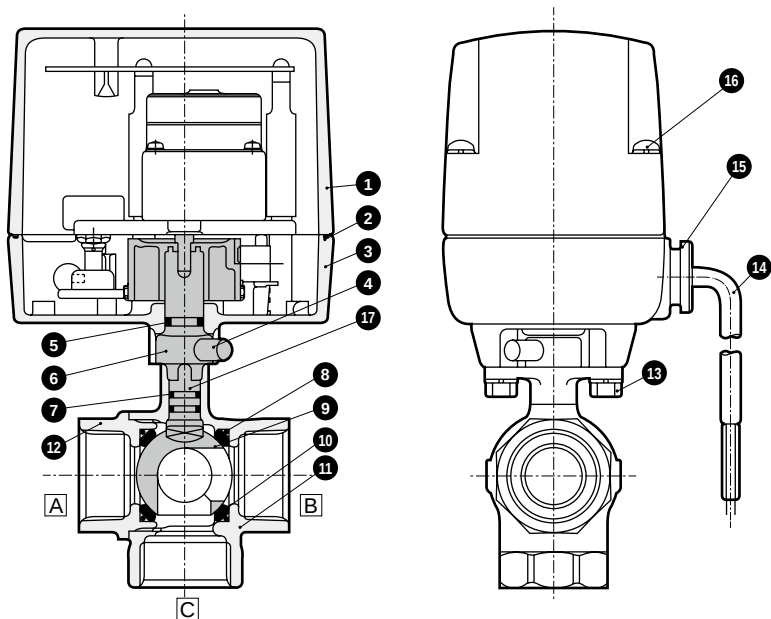
EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S ◇ B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combust
Auto- Water
Outdoor
SpecFld
Custom
Ending

Internal structure and parts list

● MXBC2-10/15/20/25-0



● MXGC2-15/20/25-0



Cannot be disassembled

No.	Part name	Material	No.	Part name	Material
1	Bonnet	ADC12	10	Ball seat	PTFE
2	Gasket	NBR	11	Body	CAC408(SCS13)
3	Adaptor	ZDC2	12	Cap	CAC408(SCS13)
4	Stopper	C2700	13	Hexagon head bolt	SWCH
5	O-ring	FKM	14	Cord	0.75 mm ² , 3-conductor
6	Intermediate bush	SUS303	15	Bushing	PF
7	O-ring	FKM,NBR *1	16	Phillips pan head machine screw	SWCH
8	O-ring	FKM	17	Shaft	SUS303(SUS304)
9	Valve ball	C3771(SUS304)			

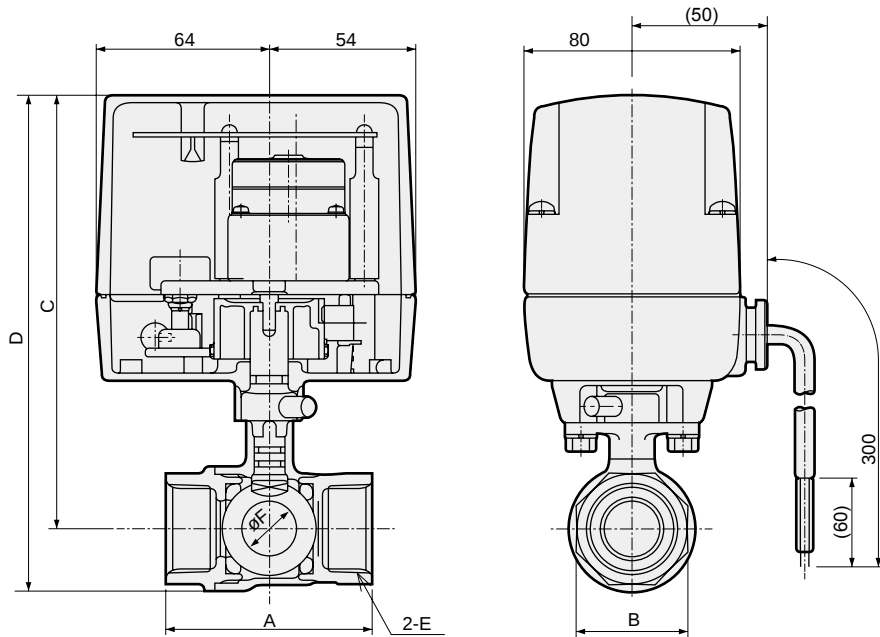
Materials shown in () are for stainless steel body.

*1 : The upper O-ring is NBR, and the lower is FKM. For stainless steel body, FKM is used for both upper and lower O rings.
*2 : Valve ball is hard chrome plated copper alloy.

Dimensions



● MXBC2-10/15/20/25-0

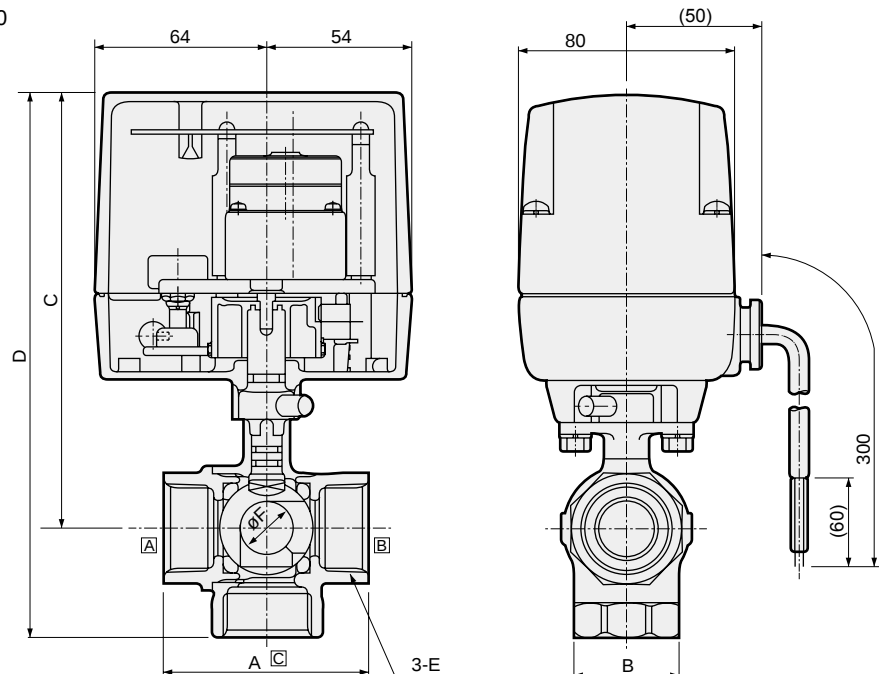


Cable length 300 mm

Model No.	A	B	C	D	E	F
MXBC2-10	50(56)	24(28)	151	166(167)	Rc3/8	10
MXBC2-15	56	28	151	166(167)	Rc1/2	10
MXBC2-20	65	34	157	176.5(177.5)	Rc3/4	15
MXBC2-25	76	41	160	183(184)	Rc1	20

Dimensions shown in () are for stainless steel body.

● MXGC2-15/20/25-0



Cable length 300 mm

Model No.	A	B	C	D	E	F
MXGC2-15	56	28	151	181	Rc1/2	10
MXGC2-20	65	34	157	193	Rc3/4	14
MXGC2-25	76	41	160	202	Rc1	19

EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/AD
APK/ADK
DryAir
EX-XPLNprf
XPLNprf
HVB/HVL
S◇B/NAB
LAD/NAD
Water-Rela
NP/NAP/NVP
SNP
CHB/G
MXB/G
Other valves
SWD/MWD
DustColl
CVE/CVSE
CCH/CPE/D
LifeSci
Gas-Combus
Auto-Water
Outdoor
SpecFld
Custom
Ending