

Discontinue

2 port electric ball valve type

HIGH CORROSION PROOF MOTOR VALVE MXB1-C SERIES

• Port size : Rc1/2, Rc3/4, Rc1, Rc1¹/₄, Rc1¹/₂, Rc2



Common specifications

Descriptions	MXB1-C
Working fluid	Corrosive fluid (not to corrode materials)
Working pressure range MPa	0 to 1.0 (refer to working pressure range on individual specifications.)
Withstanding pressure (water) MPa	2.0
Fluid temperature °C	0 to 80 (no freezing)
Ambient temperature °C	-10 to 50
Ambient humidity %	95 or less
Valve seat leakage cm ³ /min	0 (under 1.0MPa or 0.5MPa (only for port size Rc2) water pressure)
Installation attitude	Limited from vertical to horizontal installation placing motor top.
Rated voltage	AC100V(50/60Hz), AC200V(50/60Hz), DC12V, DC24V

Individual specifications

Descriptions	MXB1-15-C	MXB1-20-C	MXB1-25-C	MXB1-32-C	MXB1-40-C	MXB1-50-C
Port size	Rc1/2	Rc3/4	Rc1	Rc1 ¹ / ₄	Rc1 ¹ / ₂	Rc2
Orifice mm	9.2	12.5	16	20	24.5	32
Cv flow factor	4.8	9	15.5	24	37	62
Working pressure range MPa	0 to 1.0					0 to 0.5
Apparent power VA	AC100V	4.9/5.9 (50/60Hz)			13/15 (50/60Hz)	
	AC200V	5.4/6.2 (50/60Hz)			13/15 (50/60Hz)	
Starting	AC100V	4.9/5.9 (50/60Hz)			13/15 (50/60Hz)	
	AC200V	5.4/6.2 (50/60Hz)			13/15 (50/60Hz)	
Average Ampere A	DC12V	1.1			1.5	
	DC24V	0.7			1.0	
Peak Ampere A	DC12V	1.8 or less			3 or less	
	DC24V	1.2 or less			2 or less	
Power consumption W	AC	7			15	
	DC12V	13			18	
	DC24V	17			24	
Operation time sec.	AC	10/8 (50/60Hz)			13/11 (50/60Hz)	
	DC	7 to 9			9.5 to 11.5	
Cycle rate	AC	2 cycles/min. or less			1 cycle/min. or less	
	DC	1 cycle/min. or less			1 cycle/2min. or less	
Mass kg	1.1	1.2	1.4	2.3	2.4	2.8

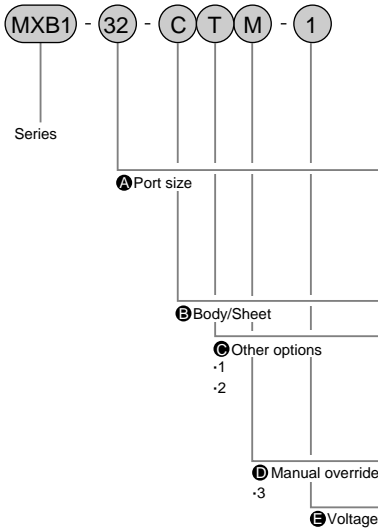
Note 1 : Allowable voltage range should be within ±10% of rated voltage.

Note 2 : Each ampere is the value when rated voltage.

Note 3 : Cycle rate should be within the specifications.

Note 4 : Consult with CKD about other than above specifications.

How to order



Symbol	Descriptions																										
Port size	A	15	Rc1/2																								
		20	Rc3/4																								
		25	Rc1																								
		32	Rc1 1/4																								
		40	Rc1 1/2																								
		50	Rc2																								
B	C	Body- stainless steel/Sheet- PTFE																									
Other options	C	<table border="1"> <thead> <tr> <th>Descriptions</th> <th>Applications</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>Blank</td> <td>5 conduc. cable (output lead wire)</td> <td>—</td> <td>—</td> </tr> <tr> <td>T</td> <td>3 conduc. cable (no output)</td> <td>Output lead wire not req'd</td> <td>3 conduc. cabtyre cable used</td> </tr> <tr> <td>B</td> <td>Round terminal box (5 conduc.)</td> <td>Optional lead wire length req'd</td> <td>—</td> </tr> <tr> <td>L</td> <td>Round terminal box + light (lighting at open)</td> <td>Fully open confir. by light</td> <td>Lighting at fully open</td> </tr> <tr> <td>R</td> <td>Round terminal box + light (lighting at closed)</td> <td>Fully closed confir. by light</td> <td>Lighting at fully closed</td> </tr> </tbody> </table>			Descriptions	Applications	Remarks	Blank	5 conduc. cable (output lead wire)	—	—	T	3 conduc. cable (no output)	Output lead wire not req'd	3 conduc. cabtyre cable used	B	Round terminal box (5 conduc.)	Optional lead wire length req'd	—	L	Round terminal box + light (lighting at open)	Fully open confir. by light	Lighting at fully open	R	Round terminal box + light (lighting at closed)	Fully closed confir. by light	Lighting at fully closed
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D	Blank	Blank																									
	M	Manual override																									
Voltage	E	1	AC100V(50/60Hz)																								
		2	AC200V(50/60Hz)																								
		3	DC24V																								
		4	DC12V																								

*1 : When selecting both no output ("C" is T) and round terminal box ("C" is B), indicate "C" as TB.

*2 : Combinations of LR, TL, TR, BL and BR aren't available for "C".

*3 : Manual override ("D" is M) is available for port size 32, 40 and 50. When port size is 15 to 25, manual override is equipped as standard.

<Example of model number>

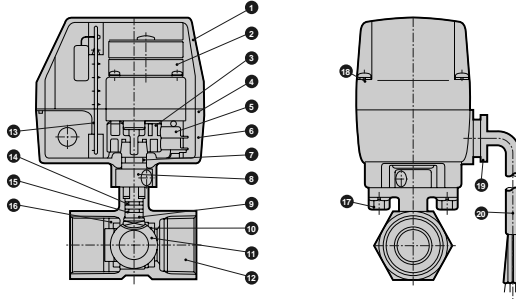
MXB1-32-CTM-1

Series : MXB1-C

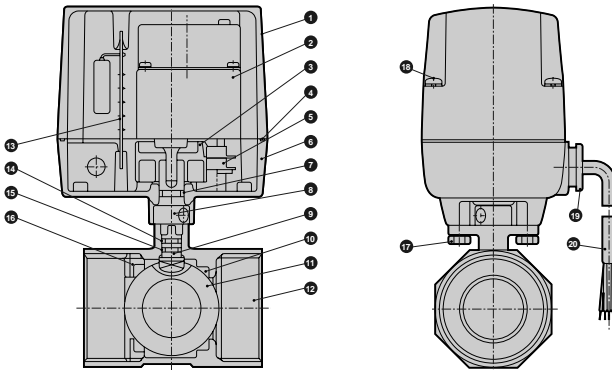
A	Port size	: Rc1/4
B	Body/Sheet	: Body- stainless steel/Sheet- PTFE
C	Other options	: 3 conductor cable (no output)
D	Manual override	: Selected
E	Voltage	: AC100V(50/60Hz)

Internal structure and main parts materials

• MXB1-15/20/25-C



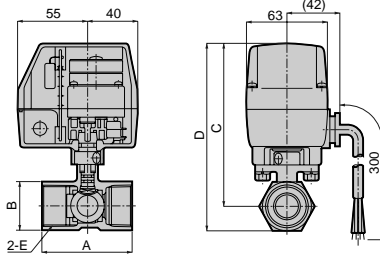
• MXB1-32/40/50-C



No.	Parts name	Material	No.	Parts name	Material
1	Bonnet	ADC12 Aluminum alloy die-casting	11	Valve ball	SUS316 Stainless steel
2	Geared motor		12	Body	SCS14 Stainless steel die casting
3	Cam	PA Polyamid	13	P plate assembly	PF Phenol resin
4	Gasket	NBR Nitrile rubber	14	O ring	NBR Nitrile rubber
5	Micro switch		15	O ring	FKM Fluoro rubber
6	Adapter	ZDC2 Zinc alloy die-casting	16	Insert	SUS316 Stainless steel
7	O ring	NBR Nitrile rubber	17	Hexagon head bolt	SWCH Carbon steel wire for cold forging
8	Intermediate bush	SUS303 Stainless steel	18	Cross headed pan	SWCH Carbon steel wire for cold forging
9	Shaft	SUS316 Stainless steel	19	Bushing	PF Phenol resin
10	Ball seat	PTFE Tetrafluoroethylene resin	20	Cabtyre cable	(0.5mm ² , 5 conductor)

Dimensions

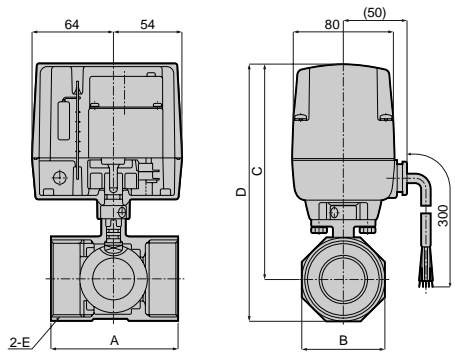
- MXB1-15/20/25-C



Lead wire length 300mm

Model	A	B	C	D	E
MXB1-15-C	56.5	25	119	131.5	Rc1/2
MXB1-20-C	59	32	121.5	137.5	Rc3/4
MXB1-25-C	71	38	125.5	144.5	Rc1

- MXB1-32/40/50-C

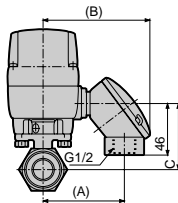


Note 1 : When large port size and manual override "M" are selected, since the yoke is inserted between the valve body and the actuator of MSB1 series, add 22mm to Dimension C, D.
Lead wire length 300mm

Model	A	B	C	D	E
MXB1-32-C	78	49	155.5	180	Rc1 1/4
MXB1-40-C	83	53	161	187.5	Rc1 1/2
MXB1-50-C	100	65	166.5	199	Rc2

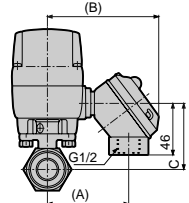
Optional dimensions

- Round terminal box
MXB1-Port size-CB



Port size	A	B	C
15	74	96	53
20	74	96	55.5
25	74	96	59.5
32	82	104	67
40	82	104	72.5
50	82	104	78

- Round terminal box with indicator light
MXB1-Port size-CLR



Port size	A	B	C
15	74	101	53
20	74	101	55.5
25	74	101	59.5
32	82	109	67
40	82	109	72.5
50	82	109	78

Note : When large port size and manual override "M" are selected, since the yoke is inserted between the valve body and the actuator MSB1 series, add 22mm to Dimension C.

Discontinue

2 port electric ball valve

MOTOR VALVE WITH HIGH CORROSION PROOFED MXB1D-C SERIES

- Port size : Rc1/2, Rc3/4, Rc1, Rc1¹/₄, Rc1¹/₂, Rc2



Common specifications

Descriptions	MXB1D-C
Working fluid	Corrosive fluid (not to corrode materials)
Working pressure range MPa	0 to 1.0 (refer to working pressure range on individual specifications.)
Withstanding pressure (water) MPa	2.0
Fluid temperature °C	0 to 80 (no freezing)
Ambient temperature °C	-10 to 50
Ambient humidity %	95 or less
Valve seat leakage cm ³ /min	0 (under 1.0MPa or 0.5MPa (only for port size Rc2) water pressure)
Installation attitude	Limited from vertical to horizontal installation placing motor top
Rated voltage	AC100V(50/60Hz), AC200V(50/60Hz)

Individual specifications

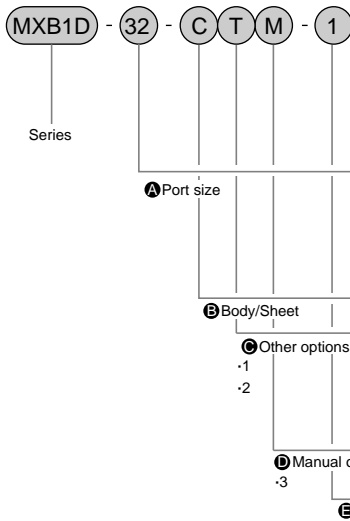
Descriptions	MXB1D-15-C	MXB1D-20-C	MXB1D-25-C	MXB1D-32-C	MXB1D-40-C	MXB1D-50-C
Port size	Rc1/2	Rc3/4	Rc1	Rc1 ¹ / ₄	Rc1 ¹ / ₂	Rc2
Orifice mm	9.2	12.5	16	20	24.5	32
Cv flow factor	4.8	9	15.5	24	37	62
Working pressure range MPa	0 to 1.0					0 to 0.5
Apparent power VA	AC100V	6.0/6.8 (50/60Hz)			14/16 (50/60Hz)	
	AC200V	6.6/7.2 (50/60Hz)			14/16 (50/60Hz)	
	AC100V	6.0/6.8 (50/60Hz)			14/16 (50/60Hz)	
	AC200V	6.6/7.2 (50/60Hz)			14/16 (50/60Hz)	
Power consumption W	8			16		
Operation time sec.	50Hz	10			13	
	60Hz	8			11	
Cycle rate	2 cycles/min. or less			1 cycle/min. or less		
Mass kg	1.2	1.3	1.4	2.4	2.5	2.9

Note 1 : Allowable voltage range should be within ±10% of rated voltage.

Note 2 : Cycle rate should be within the specifications.

Note 3 : Consult with CKD about other than above specifications.

How to order



Symbol	Descriptions			
A Port size	15	Rc1/2		
	20	Rc3/4		
	25	Rc1		
	32	Rc1 ¹ / ₄		
	40	Rc1 ¹ / ₂		
	50	Rc2		
B	C	Body- stainless steel/Sheet- PTFE		
C Other options	Blank	5 conduc. cable (output lead wire)	—	—
	T	3 conduc. cable (no output)	Output lead wire not req'd	3 conduc. cabtyre cable used
	B	Round terminal box (5 conduc.)	Optional lead wire length req'd	—
	L	Round terminal box + light (lighting at open)	Fully open confir. by light	Lighting at fully open
	R	Round terminal box + light (lighting at closed)	Fully closed confir. by light	Lighting at fully closed
D	Blank	Blank		
	M	Manual override		
E	1	AC100V(50/60Hz)		
	2	AC200V(50/60Hz)		

- 1 : When selecting both no output ("C" is T) and round terminal box ("C" is B), indicate "C" as TB.
- 2 : Combinations of LR, TL, TR, BL and BR aren't available for "C".
- 3 : Manual override ("D" is M) is available for port size 32, 40 and 50. When port size is 15 to 25, manual override is equipped as standard.

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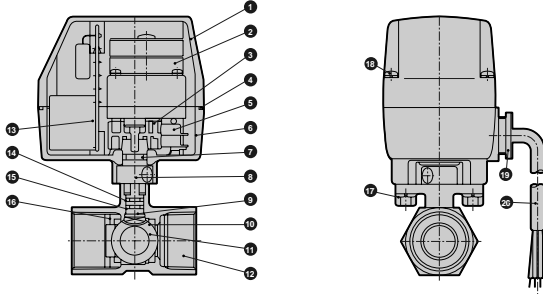
MXB1D-32-CTM-1

Series : MXB1D-C

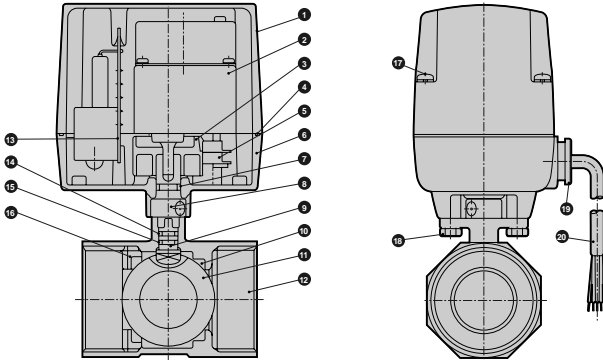
- A** Port size : Rc1¹/₄
- B** Body/Sheet : Body- stainless steel/Sheet- PTFE
- C** Other options : 3 conductor cable (no output)
- D** Manual override : Selected
- E** Voltage : AC100V (50/60Hz)

Internal structure and main parts materials

• MXB1D-15/20/25-C



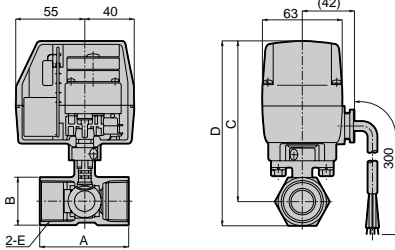
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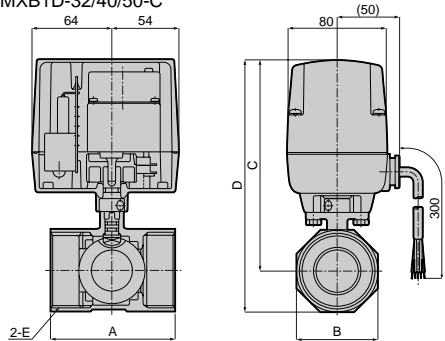
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9	Shaft	SUS316 Stainless steel	19	Bushing	PF Phenol resin
10	Ball seat	PTFE Tetrafluoroethylene resin	20	Cabtyre cable	(0.5mm ² , 5 conductor)

Dimensions

- MXB1D-15/20/25-C



- MXB1D-32/40/50-C



Note 1 : When large port size and manual override "M" are selected, since the yoke is inserted between the valve body and the actuator of MSB1 series, add 22mm to Dimension C, D.

Lead wire length 300mm

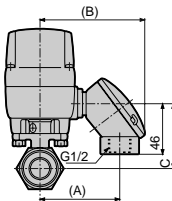
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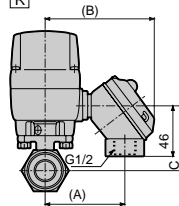
Optional dimensions

- Round terminal box
MXB1D - [Port size] - C [B]



- Round terminal box with indicator light

MXB1D - [Port size] - C $\begin{matrix} L \\ R \end{matrix}$



Port size	A	B	C
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Note : When large port size and manual override "M" are selected, since the yoke is inserted between the valve body and the actuator MSB1 series, add 22mm to Dimension C.