



Miniature motorized 2, 3-port ball valve

# MHB4/MHG4 Series

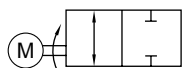
● Port size: Rc3/8 to Rc3/4



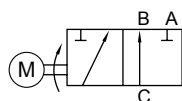
- EXA
- FWD
- HNB/G
- USB/G
- FAB/G
- FGB/G
- FVB
- FWB/G
- FHB
- FLB
- AB
- AG
- AP/AD
- APK/ADK
- DryAir
- EX-XPLNprf
- XPLNprf
- HVB/HVL
- SAB/NAB
- LAD/NAD
- Water-Rela
- NP/NAP/NVP
- SNP
- CHB/G
- MXB/G**
- Other valves
- SWD/MWD
- DustColl
- CVE/CVSE
- CCH/CPE/D
- LifeSci
- Gas-Combus
- Auto-Water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

## JIS symbol

● MHB4



● MHG4



## Common specifications

Descriptions		MHB4/MHG4
Working fluid		Water, air, oil (500 mm <sup>2</sup> /s or less)
Working pressure MPa		0 (≈0 psi, 0 bar) to 0.5 (≈73 psi, 5 bar)
Proof pressure (water pressure) MPa		1.0 (≈150 psi, 10 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 %		70 or less
Mounting orientation		From vertical direction with the actuator on the top to horizontal direction. (Refer to page 740.)
Rated voltage *1		100 VAC(50/60 Hz)
Apparent power VA	Operating	100 VAC
	Starting	100 VAC
Power consumption W		5
Frequency		1 time/min. or less

## Individual specifications

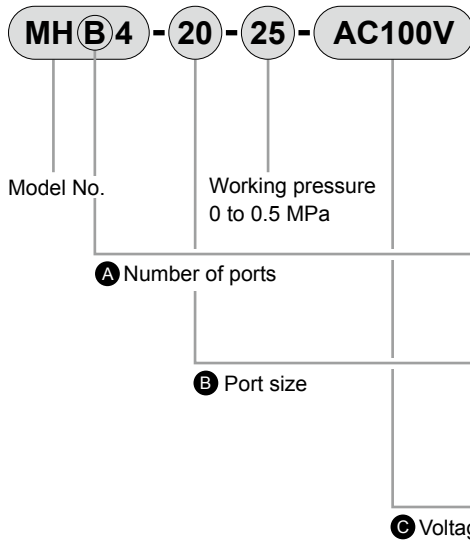
Descriptions	2-port valve			3-port valve		
	MHB4-10-25	MHB4-15-25	MHB4-20-25	MHG4-10-25	MHG4-15-25	MHG4-20-25
Port size	Rc3/8	Rc1/2	Rc3/4	Rc3/8	Rc1/2	Rc3/4
Orifice size mm	8	8	10	8	8	10
Cv	3.3	3.0	4.7	1.8	1.1	3.0
Response time sec	50 Hz			9		
	60 Hz			7.5		
Weight kg	0.42	0.44	0.51	0.45	0.49	0.57
Pressurization direction	Arbitrary			Port C pressurization only		

\*1 : Use the product within ±10% of the rated voltage.

\*2 : Consult with CKD for specifications not indicated above.

\*3 : The protection degree is JIS CO920 IPX2 "Drip proof type II", only when vertically mounted with the actuator positioned upward.

## How to order



Code	Content
<b>A Number of ports</b>	
<b>B</b>	2-port
<b>G</b>	3-port
<b>B Port size</b>	
<b>10</b>	Rc3/8
<b>15</b>	Rc1/2
<b>20</b>	Rc3/4
<b>C Voltage</b>	
<b>AC100V</b>	100 VAC(50/60 Hz)

[Example of model No.]

**MHB4-20-25-AC100V**

Model: MHB4

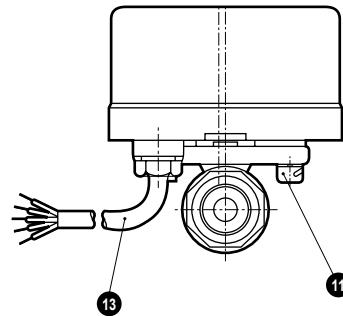
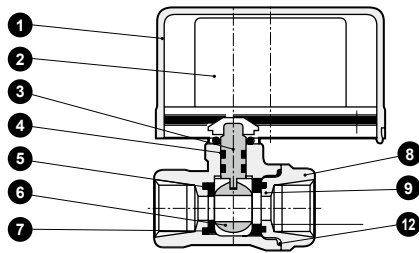
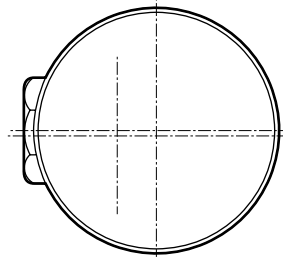
- A** Number of ports : 2-port valve
- B** Port size : Rc3/4
- C** Voltage : 100 VAC (50/60 Hz)

EXA
FWD
HNB/G
USB/G
FAB/G
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FVB
FWB/G
FHB
FLB
AB
AG
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APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S <sup>◇</sup> B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
<b>MXB/G</b>
Other valves
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DustColl
CVE/ CVSE
CCH / CPE/D
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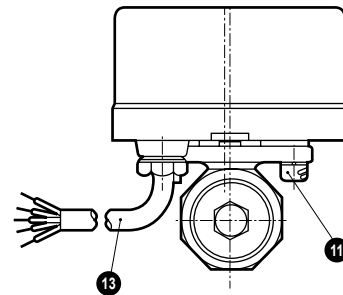
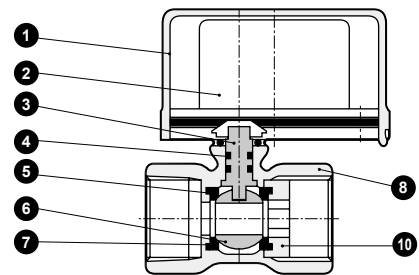
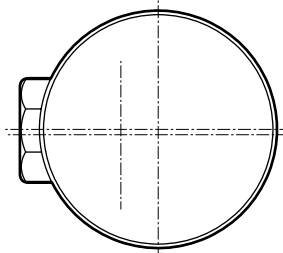
# MHB4/MHG4 Series

## Internal structure and parts list: MHB4 Series

### ● MHB4-10-25



### ● MHB4-15/20-25



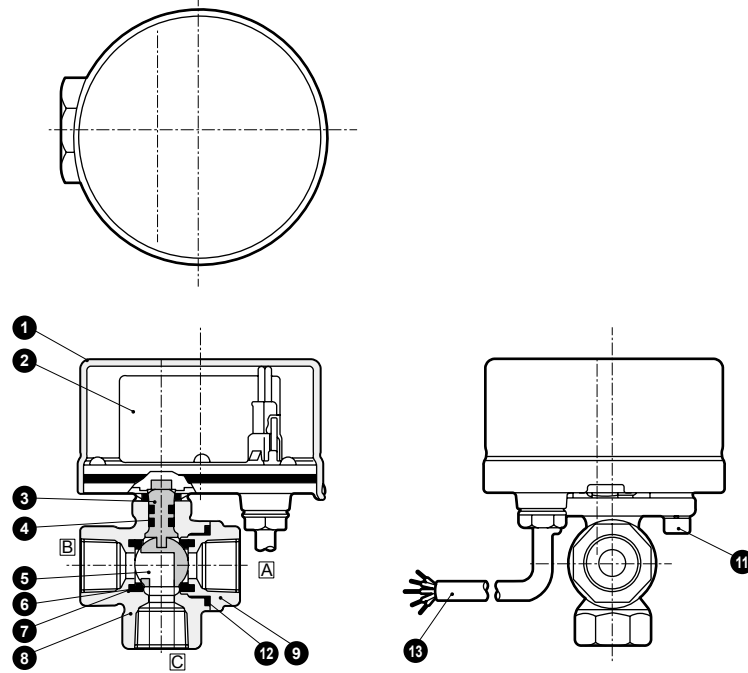
**Cannot be disassembled**

No.	Part name	Material	No.	Part name	Material
1	Cover	PP Polypropylene resin	7	Valve seat	PTFE Tetrafluoroethylene resin
2	Motor assembly	-	8	Body	CAC407/CAC408 Bronze casting
3	Shaft	SUS303 Stainless steel	9	Cap	CAC407 Bronze casting
4	O-ring	FKM Fluoro rubber	10	Insert	CAC407 Bronze casting
5	O-ring	FKM Fluoro rubber	11	Hexagon socket head cap screw	SCM435 Alloy steel
6	Valve ball	C3771 Copper alloy *1	12	O-ring	FKM Fluoro rubber
			13	Cable	0.3 mm <sup>2</sup> , 5-conductor

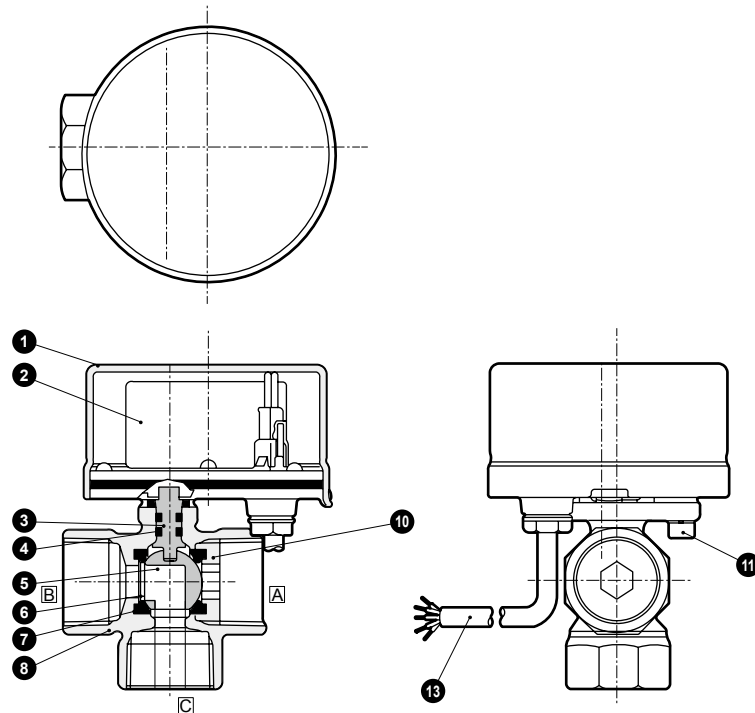
\*1 : Valve ball is hard chrome plated copper alloy.

## Internal structure and parts list: MHG4 Series

### ● MHG4-10-25



### ● MHG4-15/20-25



**Cannot be disassembled**

No.	Part name	Material	No.	Part name	Material
1	Cover	PP	7	O-ring	FKM Fluoro rubber
2	Motor assembly	-	8	Body	CAC407 Bronze casting
3	Shaft	SUS303	9	Cap	CAC407 Bronze casting
4	O-ring	FKM	10	Insert	CAC407 Bronze casting
5	Valve ball	C3771	11	Hexagon socket head cap screw	SCM435 Alloy steel
6	Valve seat	PTFE	12	O-ring	FKM Fluoro rubber
			13	Cable	0.3 mm <sup>2</sup> , 5-conductor

\*1 : Valve ball is hard chrome plated copper alloy.

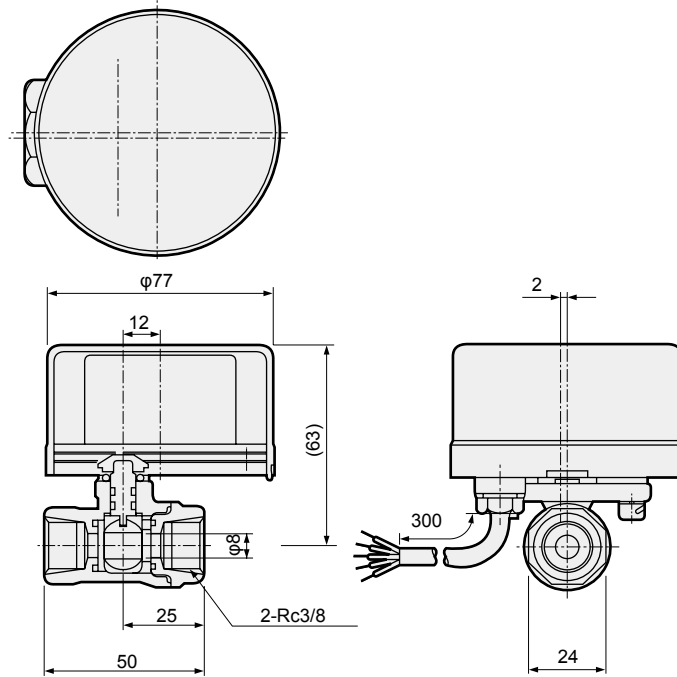
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# MHB4/MHG4 Series

## Dimensions: MHB4 Series

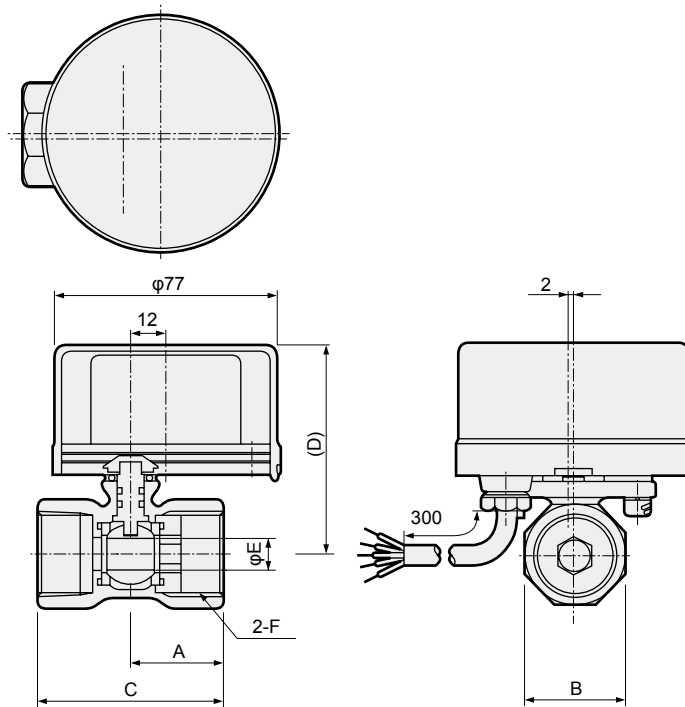


### ● MHB4-10-25



Cable length 300 mm

### ● MHB4-15/20-25



Cable length 300 mm

Model No.	A	B	C	D	E	F
MHB4-15-25	27	27	56	63	8	Rc1/2
MHB4-20-25	30	32	63	66	10	Rc3/4

### ⚠ Safety precautions

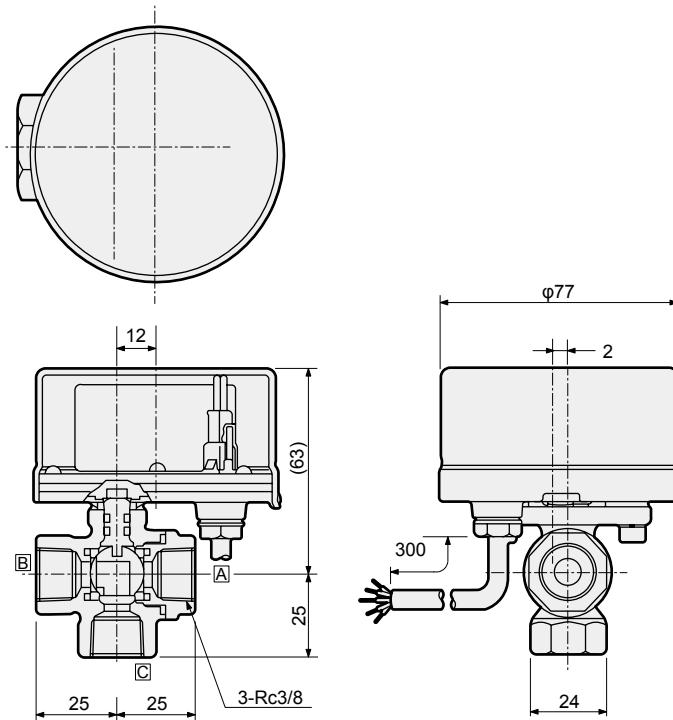
- Since this valve rotates one way only, reversing is impossible during operation. For example, if the operation switch is turned to close while the valve is on the way from closed to open, the valve will fully open once and then close.

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## Dimensions: MHG4 Series

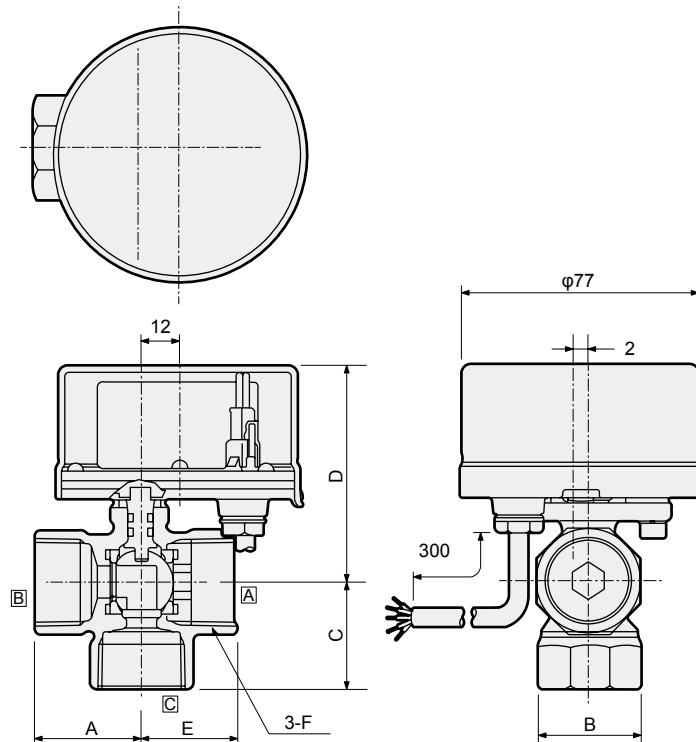


### ● MHG4-10-25



Cable length 300 mm

### ● MHG4-15/20-25



Cable length 300 mm

Model No.	A	B	C	D	E	F
MHG-4-15-25	29	27	29	63	27	Rc1/2
MHG-4-20-25	33	32	33	66	30	Rc3/4

### ⚠ Safety precautions

- Since this valve rotates one way only, reversing is impossible during operation. For example, part-way in the operation from the B-C path to the A-C path, if the operation switch is returned to the B-C path, the valve will first open to the A-C path before opening the B-C path.

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FGB/G
FVB
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FHB
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