



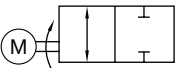
Miniature motorized 2, 3-port ball valve **MHB4/MHG4 Series**

● Port size: Rc3/8 to Rc3/4

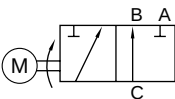


JIS symbol

● MHB4



● MHG4



Common specifications

Item		MHB4/MHG4	
Working fluid		Water, air, oil (500 mm ² /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 784.)	
Rated voltage *1		100 VAC(50/60 Hz)	
Apparent power VA	Operating	100 VAC	4.4/3.5(50/60 Hz)
	Starting	100 VAC	4.4/3.5(50/60 Hz)
Power consumption W		5	
Frequency		1 time/min. or less	

Individual specifications

Item	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

MH B 4 - 20 - 25 - AC100V

Model No.

Working pressure
0 to 0.5 MPa

A Number of ports

B Port size

C Voltage

Code	Description
A Number of ports	
B	2-port
G	3-port
B Port size	
10	Rc3/8
15	Rc1/2
20	Rc3/4
C Voltage	
AC100V	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)

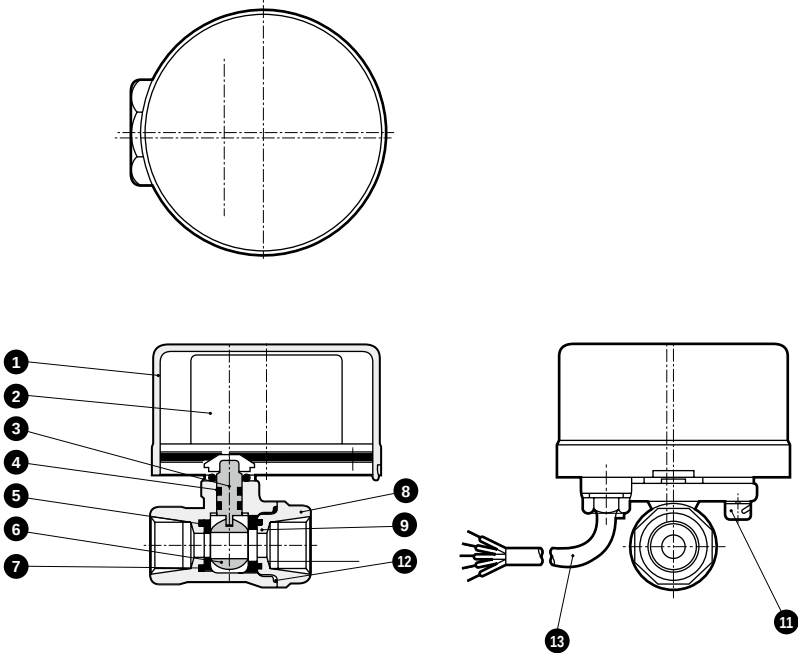
EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S ◇ B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combus
Auto- Water
Outdoor
SpecFld
Custom
Ending

MHB4/MHG4 Series

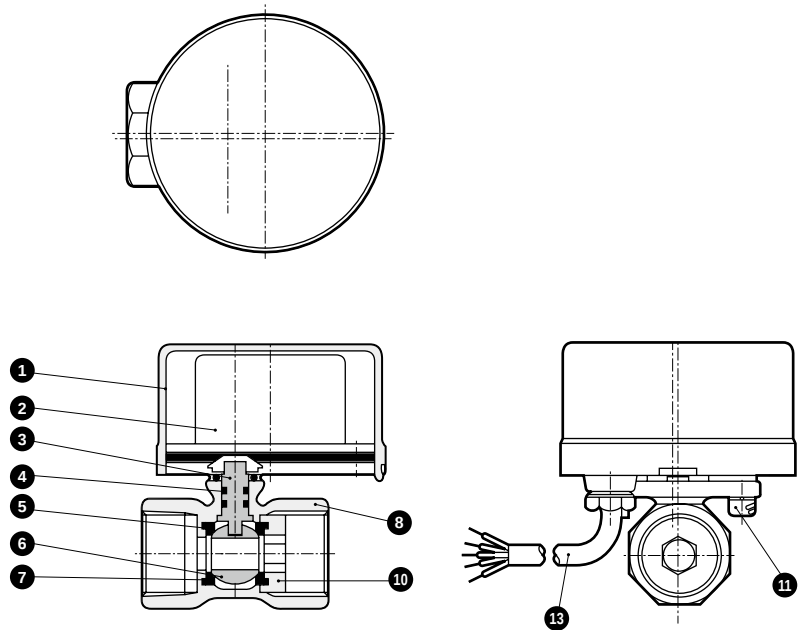
EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
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Internal structure and parts list: MHB4 Series

● MHB4-10-25



● MHB4-15/20-25



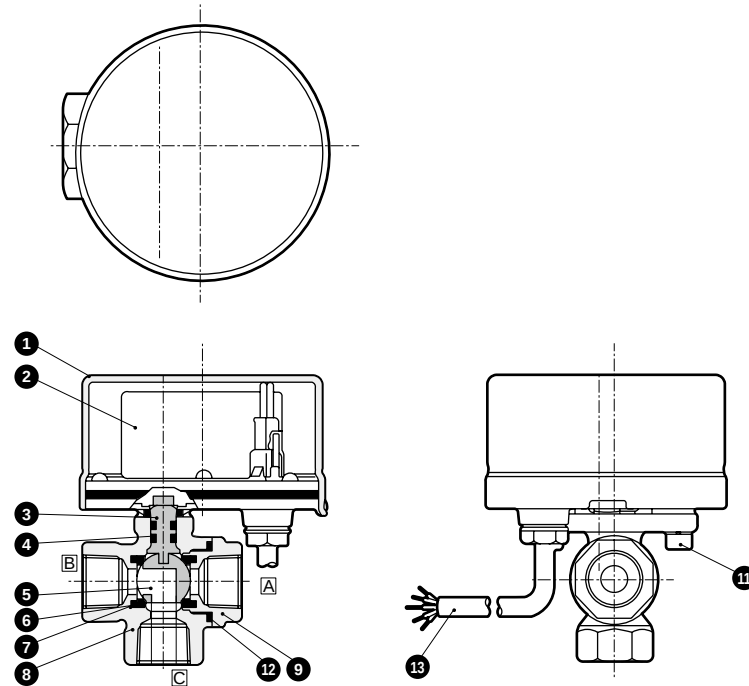
Cannot be disassembled

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	Cabtyre cable	0.3 mm ² , 5-conductor	-

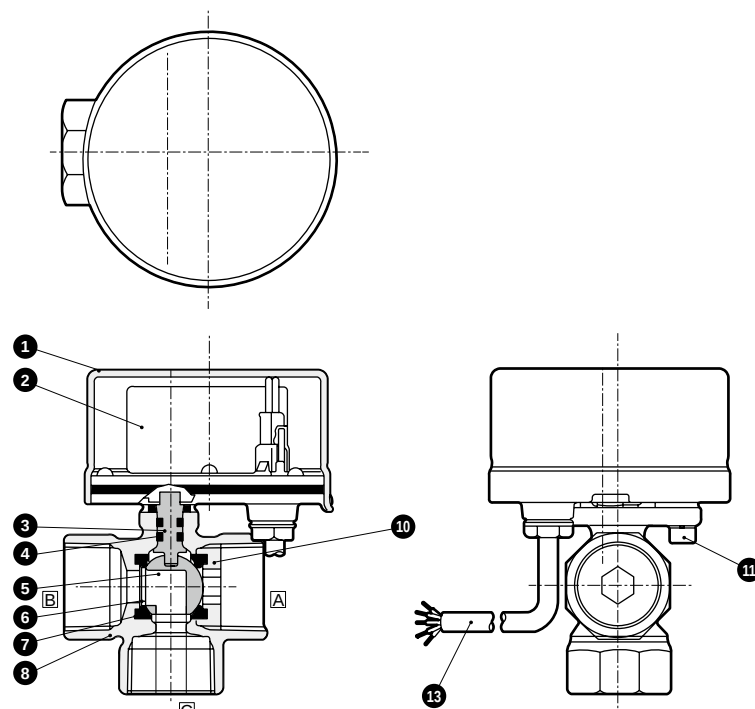
*1 : Valve ball is hard chrome plated copper alloy.

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
2	Motor assembly	-	8	Body	CAC407
3	Shaft	SUS303	9	Cap	CAC407
4	O-ring	FKM	10	Insert	CAC407
5	Valve ball	C3771	11	Hexagon socket head cap screw	SCM435
6	Valve seat	PTFE	12	O-ring	FKM
			13	Cable	0.3 mm ² , 5-conductor

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

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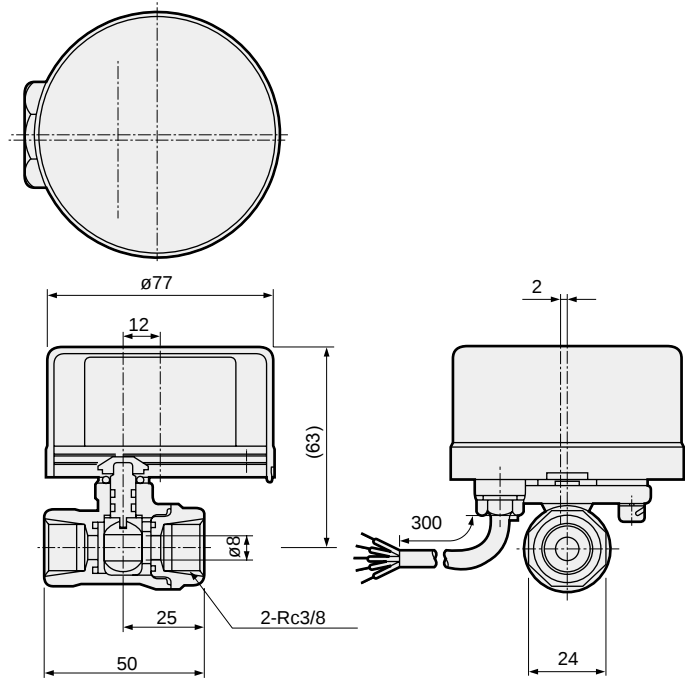
MHB4/MHG4 Series

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Dimensions: MHB4 Series

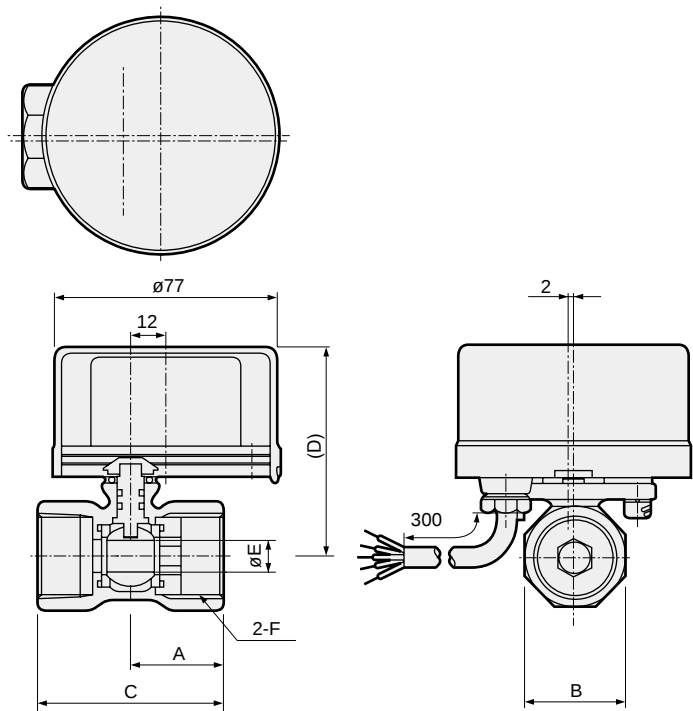


● MHB4-10-25



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

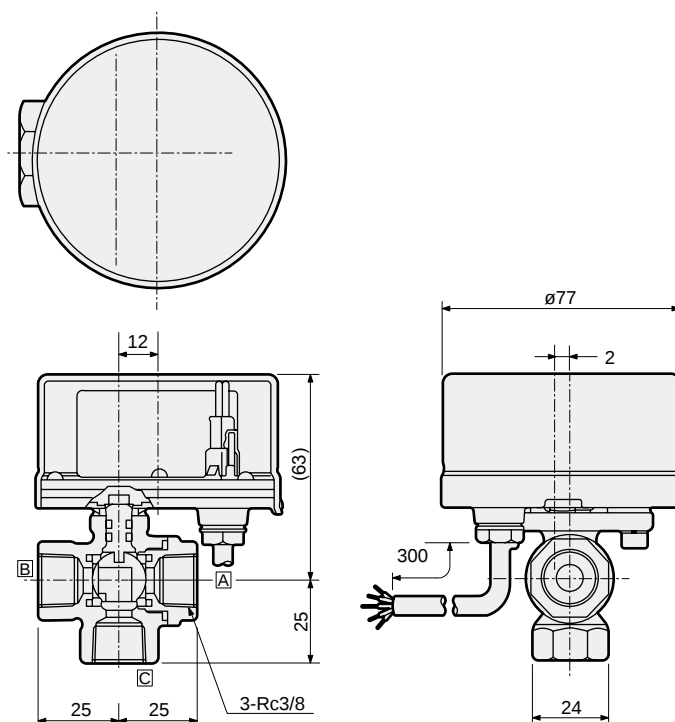
⚠ Safety precautions

- 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.

Dimensions: MHG4 Series

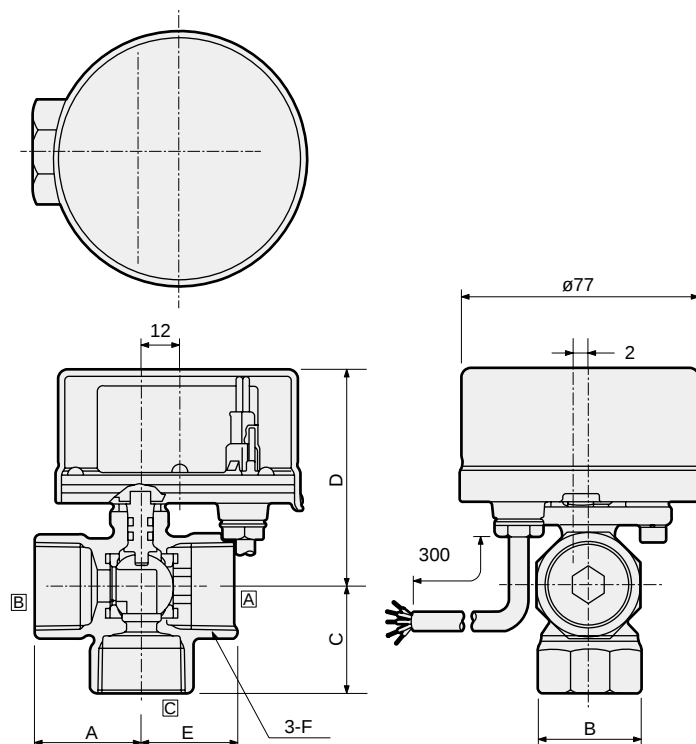


● MHG4-10-25



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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FVB
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DryAir
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XPLNprf
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S $\diamond$ B/ NAB
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