

High corrosion resistant direct acting 2 port solenoid valve



HB Series

- NC (normally closed) type
- Working fluid: water, pure water, chemical liquids
- Port size: M5, Rc1/8, Rc1/4, Rc3/8



HNB/G

USB/G

FAB/G

FGB/G

FVB

FWB/G

FHB

FLB

AB

AG

AP/
AD

APK/
ADK

For
dry air

Explosion
proof

HVB/
HVL

SAB/
SVB

NP/NAP/
NVP

CHB/G

MXB/G

Other G.P.
systems

PD/FAD/
PJ

CVE/
CVSE

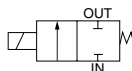
CPE/
CPD

Medical
analysis

Custom
order

JIS symbol

- NC (normally closed type)



Common specifications

Item	HB11/21/31/41
Working fluid	Water, pure water, chemical liquids (fluids that do not corrode materials at wetted parts)
Working pressure range MPa	0 to 0.7 (refer to working pressure range in individual specifications.)
Fluid temperature °C	-10 to 60 (no freezing)
Valve seat leakage cm ³ /min.	0 (water pressure) (*4) [When using PTFE sealant, 300 cm ³ /min or less at air pressure]
Mounting attitude	Free
Treatment	Oil free
Electric specifications	
Rating	Continuous
Voltage	100 VAC (50/60 Hz), 200 VAC (50/60 Hz), 12 DVC, 24 DVC

*1: Read the safety precautions for HB (page 770).

*2: When using an AC rated voltage, the voltage is converted to DC with the diode in the coil.

*3: Before starting use, check the compatibility between the materials of the product and working fluid.

Working fluids must not adhere to the product body.

*4: When using NBR or FKM sealant, valve seat leakage is 0 cm³/min. at water pressure.

*5: Foreign matter etc. inside the piping may cause malfunction and valve seat leakage. Always flush the piping before installing the valve.

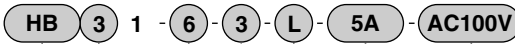
*6: Do not disassemble the product.

Individual specifications

Item	Port size	Orifice (mm)	Cv flow factor	Working pressure range (MPa)	Ambient temperature (°C)	Power consumption (W)	Weight (kg)	
Model no.								
HB11-M5-1	M5	1.0	0.03	0 to 0.7	-20 to 50	AC: 4 DC: 3	0.10	
HB11-M5-2		1.5	0.06	0 to 0.3				
HB21-6-1	Rc1/8	1.6	0.09	0 to 0.7				
HB21-6-2		2.3	0.18	0 to 0.3				
HB21-6-3		3.2	0.3	0 to 0.08				
HB31-6-3	Rc1/4	3.0	0.31	0 to 0.4		-20 to 60	11	0.52
HB31-8-3		4.0	0.48					
HB41-8-5	Rc3/8	7.0	0.82	0 to 0.08				0.69
HB41-8-7	Rc1/4							
HB41-10-7	Rc3/8							

Medical analysis process components
High corrosion resistant 2 port solenoid valve

How to order



Model no.

A Capacity

B Port size

C Orifice

D Sealant

E Coil variation

F Voltage
*2

Model no.			
H	H	H	H
B	B	B	B
1	2	3	4

Symbol	Descriptions				
A Capacity					
1	Control volume small	●			
2	Control volume medium-small		●		
3	Control volume medium			●	
4	Control volume large				●
B Port size					
M5	M5	●			
6	Rc1/8		●	●	
8	Rc1/4			●	●
10	Rc3/8				●
C Orifice					
	HB11	HB21	HB31	HB41	
1	ø1	ø1.6	-	-	● ●
2	ø1.5	ø2.3	-	-	● ●
3	-	ø3.2	ø3	-	● ●
5	-	-	-	ø4	●
7	-	-	-	ø7	●
D Sealant					
L	NBR	●	●	●	●
M	FKM	●	●	●	●
N	PTFE		●	●	●
E Coil variation					
Blank	Small size	●	●		
5A	Open frame lead wire (diode integrated) for AC voltage			●	●
3A	Open frame lead wire DC voltage			●	●
F Voltage					
AC100V	100 VAC (50/60 Hz)	●	●	●	●
AC200V	200 VAC (50/60 Hz)	●	●	●	●
DC12V	12 VDC	●	●	●	●
DC24V	24 VDC	●	●	●	●

<Example of model number>

HB41-8-5-L-3A-DC24V
Model no.: HB41

- A** Capacity : Control volume large
- B** Port size : Rc1/4
- C** Orifice : ø4
- D** Sealant : NBR
- E** Coil variation : Open frame lead wire
- F** Voltage : DC24V

*1: The combinations indicated with ● in the above table are available.

*2: 100 VAC or 200 VAC when ● is 5A, and 12 VDC or 24 VDC when ● is 3A.