



Solenoid valve for high vacuum

HVB⁵₆⁷1 Series

- NC (normally closed) type
- Port size: Flange $\phi 48, \phi 52$

JIS symbol

- NC (normally closed) type



Specifications

Descriptions	HVB51-12F-3	HVB51-12F-5	HVB61-12F-3	HVB71-15F-3	HVB71-15F-5	HVB81-15F-3	HVB81-15F-5	
Working fluid	Vacuum and inert gas (Note 1)							
Working pressure range Pa (abs)	1.3×10^{-6} to 2×10^5	1.3×10^{-6} to 1×10^5	1.3×10^{-6} to 3×10^5	1.3×10^{-6} to 1.5×10^5	1.3×10^{-6} to 1×10^5	1.3×10^{-6} to 3×10^5	1.3×10^{-6} to 1×10^5	
Max. working differential pressure MPa	0.2	0.1	0.3	0.15	0.1	0.3	0.1	
Valve seat leakage Pa·m ³ /s (He)	1.0 x 10 ⁻⁹ or less							
External leakage Pa·m ³ /s (He)	1.0 x 10 ⁻⁹ or less							
Withstanding pressure MPa	0.5							
Back pressure (Note 2) MPa	0.1	0.02	0.1	0.1	0.02	0.1	0.1	
Fluid temperature °C	5 to 55							
Ambient temperature °C	0 to 55							
Orifice mm	8	12	8	12	15	12	15	
Cv flow factor	Straight	1.8	2.7	1.8	3.2	4.3	3.2	4.3
	Radial	2.1	3.2	2.1	3.6	4.7	3.6	4.7
Frequency time/min. or less	10							
Port size	$\phi 48$ flange			$\phi 52$ flange				
Mounting attitude	Vertical installation with coil facing upward							
Weight kg	1.15			1.9				
Electrical specifications								
Rated voltage	100, 200 VAC (50/60Hz), 24 VDC							
Allowable voltage fluctuation	Rated voltage $\pm 10\%$							
Power consumption W	14.3		28		19		AC:32.5 DC:40	
Heat proof class	B		H		B		H	
Temperature rise K	80		130		80		130	

Note 1: The durability may drop remarkably depending on the degree of dryness.

Note 2: Pressurizing from the A port with the B port released to atmosphere is possible. (Note that the reverse vacuum is not available for HVB51-12F-5 and HVB71-15F-5.)

How to order



Model no. **A** Series

B Connection

C Orifice

D Option

E Voltage

Note on model no. selection

Note 1: "C" symbol 5 is not available for HVB61.

Note 2: "D" symbol 3H, 3K, 3HF and 3KF are not available for the HVB61, 81 AC voltage specifications.

Note 3: The older model HV-12-2F is equivalent to the HVB51-12F-5.

Note 4: The older model HV-15-2F is equivalent to the HVB71-15F-5.

Symbol	Descriptions
A Series	
5	Small
6	↑
7	↓
8	Large
B Connection	
12F	Flange ϕ 48 available only for HVB51, 61
15F	Flange ϕ 52 available only for HVB71, 81
C Orifice	
3	ϕ 8 for HVB51, 61
	ϕ 12 for HVB71, 81
5	ϕ 12 for HVB51
	ϕ 15 for HVB71, 81 Note 1
D Option	
Blank	Blank
3H	Square terminal box + light G1/2 Note 2
3K	Square terminal box G1/2 Note 2
F	Companion flange
3HF	Square terminal box + light G1/2 + companion flange Note 2
3KF	Square terminal box G1/2 + companion flange Note 2
E Voltage	
AC100V	100 VAC (50/60Hz)
AC200V	200 VAC (50/60Hz)
DC24V	24 VDC

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

Custom order

Solenoid valve for high vacuum