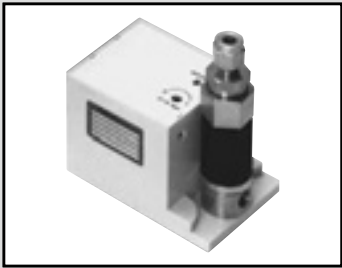


EXA  
FWD  
HNB/G  
USB/G  
FAB/G  
FGB/G  
FVB  
FWB/G  
FHB  
FLB  
AB  
AG  
AP/  
AD  
APK/  
ADK  
DryAir  
EX-  
XPLNprf  
XPLNprf  
HVB/  
HVL  
S ◇ B/  
NAB  
LAD/  
NAD  
Water-  
Rela  
NP/NAP/  
NVP  
SNP  
CHB/G  
MXB/G  
Other  
valves  
SMD/  
MWD  
DustColl  
CVE/  
CVSE  
CCH/  
CPE/D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



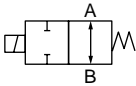
Delay vacuum solenoid valve

# HVL12 Series

● Off-delay function solenoid valve



## JIS symbol



## Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Item		HVL12
Working fluid		Air, nitrogen (*1)
Working pressure	Pa(abs)	$1.3 \times 10^{-6}$ to $2.0 \times 10^5$
Max. working pressure differential	MPa	0.2 (≈29 psi, 2 bar)
Valve seat leakage	Pa·m³/s (He)	$1.3 \times 10^{-9}$ or less
External leakage	Pa·m³/s (He)	$1.3 \times 10^{-9}$ or less
Proof pressure	MPa	0.5 (≈73 psi, 5 bar)
Fluid temperature	°C	5 (41°F) to 50 (122°F)
Ambient temperature	°C	0 (32°F) to 50 (122°F)
Orifice size	mm	1.2
Mounting orientation		Unrestricted
Weight	kg AC	0.5
	DC	0.2
(*2)		
Frequency		0.5 times/min. or less
Port size		Rc1/8, 1/4" double barbed fitting, NW10.16 vacuum clamp fitting
Cv		0.05
Max. set delay time		AC: 8 sec, DC: 10 sec (±35%)
Rated voltage		24 VDC, 100 VAC, 200 VAC
Voltage fluctuation range		Rated voltage ±10%
Power consumption	W	4

- \*1 : Durability may decrease sharply depending on the degree of dryness.  
\*2 : Weight shown in the table is for port size Rc1/8.  
\*3 : Do not handle by the lead wire only.  
\*4 : Always use the M4 screws on the bottom of the case when mounting.  
\*5 : Do not fix the valve by the port piping only.  
Use the valve in a place where vibration does not affect the performance.  
\*6 : The DC type has polarity. Connect the red lead wire to the plus (+) side and the black to the minus (-) side.

## How to order

**HVL** 1 2 - **4S** 6 - 5 - **AC100V**

Model No.

**A** Port A connection  
\*1

**B** Port B connection  
\*1

**C** Voltage

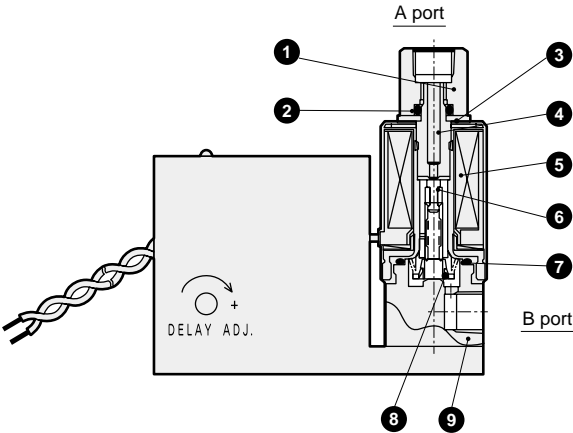
A Port A connection *1	
6	Rc1/8
4S	1/4" double barbed fitting
10K	NW10 vacuum clamp fitting
16K	NW16 vacuum clamp fitting
B Port B connection *1	
6	Rc1/8
C Voltage	
DC24V	24 VDC
AC100V	100 VAC
AC200V	200 VAC

## ⚠ Precautions for model No. selection

- \*1: If you order the same model No. of ports A and B, specify only a single model No.  
Example: When ports A and B are both Rc1/8  
HVL12-6-5-voltage (correct)  
HVL12-66-5-voltage (wrong)

Internal structure and parts list

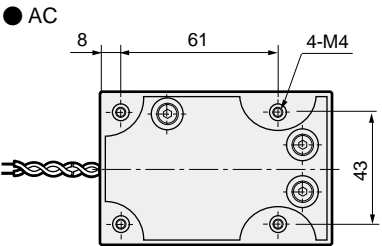
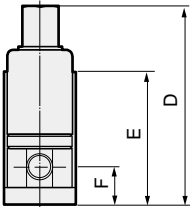
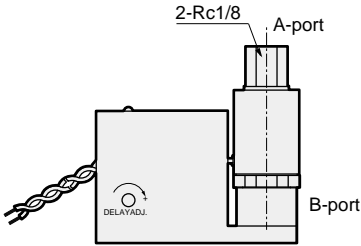
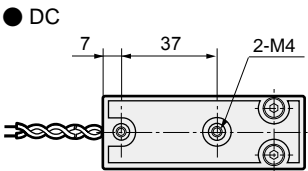
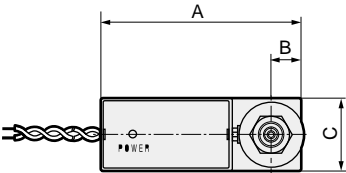
● HVL12-6-5



No.	Part name	Material
1	Socket	SUS303
2	O-ring	FKM
3	Washer	SUS304
4	Core assembly	SUS316L, SUS405
5	Coil assembly	PBT
6	Plunger assembly	SUS405, FKM, PTFE
7	O-ring	FKM
8	Spring	SUS304
9	Body	SUS303

Dimensions

● HVL12-6-5

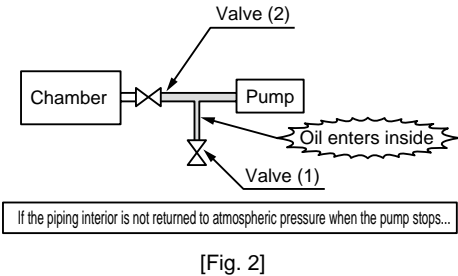
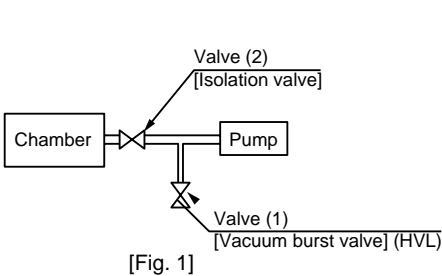


Model No. / Code	A	B	C	D	E	F
HVL12-DC24V	78	11.5	28	76	51	14.5
HVL12-AC100, 200V	90	11.5	59	76	62	14.5

Main applications

Intended use of delay vacuum solenoid valve (HVL Series)

Preventing entry of oil in case of power failure



Normally, after the machine has stopped, the pipe between the chamber and pump is released to atmospheric pressure with valve (1) to prevent the oil from rising (from entering the pipes). However, to protect the chamber (to maintain vacuum and prevent contamination), it is necessary to release the pipe to atmospheric pressure after the valve (2) has completely closed.

If valve (1) opens before valve (2) completely closes... Prevent oil rising and protect the chamber with the HVL Series!!

