Pilot Operated 5 Port Solenoid Valve
Series VF1000/3000/5000
Manifold

Note) Only DIN and conduit terminal types are available with AC mode.
Refer to the electrical entry for details.

How to Order Manifold

Common exhaust

VV5F 1 – 30 – 04 1 – □

Series

1	VF1000
3	VF3000
5	VF5000

Manifold model

Symbol	P, R port size	VF1000	VF3000	VF5000
30	1/8	○	—	—
	1/4	—	○	—
20	3/8	—	—	○
21	1/2	—	—	○

∗ The A and B ports are made on the top.

Stations

02	2 stations
⋮	⋮
20	20 stations

∗ Up to 10 stations for VV5F5-20, and up to 15 stations for VV5F5-21.

Thread type

Nil	Rc
00F	G
00N	NPT
00T	NPTF

Individual exhaust (VF1000 only)

VV5F1 – 31 – 04 3 – □

Stations

02	2 stations
⋮	⋮
20	20 stations

Thread type

Nil	Rc
00F	G
00N	NPT
00T	NPTF

Manifold model

Symbol	P, R port size	EA, EB port size
31	1/8	M5

How to Order Valve (With a gasket and two mounting screws)

∗ **For low wattage specification, refer to "How to Order Valve" on page 26.**

VF 3 1 3 0 □ □ – 5 G □ □ 1 – 01 □ – □

Series

1	VF1000
3	VF3000
5	VF5000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center

∗ Only 1 and 2 are available with the VF1000.

Body option

0: Pilot valve individual exhaust			3: Main/Pilot valve common exhaust		
PE port EA/EB port			PE port EA/EB port		
VF1000	VF3000	VF5000	VF1000	VF3000	VF5000
○	○	○	○	○	○

Body model

Symbol	VF1000	VF3000	VF5000
2	—	—	○
3	○ Note)	○	—

Note) Manifold only.

Coil specifications

Nil	Standard
T	With power saving circuit (DC only)

Note) Be sure to select the power saving circuit type when it is continuously energized for long periods of time. (Refer to page 51 for details.)

∗ T type is available with DC mode only. When T is selected, only Z type of light/surge voltage suppressor is available. (Note that when the electrical entry of DIN terminal type without connector is selected, only DOS and YOS are available.)

Pressure specifications

Nil	Standard (102 psi (0.7 MPa))
K	High-pressure type (145 psi (1 MPa))

Rated voltage

DC		AC (50/60 Hz)			
5	24 VDC	1	100 VAC	4	220 VAC [230 VAC]
6	12 VDC	2	200 VAC	7	240 VAC
		3	110 VAC [115 VAC]	B	24 VAC

Made to order
Refer to page 14 for details.
Combination with low wattage specification is not possible.

A, B port size

Symbol	Port size	VF1000	VF3000	VF5000
M5	M5 x 0.8	○	—	—
01	1/8	○	○	—
02	1/4	—	○	○
03	3/8	—	—	○

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

∗ M5 is available with Nil only.

Light/Surge voltage suppressor

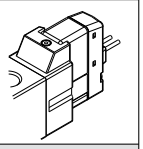
Symbol	Light/Surge voltage suppressor	DC	AC
Nil	Without light/surge voltage suppressor	○	○
S	With surge voltage suppressor	○	○ Note)
Z	With light/surge voltage suppressor	○	○
R	With surge voltage suppressor (Non-polar)	○	—
U	With light/surge voltage suppressor (Non-polar)	○	—

Note) S type is not available with AC mode, since a rectifier prevents surge voltage generation.

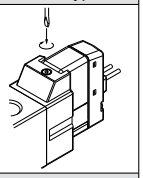
∗ In the DIN terminal type, since a light is installed in the connector, DOZ, DOU, YOZ, YOU are not available.

Manual override

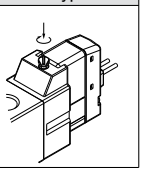
Nil: Non-locking push type



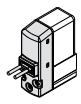
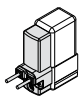
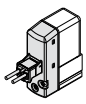
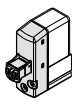
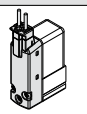
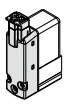
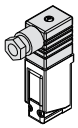
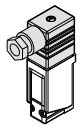
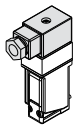
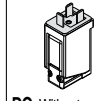
D: Push-turn locking slotted type



E: Push-turn locking lever type



Electrical entry

Grommet		L-type plug connector		M-type plug connector		DIN terminal [IP65 compatible]	DIN (EN175301-803) terminal [IP65 compatible]	Conduit terminal [IP65 compatible]
								
G: Lead wire length 300 mm **H**: Lead wire length 600 mm	**G**: Lead wire length 300 mm **H**: Lead wire length 600 mm DC Without light/surge voltage suppressor	**L**: With lead wire (length 300 mm)  **LO**: Without connector	**LN**: Without lead wire	**M**: With lead wire (length 300 mm)  **MO**: Without connector	**MN**: Without lead wire	**D**: With connector  **DO**: Without connector	**Y**: With connector  **YO**: Without connector	**T**: Conduit terminal

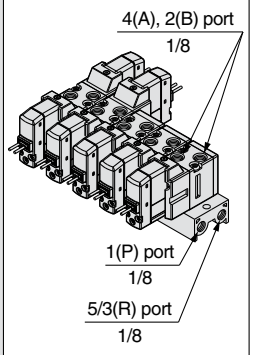
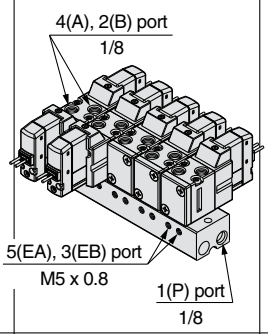
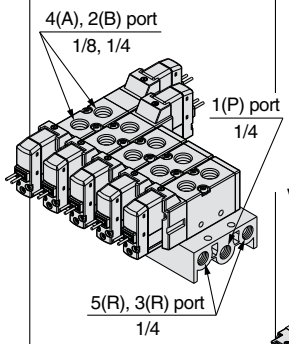
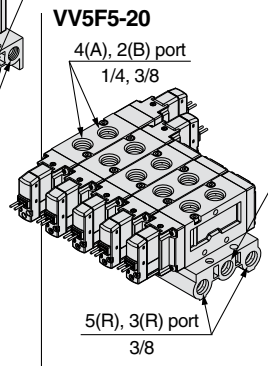
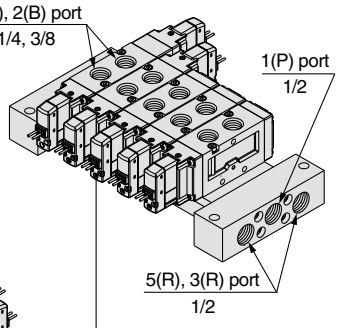
CE compliant		Grommet	L-type plug connector	M-type plug connector	DIN terminal	DIN (EN175301-803) terminal	Conduit terminal
	DC	CE	CE	CE	CE	CE	CE
	AC Note 2)	—	—	—	CE	CE	CE

∗ LN and MN types are with 2 sockets. ∗ Refer to page 49 when different length of lead wire for L/M-type plug connector is required.
∗ Refer to page 50 for details on the DIN (EN175301-803) terminal.
Note 1) When using IP65, select the main/pilot valve common exhaust type.
Note 2) With the same specifications as the DC type, all electrical entries for the 24 VAC type are CE marking compliant.

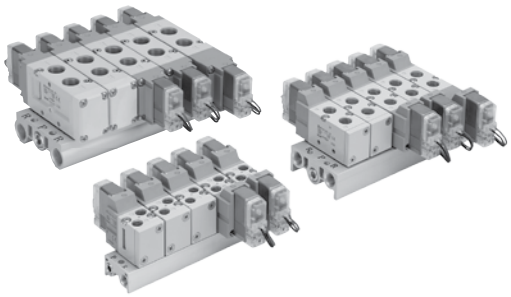
⚠ Caution

When using the surge voltage suppressor type, residual voltage will remain. Refer to page 51 for details.

Manifold Specifications

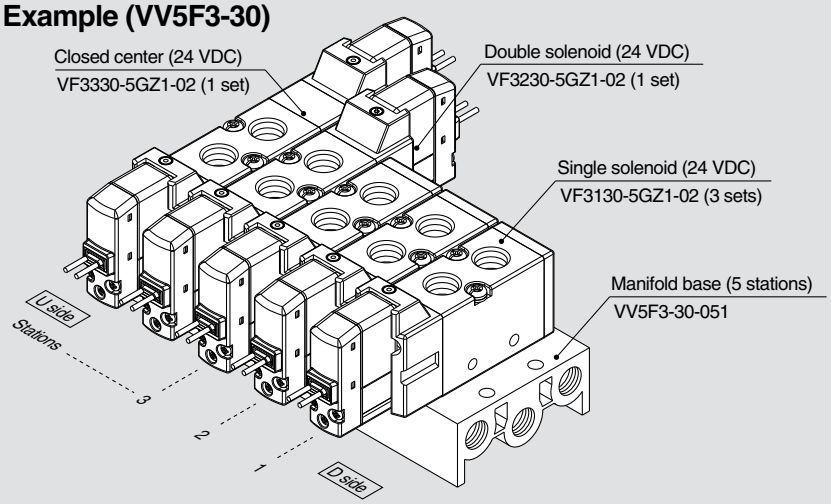
Series	VF1000		VF3000	VF5000	
Manifold base model	**VV5F1-30** 	**VV5F1-31** 	**VV5F3-30** 	**VV5F5-20** 	**VV5F5-21** 
EXH port type	Common EXH	Individual EXH	Common EXH	Common EXH	Common EXH
Applicable valve model	**VF1□30** **VF1□33**		**VF3□30** **VF3□33**	**VF5□20** **VF5□23**	
Applicable stations	2 to 20 stations		2 to 20 stations	2 to 10 stations	2 to 15 stations
Manifold base Weight: W [g] Stations: n	W = 29n + 21	W = 51n + 35	W = 63n + 64	W = 97n + 80	W = 139n + 550

Note) Supply pressure to 1(P) ports and exhaust pressure from R ports on both sides for 10 stations or more (5 stations or more for the VF5000).



How to Order Manifold Assembly

Example (VV5F3-30)



VV5F3-30-051 ····· 1 set (Type 30, 5-station manifold base part no.)
*** VF3130-5GZ1-02 ····· 3 sets (Single solenoid part no.)**
*** VF3230-5GZ1-02 ····· 1 set (Double solenoid part no.)**
*** VF3330-5GZ1-02 ····· 1 set (Closed center part no.)**
The asterisk denotes the symbol for assembly. Prefix it to the part nos. of the solenoid valve, etc.

- The valve arrangement is numbered as the 1st station from D side.
- Under the manifold base part number, state the valves to be mounted in order from the 1st station as shown in the figure above. If the arrangement becomes complicated, specify on the manifold specification sheet.