Series VFS3000 **Manifold Specifications Stacking Type**

Specifications

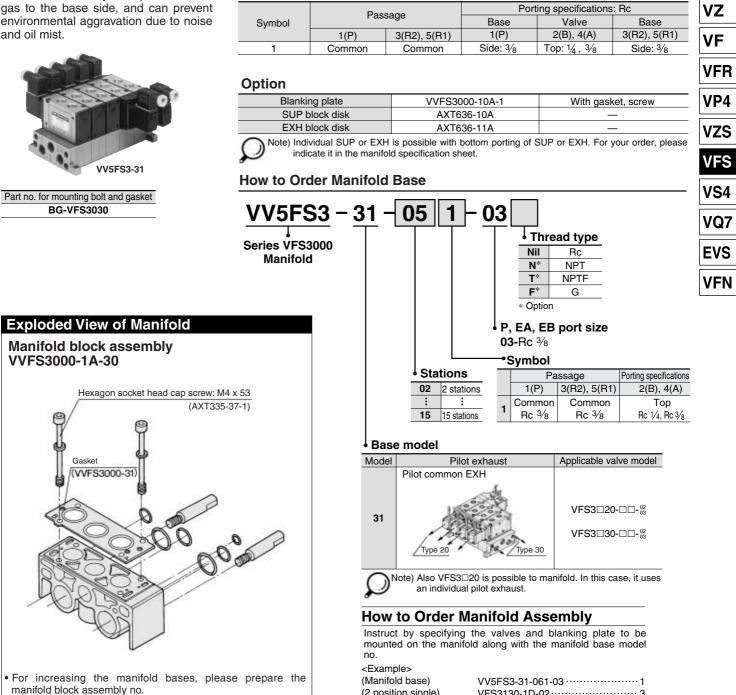
Port Specifications

Manifold base type

Stations

Keeps environmental air clean from pilot exhaust

Use of the VV5FS3-31 manifold can exhaust intensively the pilot exhaust gas to the base side, and can prevent environmental aggravation due to noise and oil mist.

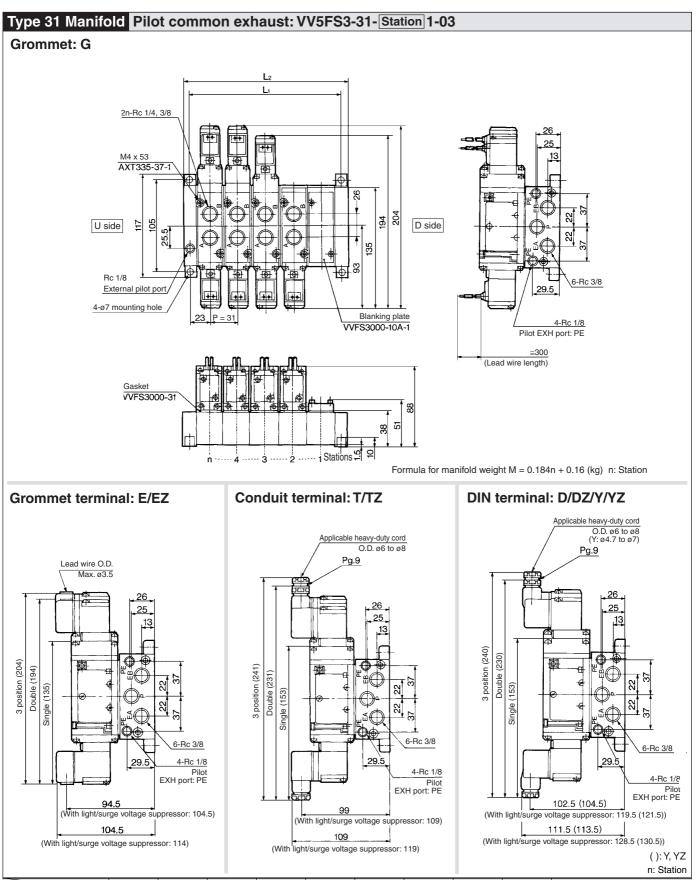


(Manifold base)	VV5FS3-31-061-03 ······1
(2 position single)	VFS3130-1D-02······3
(2 position double)	VFS3230-1D-02······ 2
(Blanking plate)	VVFS3000-10A-1 ····· 1

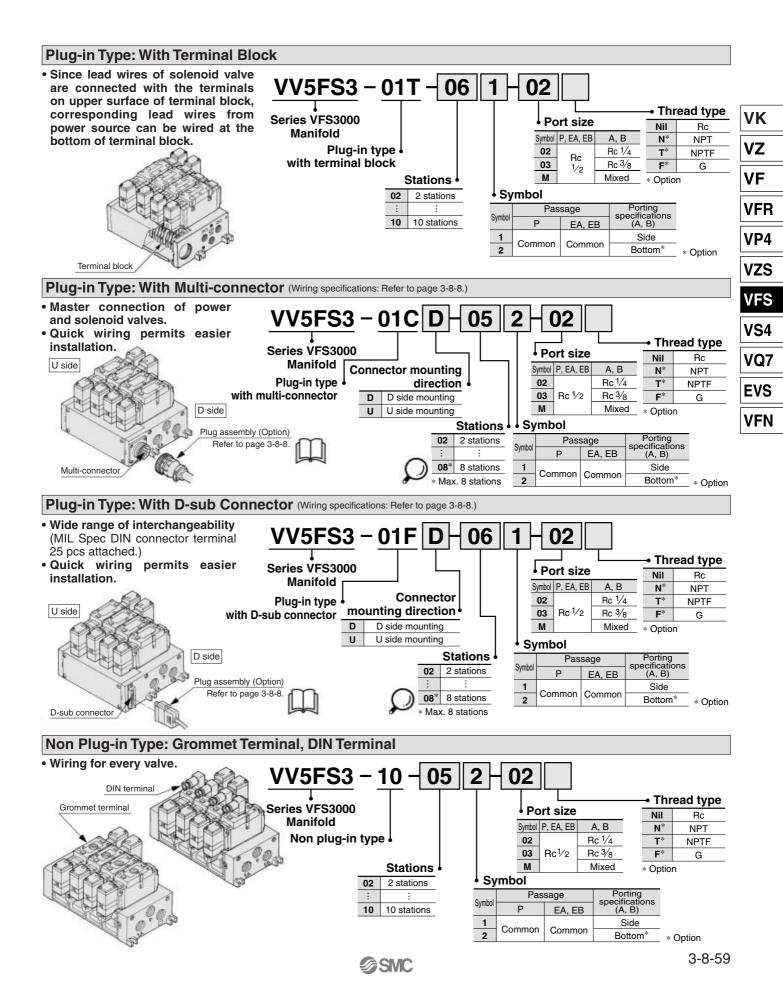
Stacking type

Max. 15 stations

VK



Series VFS3000 Manifold Specifications



How to Order Manifold Assembly

Please indicate manifold base type, corresponding valve, and option parts.

<Example>

 Plug-in type with terminal block: 6 stations (Manifold base) VV5FS3-01T-061-02 ····· 1 (2 position single) VFS3100-5FZ ······ 3 (2 position double) VFS3200-5FZ ······ 2 (Blanking plate) VVFS3000-10A ····· 1
 <Example>

Non plug-in type: 6 stations

(Manifold base) VV5FS3-10-061-03 1
(2 position single) VFS3110-5D
(3 position exhaust center) VFS3410-5D 1
(Individual EXH spacer) VVFS3000-R-03-2 ··· 1

Manifold Option Parts Assembly

Individual SUP spacer

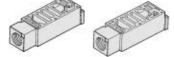
An individual SUP spacer set on manifold block can form SUP port for every valve.

Body type	Plug-in type	Non plug-in type
Part no.	VVFS3000-P-03-1	VVFS3000-P-03-2
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¢,		Carl South
S		

Individual EXH spacer

An individual EXH spacer set on manifold block can form EXH port for every valve. (common EXH type)

	31)	
Body type	Plug-in type	Non plug-in type
Part no.	VVFS3000-R-03-1	VVFS3000-R-03-2
	Aller	~



* SUP block disk

When supplying manifold with more than two different pressures, high and low, insert a block disk in between stations subjected to different pressures.

Body type	Plug-in type	Non plug-in type
Part no.	AXT636-1A	

* EXH block disk

When valve exhaust affects the other stations on the circuit or when the reverse pressure valve is used to standard manifold valve, insert EXH block disk between stations to separate valve exhaust.

Body type	Plug-in type	Non plug-in type
Part no.	AXT636-1A	



Manifold Specifications

Base model	Wiring	Porting specifications A, B port	Port siz P, EA, EB		Stations	Applicable valve model
Plug-in type VV5FS3-01□	With terminal blockWith multi-connectorWith D-sub connector	ctor ector Side/	1/2 1/4, 3/8	1/4,3/8	2 to 10	VFS3□00-□F
Non plug-in type VV5FS3-10	DIN terminalGrommet terminal	Bottom				VFS3□10-□D VFS3□10-□E

Note 1) Appropriate silencer for EA, EB port: "AN403-04" (O.D. ø27).

Note 2) With multi-connector, or with D-sub connector: 8 stations max.

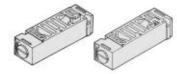
Flow Characteristics at the Number of Manifold Stations (Operated individually)

Model	Passage	/Stations	Station 1	Station 5	Station 10
	1 . 4/0	C [dm³/(s·bar)]	6.0	6.0	6.0
	$1 \rightarrow 4/2$ $(P \rightarrow A/B)$	b	0.20	0.20	0.20
VV5FS3		Cv	1.4	1.4	1.4
v v 9 - 5 3	$4/2 \rightarrow 5/3$ (A/B \rightarrow R1/R2)	C [dm³/(s·bar)]	7.0	7.0	7.0
		b	0.20	0.20	0.20
	$(A'D \rightarrow n 1/n2)$	Cv	1.8	1.8	1.8
* Port size:	Rc 3/8				

Throttle valve spacer

Needle valve set on the manifold block can control cylinder speed by throttling exhaust.

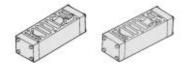
Body type	Plug-in type	Non plug-in type
Part no.	VVFS3000-20A-1	VVFS3000-20A-2



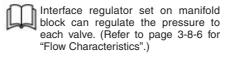
Double check spacer

If the double check spacer with a built-in double check valve is combined, it will enable the cylinder to stop in the intermediate stroke and maintain its position for a long time without being affected by the leakage between the spools.

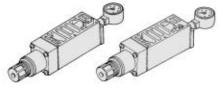
Body type	Plug-in type	Non plug-in type
Part no.	VVFS3000-22A-1	VVFS3000-22A-2



Interface regulator



Body type	Plug-in type	Non plug-in type
P port regulation	ARBF3050-00-P-1	ARBF3050-00-P-2
A port regulation	ARBF3050-00-A-1	ARBF3050-00-A-2
B port regulation	ARBF3050-00-B-1	ARBF3050-00-B-2



Blanking plate

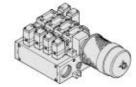
It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.

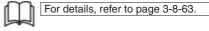
Body type	Plug-in type	Non plug-in type
Part no.	VVFS3000-10A	

Manifold Option

With exhaust cleaner

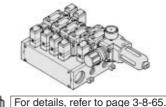
- Plug-in type/Non Plug-in type
- Valve exhaust noise dampening: 35 dB or more.
- Oil mist collection: Rate of collection 99.9% or more.
- Piping process reduced.





With control unit

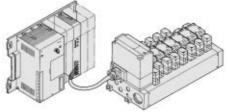
- Plug-in type/Non Plug-in type
- Filter, regulation valve, pressure switch and air release valve are all combined to form one unit.
- · Piping processes are eliminated.



With serial interface unit for serial transmission

Plug-in type

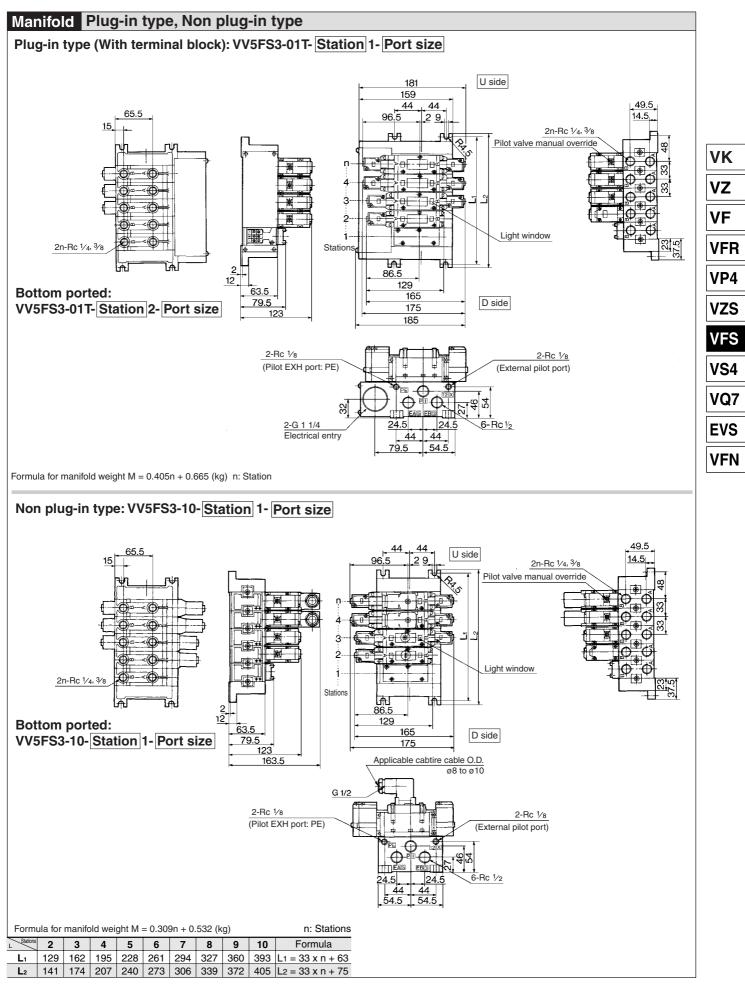
- Solenoid valve wiring process reduced considerably.
- Disperse installation possible. Manifold solenoid valve: 8 stations max. 32 positions (512 solenoids).
- Maintenance and inspection are easy.

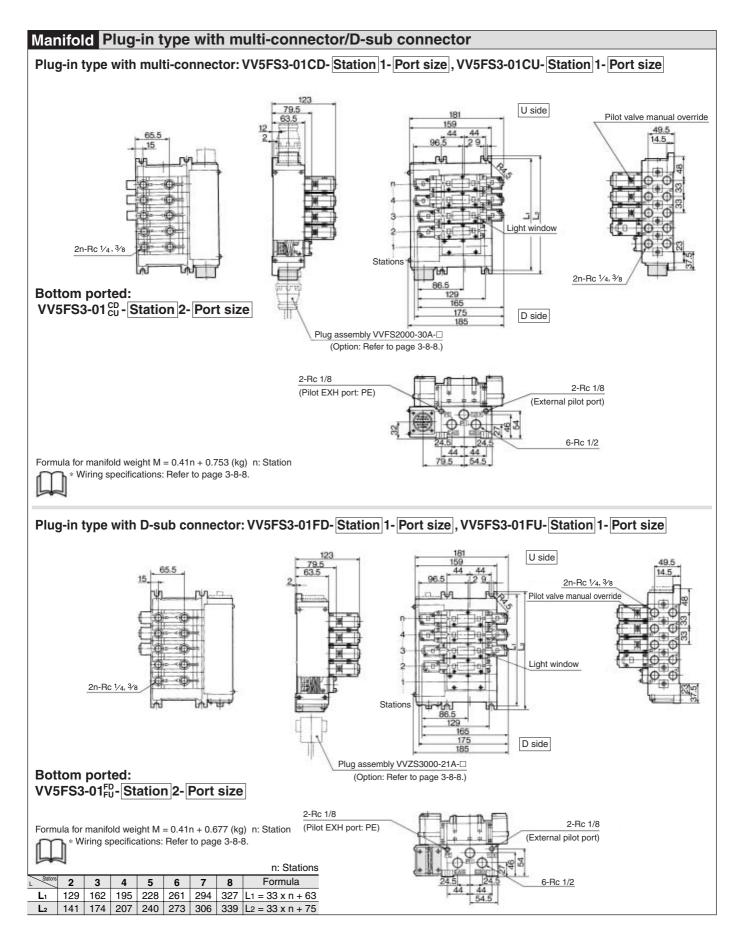


For details, refer to "Serial Transmission" catalog separately.



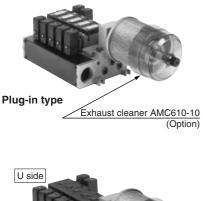
5 Port Pilot Operated Solenoid Valve Metal Seal, Plug-in/Non Plug-in Series VFS3000





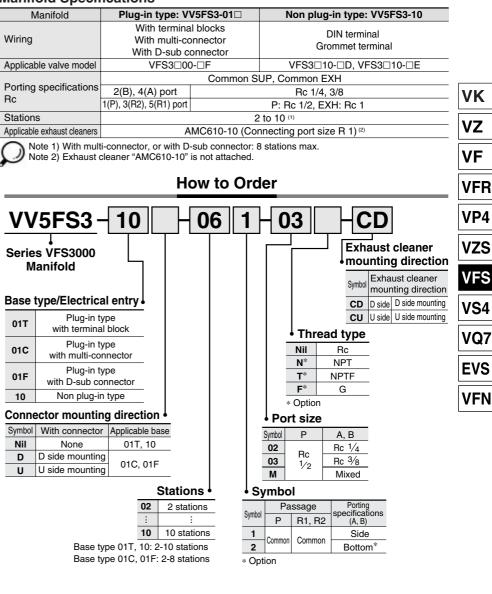
Manifold with Exhaust Cleaner –

- · Serves to protect working environment.
- Valve exhaust noise dampening: 35 dB or more.
- Collection rate of drainage and oil mist: 99.9% or more.
- Piping work is reduced.



D side Non plug-in type Exhaust cleaner AMC610-10 (Option)

Manifold Specifications



∧ Caution

When using an exhaust cleaner, mount it downwards.

<example></example>	
 Plug-in type with tern 	ninal block (6 stations)
(Manifold base)	VV5FS3-01T-061-03-CD ······ 1
(2 position single)	VFS3100-5FZ 3
(2 position double)	VFS3200-5FZ 2
(Blanking plate)	VVFS3000-10A 1
(Exhaust cleaner)	AMC610-10 ····· 1
• Non plug-in type (6 st	ations)
(Manifold base)	VV5FS3-10-061-03-CU 1
(2 position single)	VFS3110-5E3
(2 position double)	VFS3210-5E2
(Blanking plate)	VVFS3000-10A 1
(Exhaust cleaner)	AMC610-10 ····· 1

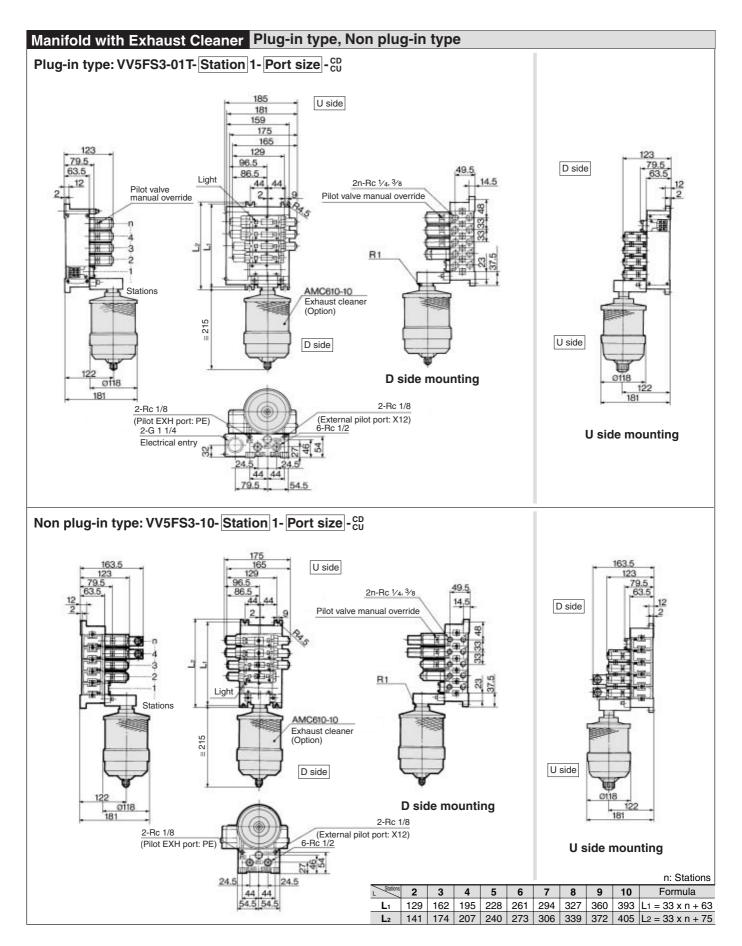
Please indicate manifold base type, corresponding valve, and

option parts.



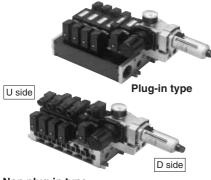
For details about exhaust cleaners, refer to Best Pneumatic Vol. 5

多SMC



Manifold with Control Unit

- Control unit (Filter, Regulator, Pressure switch, Air release valve) are all standardized to the one unit, and can be mounted on the manifold base without any attachments.
- Piping processes are eliminated.



Non plug-in type

▲ Caution

When using an air filter with auto-drain or manual drain, mount the filter vertically.

Manifold Specifications

Manifold	Plug-in type: VV5FS3-01		Non plug-in type: VV5FS3-10	
Wiring	With terminal block With multi-connector With D-sub connector		DIN terminal Grommet terminal	
Applicable valve model	VFS3□00-□F		VFS3□10-□D, VFS3□10-□E	
Porting specifications Rc	Common SUP, Common EXH			
	2(B), 4(A) port	Rc 1/4, 3/8		
	1(P), 3(R2), 5(R1) port	Rc 1/2		
Stations	2 to 10 *			

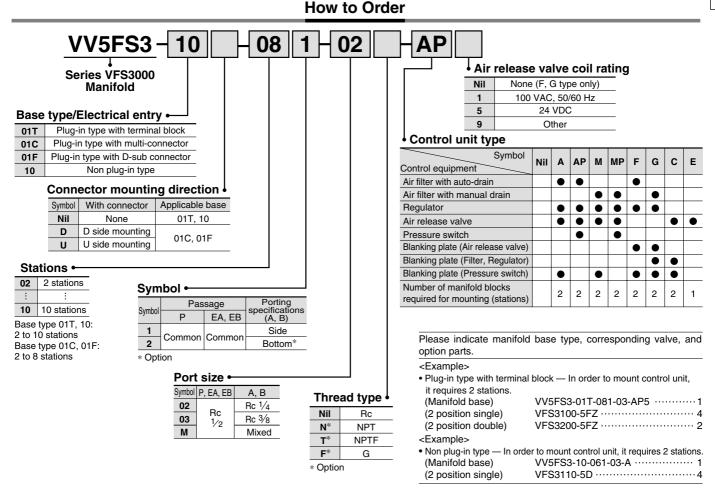
Control Unit Specifications

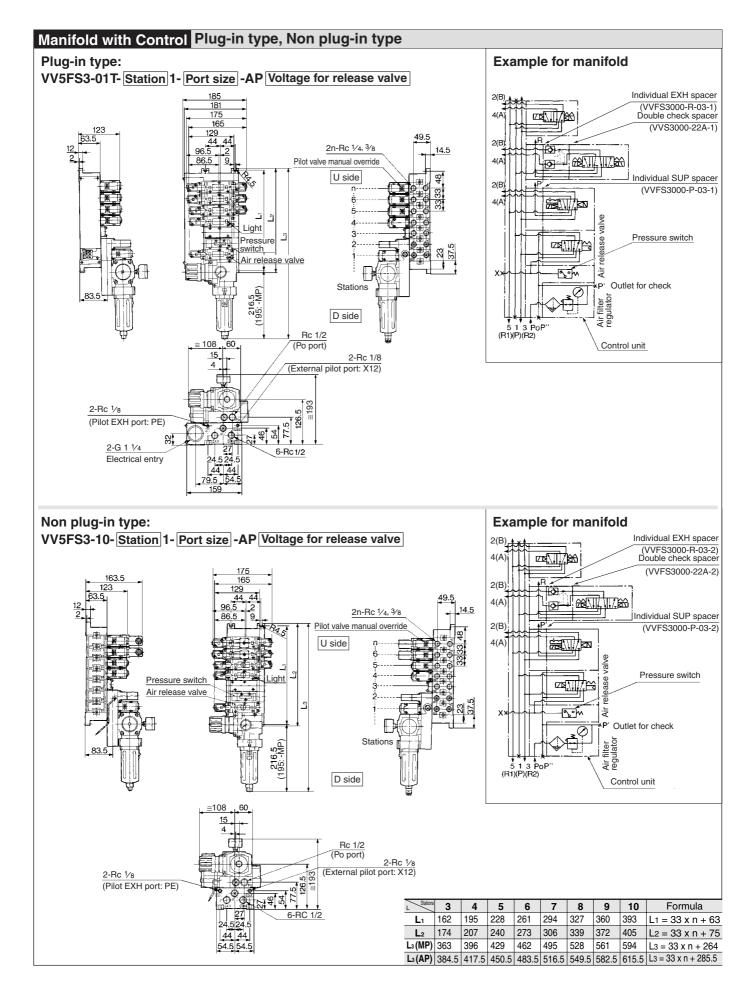
	•			
Air filter (With auto-drain/With manual drain)				
Filtration degree	5 μm			
Regulator				
Set pressure (Outlet pressure)	0.05 to 0.85 MPa			
Pressure switch ⁽¹⁾				
Set pressure range: OFF	0.1 to 0.6 MPa			
Differential	0.08 MPa or less			
Contact	1a			
Indicator light	LED (RED)			
Max. switch capacity	2 VA AC, 2 W DC			
Max. operating current	24 VAC/DC or less: 50 mA			
	100 VAC/DC: 20 mA			
Air release valve (Single only)				
Operating pressure range	0.1 to 1.0 MPa			

<Plug-in type> Air releas VVFS3000-24A-1R (D side mounting) valve <Non plug-in type> spacer VVFS3000-24A-2R (D side mounting) Pressure⁽ switch IS1000P-2-1 MP2-3 Filter regulator Blanking MP3-2 Pressure switch plate VVFS3000-24A-10 Release valve Filter element INA-13-854-12-5B Note 1) Voltage: 24 VDC to 100 VAC Inner voltage drop: 4 V Note 2) Combination of valve VFS31 (single) and a release valve spacer can be used an air release valve. Note 3) The non plug-in type cannot be mounted afterwards.

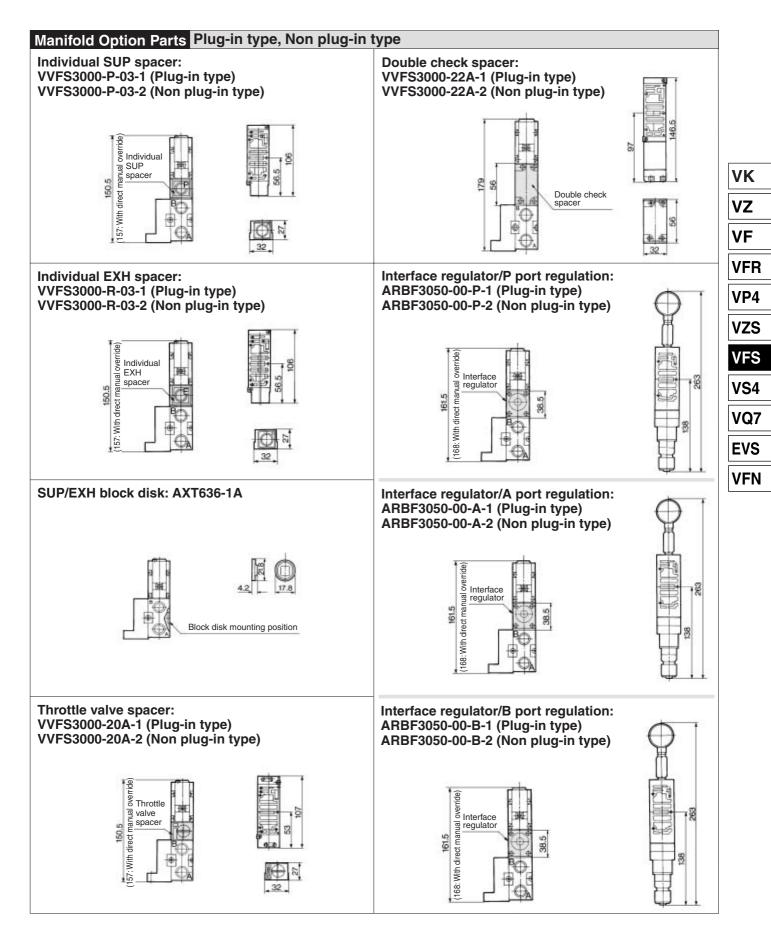
Control Unit/Option

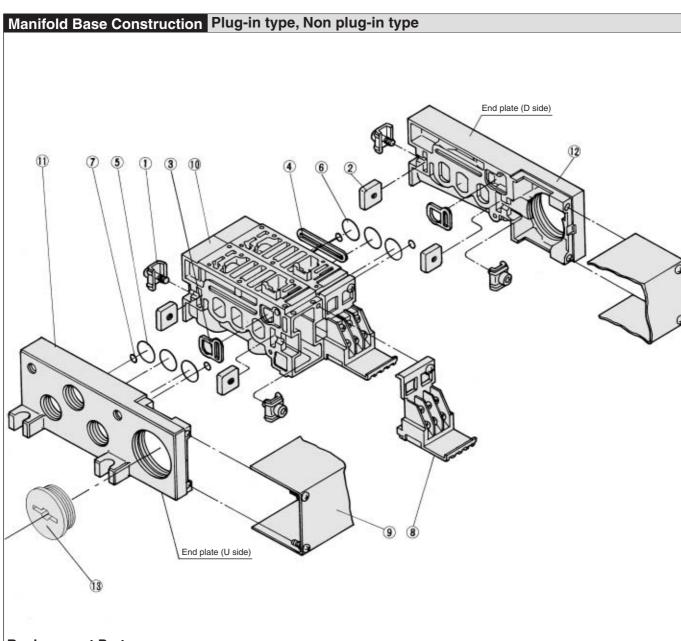
VK
VZ
VF
VFR
VP4
VZS
VFS
VS4
VQ7
EVS
VFN





5 Port Pilot Operated Solenoid Valve Metal Seal, Plug-in/Non Plug-in Series VFS3000





Replacement Parts

No.	Description	Material	Part no.
1	Connection fitting A	Steel plate	VVFS3000-5-1A
2	Connection fitting B	Steel plate	VVFS3000-5-2
3	Gasket	NBR	VVFS3000-7-1
4	Gasket	NBR	VVFS3000-8
(5)	O-ring	NBR	19.8 x 16.6 x 1.6 (End plate)
6	O-ring	NBR	20 x 16 x 2 (Manifold block)
$\overline{\mathcal{O}}$	O-ring	NBR	6.2 x 3 x 1.6
8	Terminal assembly		VVFS3000-6A
(9) Ju	Junction cover assembly	For 01T	VVFS3000-4A-Stations
9	Junction cover assembly	For 01SU	AZ738-22A-Stations
13	Rubber plug	NBR	AXT336-9

VVFS3000-3A-1

VVFS3000-3A-2

• For increasing the manifold bases, please order the manifold block assembly number of the principal part assembly (10). For plug-in type: The manifold base with terminal stand (integrated with a junction cover) is required with the (3) junction cover assembly.

Plug-in type

Non plug-in type

Replacement Parts: Sub Assembly

End plate (D side)

assembly

Note) Manifold Base/Construction: Plug-in with terminal block. Description Assembly part no. Component parts Applicable manifold base Manifold block 10, Terminal (8), Metal joint (1), (2), VVFS3000-1A-1-02 Plug-in type Manifold block Gasket ③, ④, O-ring ⑥, ⑦, Receptacle assembly Manifold block ⑩, Metal joint ①, ②, Gasket ③, ④, O-ring ⑥, ⑦ assembly VVFS3000-1A-2-02 03 Non plug-in type VVFS3000-2A-1 Plug-in type End plate (U side) End plate (U) (1), Metal joint (1), (2), O-ring (5), (6)Non plug-in type assembly VVFS3000-2A-2 End plate (U) (1), Metal joint (1), (2), O-ring (5), (6)

End plate (D) ⁽¹/₂), Metal joint ⁽¹), ⁽²/₂), Gasket ⁽³⁾ End plate (D) ⁽¹/₂), Metal joint ⁽¹/₂), ⁽²⁾/₂, Gasket ⁽³⁾/₃

No.

10

1

12

