Series VFS2000 Manifold Specifications Single Base Type

Keeps environmental air clean from pilot exhaust

Use of the VV5FS2-30 manifold can exhaust side, and can prevent environmental aggravation due to noise and oil mist.



VV5FS2-20



VV5FS2-30

Part no. for mounting bolt and gasket BG-VFS2030

Specifications

Manifold base type	Bar manifold, Body ported
Stations	Max. 15 stations

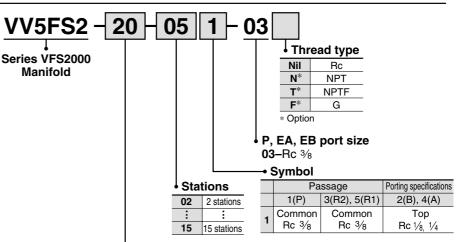
Port Specifications

	Passage		Porting specifications: Rc		
Symbol	rasi	saye	Base	Valve	Base
	1(P)	5(R1), 3(R2)	1(P)	2(B), 4(A)	3(R2), 5(R1)
1	Common	Common	Side: 3/8	Top: 1/8, 1/4	Side: 3/8

Option

- Priori			
Blanking plate	VVFS2000-10A-1	With gasket, screw	

How to Order Manifold Base



Base model

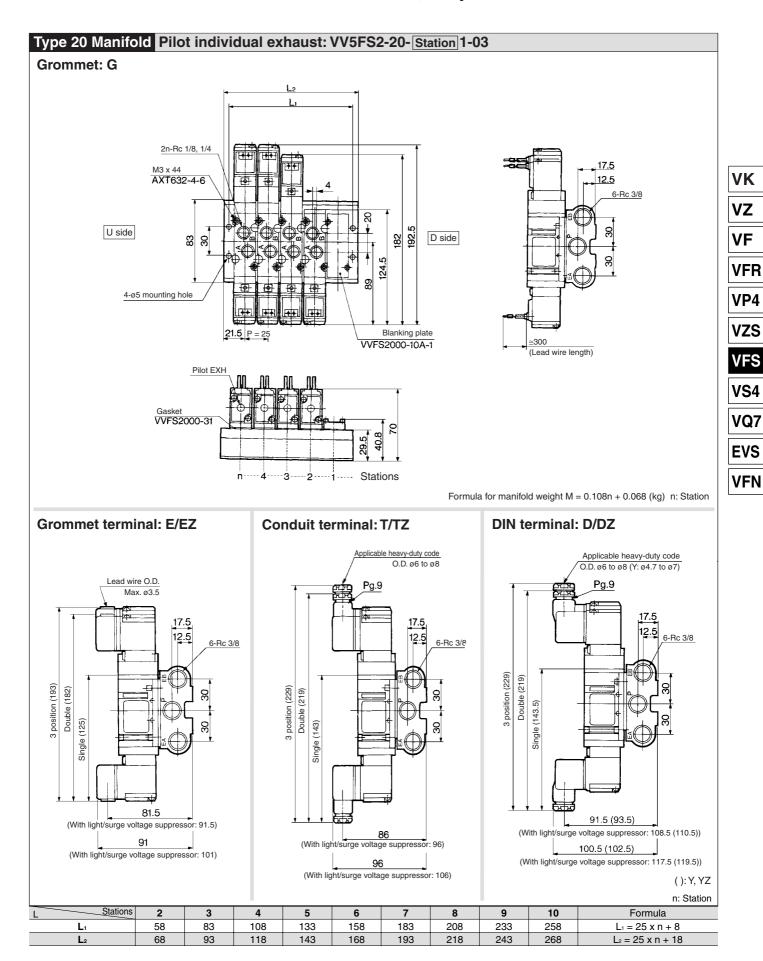
2400040.			
Model	Pilot exhaust	Applicable valve model	
20	Pilot individual EXH	VFS2□20-□□- ⁰¹ ₀₂	
30	Pilot common EXH	VFS2□30-□□- ⁰¹ ₀₂ *VFS2□20-□□- ⁰¹ ₀₂ mountable	

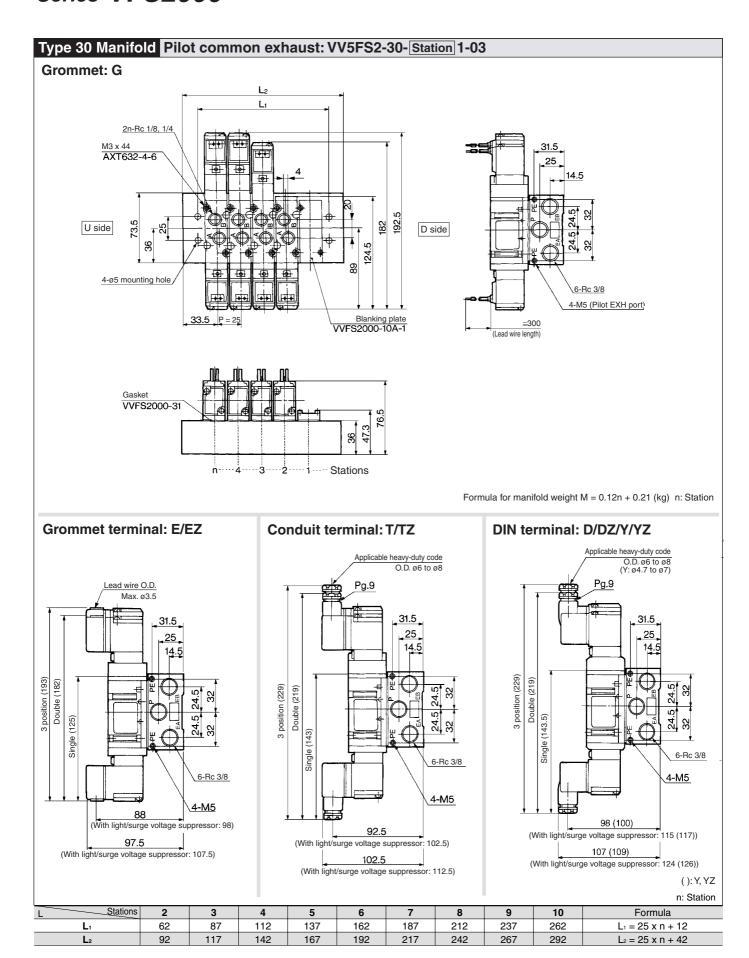
How to Order Manifold Assembly

Instruct by specifying the valves and blanking plate to be mounted on the manifold along with the manifold base model no.

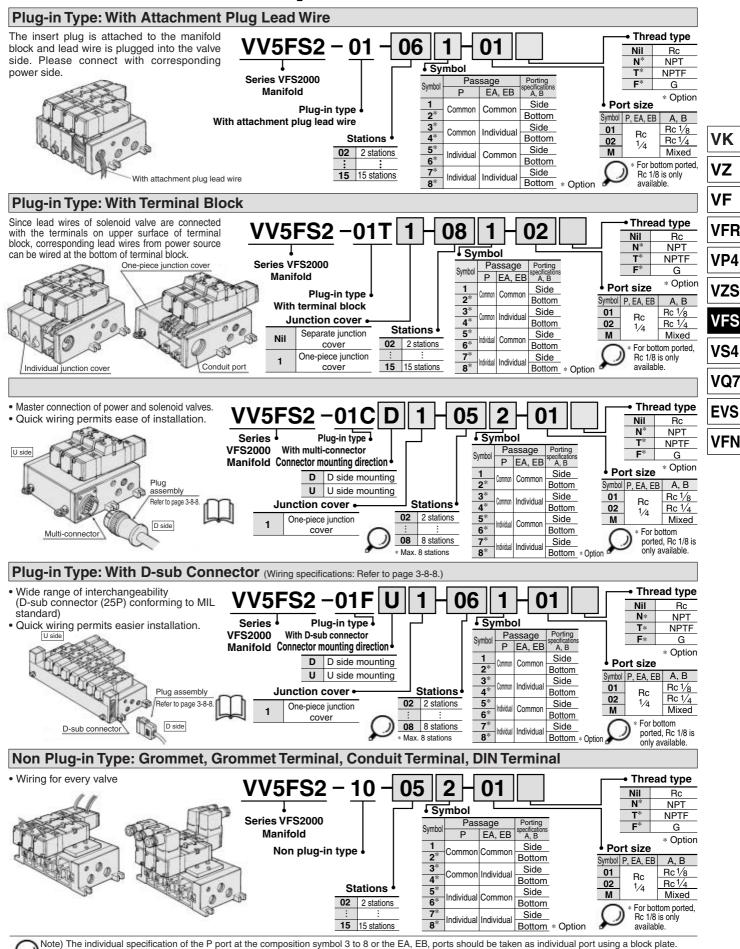
<examble></examble>	
(Manifold base)	VV5FS2-20-061-03 · · · · · 1
(2 position single)	VFS2120-1D-02····· 3
(2 position double)	VFS2220-1D-022
(Blanking plate)	VVFS2000-10A-1 ····· 1

5 Port Pilot Operated Solenoid Valve Metal Seal, Body Ported Series VFS2000





Manifold Specifications



Therefore, if an individual port is using a single SUP spacer of option or a single EXH spacer, the composition symbol mark is "1".



How to Order Manifold Assembly

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

- <Example>
- Plug-in type with terminal block
 (6 stations, one-piece style junction cover)
 (Manifold base) VV5FS2-01T1-061-02----1
 (2 position single) VFS2100-5FZ-------3
 (2 position double) VFS2200-5FZ--------2
 (Blanking plate) VVFS2000-10A---------1

Manifold Specifications

Base model	Wiring	Porting specifications A, B port	Port siz P, EA, EB		Stations	Applicable valve model
Plug-in type VV5FS2-01□	With attachment plug lead wire With terminal block With multi-connector With D-sub connector		1/.	1/8,1/4	2 to 15*	VFS2□00-□F
Non plug-in type VV5FS2-10	Grommet Grommet terminal Conduit terminal DIN terminal	Side/Bottom	1/4	78,74	stations	VFS2□10-□G VFS2□10-□E VFS2□10-□T VFS2□10-□D

* With circular connector, with D-sub connector: 8 stations at the maximum.

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

Model	Passage	/Stations	Station 1	Station 5	Station 10
	1 → 4/2	C [dm³/(s·bar)]	2.4	2.4	2.4
	$(P \rightarrow A/B)$	b	0.14	0.14	0.14
VVFS2	(P → A/D)	Cv	0.50	0.50	0.50
V V F 32	4/2 → 5/3	C [dm ³ /(s·bar)]	2.5	2.5	2.5
	$(A/B \rightarrow R1/R2)$	b	0.18	0.18	0.18
	(A/D → N I/N2)	Cv	0.60	0.60	0.60



Manifold Option Parts Assembly

Individual SUP spacer

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

Во	dy type	Plug-in type	Non plug-in type
no.	Rc 1/8	VVFS2000-P-01-1	VVFS2000-P-01-2
Part	Rc 1/4	VVFS2000-P-02-1	VVFS2000-P-02-2





Individual EXH spacer

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

Body type		Plug-in type	Non plug-in type
no.	Rc 1/8	VVFS2000-R-01-1	VVFS2000-R-01-2
Part	Rc 1/4	VVFS2000-R-02-1	VVFS2000-R-02-2





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.	AXT62	25-12A

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 in between stations to separate valve exhaust.

Body type	Plug-in type	Non plug-in type
Part no.	AXT62	25-12A



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.	VVFS2000-20A-1	VVFS2000-20A-2





Interface regulator (P port regulation)



Interface regulator set on manifold block can regulate the pressure to each valve. Refer to "Flow Characteristics" on page 3-8-6.

Body type	Plug-in type	Non plug-in type	
P port regulation	ARBF2000-00-P-1	ARBF2000-00-P-2	





Air shutoff valve spacer

When stopping supply air and releasing residual pressure after completion of work, actuators may move from original position. Air shut off valve spacer makes it possible to stop actuators in original position for extended periods.

Body type	Plug-in type	Non plug-in type	
Part no.	VVFS2000-21A-1	VVFS2000-21A-2	



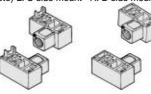


* Not mountable for standard type sub-plate

Air release valve spacer

The concurrent use of air release valve spacer with VFS21 \(\sigma \) can release air.

Body type Plug-in type		Non plug-in type
Part no. VVFS2000-24A-1 L		VVFS2000-24A-2 L
Note	e) L: U side mount	R: D side mount



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.	VVFS2000-22A-1	VVFS2000-22A-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.	VVFS2000-10A	

Accessory

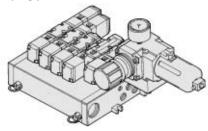
One pair of gasket and mounting thread is attached to every option parts assembly.

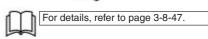
Manifold Option

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.

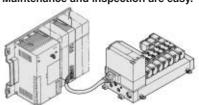




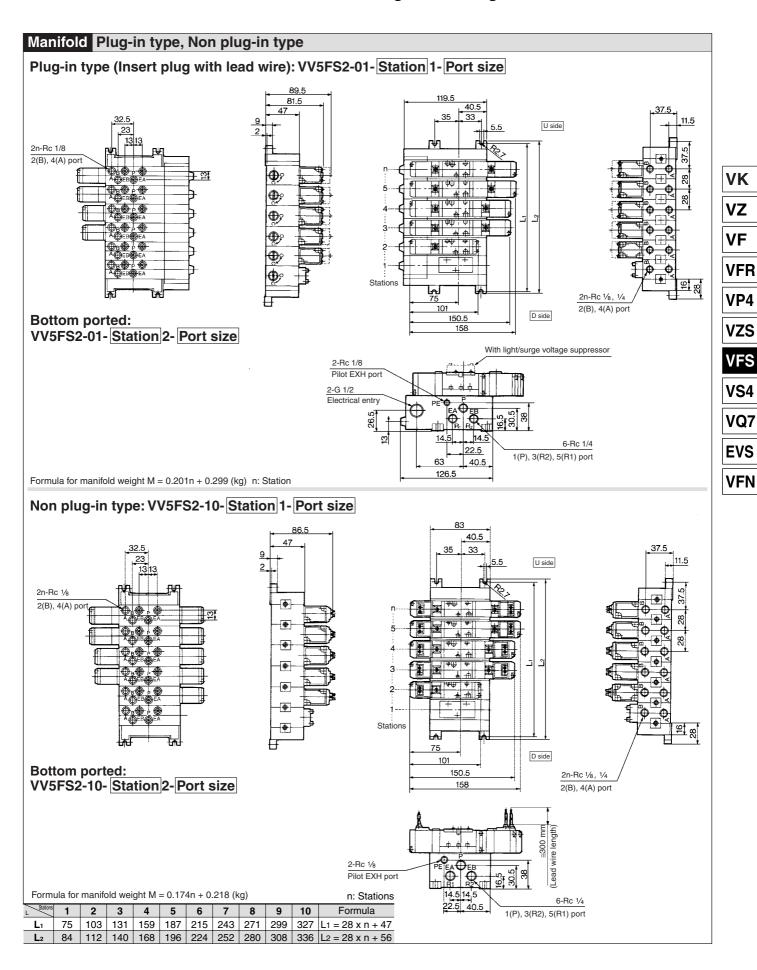
With serial interface unit for serial transmission

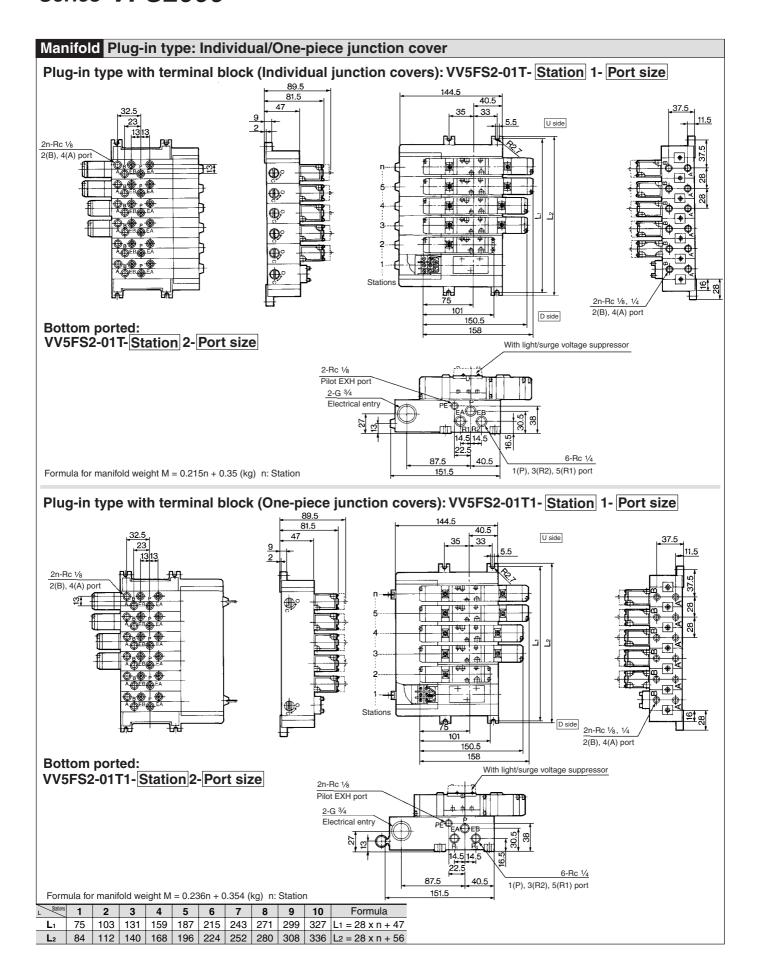
Plug-in type

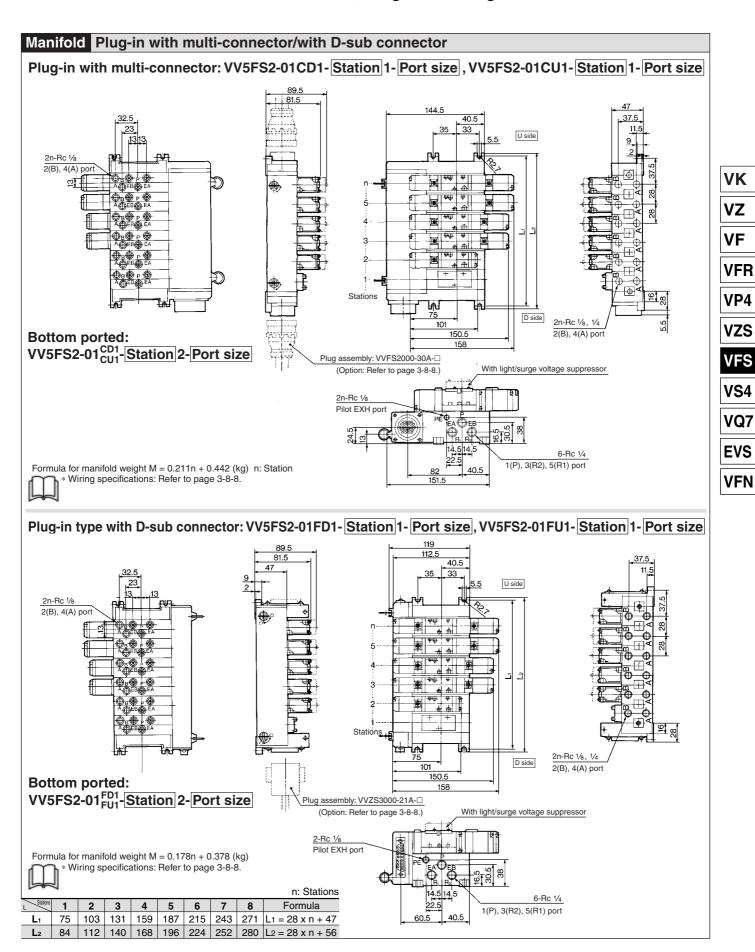
- Solenoid valve wiring process reduced considerably.
- Disperse installation possible.
 Manifold solenoid valve: 8 stations max.
 32 positions (512 solenoids).
- Maintenance and inspection are easy.

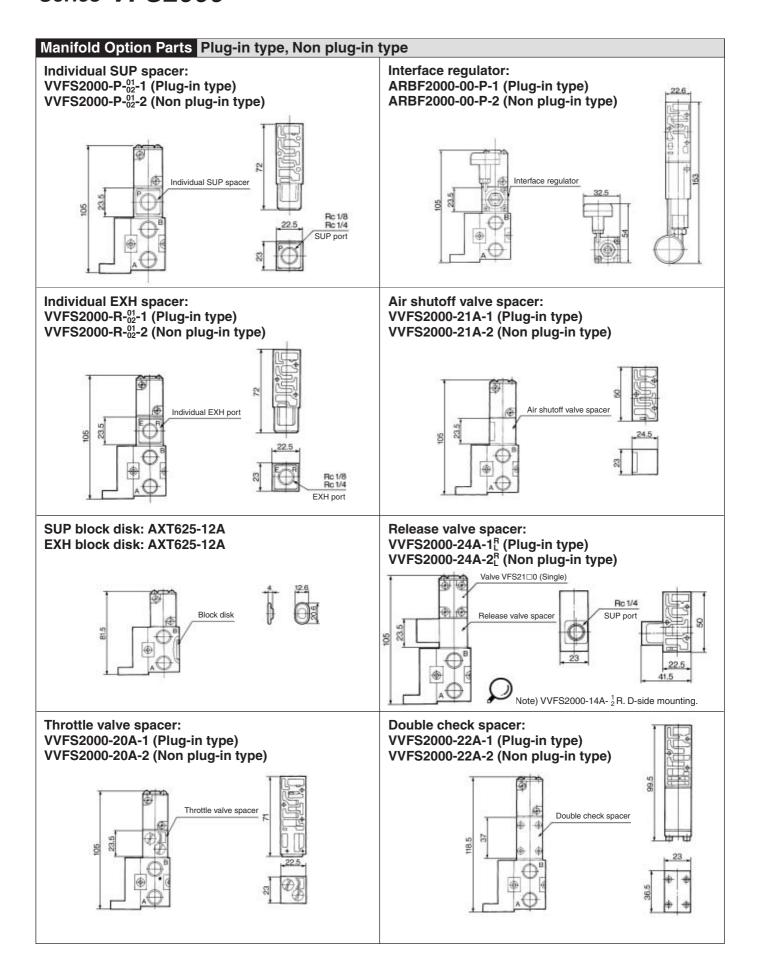


For details, refer to "Serial Transmission" catalog separately.









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.



Plug-in type



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: VV5FS2-01□		Non plug-in type: VV5FS2-10
	Plug-in with attachment plug lead wire		Grommet
Wiring	With terminal block		Grommet terminal
· · · · · · · · · · · · · · · · · · ·	With multi-connector		Conduit terminal
	With D-sub connector		DIN terminal
A			VFS2□10-□G, VFS2□10-□E
Applicable valve model	VFS2□00-□F		VFS2□10-□T, VFS2□10-□D
D 11 10 11			UP, Common EXH
Porting specifications			c 1/8, 1/4, Bottom: Rc 1/8 (Option)
Rc	1 (P), 3(R2), 5(R1) port	(1) port Side: Rc 1/4, 1/8, Bottom: Rc 1/8 (Option)	
Stations	2 to 15 stations*		
·	·	·	·

^{*} With multi-connector, or D-sub connector: 8 stations max.

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)		
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: 50 100 VAC/DC: 20 mA			
Air release valve	(Single only)		
Operating pressure range 0.1 to 1.0 MPa			

Control Unit/Option

	Air release	<pre><plug-in type=""> VVFS2000-24A-1R (D side mounting) VVFS2000-24A-1L (U side mounting)</plug-in></pre>			
	spacer	<non plug-in="" type=""></non>			
		VVFS2000-24A-2R (D s	side mounting)		
		VVFS2000-24A-2L (U s			
Ī	Pressure switch (3)	IS1000P-2-1			
Ī	Dlankina	With control unit/Filter regulator	MP2-2		
	Blanking plate	Pressure switch	MP3-2		
		Release valve	AXT625-18A		
Ī	Filter element	111511-5B			

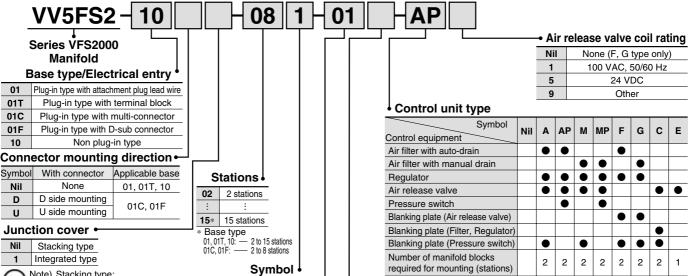
Note 1) Voltage: 24 VDC to 100 VAC Inner voltage drop: 4 V
Note 2) Refer to manifold option parts on page 3-8-42.

Note 3) The non plug-in type cannot be mounted afterwards.

How to Order



Note) The manifold of plug-in type with attachment plug lead wire is applied to individual type only. Non plug-in type has no junction



Note) Stacking type:
Base type 01, 01T
Integrated type:
Base type 01T, 01C, 01F

Symbol	Passage		Porting specifications
Syllibol	Р	EA, EB	B, A
1	Common	0	Side
2*	Common	Common	Bottom
3*	^	Individual	Side
4*	Common		Bottom
5*	Individual	0	Side
6*	individual	Common	Bottom
7*	Individual	Landbalah ad	Side
8*		Individual	Bottom

* Option The in

The individual specification of the P port in the composition symbol marks 3 to 8 or EA, EB ports should be taken as individual port using a block plate. Therefore, if an individual port is taken using a single SUP spacer of option or a single EXH spacer, the composition symbol mark is "1".

Thread type

Nil	Rc
N*	NPT
T*	NPTF
F*	G
* Ontion	

Port size

	Symbol	P, EA, EB	B, A
	01	D-	Rc 1/8
	02	Rc 1/4	Rc 1/4
	М	/4	Mixed

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

- <Example>
- Plug-in type with terminal block
- (Manifold base)
 VV5FS2-01T1-091-02-MP5 ··· 1

 (2 position single)
 VFS2100-5FZ ··· 5

 (2 position double)
 VFS2200-5FZ ··· 2
- * 2 stations are needed to mount control unit.
- Non plug-in type
- (Manifold base)
 VV5FS2-10-071-01-M····· 1

 (2 position single)
 VFS2110-5D ······· 5
- * 2 stations are needed to mount control unit.

VK

VZ VF

VFR

VP4

VZS

VZS

VFS

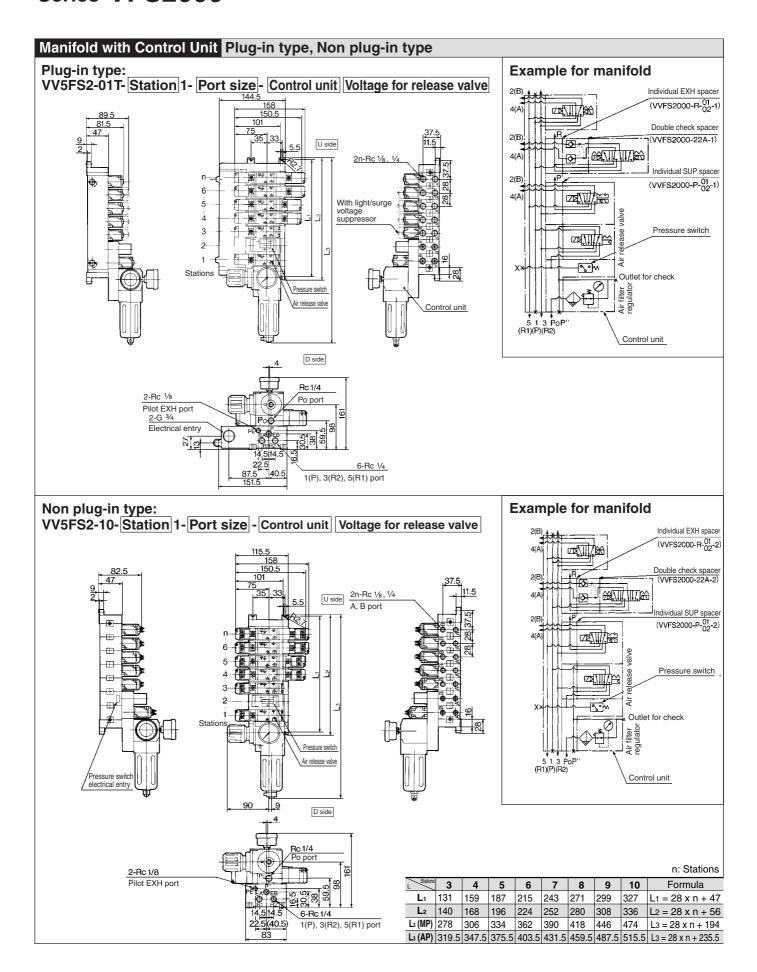
VS4

V54

VQ7

EVS

VFN



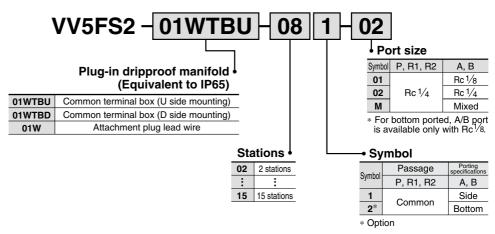
Dripproof Manifold (Equivalent to IP65)

Manifold Specifications

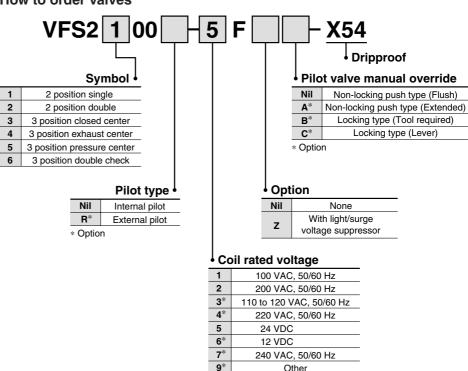
Manifold	VV5FS2-01WTBD		VV5FS2-01W
Wiring	Common terminal box		Attachment plug lead wire
Applicable value model	VFS2□00-□F-X54		
Porting specifications Rc	Common SUP, Common EXH		
	2(B), 4(A) port	Side: Rc 1/8, 1/4, Bottom: Rc 1/8 (Option)	
	1(P), 3(R2), 5(R1) port Side: Rc 1/4		Side: Rc 1/4
Stations	2 to 10 stations		2 to 15 stations

How to Order

How to order manifold



How to order valves



* Option

۷K

٧Z

۷F

VFR

VP4

VZS

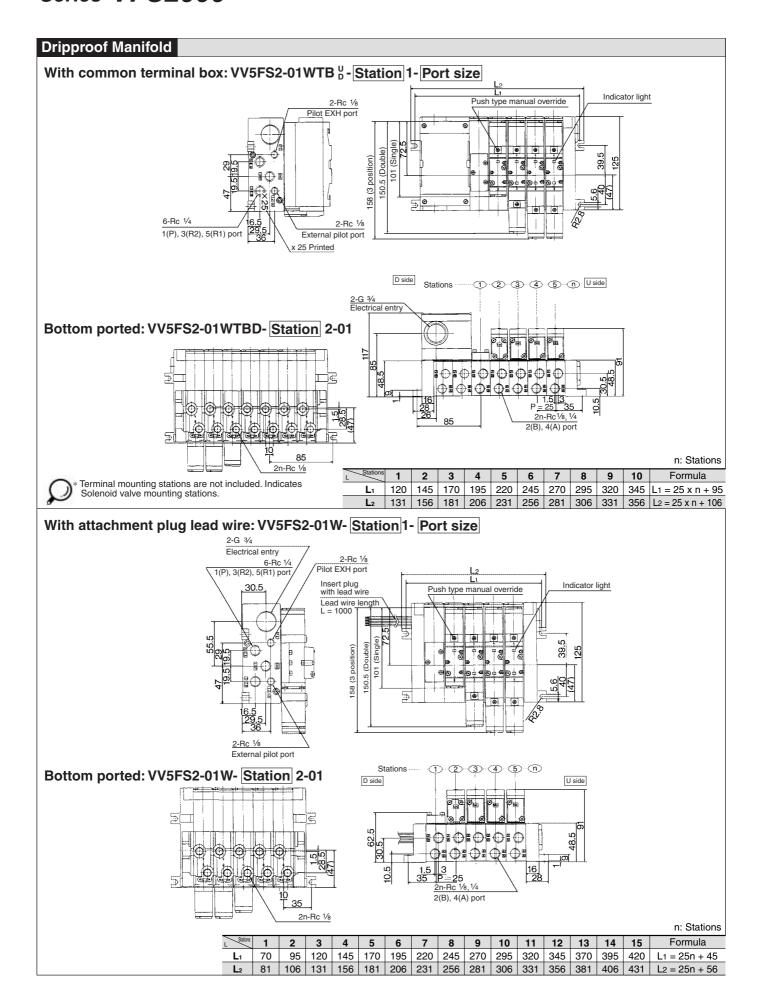
VFS

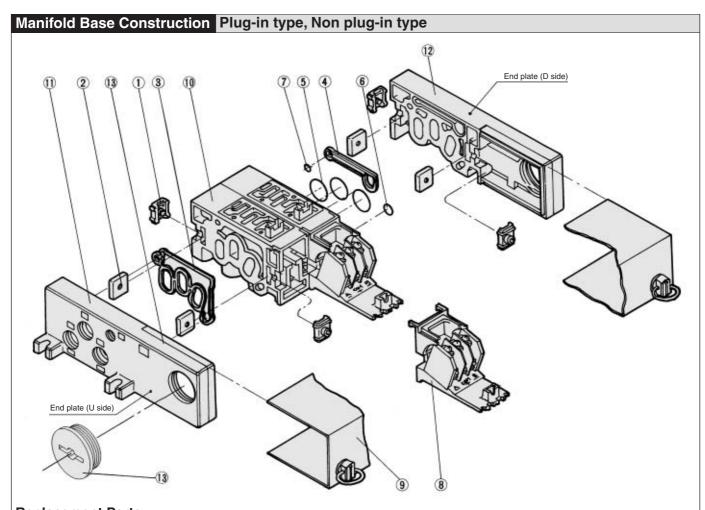
VS4

VQ7

EVS

VFN





Replacement Parts

No.	Description	Material	Part no.		
1	Connection fitting A	Steel plate		AXT625-4-1	
2	Connection fitting B	Steel plate	AXT625-5		
3	Gasket A	NBR	AXT625-17		
4	Gasket B	NBR		AXT625-16	
(5)	O-ring	NBR		18 x 15 x 1.5	
6	O-ring	NBR		10.5 x 7.5 x 1.5	
7	O-ring	NBR		8 x 5 x 1.5	
8	Adapter plate	Resin	For 01	AXT625-6	
	Adapter		For 01T	AXT625-28-1A (Terminal section with adapter plate)	
	plate assembly	-	For 01T1		
	Adapter plate	Resin	For 01C	AXT625-28-1	
			For 01F	VVF2000-26-6	
			For 01SU	AXT625-6	

No.	Description	Material	Part no.		
	Junction cover assembly	_	For 01	AXT625-7A	
			For 01T	AXT625-28-3A	
(9)			For 01T1	AXT625-28-7A- Stations	
9			For 01C		
			For 01F	VVF2000-26-5A- Stations	
			For 01SU	AZ738-10A- Stations	
13	Rubber plug	NBR	For 01	AXT333-12	
			For 01T 01SU	AXT625-22	
	Plug	_	For 01 W	EXP22S	

[•] For increasing the manifold bases, please order the manifold block assembly number of the principle number assembly ①. For plug-in type: The manifold base with terminal stand (integrated with a junction cover) is required with the (9) junction cover assembly.

Replacement Parts: Sub Assembly Note) Manifold Base/Construction: Plug-in type with terminal block							
No.	Description	Assembly part no. Component parts		Applicable manifold base			
10	Manifold block assembly	AXT625-01A-1 Note)	Manifold block ①, Metal joint ①, ②. O-ring ⑤, ⑥, ⑦ Junction cover, Adapter plate, Pin housing, Guide, Insert plug lead wire	Plug-in type With attachment plug lead wire			
		AXT625-20A-1 Note)	Manifold block ®, Metal joint ①, ②, O-ring ⑤, ⑥, ⑦ Terminal ®, Junction cover ⑨, Adaptor plate, Pin housing, Guide	Plug-in type With terminal block			
		AXT625-10A-1 Note)	Manifold block ①, Metal joint ①, ②, O-ring ⑤, ⑥, ⑦	Non plug-in type			
11)	End plate (U side) assembly	AXT625-2A	End plate (U) ①, Metal joint ①, ②, Gasket A ③, Guard ③	Plug-in type With attachment plug lead wire			
		AXT625-2A-20	End plate (U) ①, Metal joint ①, ②, Gasket A ③, Guard ③	Plug-in type With terminal block			
		AXT625-2A-10	End plate (U) ①, Metal joint ①, ②, Gasket A ③, Guard ③	Non plug-in type			
12	End plate (D side) assembly	AXT625-3A	End plate (D) ②, Metal joint ①, ②, Gasket B ④, Guard ③, Steel ball	Plug-in type With attachment plug lead wire			
		AXT625-3A-20	End plate (D) ②, Metal joint ①, ②, Gasket B ④, Guard ③, Steel ball	Plug-in type With terminal block			
		AXT625-3A-10	End plate (D) ①, Metal joint ①, ②, Gasket B ④, Guard ③, Steel ball	Non plug-in type			

Note) A, B ports: 1/8, 1/4



۷K

٧Z

VF

VFR

VP4

VZS

VFS

VS4

VQ7

EVS

VFN