

ISO Standard Solenoid Valve

Sizes 01, 02, 03

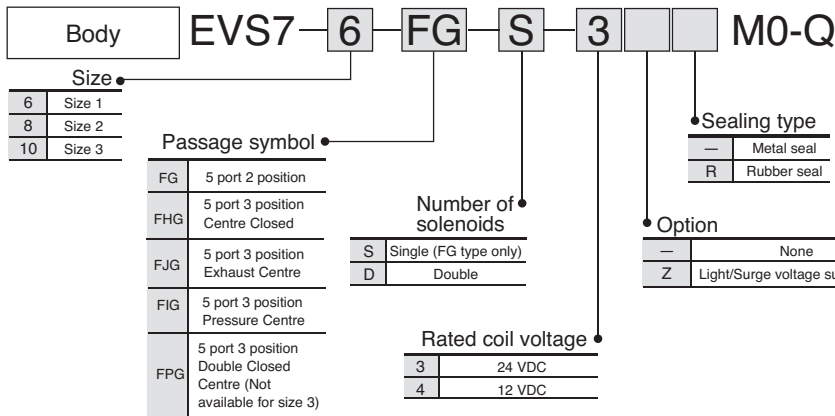
Series EVS7-6/7-8/7-10

Features

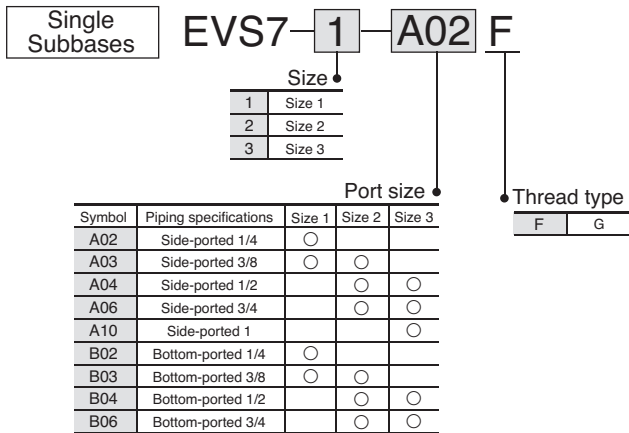
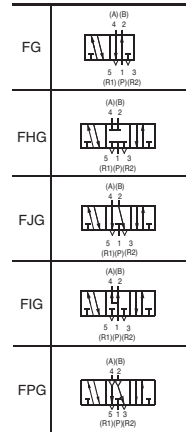
- Mounting to ISO 5599/1 sizes 1, 2 and 3.
- M12 connector for easy wiring.
- Compact body.
- IP65 splashproof rating.
- Lightweight, with large flow capacity.



How to Order



Symbols



Single Subbase Specifications

Model	Piping direction	Piping specifications	
		Port size for 1(P), 2(B), 4(A)	Port size for 3(R2), 5(R1)
EVS7-1-A02F	Horizontal	1/4	3/8
EVS7-1-A03F			3/8
EVS7-1-B02F		Bottom	1/4
EVS7-1-B03F			3/8
EVS7-2-A03F	Horizontal		3/8
EVS7-2-A04F			1/2
EVS7-2-A06F			3/4
EVS7-2-B03F	Bottom		3/8
EVS7-2-B04F			1/2
EVS7-2-B06F			3/4
EVS7-3-A04F	Horizontal	1/2	3/4
EVS7-3-A06F			3/4
EVS7-3-A10F			1
EVS7-3-B04F	Bottom		1/2
EVS7-3-B06F			3/4

Product Recommendation



Stocked items for fast delivery / ISO Valves

EVS7-6-FG-D-3ZM0-Q	EVS7-6-FG-S-3ZRM0-Q	EVS7-8-FG-D-3ZM0-Q	EVS7-8-FG-S-3ZRM0-Q	EVS7-8-FHG-D-3ZRM0-Q	EVS7-8-FJG-D-3ZM0-Q
EVS7-6-FG-D-3ZRM0-Q	EVS7-6-FHG-D-3ZM0-Q	EVS7-8-FG-D-3ZRM0-Q	EVS7-8-FHG-D-3ZM0-Q	EVS7-8-FIG-D-3ZRM0-Q	EVS7-10-FG-S-3ZM0-Q
EVS7-6-FG-S-3ZM0-Q	EVS7-6-FJG-D-3ZRM0-Q	EVS7-8-FG-S-3ZM0-Q			



Stocked items for fast delivery / Single Subbases

EVS7-1-A02F	EVS7-2-A03F	EVS7-2-A04F	EVS7-2-A06F	EVS7-3-A06F	EVS7-3-A10F
EVS7-1-A03F					



Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air preparation - page 1076

Series TU - Tubing - page 1223

Series KQ2 - Fittings - page 1184

Valve Specifications

Valve specifications	Valve type	Metal seal	Rubber seal	
	Fluid	Air, Inert gas		
	Maximum operating pressure	1.0 MPa		
	Minimum operating pressure	Single	0.1 MPa	0.1 MPa
		Double	0.1 MPa	0.1 MPa
		3 position	0.1 MPa	0.1 MPa: Size 1 0.15 MPa: Size 2, 3
	Ambient and fluid temperature	-10 to 60°C No Freezing	-5 to 60°C No Freezing	
	Lubrication	None		
	Manual override	Push type (Tool required)		
Enclosure	IP65 (Dust/Splashproof type)			
Electric specifications	Rated coil voltage	12 VDC, 24 VDC		
	Allowable voltage fluctuation	-15 to +10% of rated voltage		
	Type of coil insulation	Equivalent to Class B		
	Power consumption	24 VDC	1.8 W DC (75 mA)	
		12 VDC	1.8 W DC (150 mA)	

Flow Characteristics

Series EVS7-6

Positions			Bore size	Flow characteristics					
				1 → 4, 2 (P → A, B)			4, 2 → 5, 3 (A, B → EA, EB)		
				C	b	Cv	C	b	Cv
2 position	Single	Metal seal	1/4	4.1	0.10	0.9	5.2	0.07	1.1
		Rubber seal		5.0	0.13	1.1	6.0	0.11	1.4
	Double	Metal seal		4.1	0.10	0.9	5.2	0.07	1.1
		Rubber seal		5.0	0.13	1.1	6.0	0.11	1.4
3 position	Closed centre	Metal seal		4.1	0.10	0.9	5.2	0.10	1.1
		Rubber seal		5.0	0.13	1.1	5.6	0.20	1.3
	Exhaust centre	Metal seal		4.1	0.10	0.9	5.2	0.10	1.1
		Rubber seal		4.8	0.16	1.1	6.0	0.17	1.4
	Pressure centre	Metal seal	4.1	0.10	0.9	5.2	0.08	1.1	
		Rubber seal	5.6	0.15	1.2	5.9	0.08	1.3	
	Perfect type	Metal seal	1.4	—	—	3.1	—	—	
		Rubber seal	1.4	—	—	3.1	—	—	

Series EVS7-8

Positions			Bore size	Flow characteristics					
				1 → 4, 2 (P → A, B)			4, 2 → 5, 3 (A, B → EA, EB)		
				C	b	Cv	C	b	Cv
2 position	Single	Metal seal	3/8	10	0.18	2.4	12	0.24	3.0
		Rubber seal		12	0.24	3.0	13	0.27	3.3
	Double	Metal seal		10	0.18	2.4	12	0.24	3.0
		Rubber seal		12	0.24	3.0	13	0.27	3.3
3 position	Closed centre	Metal seal		10	0.28	2.4	10	0.24	2.4
		Rubber seal		11	0.25	2.8	11	0.27	2.8
	Exhaust centre	Metal seal		10	0.16	2.4	10	0.20	2.4
		Rubber seal		11	0.26	2.8	13	0.27	3.3
	Pressure centre	Metal seal	10	0.26	2.4	11	0.25	2.8	
		Rubber seal	13	0.27	3.3	12	0.29	3.0	
	Perfect type	Metal seal	7.2	—	—	7.0	—	—	
		Rubber seal	7.2	—	—	7.0	—	—	

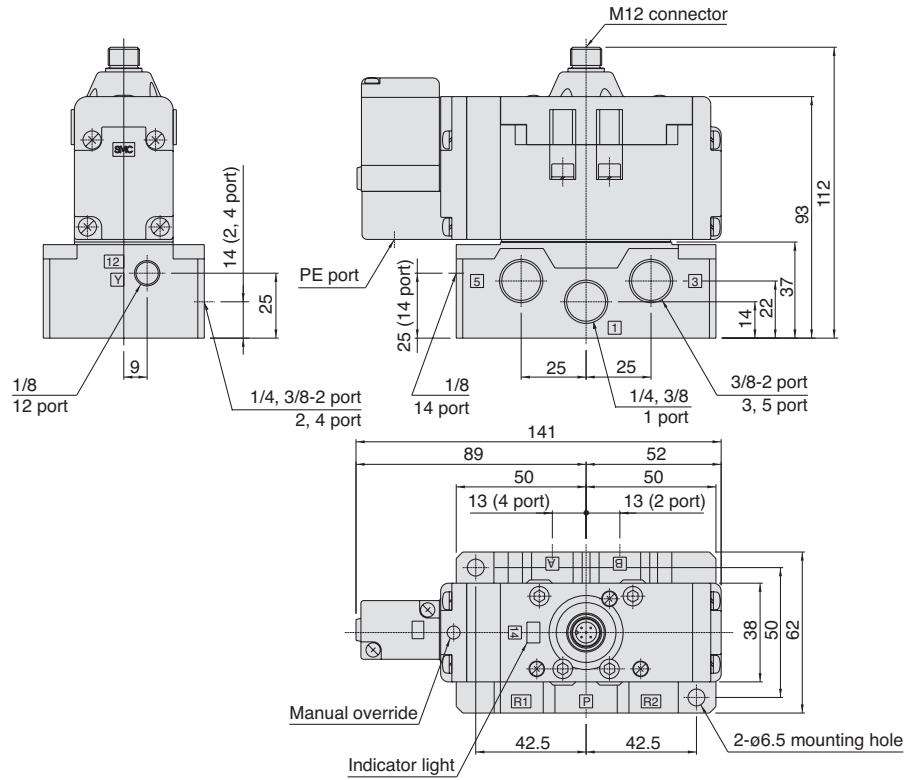
Series EVS7-10

Positions			Bore size	Flow characteristics					
				1 → 4, 2 (P → A, B)			4, 2 → 5, 3 (A, B → EA, EB)		
				C	b	Cv	C	b	Cv
2 position	Single	Metal seal	1/2	13	0.10	3.0	18	0.10	4.0
		Rubber seal		16	0.20	4.0	18	0.20	4.4
	Double	Metal seal		13	0.10	3.0	18	0.10	4.0
		Rubber seal		16	0.20	4.0	18	0.20	4.4
3 position	Closed centre	Metal seal		13	0.10	3.0	18	0.10	4.0
		Rubber seal		15	0.20	3.5	15	0.20	3.7
	Exhaust centre	Metal seal		13	0.10	3.0	18	0.10	4.0
		Rubber seal		16	0.20	4.0	16	0.20	4.0
	Pressure centre	Metal seal	13	0.10	3.0	18	0.10	4.0	
		Rubber seal	15	0.20	3.8	19	0.10	4.4	

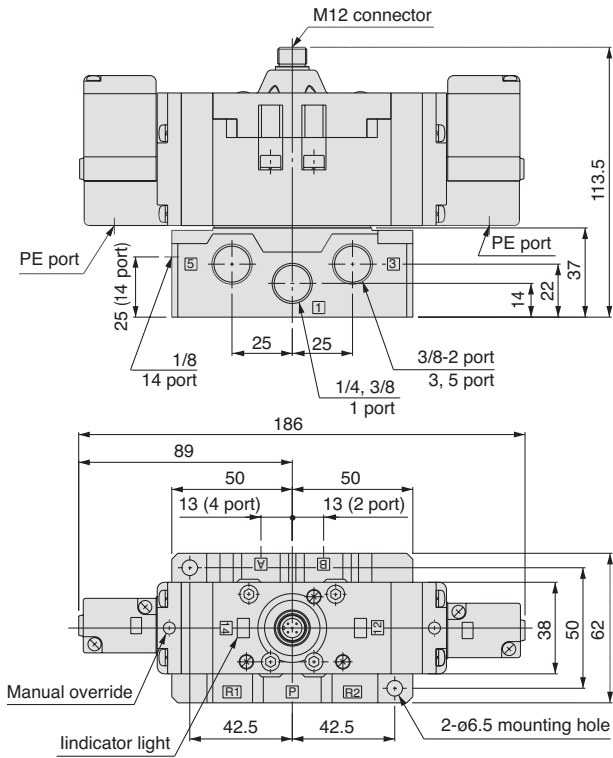


Dimensions

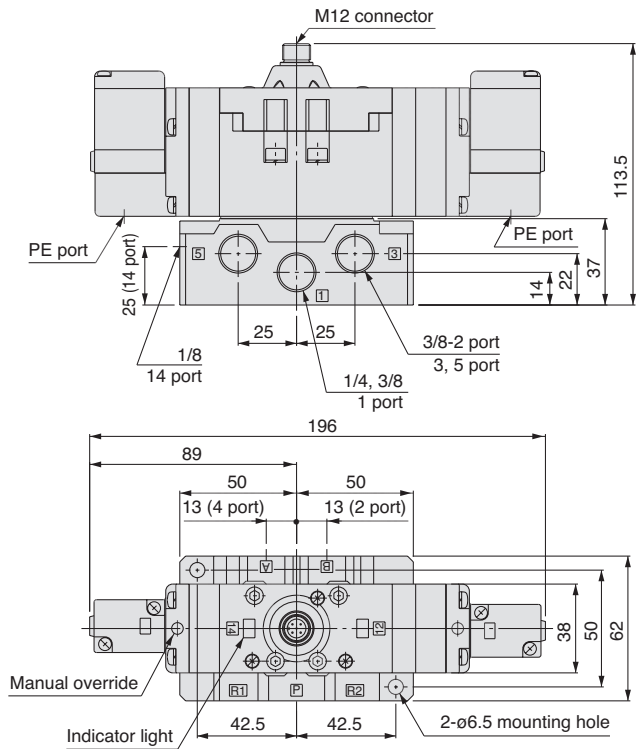
EVS7-6-FG-S-□□M0-Q



EVS7-6-FG-D-□□M0-Q

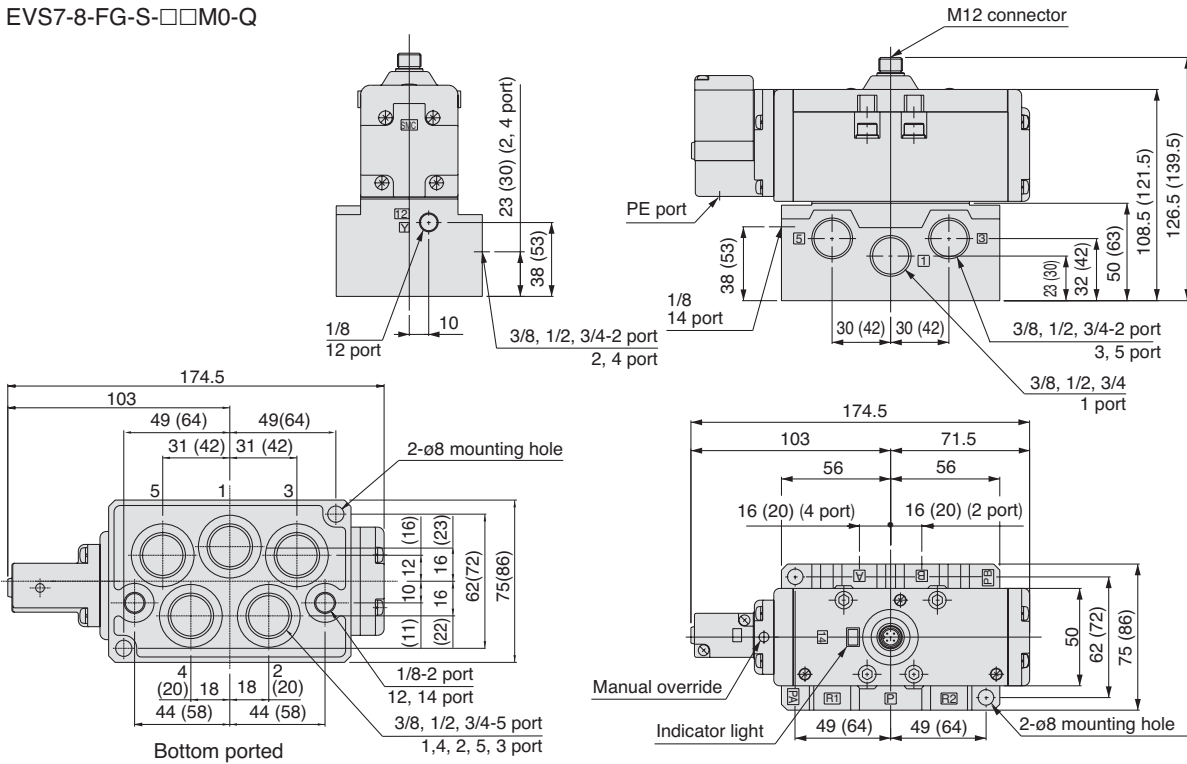


EVS7-6-F^HJG-D-□□M0-Q



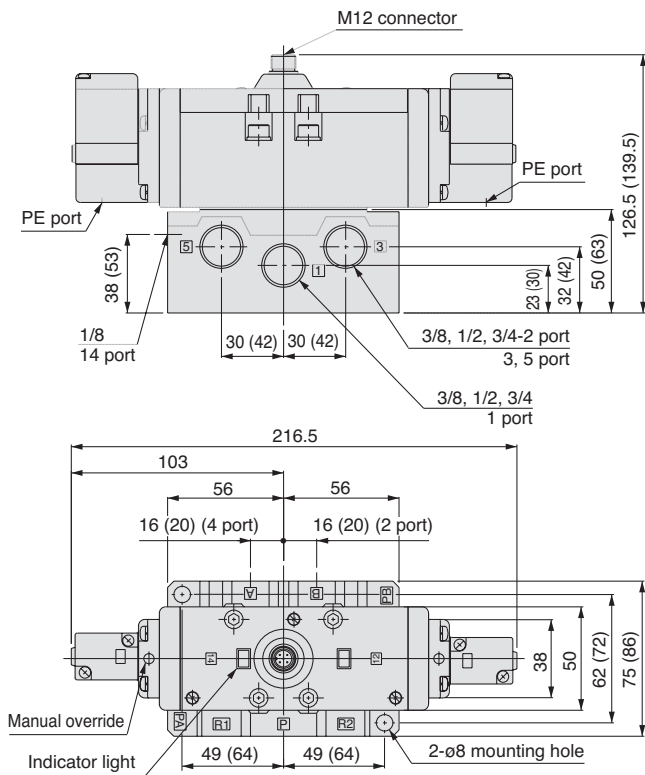
Dimensions

EVS7-8-FG-S-□□M0-Q

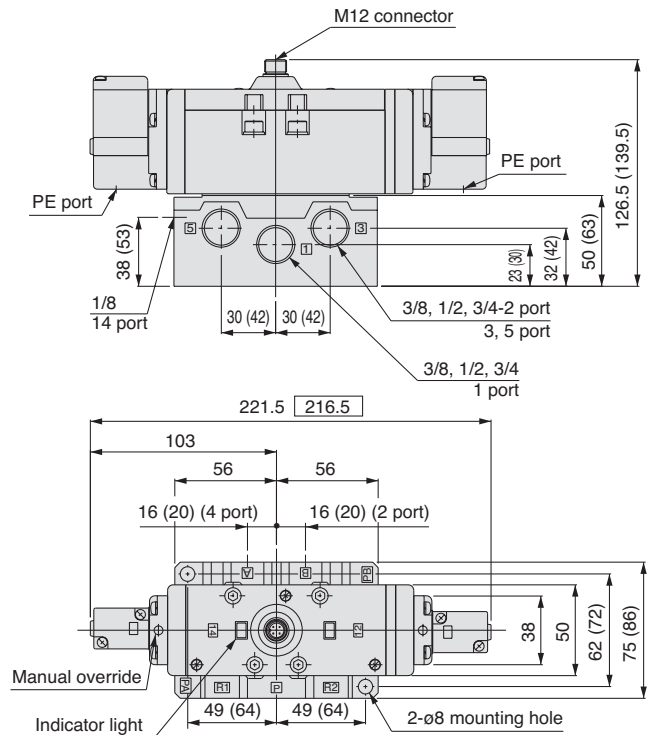


Valves

EVS7-8-FG-D-□□M0-Q



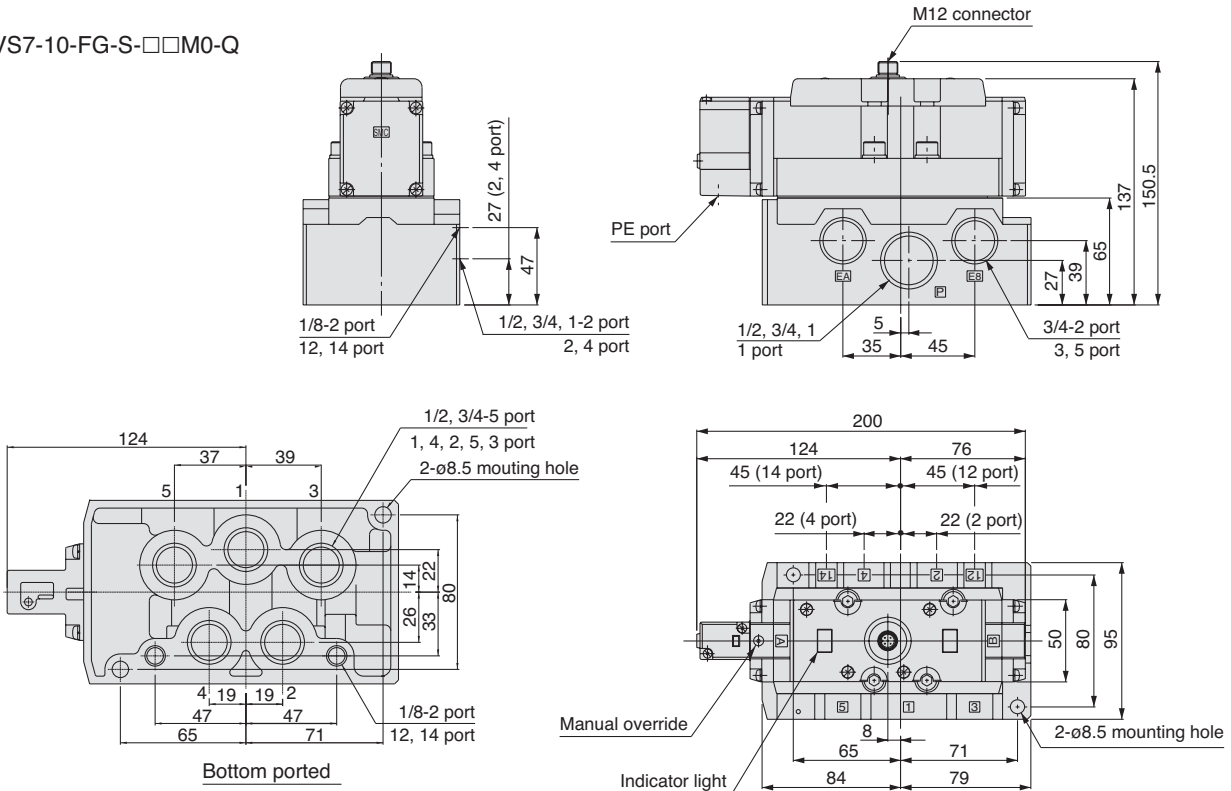
EVS7-8-F^HJG-D-□□M0-Q



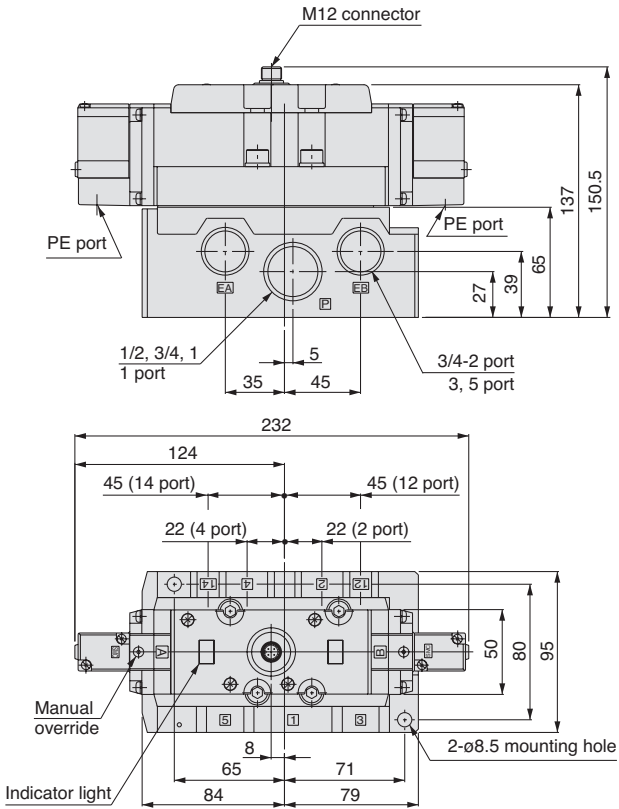
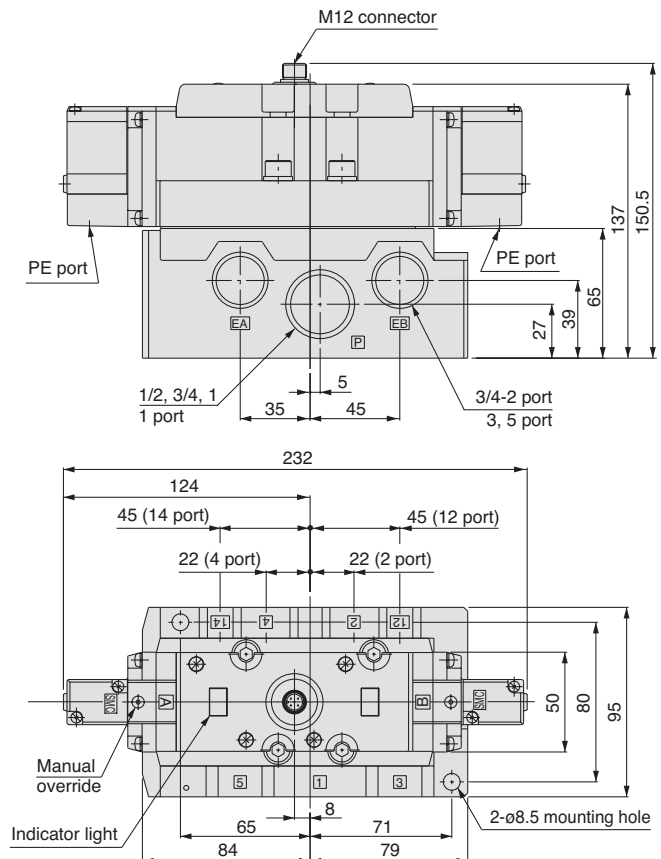
Dimension inside is for rubber seal.
Dimensions inside () are for Sub-plate.

Dimensions

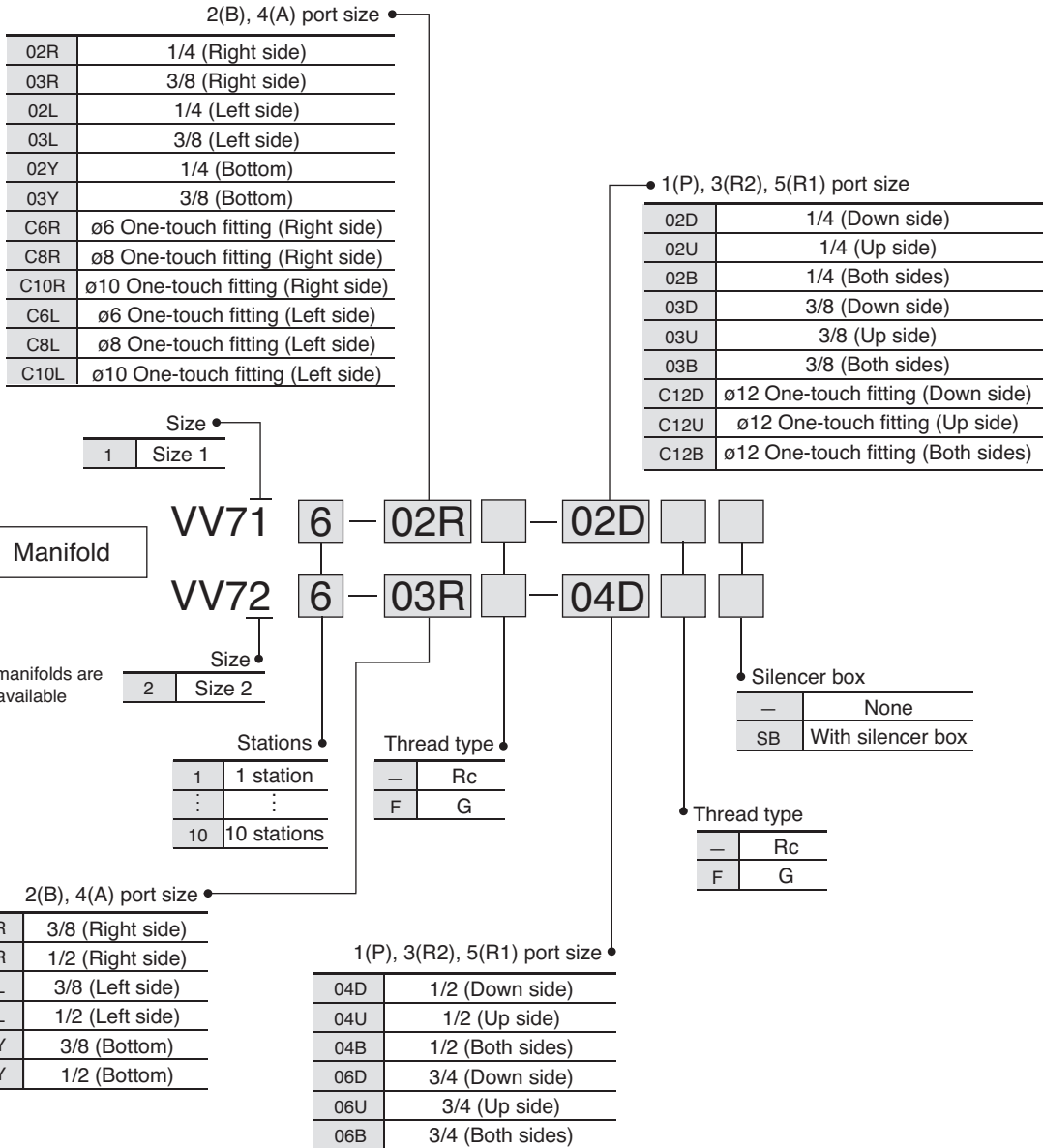
EVS7-10-FG-S-□□M0-Q



EVS7-10-FG-D-□□M0-Q


 EVS7-10-F^HJ^G-D-□□M0-Q


How to Order Manifolds



Product Recommendation



Stocked items for fast delivery / Manifolds

VV712-03R-03DSB	VV715-03R-03DSB	VV722-04R-06DSB	VV723-04R-06DSB	VV725-04R-06DSB	VV728-04R-06DSB
VV713-03R-03DSB	VV718-03R-03DSB				



Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air preparation - page 1076

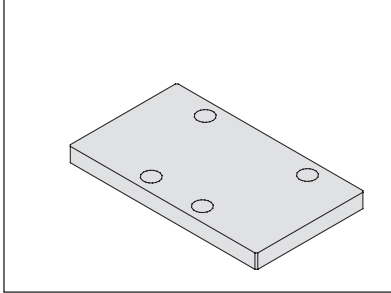
Series TU - Tubing - page 1223

Series KQ2 - Fittings - page 1184

Manifold Accessories

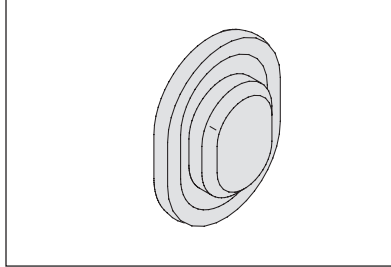
Blanking plate assembly

Size 1 AXT502-9A
Size 2 AXT512-9A



Block disk (For SUP/EXH passages)

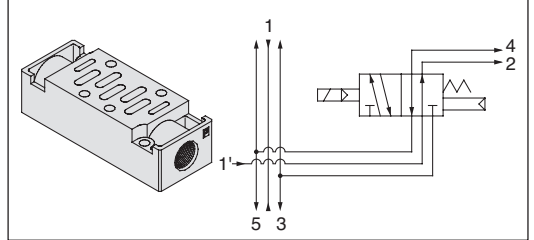
Size 1 AXT502-14 (supply and exhaust)
Size 2 AXT512-14-1A (supply only)
AXT512-14-2A (exhaust only)



Individual SUP spacer

Size 1 VV71-P-02F
03F
C10
Size 2 VV72-P-03F
04F

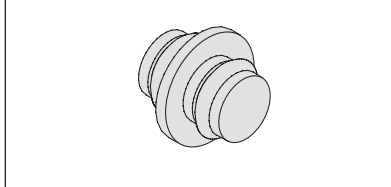
By mounting individual SUP spacers on a manifold, it is possible to provide individual air supply to a valve.



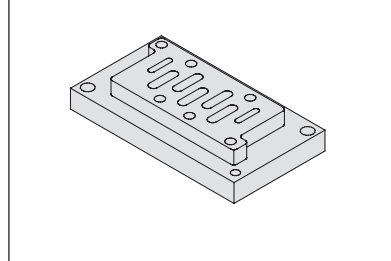
Block disk (For pilot EXH passage)

Size 1 AZ503-53A
Size 2 AZ512-49A

When a valve's pilot valve exhaust effects other valves in a circuit, block disks are used between stations where the pilot exhaust passages are to be separated.


 Conversion adapter plate
VV72-V-1

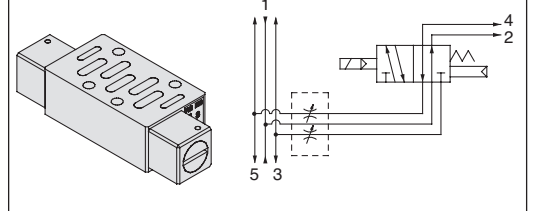
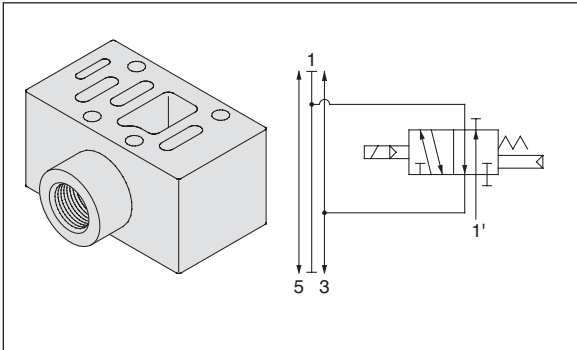
This conversion adapter plate allows a VQ7-6 (size 1) valve to be mounted on a VQ7-8 manifold base.



Throttle valve spacer

Size 1 AXT503-23A
Size 2 AXT510-32A

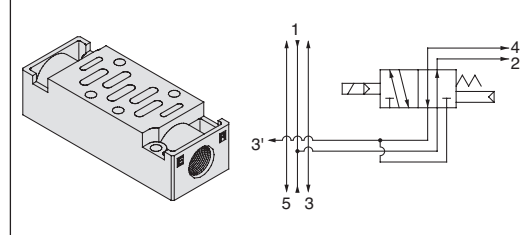
A throttle valve spacer is mounted on a manifold block to control cylinder speed by throttling exhaust air flow.


 Release valve spacer (Size 1 only)
AXT502-17AF


Individual EXH spacer

Size 1 VV71-R-02F
03F
C12
Size 2 VV72-R-03F
04F

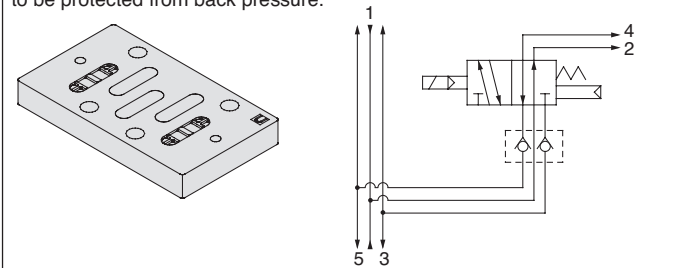
By mounting individual EXH spacers on a manifold block, exhaust ports can be provided individually for each valve.



Main EXH back pressure check plate

Size 1 AXT503-37A
Size 2 AXT512-25A

In cases where back pressure effects actuator operation due to simultaneous operation of manifold valves, etc., this effect can be eliminated by installing a plate between the manifold block and the valve to be protected from back pressure.



Also Available

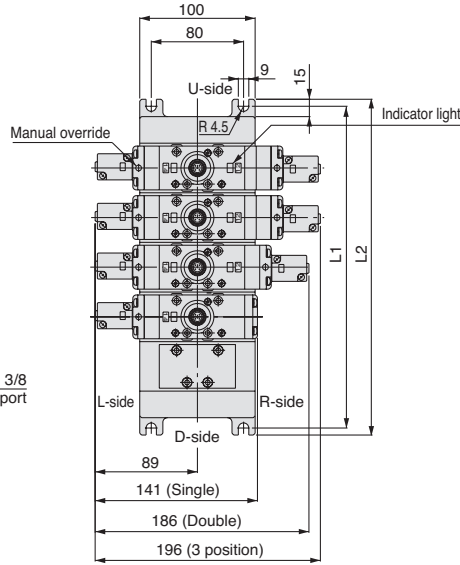
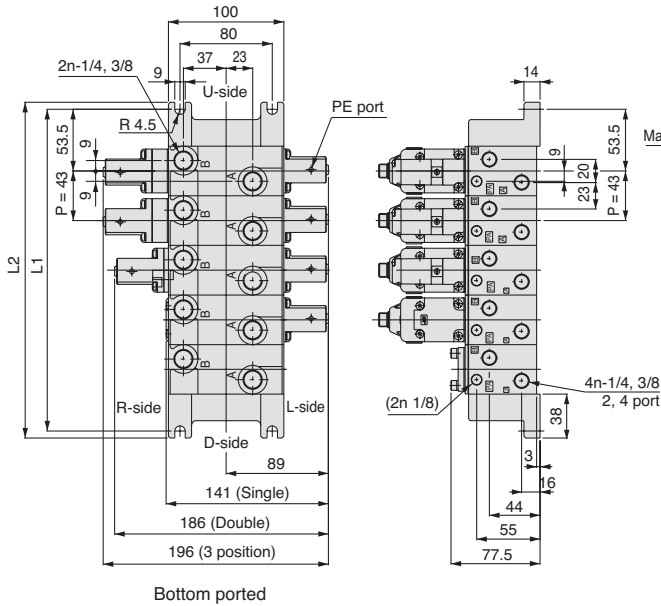
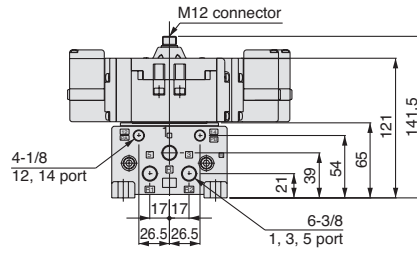
The following manifold accessories are also available.

Accessory	Size 1	Size 2
Reverse Pressure Spacer	○	○
Residual Pressure Release Valve Spacer	○	
R1/R2 Individual Exhaust Spacer	○	○
Individual Supply Spacer with Residual Pressure Release	○	
Lock Up Adaptor Plate	○	○
Double Check Spacer with Residual Pressure Release	○	

Dimensions

VV71□-□-□□□
(M Connector type)

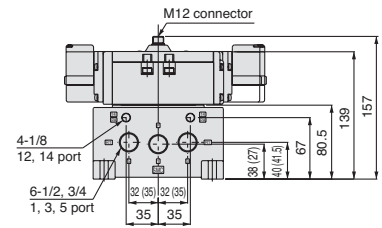
L: Dimensions		n: Stations [mm]									
n	1	2	3	4	5	6	7	8	9	10	Formula
L1	107	150	193	236	279	322	365	408	451	494	$L1 = 43n + 64$
L2	119	162	205	248	291	334	377	420	463	506	$L2 = 43n + 76$



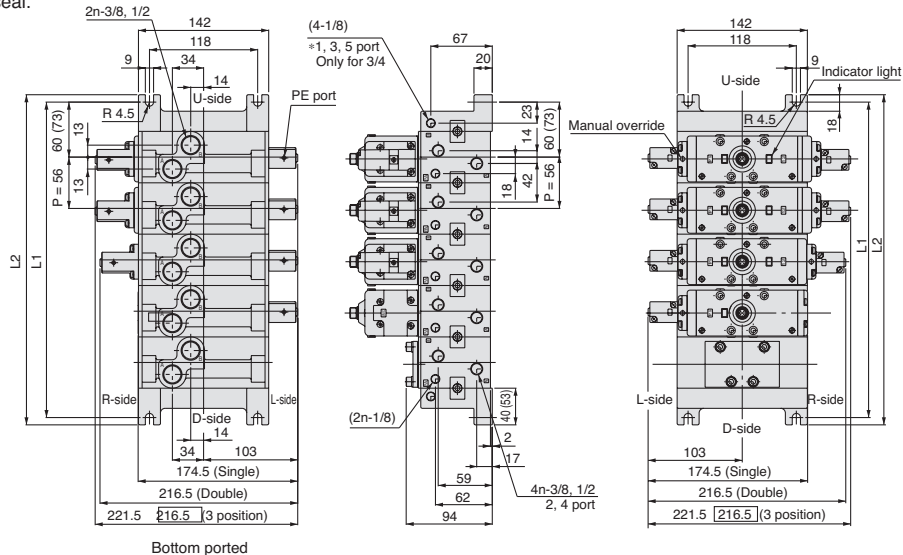
Valves

VV72□-□-□□□
(M connector type)

L: Dimensions		n: Stations [mm]										
P, R1, R2 port	n	1	2	3	4	5	6	7	8	9	10	Formulas
Rc 1/2	L1	120	176	232	288	344	400	456	512	568	624	$L1 = 56n + 64$
	L2	136	192	248	304	360	416	472	528	584	640	$L2 = 56n + 80$
Rc 3/4	L1	146	202	258	314	370	426	482	538	594	650	$L1 = 56n + 90$
	L2	162	218	274	330	386	442	498	554	610	666	$L2 = 56n + 106$



Dimensions inside () are for 3/4.
Dimensions inside □ are for rubber seal.



ISO/CNOMO Standard Solenoid Valve Metal Seal Sizes 01, 02, 03 Series EVS7-6/7-8/7-10

Features

- Mounting to ISO 5599/1 sizes 1, 2 and 3.
- Solenoid interface conforms to CNOMO.
- IP65 splashproof rating.
- Fast response, long life, with large flow capacity.

How to Order

Body **EVS7-6-FG-S-3-CV-Q**

Size

6	Size 1
8	Size 2
10	Size 3

Passage symbol

FG	5 port 2 position
FHG	5 port 3 position Centre Closed
FJG	5 port 3 position Exhaust Centre
FIG	5 port 3 position Pressure Centre

Number of solenoids

S	Single (FG type only)
D	Double

Rated coil voltage

3	24 VDC
4	12 VDC
5	110 VAC
6	220 VAC
9*	Others ≤ 250V

Connector

-	With Connector
O*	Without Connector

* Alphabet

* Add the other voltage at the end of the part number between brackets [for example EVS7-6-FG-S-9CV(AC24V)]

Single Subbases **EVS7-1-A02-F**

Size

1	Size 1
2	Size 2
3	Size 3

Thread

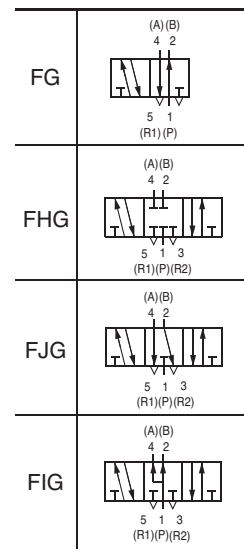
F	G(PF)
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Port size

Symbol	Piping specifications	Size 1	Size 2	Size 3
A02*	Side-ported 1/4	○		
A03	Side-ported 3/8	○	○	
A04	Side-ported 1/2		○	
A06	Side-ported 3/4		○	○
A10	Side-ported 1			○
B02*	Bottom-ported 1/4	○		
B03	Bottom-ported 3/8	○	○	
B04	Bottom-ported 1/2		○	
B06	Bottom-ported 3/4		○	○

* R port: 3/8

Symbols



Accessories and Related Products

- (Accessories)
Series AN - Silencers - page 556
- (Related Products)
Series AC - Air preparation - page 1076
Series TU - Tubing - page 1223
Series KQ2 - Fittings - page 1184

Product Recommendation



Stocked items for fast delivery / ISO/CNOMO Valves

EVS7-6-FG-D-3CVO-Q	EVS7-6-FG-S-6CVO-Q	EVS7-6-FHG-D-9CVO-Q(AC24V)	EVS7-8-FG-D-6CVO-Q	EVS7-8-FG-S-9CV-Q(AC24V)	EVS7-10-FG-D-3CVO-Q
EVS7-6-FG-D-3CV-Q	EVS7-6-FG-S-6CV-Q	EVS7-6-FHG-D-3CVO-Q	EVS7-8-FG-D-6CV-Q	EVS7-8-FHG-D-3CVO-Q	EVS7-10-FG-D-3CV-Q
EVS7-6-FG-D-5CV-Q	EVS7-6-FG-S-9CVO-Q(AC24V)	EVS7-6-FHG-D-3CV-Q	EVS7-8-FG-D-9CVO-Q(AC24V)	EVS7-8-FHG-D-3CV-Q	EVS7-10-FG-S-3CVO-Q
EVS7-6-FG-D-6CV-Q	EVS7-6-FG-S-9CV-Q(AC24V)	EVS7-6-FJG-D-3CVO-Q	EVS7-8-FG-S-3CVO-Q	EVS7-8-FHG-D-5CV-Q	EVS7-10-FG-S-3CV-Q
EVS7-6-FG-D-9CVO-Q(AC24V)	EVS7-6-FHG-D-3CVO-Q	EVS7-6-FJG-D-3CV-Q	EVS7-8-FG-S-3CV-Q	EVS7-8-FHG-D-9CVO-Q(AC24V)	EVS7-10-FG-S-6CV-Q
EVS7-6-FG-S-3CVO-Q	EVS7-6-FHG-D-3CV-Q	EVS7-6-FJG-D-9CVO-Q(AC24V)	EVS7-8-FG-S-5CVO-Q	EVS7-8-FHG-D-3CVO-Q	EVS7-10-FHG-D-3CVO-Q
EVS7-6-FG-S-3CV-Q	EVS7-6-FHG-D-5CV-Q	EVS7-8-FG-D-3CVO-Q	EVS7-8-FG-S-5CV-Q	EVS7-8-FJG-D-3CVO-Q	EVS7-10-FHG-D-3CV-Q
EVS7-6-FG-S-5CVO-Q	EVS7-6-FHG-D-6CVO-Q	EVS7-8-FG-D-3CV-Q	EVS7-8-FG-S-6CVO-Q	EVS7-8-FJG-D-3CV-Q	EVS7-10-FJG-D-3CVO-Q
EVS7-6-FG-S-5CV-Q	EVS7-6-FHG-D-6CV-Q	EVS7-8-FG-D-5CV-Q	EVS7-8-FG-S-9CVO-Q(AC24V)	EVS7-8-FJG-D-6CVO-Q	EVS7-10-FJG-D-3CV-Q

Valve Specifications

Fluid		Air and inert gas	
Operating pressure (MPa)	Single	2 position	0.15 to 1.0
	Double	2 position	0.1 to 1.0
		3 position	0.15 to 1.0
Ambient and fluid temperature		Max. 50°C	
Manual operation		Non-locking	
Electrical entry		DIN43650 connector	

Pilot Valve Specifications

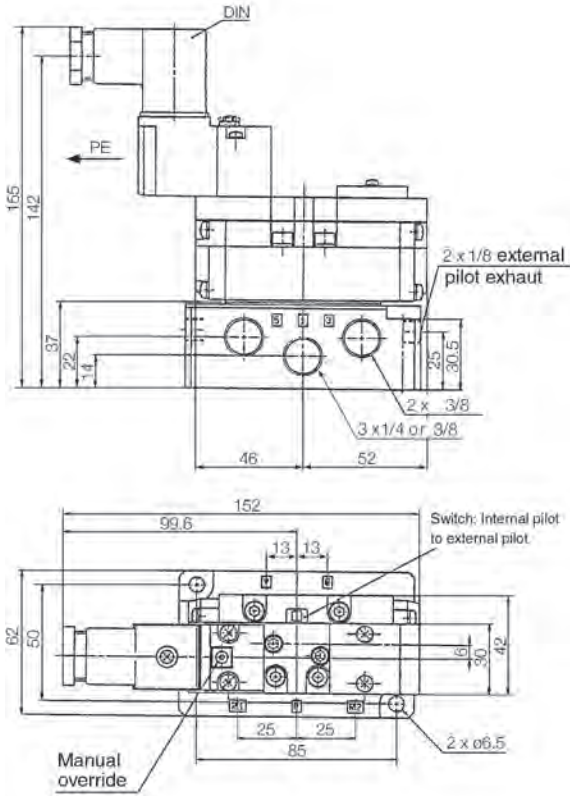
Rated voltage (V)		100V AC 50/60Hz, 200V AC 50/60Hz, 24V DC, 12V DC
Power consumption	DC (W)	1.8 (12V DC, 24V DC)
	AC Inrush current (VA)	5.4 (100V AC); 2.7 (200V AC)
	AC Holding current (VA)	3.6 (100V AC); 1.8 (200V AC)
Allowable voltage (V)		-15% to +10% of rated voltage
Coil insulation		Class B (130°C) or equivalent



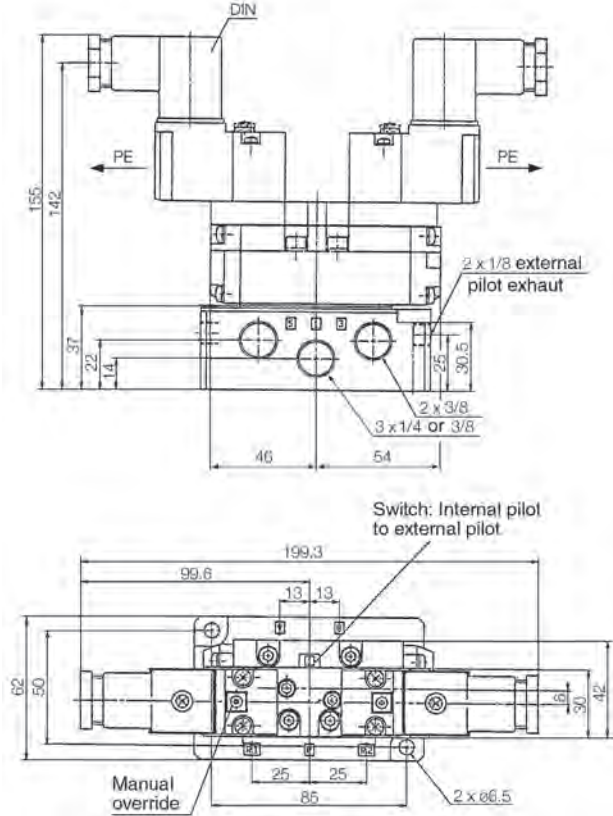
For more product options and details see our specific catalogues or on-line information.

Dimensions with Sub-plate - Size ①

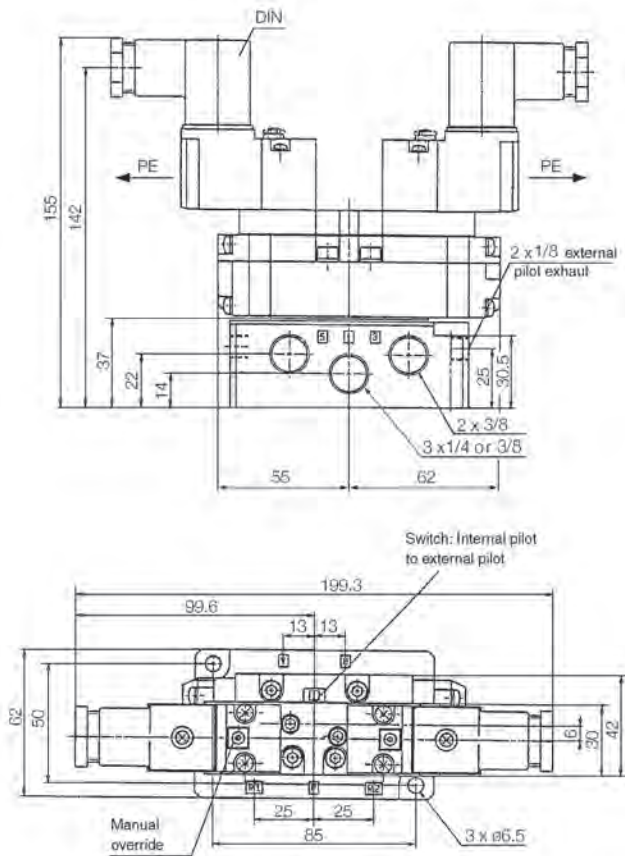
EVS7-6-FG-S-□CV-Q



EVS7-6-FG-D-□CV-Q

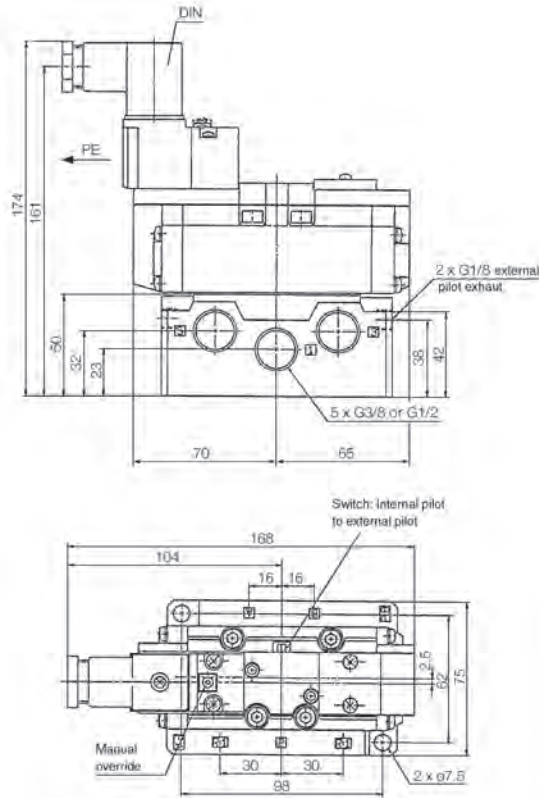


EVS7-6-FHG-D-□CV-Q • EVS7-6-FJG-D-□CV-Q • EVS7-6-FIG-D-□CV-Q

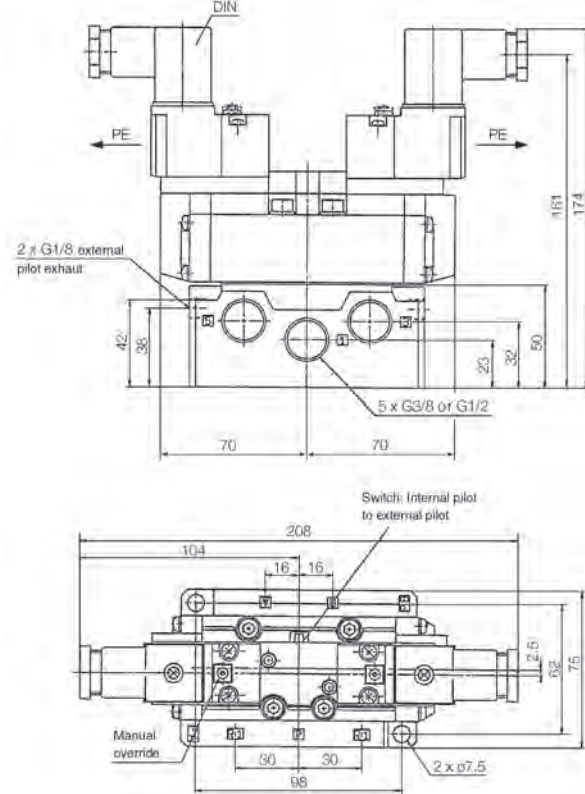


Dimensions with Sub-plate - Size ②

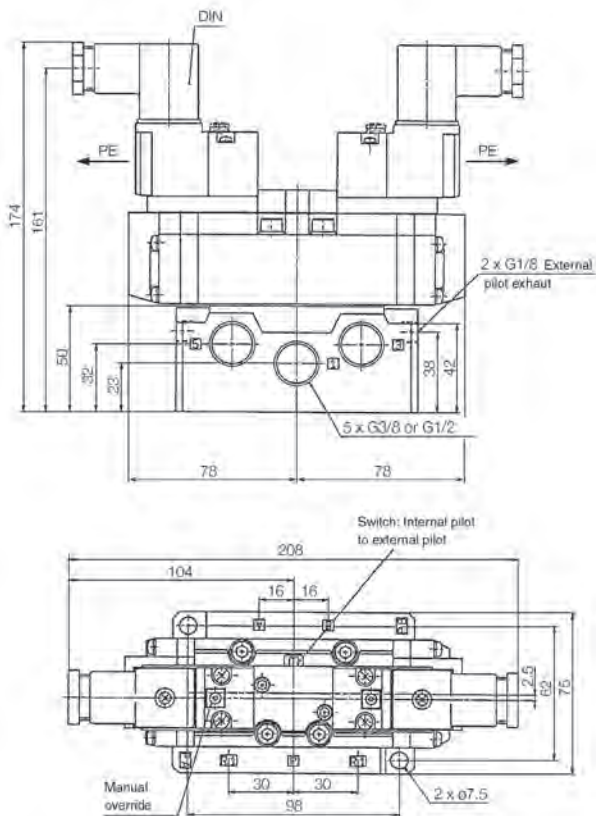
EVS7-8-FG-S-□CV-Q



EVS7-8-FG-D-□CV-Q



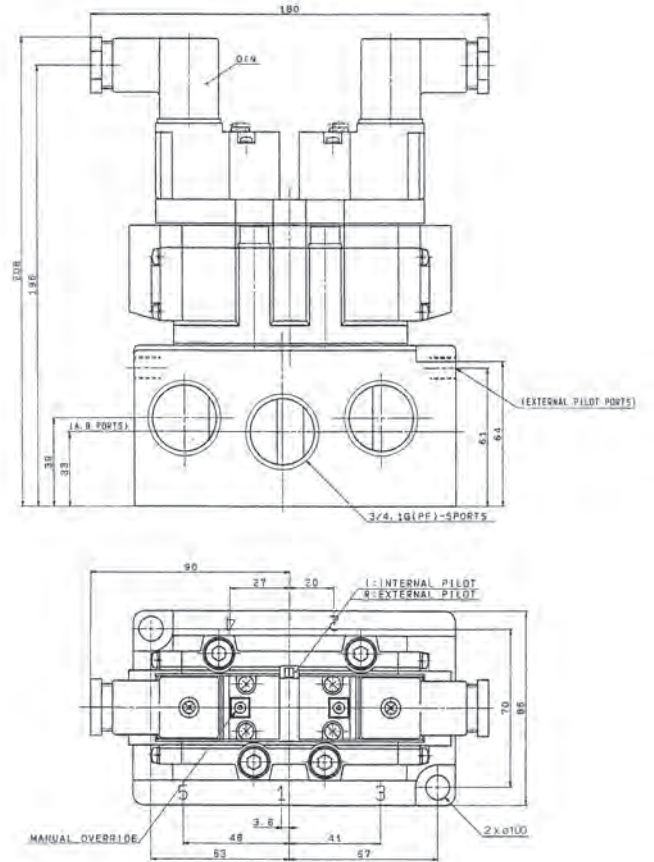
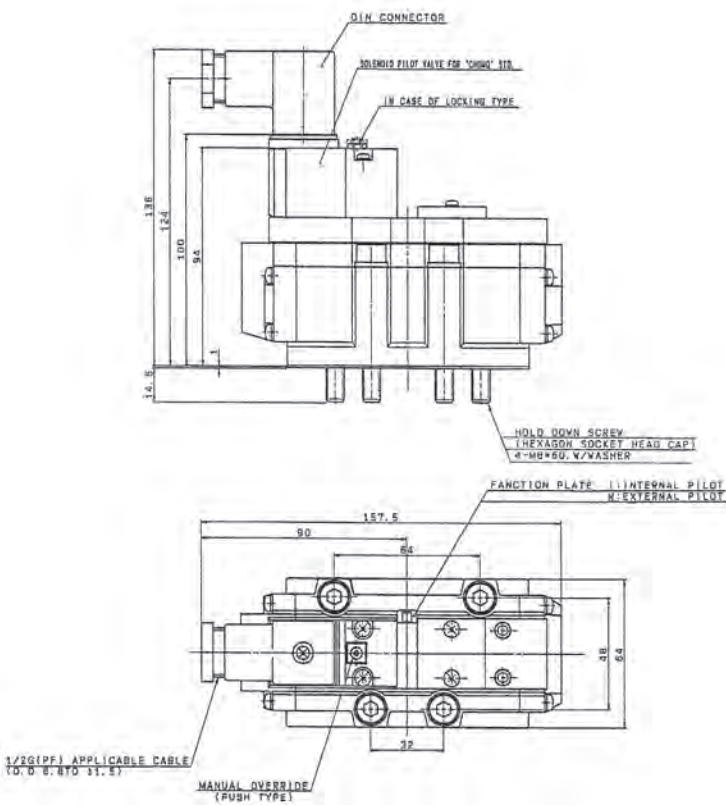
EVS7-8-FHG-D-□CV-Q • EVS7-8-FJG-D-□CV-Q • EVS7-8-FIG-D-□CV-Q



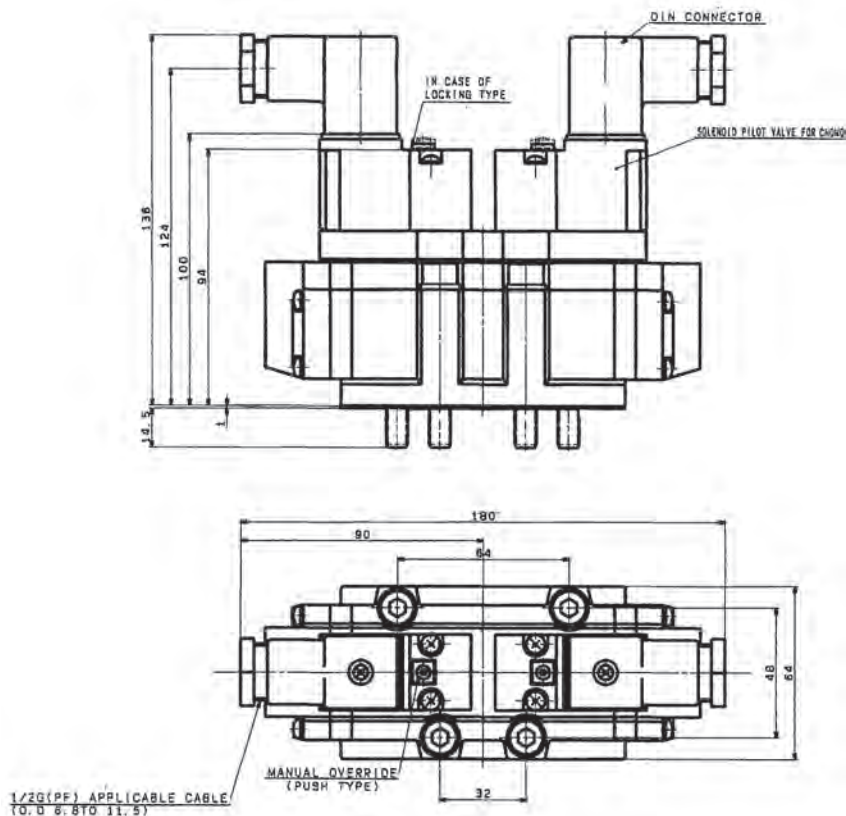
Dimensions with Sub-plate - Size ③

EVS7-10-FG-S-□CV-Q

EVS7-10-FG-D-□CV-Q



EVS7-10-FHG-D-□CV-Q • EVS7-10-FJG-D-□CV-Q • EVS7-10-FIG-D-□CV-Q



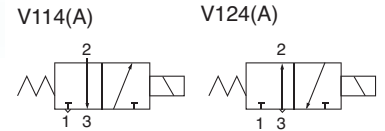
3 Port Direct Operated-Rubber Seal Solenoid Valve Series V100

Features

- Ultra-compact design.
- N.O. or N.C. options.
- Energy saving (0.1W power consumption)
- High flow version.



Symbol



How to Order

Base mounted V1 1 4 [] - 5 MO [] - []

Type of actuation

1	Normally closed
2	Normally open

Coil specification

-	0.35 W
T	0.1 W (With power saving circuit) (24 VDC, 12 VDC only)
A	1.0 W (High Flow type)

Rated voltage

For DC	
5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

Port size

-	Without sub-plate
M5	With sub-plate

Light/Surge voltage suppressor

-	Without light/surge voltage suppressor
Z*	With light/surge voltage suppressor (Power Saving type)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar, not for Power Saving type)

* Not for high flow type.

Electrical entry

24 VDC, 12 VDC, 6 VDC, 5 VDC, 3 VDC		
Grommet	L plug connector	M plug connector
G: 300 mm lead wire	LO: Without connector	MO: Without connector

Note: Connector lead for L and M type connectors are common to SY valves.
Please see the cable appendix in this catalogue for details and part numbers.

Product Recommendation



Stocked items for fast delivery (Valves)

V114-5G	V114-5LOZ	V114A-5GU	V114A-6LOU	V114T-5MOZ	V124-5MOU-M5
V114-5G-M5	V114-5MOU	V114A-5LO	V114A-6LOU-M5	V124-5G	V124A-5GU
V114-5GU	V114-6LOU	V114A-5LOU	V114T-5GZ	V124-5LOU	V124A-5LOU
V114-5LO	V114-6MOU	V114A-5MO	V114T-5LOZ	V124-5MOU	V124A-5MOU-M5
V114-5LOU	V114A-5G	V114A-5MOU			



Related Products

Series AN - Silencers - page 556
Series AC - Air preparation - page 1076
Series TU - Tubing - page 1223
Series KQ2 - Fittings - page 1184



For more product options and details see our specific catalogues or on-line information.

Specifications

Fluid	Air
Ambient and fluid temperature [°C]	-10 to 50 No freezing
Response time [ms]	ON: 5 or less OFF: 4 or less
Max. operating frequency [Hz]	20
Manual override	Non-locking push, Locking slotted
Lubrication	Not required
Mounting position	Unrestricted

Electrical Specifications

Series		V114/V124	V114A/V124A
Electrical entry		Grommet (G)/(H), L plug connector(L) M plug connector (M)	
Coil rated voltage [V]	DC	24, 12, 6, 5, 3	
Allowable voltage fluctuation		-10 to 10%	
Power consumption [W]	DC	Standard: 0.35 (With indicator light: 0.4) With power saving circuit 0.1	1 W (With indicator light: 1.1)
Indicator light		LED	

Pressure Specifications

Valve model	Type of actuation	Model	Operating pressure range [MPa]	Vacuum specification [MPa]		Port size		Weight [g] with sub-plate)	
				Port 1	Port 3	Port 1, 3	Port 2	Grommet	L plug connector M plug connector
V114	N.C.	Standard	0 to 0.7	-100 kPa to 0.6	-100 kPa to 0	M5	M5	V1□4: 27 V1□4A: 30	Plug connector V1□4: 26 V1□4A: 29
V114A	N.C.	Large flow capacity	0 to 0.7	-100 kPa to 0.6	-100 kPa to 0	M5	M5		
V124	N.O.	Standard	0 to 0.7	-100 kPa to 0	-100 kPa to 0.6	M5	M5		
V124A	N.O.	Large flow capacity	0 to 0.7	-100 kPa to 0	-100 kPa to 0.6	M5	M5		

Flow Specifications

On single sub-plate

Valve model	Flow characteristics							
	1 → 2				2 → 3			
	C[dm ³ /(s·bar)]	b	Cv	Q[L/min] (ANR) ^{Note2)}	C[dm ³ /(s·bar)]	b	Cv	Q[L/min] (ANR) ^{Note2)}
V114	0.037	0.11	0.0080	8	0.054	0.35	0.015	14
V114A	0.076	0.070	0.016	17	0.099	0.23	0.024	24
V124	0.054	0.35	0.015	14	0.037	0.11	0.0080	8
V124A	0.099	0.23	0.024	24	0.076	0.070	0.016	7

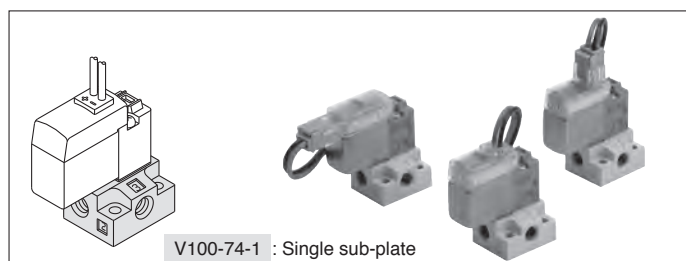
On manifold mounting

Manifold		Port size	Flow characteristics								
			1, 2, 3 port	1 → 2				2 → 3			
				C[dm ³ /(s·bar)]	b	Cv	Q[L/min] (ANR) ^{Note2)}	C[dm ³ /(s·bar)]	b	Cv	Q[L/min] (ANR) ^{Note2)}
Type VV100-S41	V114	M5	0.032	0.13	0.0072	7	0.050	0.26	0.012	12	
	V114A		0.070	0.10	0.016	16	0.085	0.16	0.020	20	
	V124		0.050	0.26	0.012	12	0.032	0.13	0.0072	7	
	V124A		0.085	0.16	0.020	20	0.070	0.10	0.016	16	

Note 1) Values when manifold base (5 stations) is mounted.

Note 2) These valves have been calculated according to ISO6358.

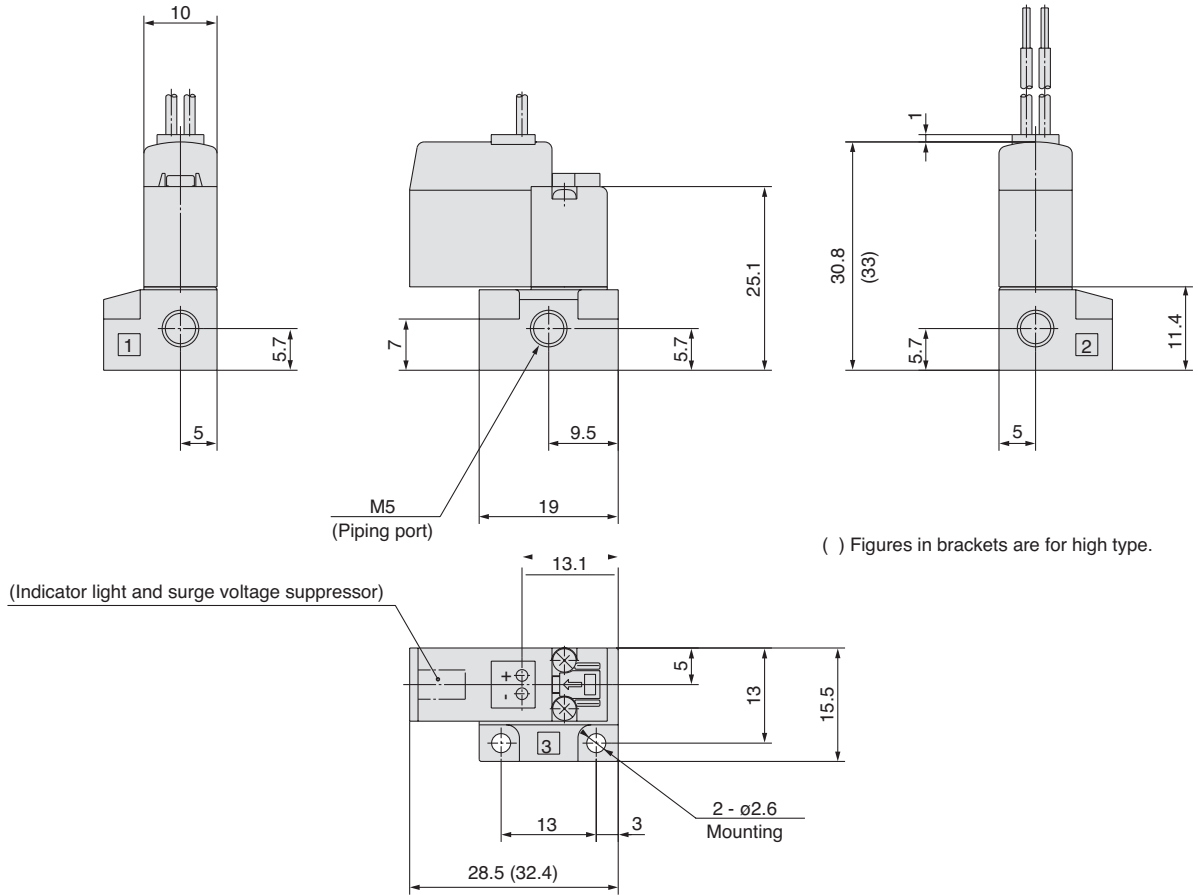
Accessories



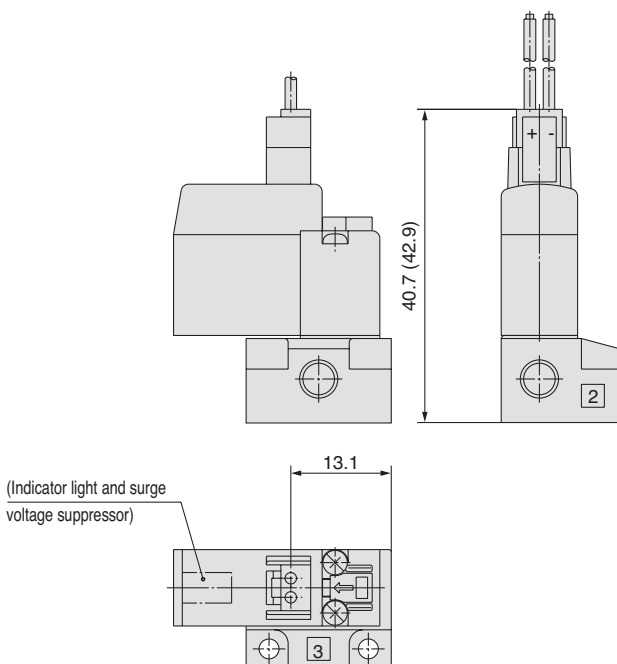
Dimensions

Base Mounted (With sub-plate)

Grommet (G): V1 $\frac{1}{2}$ 4(A)-□G□□-M5

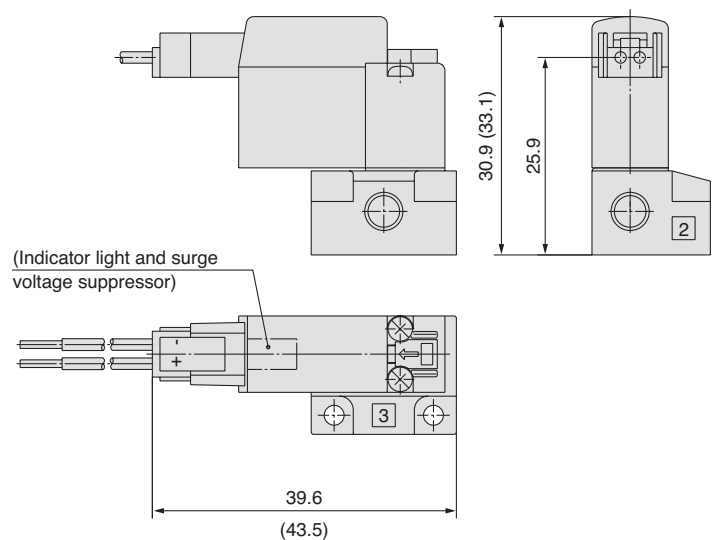


L plug connector (L): V1 $\frac{1}{2}$ 4(A)-□L□□-M5



* Other dimensions are same as grommet style.

M plug connector (M): V1 $\frac{1}{2}$ 4(A)-□M□□-M5



* Other dimensions are same as grommet style.



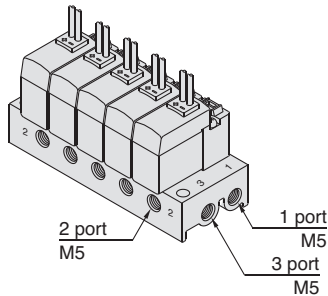
For more product options and details see our specific catalogues or on-line information.

Manifold Specifications Series V100

How to Order

Common SUP/Common EXH

Type S41



VV100 – S41 – 05 – M5

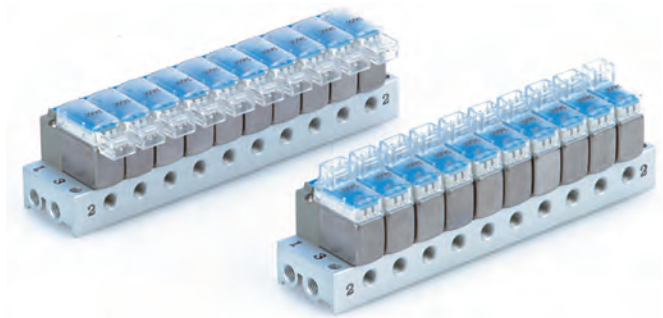
Stations	
02	2 stations
⋮	⋮
20	20 stations

2 port size	
M5	M5

Applicable solenoid valve

- V114-□□□□
- V114A-□□□□
- V124-□□□□
- V124A-□□□□

Note: V114(A) and V124(A) cannot be mixed on manifolds.



Product Recommendation



Stocked items for fast delivery/Manifolds

VV100-S41-02-M5	VV100-S41-04-M5	VV100-S41-06-M5	VV100-S41-08-M5	VV100-S41-10-M5	VV100-S41-18-M5
VV100-S41-03-M5	VV100-S41-05-M5	VV100-S41-07-M5	VV100-S41-09-M5	VV100-S41-12-M5	VV100-S41-20-M5



Related Products

- Series AN - Silencers - page 556
- Series AC - Air preparation - page 1076
- Series TU - Tubing - page 1223
- Series KQ2 - Fittings - page 1184

Manifold Specifications

Specifications		Type S41
P (SUP)/R (EXH) type		Common SUP/Common EXH
Number of valves		2 to 20 stations
Output port porting specifications	Location	Base
	Direction	Side
Port size	1, 2, 3 port	M5

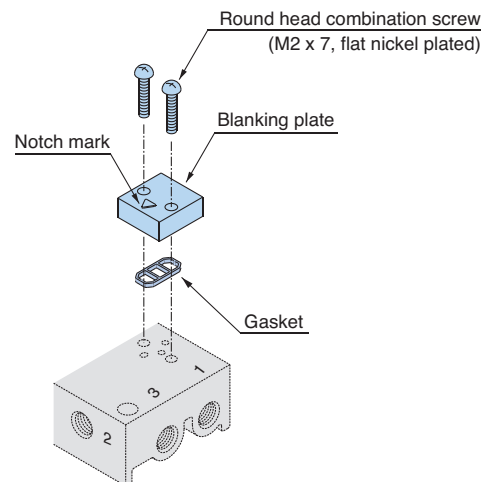
Note 1) V114(A) and V124(A) cannot be mounted onto the same manifold.
 Note 2) For V124(A), pressure from port 3 and exhaust from port 1.

Accessories

Blanking Plate Assembly

Part no.: V100-77-1A

Place notch mark on the blank plate to 2 port side when assembling.

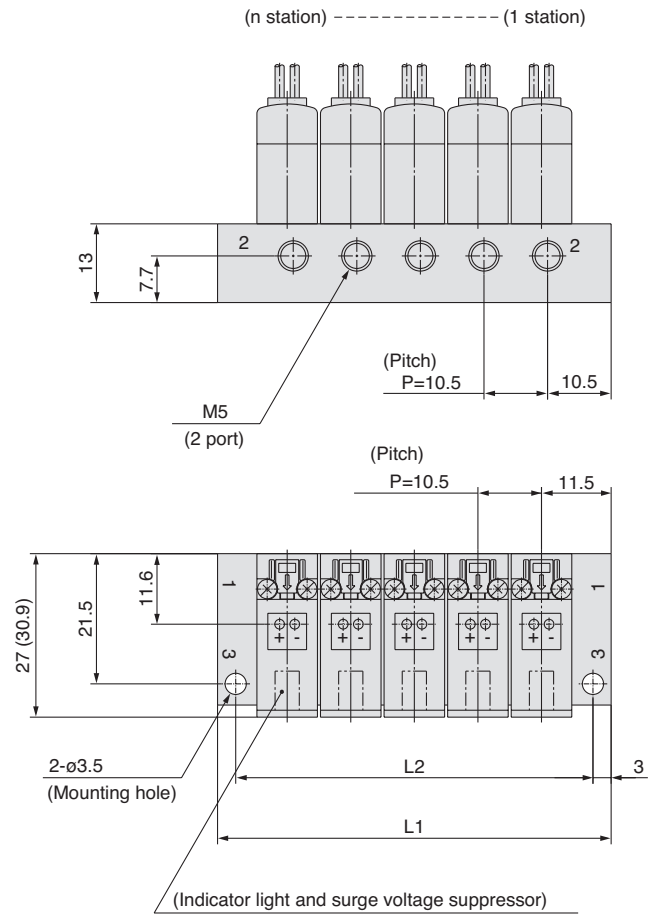
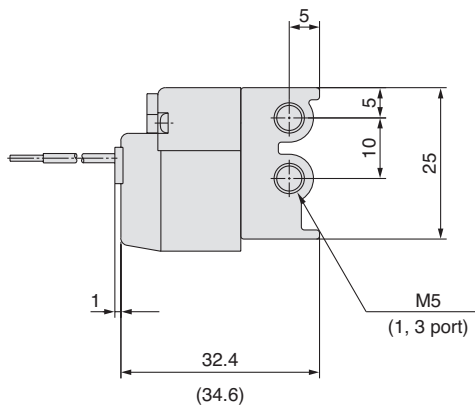


Dimensions

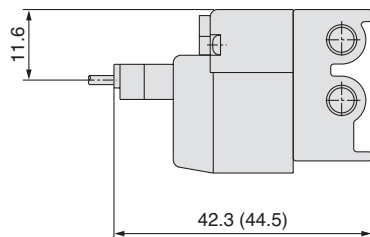
Manifold type S41: Side ported/VV100-S41-Stations-M5

Grommet (G)

() Figures in brackets are for high type.

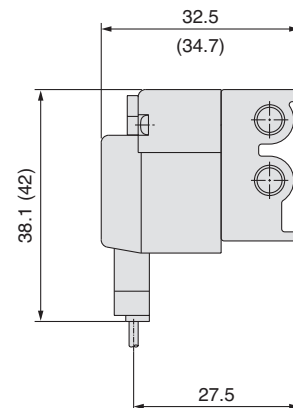


L plug connector (L)



* Other dimensions are same as grommet style.

M plug connector (M)

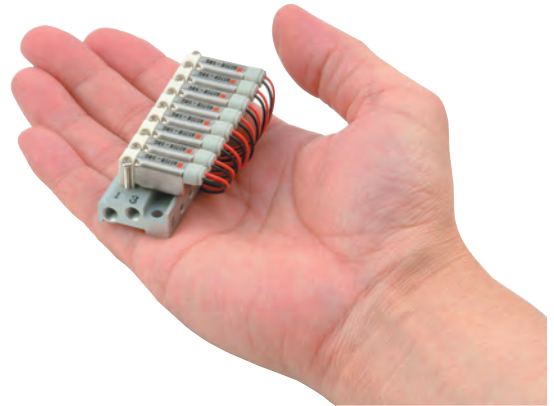


* Other dimensions are same as grommet style.

Station	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	33.5	44	54.5	65	75.5	86	96.5	107	117.5	128	138.5	149	159.5	170	180.5	191	201.5	212	222.5
L2	27.5	38	48.5	59	69.5	80	90.5	101	111.5	122	132.5	143	153.5	164	174.5	185	195.5	206	216.5



3 Port Solenoid Valve Compact Direct Operated Series S070



Features

- Compact design (7mm width) and lightweight (5 gr single unit valve).
- Energy saving (0.1W power consumption).
- Operation noise 38 dB (A) or less.

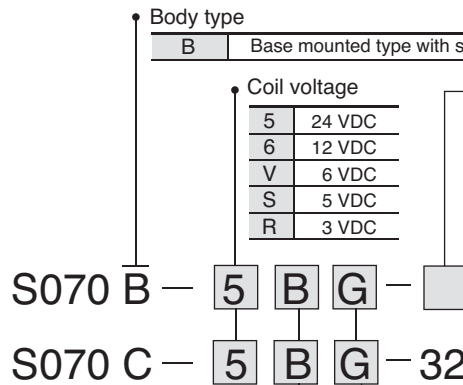
How to Order



Base mounted



Body ported

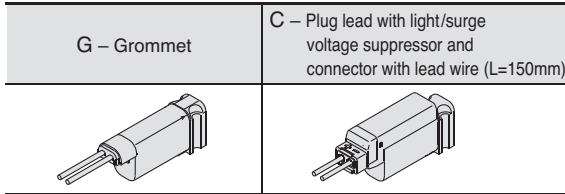


Power consumption – Pressure specification – Flow rate

Symbol	Power consumption [W]	Maximum operating pressure [MPa]	Cv factor
A	0.35	0.1	0.016
B		0.3	0.011
C		0.3	0.016
D	0.5	0.5	0.011
E (Note)	0.1 (with power saving circuit)	0.1	0.011
F (Note)		0.3	0.006

Note) An option only applicable to 24 VDC plug lead type.

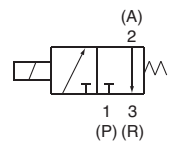
Electrical entry



Port size

Symbol	Connection	Applicable tubing
32	Barb fitting	ø3.18/ø2

Symbols

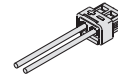


Symbol	Sub-plate
—	Without sub-plate
M3	With sub-plate
M5	

Accessories

Plug connector assembly (for plug lead)

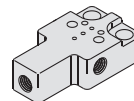
S070-14A-



Lead wire length	Weight [g]
—	150 mm 0.8
3	300 mm 1.4
10	1000 mm 4.2

Sub-plate

S070-S-M3



Port size	Weight [g]
M3 M3 female thread	7.6
M5 M5 female thread	7.7

Mounting screw

Valve model	Mounting screw No.
S070B	AXT632-106A-1
S070C	AXT632-106A-2



Note) Each of the above part numbers is for two screws, which are to be ordered by 10 units. Order is accepted in 10 units.

Gasket

Valve model	Gasket No.
S070A	S070A-80A-1
S070B	S070B-80A-1
S070M	S070M-80A-1



Note) Order is accepted in 10 units.

Product Recommendation



Stocked items for fast delivery (Valves)

S070A-5DC	S070B-5BG-M5	S070C-5DC-32	S070C-SAG-32
S070A-6DC	S070B-5DC	S070C-5DG-32	S070C-SBG-32
S070B-5BC	S070B-5DG	S070C-6AG-32	S070C-SDG-32
S070B-5BG	S070C-5BG-32	S070C-RAG-32	S070M-5DG-40



Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air preparation - page 1076

Series TU - Tubing - page 1223

Series KQ2 - Fittings - page 1184

Series M - Miniature fittings - page xxx

Series KJ - One-touch miniature fittings - page xxx

Specifications

Valve construction	Poppet
Fluid	Air / Inert gas / Low vacuum (1.33×10^2 Pa)
Maximum operating pressure	0.3 MPa (0.35 W, 0.1 W), 0.5 MPa (0.5 W)
Proof pressure	1 MPa
Ambient and fluid temperature	-10 to 50°C
Lubrication	Not required
Enclosure	IP40
Weight	5 g (single unit valve)
Mounting orientation	Free

Valve specifications

Power consumption ^{Note 1)}	0.35 W (standard), 0.5 W (high pressure), 0.1 W (power saving)
Rated coil voltage	3, 5, 6, 12, 24 VDC
Allowable voltage fluctuation ^{Note 2)}	10% of the rated voltage
Coil insulation type	Equivalent to class B

Note 1) With a light/surge voltage suppressor and power saving circuit, the light consumes a power equivalent to 2mA. With the 0.1 W DC specification 0.35 W DC at inrush (20 ms) and 0.1 W DC at holding.

Note 2) With a power saving circuit, keep the voltage fluctuation within 24 VDC 5%.

Flow specifications/Response time

Power consumption	Maximum operating pressure	Flow characteristics				Response time ms ^{Note 2)}	
		C[dm ³ /(s·bar)]	b	Cv	[L/min], ANR ^{Note 3)}	ON	OFF
0.5 W DC	0.5 MPa	0.042	0.27	0.011	9.6	3 or less	3 or less
	0.3 MPa	0.060	0.28	0.016	10.9	5 or less	3 or less
0.35 W DC	0.3 MPa	0.042	0.27	0.011	7.6	3 or less	3 or less
	0.1 MPa	0.060	0.28	0.016	6.9	5 or less	3 or less
0.1 W DC (at holding) with power saving circuit ^{Note 1)}	0.3 MPa	0.021	0.27	0.006	3.8	3 or less	6 or less
	0.1 MPa	0.042	0.28	0.011	4.8	5 or less	6 or less

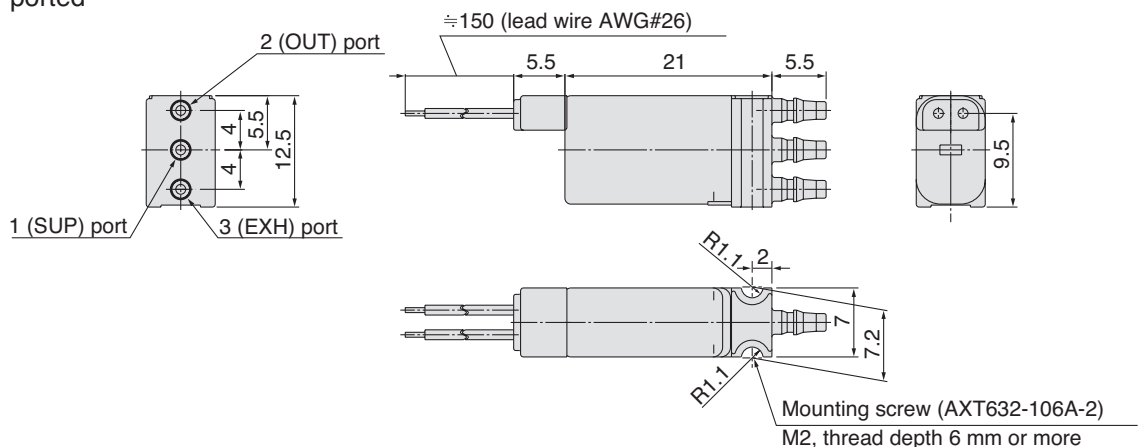
Note 1) With the 0.1 W DC specification, keep the vibration/impact within 10/50 m/s².
0.35 W DC at inrush (20 ms) and 0.1 W DC at holding.

Note 2) The response time is the value at the rated voltage and maximum operating pressure.

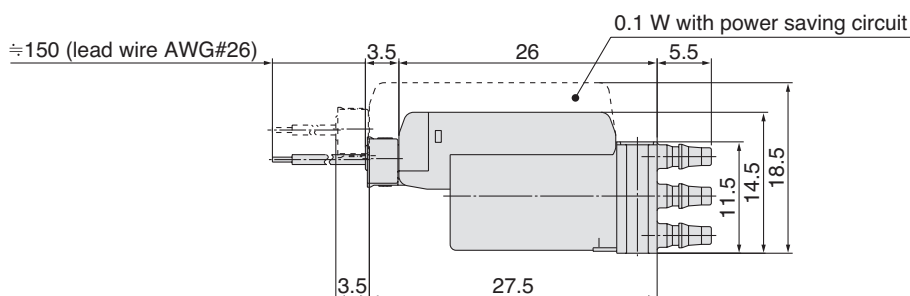
Note 3) These valves have been calculated according to ISO 6358.

Dimensions: Body ported

S070C-□□G-32
Grommet type

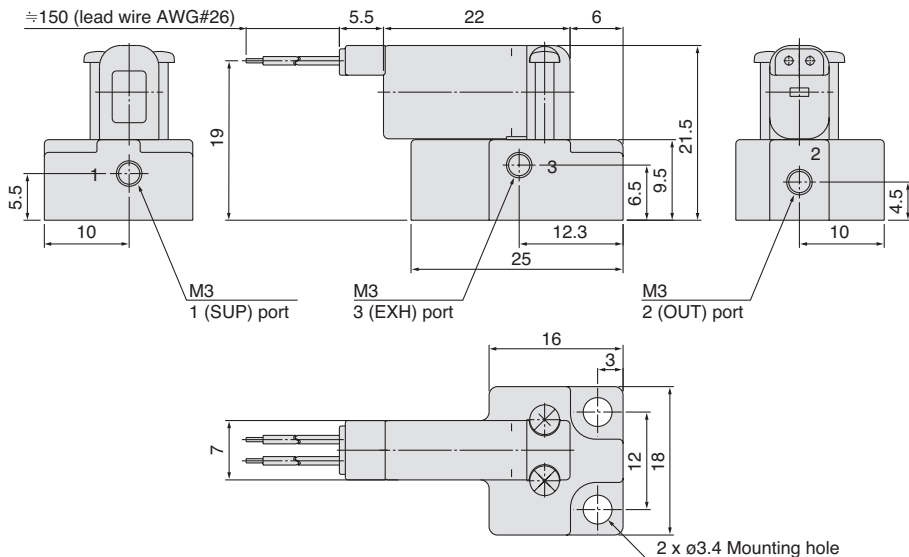


S070C-□□C-32
Plug lead type

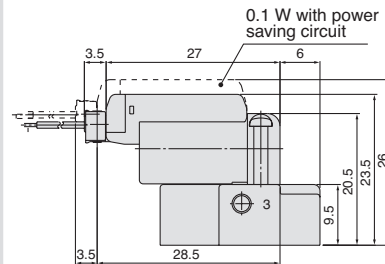


Dimensions: Base mounted with sub-plate

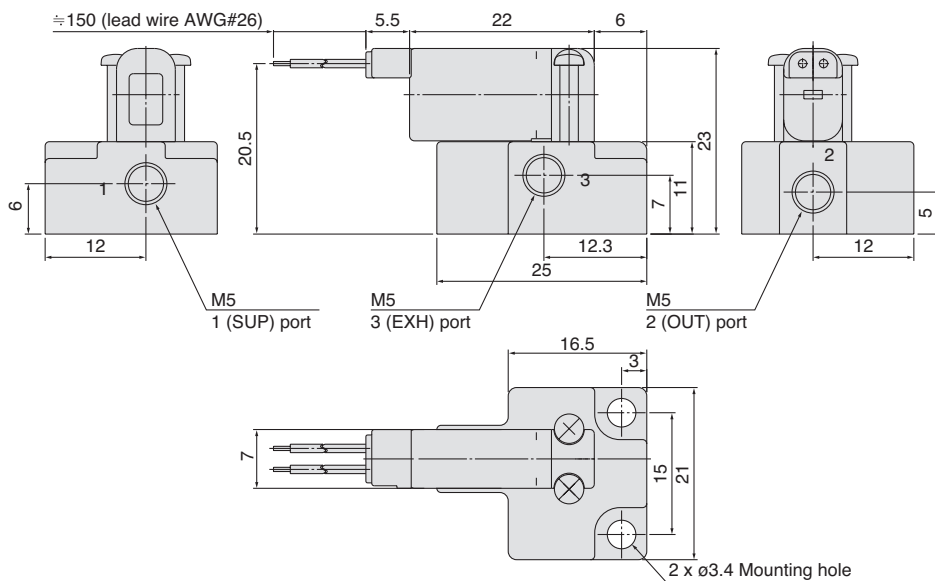
S070B-□□G-M3
Grommet type



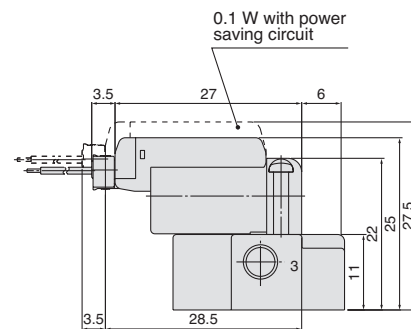
S070B-□□C-M3
Plug lead type



S070B-□□G-M5
Grommet type



S070B-□□C-M5
Plug lead type



Manifold Specifications

Series S070 Base Mounted Manifold Stacking Base Type

How to Order Manifold

Base Mounted Manifold Stacking Base

SS07 3 A01 - 08 C

Ports	3 port
-------	--------

Port size

Symbol	SUP/EXH port (Applicable tubing)	OUT port	
	Applicable tubing	Applicable tubing	
A01	Barb fittings	Barb fittings	ø3.18/ø2
A02	(ø6/ø4)		ø4/ø2.5

Note) The outside and inside diameters of the "applicable tubing" are indicated for the barb fitting.



Electrical entry

C	Grommet/Plug lead
---	-------------------

Stations

02	2 stations
03	3 stations
⋮	⋮
20	20 stations

Note) Maximum of 20 stations

How to Order Valves for manifold

S070 A - 5 B G

Body type

A	Base mounted with clips
---	-------------------------

Coil voltage

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

Electrical entry

G	Grommet
C	Plug lead with light/surge voltage suppressor and connector with lead wire (L=150mm)

Power consumption – Pressure specification – Flow rate

Symbol	Power consumption [W]	Maximum operating pressure [MPa]	Cv factor
A	0.35	0.1	0.016
B		0.3	0.011
C	0.5	0.3	0.016
D		0.5	0.011
E Note)	0.1 (with power saving circuit)	0.1	0.011
F Note)		0.3	0.006

Note) An option only applicable to 24 VDC plug lead type.

Product Recommendation



Stocked items for fast delivery (Manifold)

SS073A01-02C	SS073A01-07C	SS073A01-12C
SS073A01-05C	SS073A01-08C	



Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air preparation - page 1076

Series TU - Tubing - page 1223

Series KQ2 - Fittings - page 1184

Series M - Miniature fittings - page xxx

Series KJ - One-touch miniature fittings - page xxx



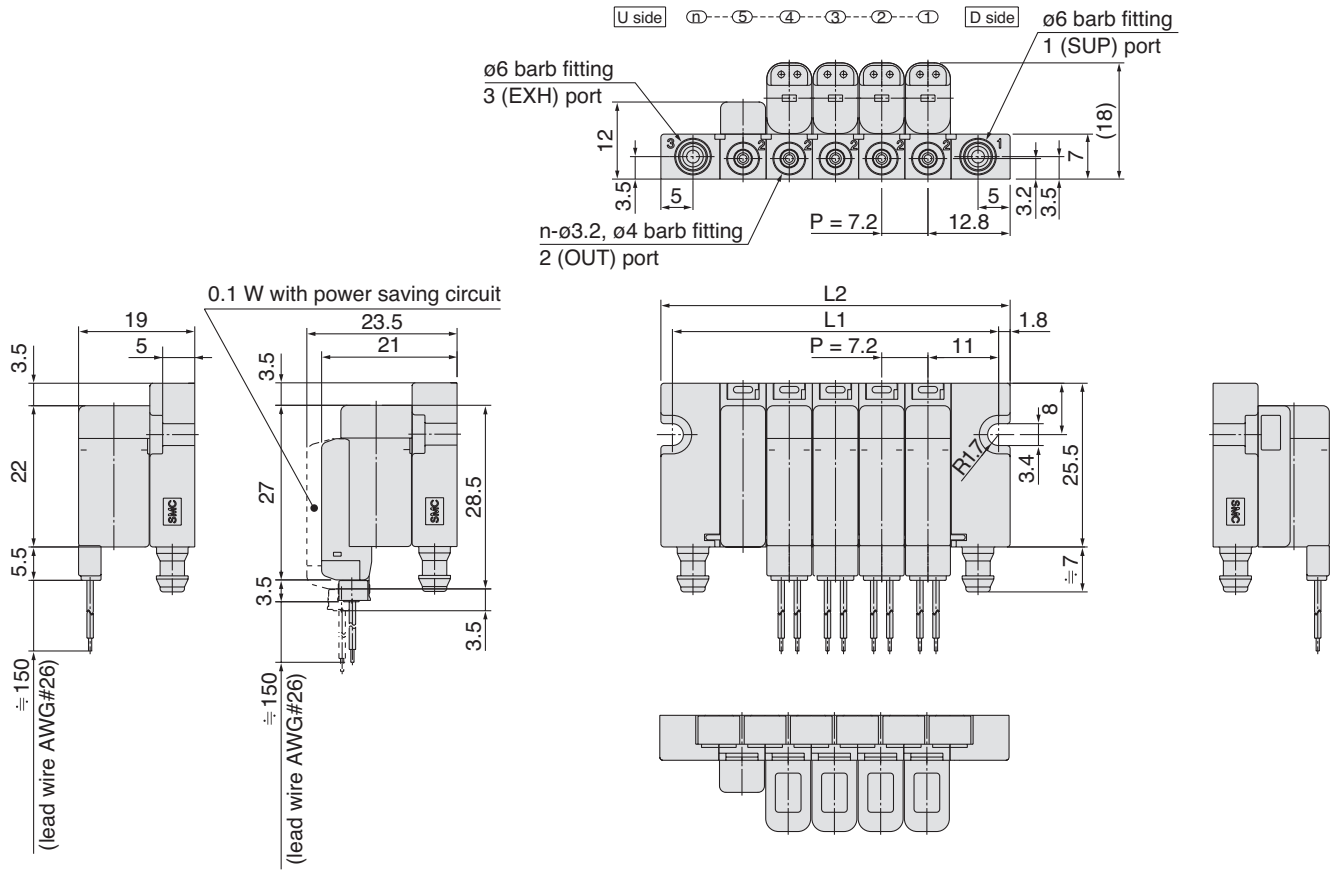
For more product options and details see our specific catalogues or on-line information.

Dimensions

Base mounted manifold / Stacking base

SS073A⁰¹₀₂ Stations C

Valves



Dimensions

Formulas: L1 = n x 7.2 + 14.8, L2 = n x 7.2 + 18.4, n: Stations (maximum 20 stations)

L	n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1		29.2	36.4	43.6	50.8	58	65.2	72.4	79.6	86.8	94	101.2	108.4	115.6	122.8	130	137.2	144.4	151.6	158.8
L2		32.8	40	47.2	54.4	61.6	68.8	76	83.2	90.4	97.6	104.8	112	119.2	126.4	133.6	140.8	148	155.2	162.4

Manifold Specifications

Series S070 Base Mounted Manifold

Bar Base Specification

How to Order Manifold

Base Mounted Manifold
Bar Base

SS07 3 B01 - 08 C

Ports
3 3 port

Port size

Electrical entry
C Grommet/Plug lead

Symbol	SUP/EXH port (Applicable tubing)	OUT port	Applicable tubing
B01	M5 female thread	M3 female thread	-

Stations

02	2 stations
03	3 stations
⋮	⋮
20	20 stations

Note) Maximum of
20 stations



S070 B - 5 B G

Body type

B	Base mounted with screws
---	--------------------------

Coil voltage

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

Electrical entry

G	Grommet
C	Plug lead with light/surge voltage suppressor and connector with lead wire (L=300)

Power consumption – Pressure specification – Flow rate

Symbol	Power consumption [W]	Maximum operating pressure [MPa]	Cv factor
A	0.35	0.1	0.016
B		0.3	0.011
C	0.5	0.3	0.016
D		0.5	0.011
E Note)	0.1 (with power saving circuit)	0.1	0.011
F Note)		0.3	0.006

Note) An option only applicable to 24 VDC plug lead type.

Product Recommendation



Stocked items for fast delivery (Manifold)

SS073B01-02C	SS073B01-05C	SS073B01-12C
SS073B01-04C	SS073B01-06C	



Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air preparation - page 1076

Series TU - Tubing - page 1223

Series KQ2 - Fittings - page 1184

Series M - Miniature fittings - page xxx

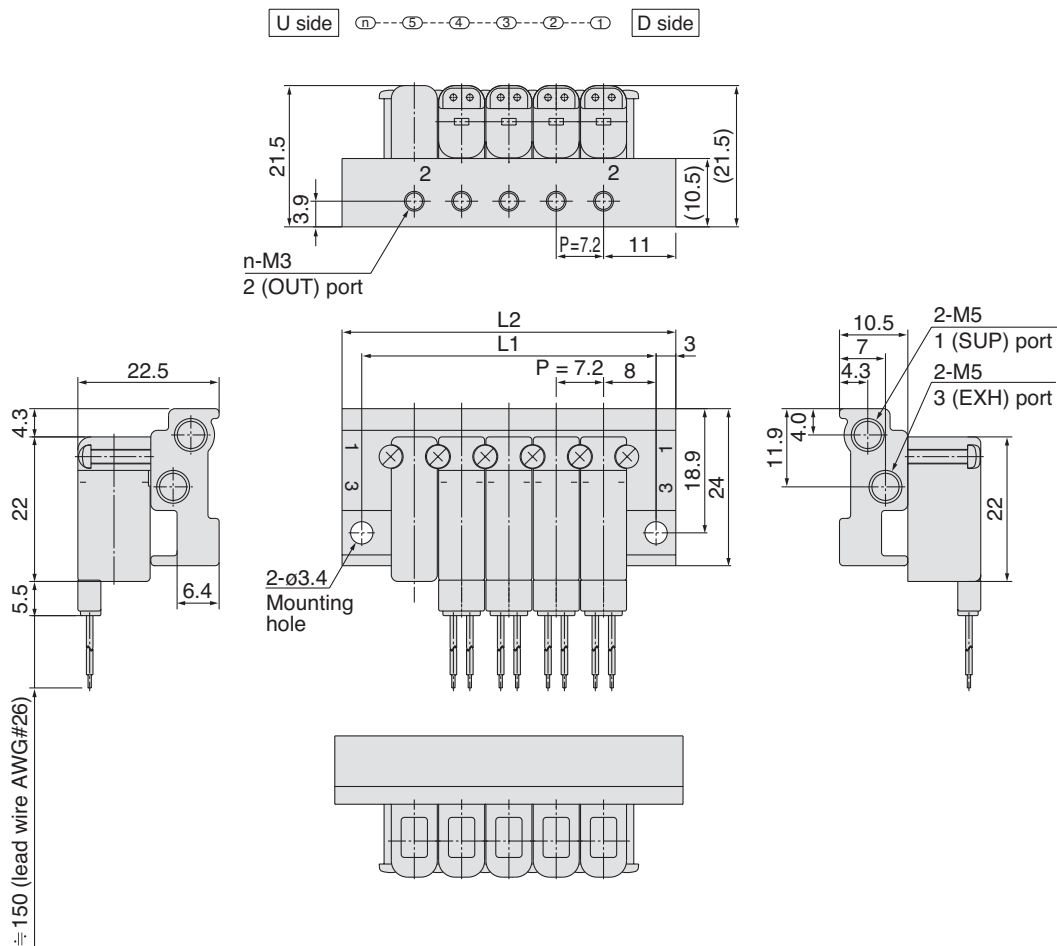
Series KJ - One-touch miniature fittings - page xxx



For more product options and details see our specific catalogues or on-line information.

Dimensions

Base mounted manifold / Bar base
 SS073B01- [Stations] C



Dimensions

Formulas: $L1 = n \times 7.2 + 8.8$, $L2 = n \times 7.2 + 14.8$, n: Stations (maximum 20 stations)

n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	23.2	30.4	37.6	44.8	52	59.2	66.4	73.6	80.8	88	95.2	102.4	109.6	116.8	124	131.2	138.4	145.6	152.8
L2	29.2	36.4	43.6	50.8	58	65.2	72.4	79.6	86.8	94	101.2	108.4	115.6	122.8	130	137.2	144.4	151.6	158.8

Manifold Specifications

Series S070 Body Ported Manifold Stacking Type Specifications

How to Order Manifold

Body Ported Manifold Stacking type

SS07 3 M01 - 08 C

- Ports: 3 port
- Port size: (indicated by '3' in SS07 3)
- Electrical entry: C (Grommet/Plug lead)
- Stations: (indicated by '08')

Symbol	SUP/EXH port (Applicable tubing)	OUT port	
		Applicable tubing	
M01	Barb fittings (ø6/ø4)	Barb fittings	ø3.18/ø2
M02			ø4/ø2.5

Symbol	Stations
02	2 stations
03	3 stations
⋮	⋮
20	20 stations

Note) The outside and inside diameters of the "applicable tubing" are indicated for the barb fitting.

Note) Maximum of 20 stations



How to Order Valve for stacking body port manifold

S070 M - 5 B G - 32

- Body type: M
- Coil voltage: 5
- Electrical entry: G (Grommet)
- Port size: 32
- Power consumption – Pressure specification – Flow rate: (indicated by '32')

Symbol	Body type
M	Body ported stacking manifold type

Symbol	Connection	Applicable tubing
32	Barb fitting	ø3.18/ø2
40		ø4/ø2.5

Symbol	Electrical entry
G	Grommet
C	Plug lead with light/surge voltage suppressor and connector with lead wire (L=300)

Symbol	Coil voltage
5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

Symbol	Power consumption [W]	Maximum operating pressure [MPa]	Cv factor
A	0.35	0.1	0.016
B		0.3	0.011
C	0.5	0.3	0.016
D		0.5	0.011
E (Note)	0.1 (with power saving circuit)	0.1	0.011
F (Note)		0.3	0.006

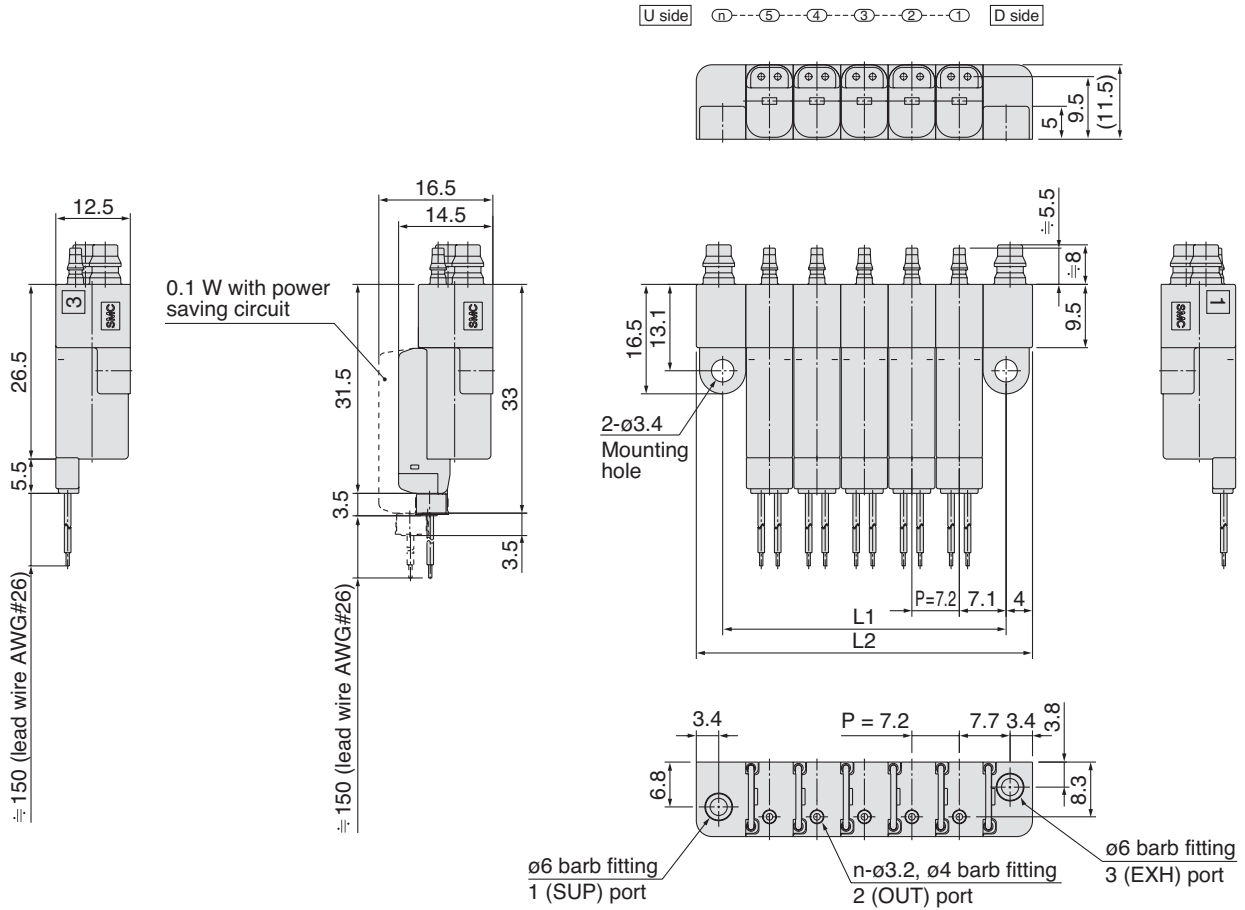
Note) An option only applicable to 24 VDC plug lead type.



Dimensions

Body ported stacking type manifold

SS073M⁰¹₀₂-Stations C



Dimensions

Formulas: $L1 = n \times 7.2 + 7$, $L2 = n \times 7.2 + 15$, n: Stations (maximum 20 stations)

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	21.4	28.6	35.8	43	50.2	57.4	64.6	71.8	79	86.2	93.4	100.6	107.8	115	122.2	129.4	136.6	143.8	151
L2	29.4	36.6	43.8	51	58.2	65.4	72.6	79.8	87	94.2	101.4	108.6	115.8	123	130.2	137.4	144.6	151.8	159

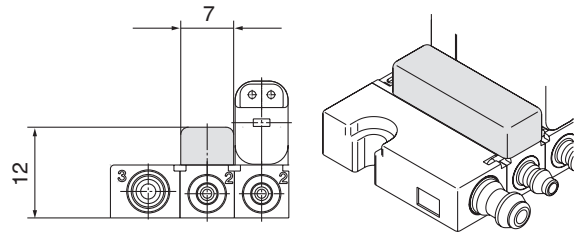
Manifold Options

Blanking plate assembly (for SS073A)

SS070A-10A (for separable base)

This assembly is mounted on a manifold block where the valve is removed for maintenance or a replacement valve is going to be mounted.

Name	No.	Weight [g]
Blanking plate	SS070A-10A	0.7

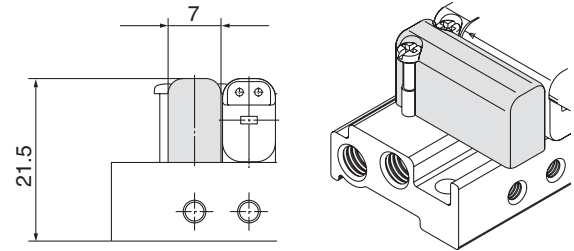


Blanking plate assembly (for SS073B)

SS070B-10A (for bar base)

This assembly is mounted on a manifold block where the valve is removed for maintenance or a replacement valve is going to be mounted.

Name	No.	Weight [g]
Blanking plate	SS070B-10A	1.3

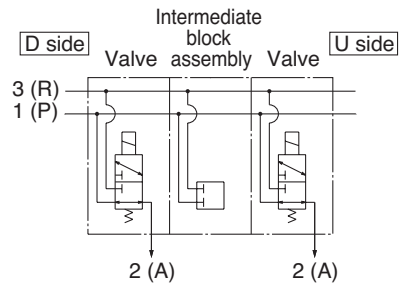
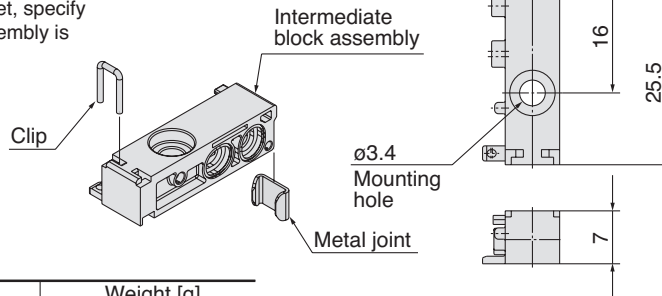


Intermediate block assembly (for SS073A)

SS070A-B (for separable base)

This assembly is used to secure the manifold when a large number of stations are manifolded. (Accommodated as one station.)

* In the manifold specification sheet, specify the position where the block assembly is mounted.



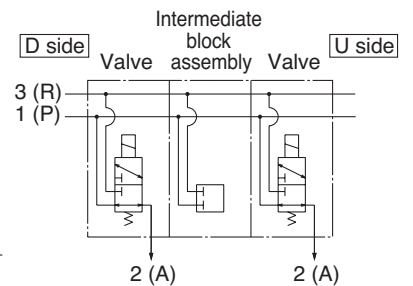
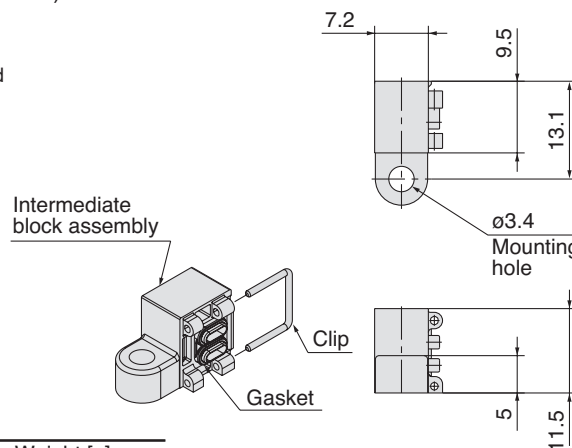
Name	No.	Weight [g]
Intermediate block	SS070A-B	1.5

Intermediate block assembly (for SS073M)

SS070M-B (for stacking type)

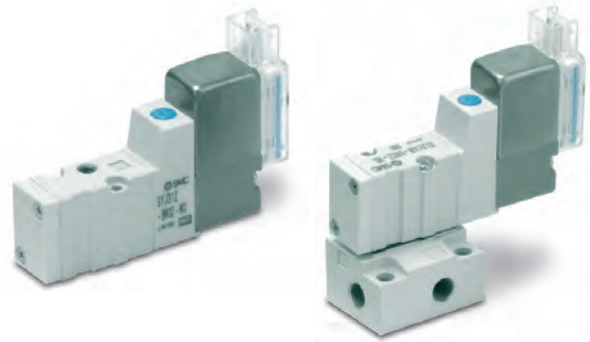
This assembly is used to secure the manifold when 20 or more stations are manifolded. (Accommodated as one station.)

* In the manifold specification sheet, specify the position where the block assembly is mounted.



Name	No.	Weight [g]
Blanking plate	SS070M-B	1.2

3 Port Pilot Operated Solenoid Valve Rubber Seal Series SYJ300/500/700



Features

- Micro design.
- Energy saving (0.1W power consumption).
- N.O. or N.C. options.
- Design life of 50 Million switching cycles.

How to Order

Type of actuation 1 Normally closed 2 Normally open		Rated voltage DC 5 24 VDC 6 12 VDC V 6 VDC S 5 VDC R 3 VDC		Light/Surge voltage suppressor — Without light/surge voltage suppressor Z With light/surge voltage suppressor U With light/surge voltage suppressor (Non-polar type)	
Valve size 3 SYJ300 5 SYJ500 7 SYJ700		Port size M3 M3 SYJ300 M5 M5 SYJ500 O1F G1/8 SYJ700			

Valve	Manifold type
SYJ300	20,21
SYJ500	20
SYJ700	20

Body ported: SYJ 3 1 2 □ 5 M □ □ M3 Q

Base mounted: SYJ 3 1 4 □ 5 M □ □ Q

Valve	Manifold type
SYJ300	41, S41, 42, S42
SYJ500	40, 41
SYJ700	40, 41, 42

For sub-plate type

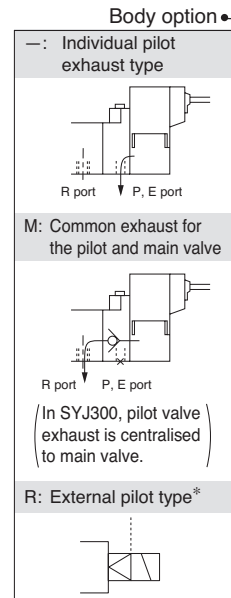
—: Individual pilot exhaust type	D: Push-turn locking slotted type	E: Push-turn locking lever type

Manual override

24, 12, 6, 5, 3 VDC			24, 12 VDC	24, 12, 6, 5, 3 VDC		
Grommet	L plug connector	LO: Without connector	M plug connector	DIN terminal	M8 connector	
G: Lead wire length 300 mm	L: With lead wire (Length 300 mm)		M: With lead wire (Length 300 mm)	MO: Without connector	D: With connector	WO: Without connector cable

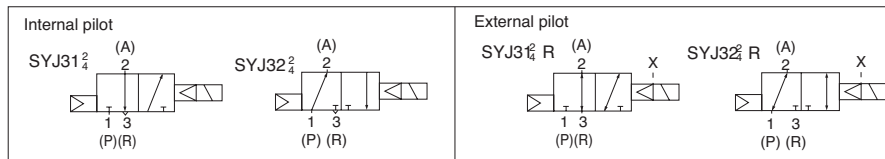
Electrical entry

DO: Without connector
Note: Not applicable for SYJ300



* SYJ□□R is only for manifold use.

Symbols



For connector cables, please see the cables appendix.

Product Recommendation



Stocked items for fast delivery (Valves)

Part number	Stations (□)
SS3YJ3-20-□-Q	08
SS3YJ3-42-□-C4F-Q	02,03,04,06,08
SS3YJ3-42-□-M5F-Q	02,03,04,05,06,07,08,10
SS3YJ3-S41-□-M3-Q	02,03
SS3YJ3-S42-□-C4F-Q	03,04,06,08,13
SS3YJ3-S42-□-M5F-Q	02,03,04,05,06,08,10
SS3YJ5-20-□-00F-Q	02,04,06,08
SS3YJ5-41-□-01F-Q	02,10
SS3YJ5-41-□-C6F-Q	02,04,06,10
SS3YJ5-41-□-M5F-Q	03
SS3YJ7-21-□-00F-Q	02,03,04,05,06,08,12



Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air Preparation - page 1076

Series TU - Tubing - page 1223

Series KQ2 - Fittings - page 1184

Specifications

Valve model	SYJ300	SYJ500	SYJ700
Fluid	Air		
Operating pressure range MPa	Internal pilot 0.15 to 0.7		
Ambient and fluid temperature (°C)	-10 to 50 (No freezing)		
Response time ms (at 0.5 MPa)	15 or less	25 or less	30 or less
Max. operating frequency [Hz]	10	5	
Manual override (Manual operation)	Non-locking push type, push-turn locking slotted type, push-turn locking lever type		
Pilot exhaust method	Individual exhaust for the pilot valve, common exhaust for the pilot and main valve		
Lubrication	Not required		
Mounting orientation	Unrestricted		
Shock/Vibration resistance [m/s ²]	150/30		
Enclosure	Dustproof (M8 connector conforms to IP65.)		

Electrical Specifications

Electrical entry	Grommet (G), L plug connector (L), M plug connector (M), M8 connector (W)		
Coil rated voltage (V)	DC	24, 12, 6, 5, 3	
Allowable voltage fluctuation	10% of rated voltage		
Power consumption [W]	DC	Standard	0.35 (With indicator light: 0.4) (DIN terminal with indicator light: 0.45)
		With power saving circuit	0.1 (With indicator light only)
Surge voltage suppressor	Diode (varistor when non-polar types)		
Indicator light	LED		

Flow Characteristics/Weight



Note (): Without sub-plate.

SYJ300	Valve model		Type of actuation	Flow characteristics								Effective area [mm ²]	Weight [g] ^{Note}		
				1 → 2 (P → A)				2 → 3 (A → R)					Grommet	L/M plug connector	M8 connector
				C [dm ³ /(s bar)]	b	Cv	Q[L/min] ANR*	C [dm ³ /(s bar)]	b	Cv	Q[L/min] ANR*				
Body ported	SYJ312	N.C.	—	—	—	—	—	—	—	—	—	0.9	32	33	37
	SYJ322	N.O.	—	—	—	—	—	—	—	—	—				
Base mounted (with sub-plate)	SYJ314	N.C.	0.41	0.18	0.086	97	0.35	0.33	0.086	91	—	53 (32)	54 (33)	58 (37)	
	SYJ324	N.O.	0.36	0.31	0.089	92	0.36	0.31	0.089	92					

SYJ500/700	Valve model		Type of actuation	Flow characteristics								Grommet	L/M plug connector	DIN terminal	M8 connector
				1 → 2 (P → A)				2 → 3 (A → R)							
				C [dm ³ /(s bar)]	b	Cv	Q[L/min] ANR*	C [dm ³ /(s bar)]	b	Cv	Q[L/min] ANR*				
Body ported	SYJ512	N.C.	0.53	0.45	0.14	150	0.47	0.39	0.12	127	46	47	68	51	
	SYJ522	N.O.	0.66	0.45	0.18	186	0.66	0.45	0.18	186					
Base mounted (with sub-plate)	SYJ514	N.C.	1.2	0.41	0.32	329	1.1	0.46	0.32	313	60 (46)	61 (47)	82 (68)	65 (51)	
	SYJ524	N.O.	1.3	0.37	0.33	346	1.2	0.48	0.34	347					
Body ported	SYJ712	N.C.	2.8	0.43	0.77	779	2.5	0.51	0.76	741	75	76	97	80	
	SYJ722	N.O.	2.7	0.38	0.72	724	2.4	0.42	0.69	662					
Base mounted (with sub-plate)	SYJ714	N.C.	2.9	0.32	0.71	747	2.7	0.34	0.69	705	135 (75)	136 (76)	157 (97)	140 (80)	
	SYJ724	N.O.	2.8	0.21	0.70	674	2.3	0.45	0.63	649					
	SYJ714	N.C.	3.0	0.31	0.74	768	2.6	0.33	0.66	674					
	SYJ724	N.O.	2.7	0.31	0.68	791	2.3	0.48	0.64	665					



External Pilot

SYJ314R, SYJ324R / SYJ514R, SYJ524R / SYJ714R, SYJ724R

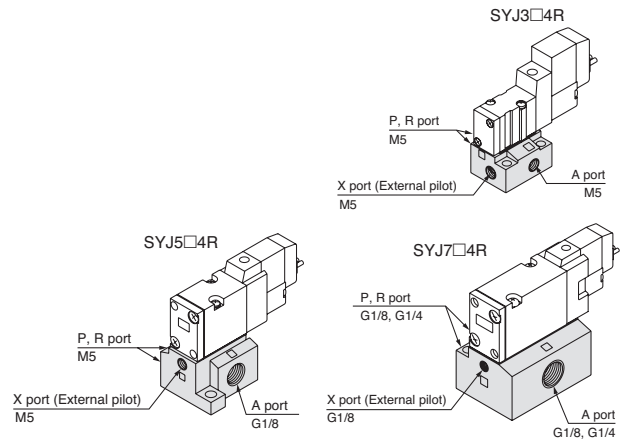
Pilot valve pressure is supplied separately from the main valve pressure through the use of a separate supply port. It can be used in the vacuum (up to -100 kPa) or low pressure line with 0.15 MPa or less.

Specifications

Applicable model	Base mounted	
Operating pressure range [MPa]	Main pressure	-100 kPa to 0.7
	External pilot pressure	0.15 to 0.7

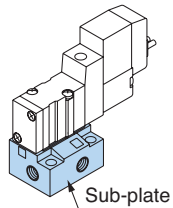


Note 1) External pilot type body ported valves (SYJ□□2R) can only be used on the manifold.



Accessories

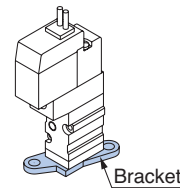
How to order Sub-plate



Series	Port size	Sub-plate part no.
SYJ300	M3	SYJ300-9-1-Q
SYJ500	G1/8	SYJ500-9-1F-Q
SYJ700	G1/8	SYJ700-9-1F-Q
	G1/4	SYJ700-9-2F-Q

(With gasket and screws)

How to order Bracket



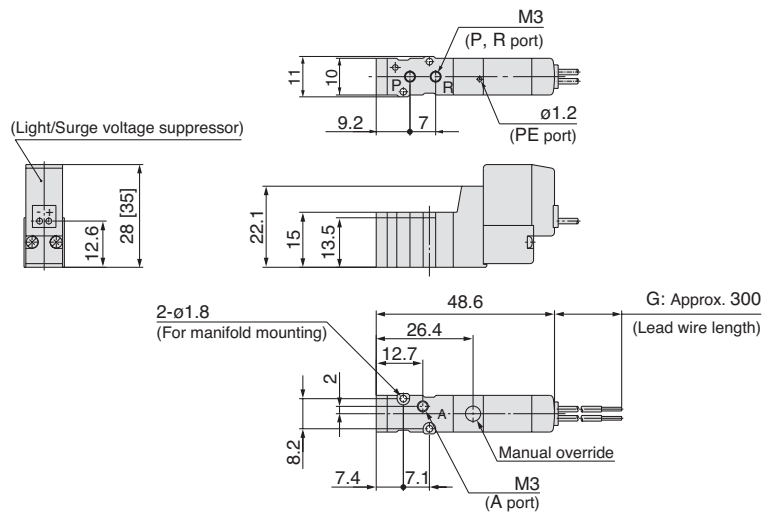
Series	Bracket part no.
SYJ300	Available if ordered with valve. Contact SMC for details.
SYJ500	SYJ5000-13-3A
SYJ700	SYJ700-19-1A

(Supplied with 2 screws)

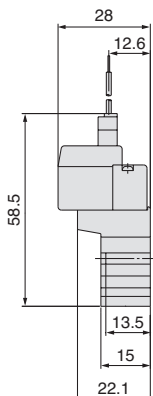
Dimensions

Body Ported

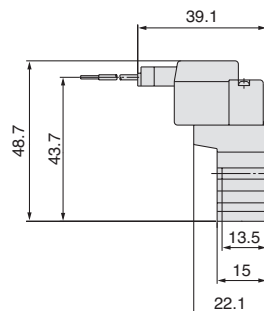
Grommet (G): SYJ3□2-□G□□-M3-Q



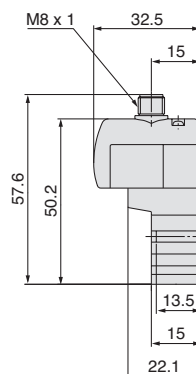
L plug connector (L): SYJ3□2-□L□□-M3-Q



M plug connector (M): SYJ3□2-□M□□-M3-Q



M8 connector (WO): SYJ3□2-□WO□□-M3-Q



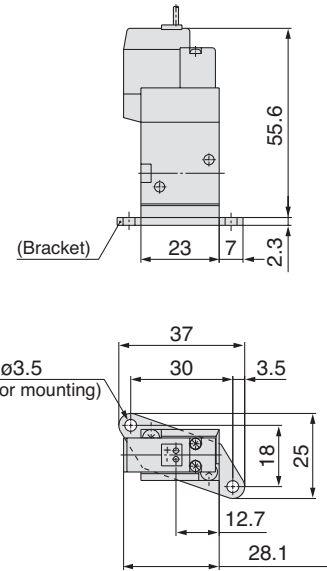
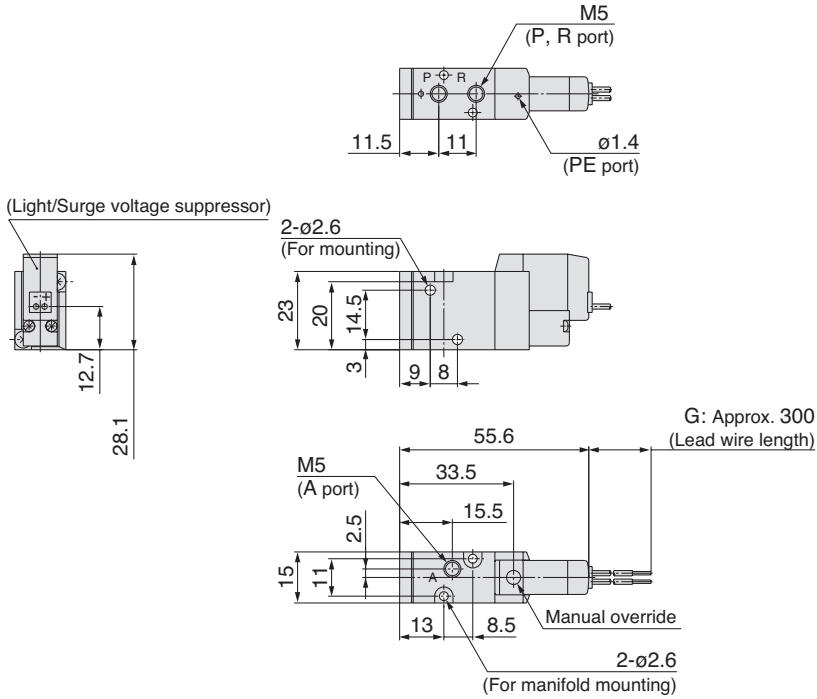
Dimensions

Body Ported

Grommet (G): SYJ5□2-□G □□-M5-Q

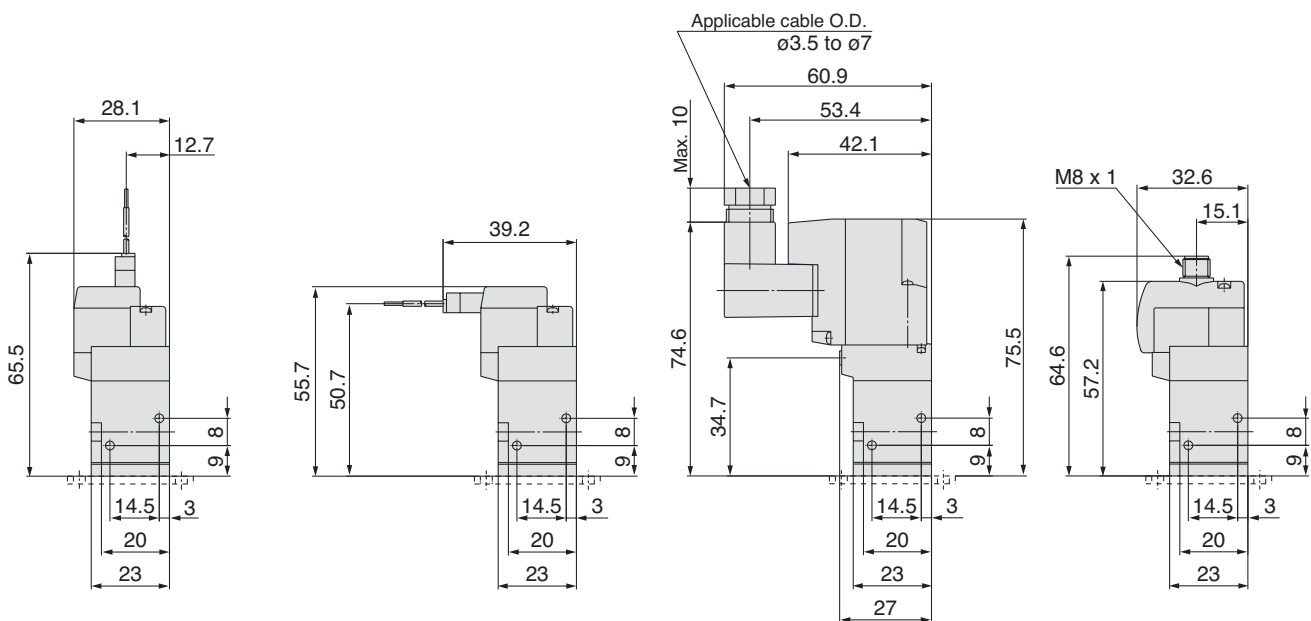
With bracket:

SYJ5□2-□G □□-M5-Q


 L plug connector (L):
 SYJ5□2-□L□□-M5-Q

 M plug connector (M):
 SYJ5□2-□M□□-M5-Q

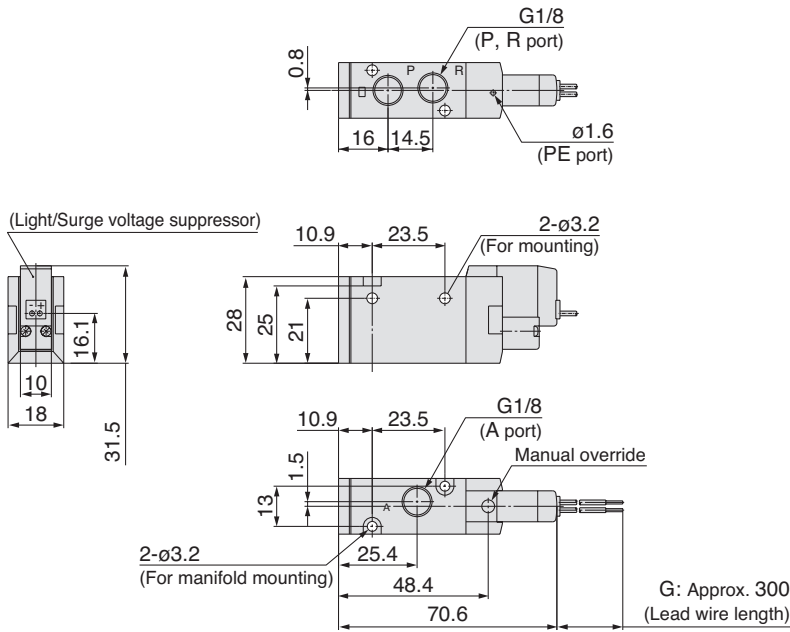
 DIN terminal (D):
 SYJ5□2-□D□□-M5-Q

 M8 connector (MO):
 SYJ5□2-□WO□□-M5-Q


Dimensions

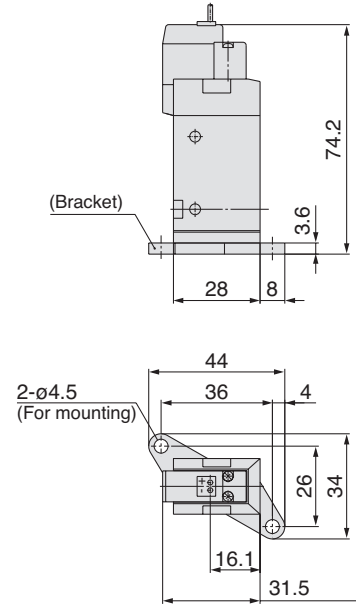
Body Ported

Grommet (G): SYJ7□2-□G □□-01F-Q



With bracket:

SYJ7□2-□G □□-01F-Q



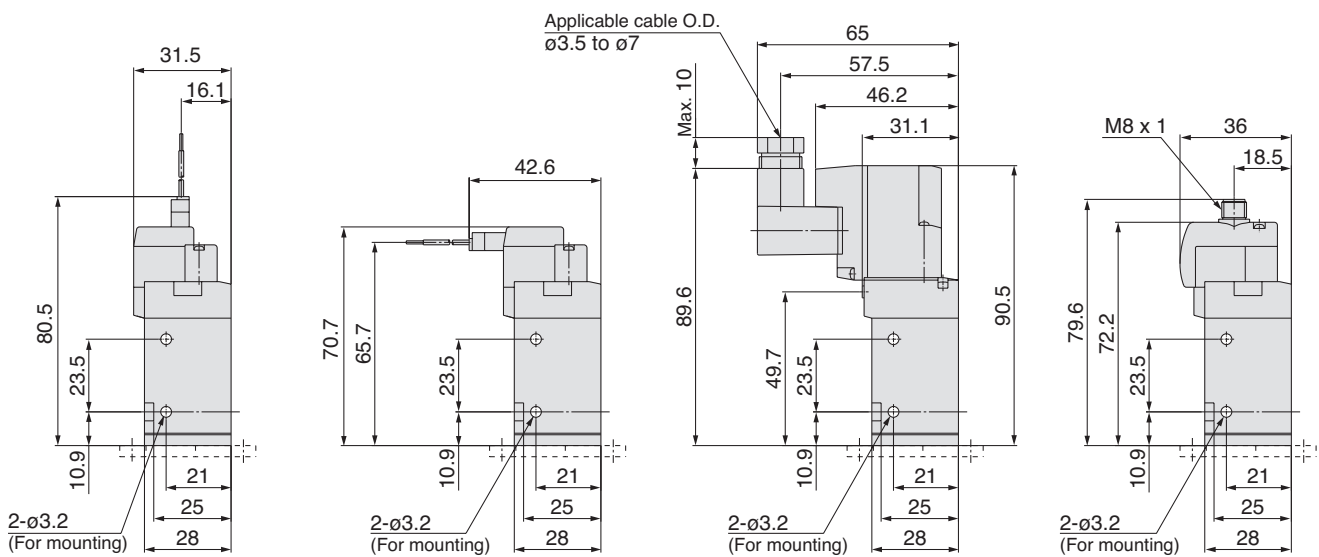
Valves

L plug connector (L):
SYJ7□2-□L□□-01F-Q

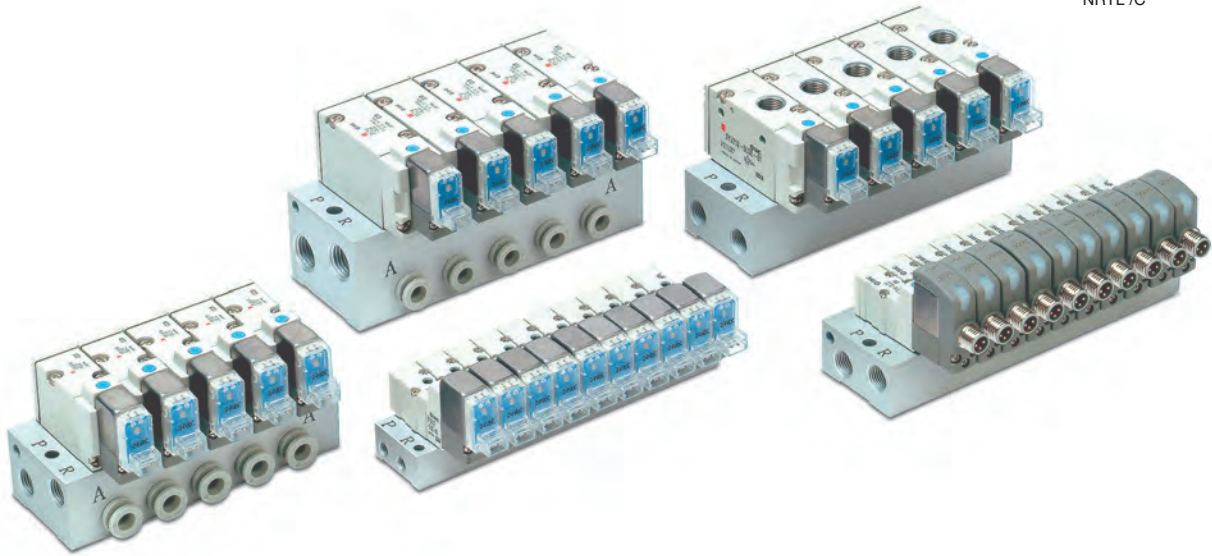
M plug connector (M):
SYJ7□2-□M□□-01F-Q

DIN terminal (D):
SYJ7□2-□D□□-01F-Q

M8 connector (MO):
SYJ7□2-□WO□□-01F-Q

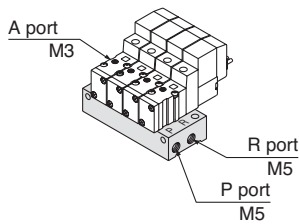


Manifold Specifications Series SYJ300/500/700



How to Order: SYJ300 (Manifold for Internal Pilot Type)

Type 20



How to Order

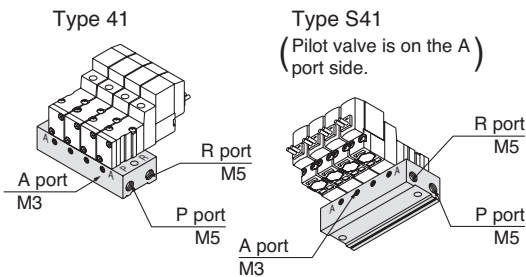
SS3YJ3 – 20 – 05 – Q

Stations	
02	2 stations
:	:
20	20 stations

Applicable solenoid valve
SYJ312-□□□□-M3-Q
SYJ312M-□□□□-M3-Q
SYJ322-□□□□-M3-Q
SYJ322M-□□□□-M3-Q

Applicable blanking
plate assembly
SYJ300-10-1A-Q

Type 41



How to Order

SS3YJ3 – □ 41 – 05 – M3 – Q

Valve mounting direction

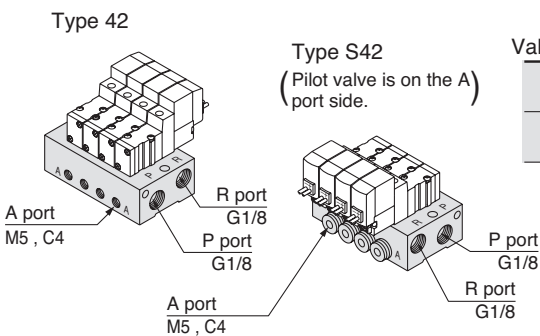
–	Pilot valve is opposite the A port side.
S	Pilot valve is on the A port side.

Stations	
02	2 stations
:	:
20	20 stations

Applicable solenoid valve
SYJ314-□□□□-Q
SYJ314M-□□□□-Q
SYJ324-□□□□-Q
SYJ324M-□□□□-Q

Applicable blanking
plate assembly
SYJ300-10-2A-Q

Type 42



How to Order

SS3YJ3 – □ 42 – 05 – M5 F – Q

Valve mounting direction

–	Pilot valve is opposite the A port side.
S	Pilot valve is on the A port side.

Stations	
02	2 stations
:	:
20	20 stations

A port size	
M5	M5
C4	ø4 One-touch fitting

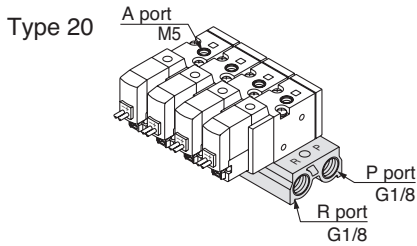
Applicable solenoid valve
SYJ314-□□□□-Q
SYJ314M-□□□□-Q
SYJ324-□□□□-Q
SYJ324M-□□□□-Q

Applicable blanking
plate assembly
SYJ300-10-2A-Q

Note: Manifolds for use with external pilot valves are available. Please contact SMC for details.



How to Order: SYJ500 (Manifold for Internal Pilot Type)



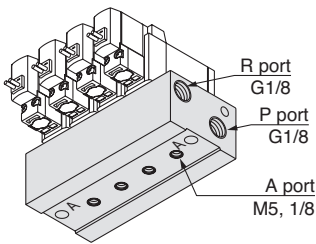
How to Order
SS3YJ5 – 20 – 05 – 00F – Q

Stations	
02	2 stations
:	:
20	20 stations

Applicable solenoid valve
 SYJ512-□□□□-M5-Q
 SYJ512M-□□□□-M5-Q
 SYJ522-□□□□-M5-Q
 SYJ522M-□□□□-M5-Q

Applicable blanking plate assembly
 SYJ500-10-1A-Q

Type 40



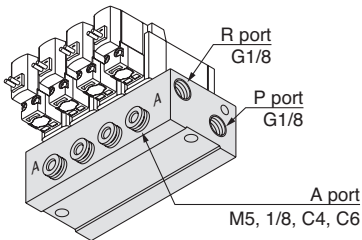
How to Order
SS3YJ5 – 40 – 05 – M5 F – Q

Stations		A port size	
02	2 stations	M5	M5
:	:	01	G1/8
20	20 stations		

Applicable solenoid valve
 SYJ514-□□□□-Q
 SYJ514M-□□□□-Q
 SYJ524-□□□□-Q
 SYJ524M-□□□□-Q

Applicable blanking plate assembly
 SYJ500-10-3A-Q

Type 41



How to Order
SS3YJ5 – 41 – 05 – C6 F – Q

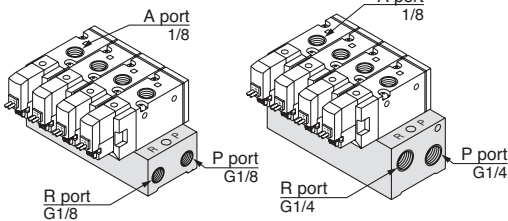
Stations		A port size	
02	2 stations	M5	M5
:	:	01	1/8
20	20 stations	C4	ø4 One-touch fitting
		C6	ø6 One-touch fitting

Applicable solenoid valve
 SYJ514-□□□□-Q
 SYJ514M-□□□□-Q
 SYJ524-□□□□-Q
 SYJ524M-□□□□-Q

Applicable blanking plate assembly
 SYJ500-10-3A-Q

How to Order: SYJ700 (Manifold for Internal Pilot Type)

Type 20/Type 21



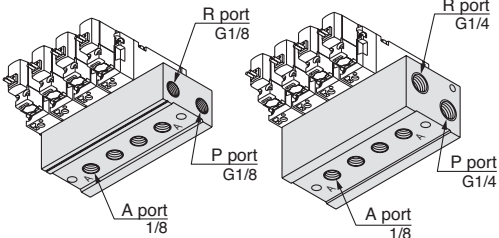
How to Order
SS3YJ7 – 20 – 05 – 00F – Q

Manifold type		Stations	
20	Type 20	02	2 stations
21	Type 21	:	:
		20	20 stations

Applicable solenoid valve
 SYJ712-□□□□-01F-Q
 SYJ712M-□□□□-01F-Q
 SYJ722-□□□□-01F-Q
 SYJ722M-□□□□-01F-Q

Applicable blanking plate assembly
 SYJ700-10-2A-1-Q

Type 40/Type 41



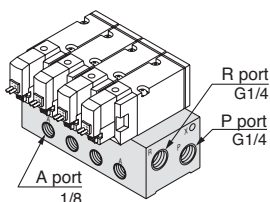
How to Order
SS3YJ7 – 40 – 05 – 01 F – Q

Manifold type		Stations		A port size	
40	Type 40	02	2 stations	01	1/8
41	Type 41	:	:		
		20	20 stations		

Applicable solenoid valve
 SYJ714-□□□□-Q
 SYJ714M-□□□□-Q
 SYJ724-□□□□-Q
 SYJ724M-□□□□-Q

Applicable blanking plate assembly
 SYJ700-10-2A-2-Q

Type 42



How to Order
SS3YJ7 – 42 – 05 – C6 F – Q

Stations		A port size	
02	2 stations	01	1/8
:	:	C6	ø6 One-touch fitting
20	20 stations	C8	ø8 One-touch fitting

Applicable solenoid valve
 SYJ714-□□□□-Q
 SYJ714M-□□□□-Q
 SYJ724-□□□□-Q
 SYJ724M-□□□□-Q

Applicable blanking plate assembly
 SYJ700-10-2A-2-Q

Note: Manifolds for use with external pilot valves are available. Please contact SMC for details.

Product Recommendation



Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air Preparation - page 1076

Series TU - Tubing - page 1223

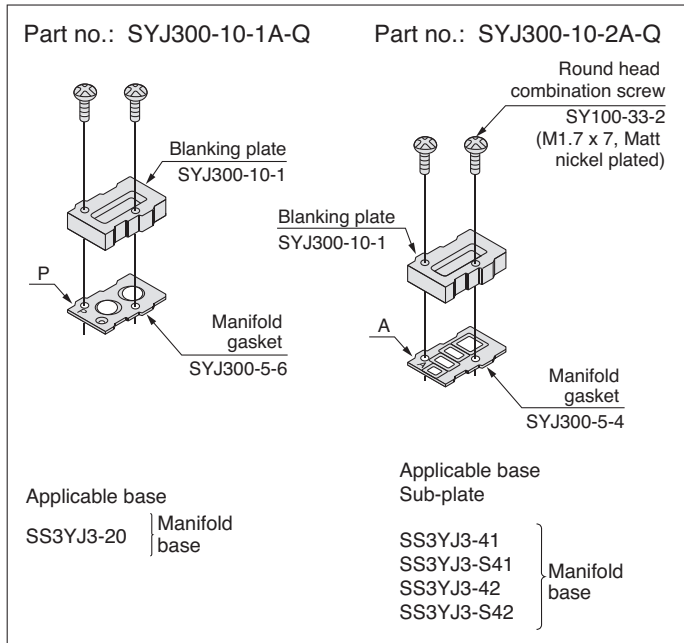
Series KQ2 - Fittings - page 1184


Stocked items for fast delivery (Manifold)

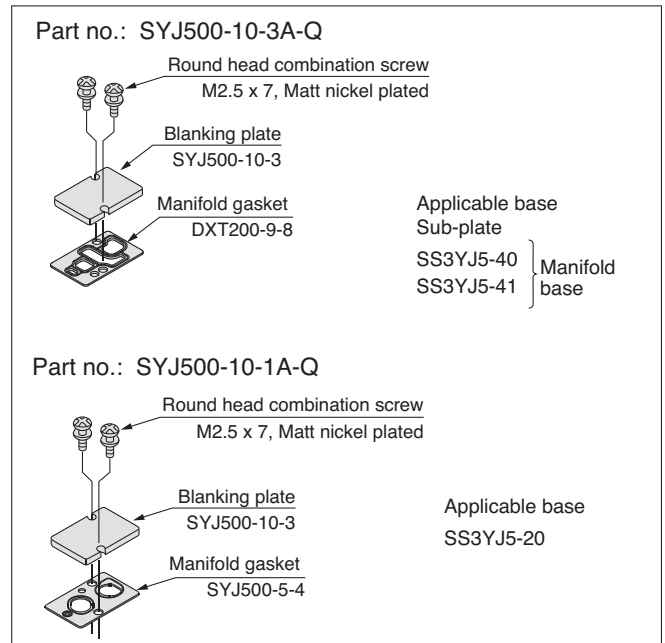
SYJ312M-5LOUD-M3-Q	SYJ324-5GU-Q	SYJ514M-5DO-Q
SYJ312M-5LOU-M3-Q	SYJ324-5LO-Q	SYJ514M-5LOD-Q
SYJ314-5GU-Q	SYJ324-5LOU-Q	SYJ514M-5LOU-Q
SYJ314-5LO-Q	SYJ324M-5G-Q	SYJ514R-5LOU-Q
SYJ314-5LOU-Q	SYJ324M-5LOU-Q	SYJ522M-5LOU-M5-Q
SYJ314-5LOZ-Q	SYJ324M-5MOU-Q	SYJ524-5LOU-Q
SYJ314-5MOZ-Q	SYJ512-5DO-M5-Q	SYJ712-5DO-01F-Q
SYJ314-5WO-Q	SYJ512-5G-M5-Q	SYJ712-5DZ-01F-Q
SYJ314M-5G-Q	SYJ512-5LO-M5-Q	SYJ712-5LOU-01F-Q
SYJ314M-5LOUD-Q	SYJ512-5LOUD-M5-Q	SYJ712-5LOZ-01F-Q
SYJ314M-5LOU-Q	SYJ512-5LOU-M5-Q	SYJ712-5MOUD-01F-Q
SYJ314M-5LOZ-Q	SYJ512-5LOZ-M5-Q	SYJ712M-5DO-01F-Q
SYJ314M-5MOUD-Q	SYJ512M-5DO-M5-Q	SYJ712M-5DOD-01F-Q
SYJ314M-5MOU-Q	SYJ512M-5LOU-M5-Q	SYJ712M-5LOU-01F-Q
SYJ314M-6G-Q	SYJ512M-5MOU-M5-Q	SYJ712M-5WOU-01F-Q
SYJ314M-6LOU-Q	SYJ512M-6LOU-M5-Q	SYJ714-5DZ-Q
SYJ314R-5G-Q	SYJ514-5LOUD-Q	SYJ714-5LOU-Q
SYJ314R-5LOU-Q	SYJ514-5LOU-Q	SYJ714M-5DO-Q
SYJ314R-5LZ-Q	SYJ514-5LOZ-Q	SYJ714M-5LOU-Q
SYJ314R-5MOU-Q	SYJ514-5MOZ-Q	SYJ722M-5LOU-01F-Q

Accessories: Blanking Plate Assembly

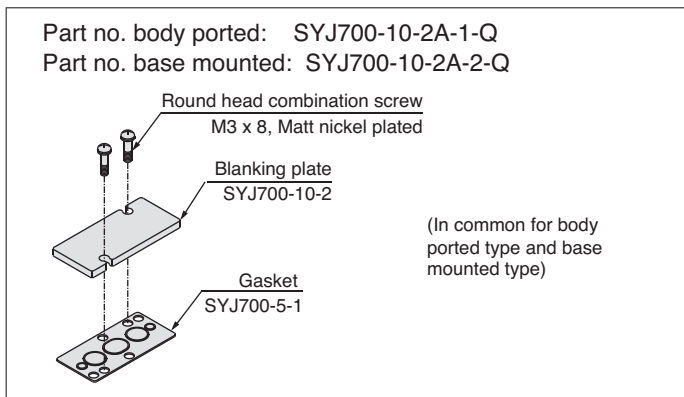
SYJ300



SYJ500



SYJ700



Flow Characteristics for SYJ300 on manifold mounting

Manifold			Flow characteristics								Effective area [mm ²]
			1 → 2 (P → A)				2 → 3 (A → R)				
			C [dm ³ /(s bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s bar)]	b	Cv	Q [L/min] (ANR)*	
Body ported for internal pilot	Type SS3YJ3-20	SYJ3□2	—	—	—	—	—	—	—	—	0.9
Base mounted for internal pilot	Type SS3YJ3-41 S41	SYJ3□4	—	—	—	—	—	—	—	—	1.5
	Type SS3YJ3-42-M5	SYJ3□4	0.31	0.17	0.075	73	0.32	0.11	0.072	72	—
	Type SS3YJ3-42-C4		0.33	0.36	0.086	87	0.33	0.2	0.082	74	—
	Type SS3YJ3-S42-M5	SYJ3□4	0.32	0.3	0.079	81	0.33	0.35	0.086	74	—
Type SS3YJ3-S42-C4	0.35		0.17	0.082	82	0.35	0.26	0.086	79	—	

* These Valves have been calculated according to ISO 6368.

Flow Characteristics for SYJ500 on manifold mounting

Manifold			Flow characteristics							
			1 → 2 (P → A)				2 → 3 (A → R)			
			C [dm ³ /(s-bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s-bar)]	b	Cv	Q [L/min] (ANR)*
Body ported for internal pilot	Type SS3YJ5-20	SYJ5□2	0.47	0.43	0.13	131	0.74	0.32	0.19	176
Base mounted for internal pilot	Type SS3YJ5-40-M5	SYJ5□4	0.71	0.52	0.21	212	0.81	0.28	0.20	194
	Type SS3YJ5-40-01		0.98	0.36	0.25	259	0.92	0.24	0.22	223
	Type SS3YJ5-41-M5		0.71	0.49	0.20	207	0.80	0.23	0.19	191
	Type SS3YJ5-41-01		1.0	0.37	0.26	266	0.96	0.25	0.24	235
	Type SS3YJ5-41-C4		0.68	0.35	0.17	179	1.0	0.25	0.24	245
	Type SS3YJ5-41-C6		1.0	0.27	0.25	250	1.0	0.30	0.26	248

* These Valves have been calculated according to ISO 6368.

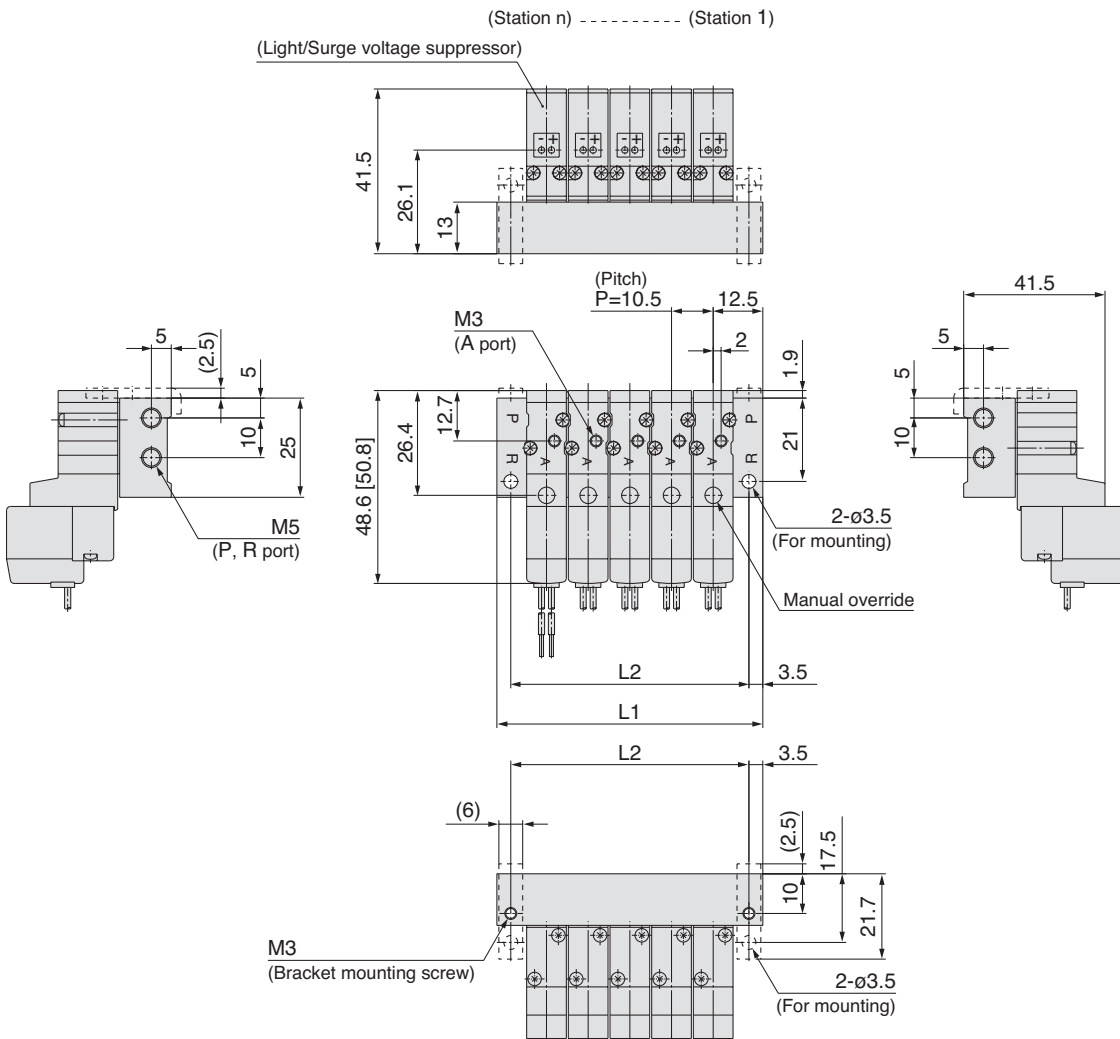
Flow Characteristics for SYJ700 on manifold mounting

Manifold			Flow characteristics							
			1 → 2 (P → A)				2 → 3 (A → R)			
			C [dm ³ /(s-bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s-bar)]	b	Cv	Q [L/min] (ANR)*
Body ported for internal pilot	Type SS3YJ7-20	SYJ7□2	2.2	0.34	0.55	574	2.3	0.27	0.59	574
	Type SS3YJ7-21		2.2	0.39	0.59	594	2.4	0.32	0.62	618
	Type SS3YJ7-40		2.1	0.35	0.59	552	2.3	0.27	0.54	574
Base mounted for internal pilot	Type SS3YJ7-41	SYJ7□4	2.2	0.35	0.59	578	2.4	0.36	0.66	635
	Type SS3YJ7-42-01		2.0	0.27	0.47	499	2.2	0.32	0.56	567
	Type SS3YJ7-42-C6		1.6	0.32	0.39	412	2.2	0.27	0.54	549
	Type SS3YJ7-42-C8		2.1	0.24	0.51	515	2.3	0.31	0.59	589

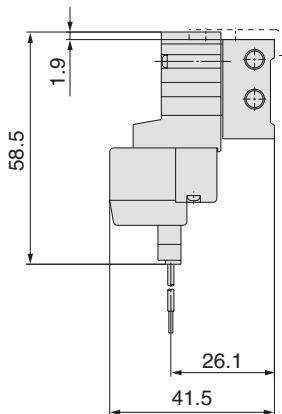
* These Valves have been calculated according to ISO 6368.

Dimensions

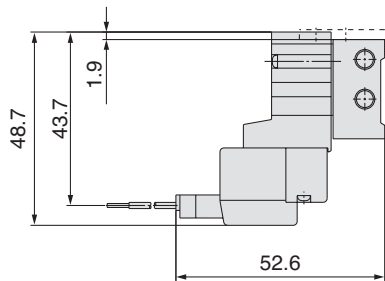
Type 20 Manifold: Top Ported/SS3YJ3-20-Stations -Q
Grommet (G)



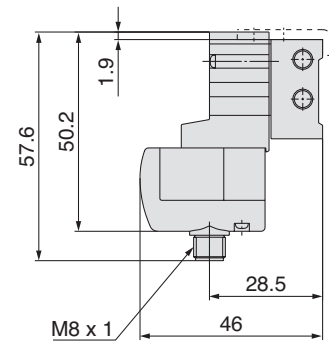
L plug connector (L)



M plug connector (M)



M8 connector (WO)

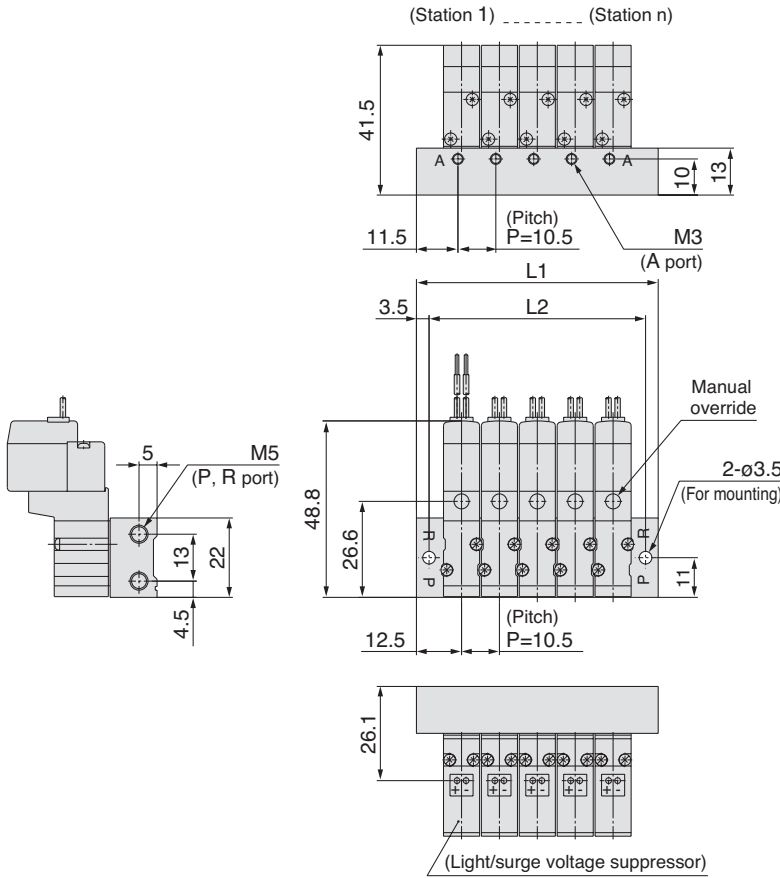


Station n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	35.5	46	56.5	67	77.5	88	98.5	109	119.5	130	140.5	151	161.5	172	182.5	193	203.5	214	224.5
L2	28.5	39	49.5	60	70.5	81	91.5	102	112.5	123	133.5	144	154.5	165	175.5	186	196.5	207	217.5

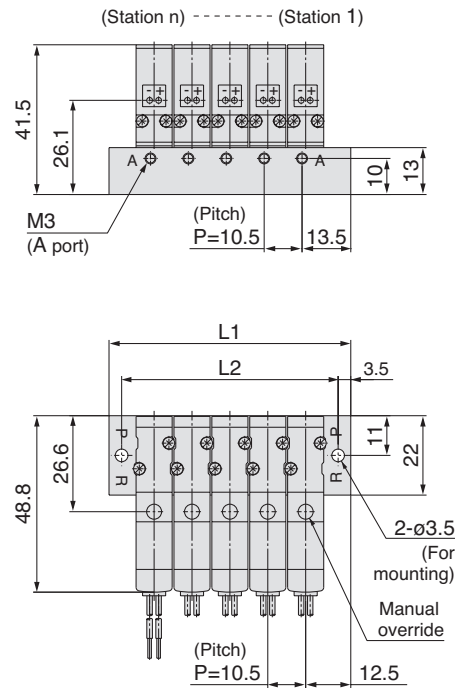


Dimensions

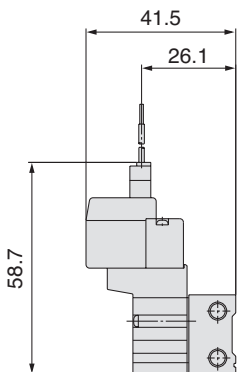
Type 41 Manifold: Side Ported/SS3YJ3-41-**Stations** -M3-Q
Grommet (G)



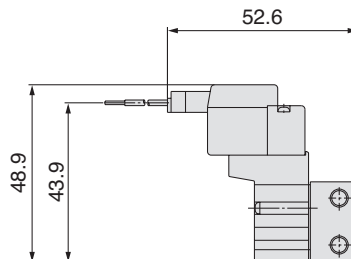
Type 41 Manifold: Side Ported
(Pilot valve is on the A port side) /
SS3YJ3-S41-**Stations** -M3-Q



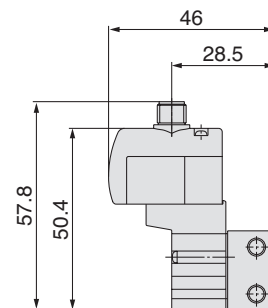
L plug connector (L)



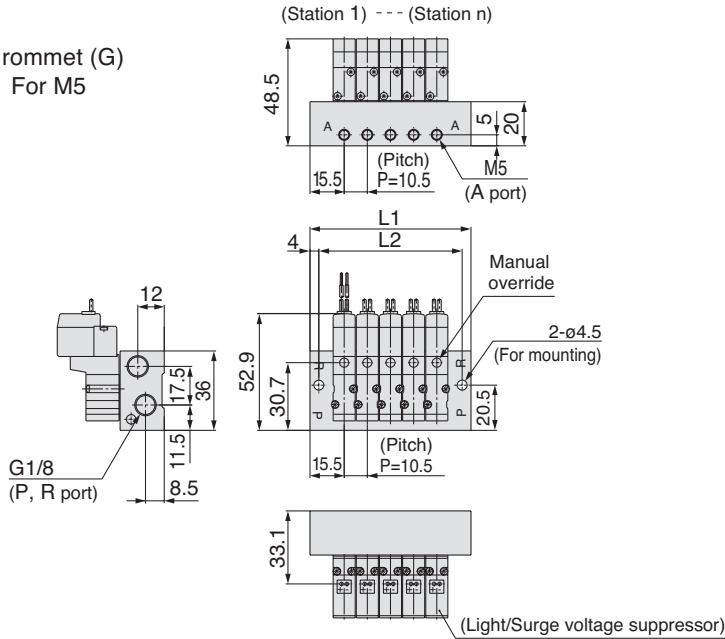
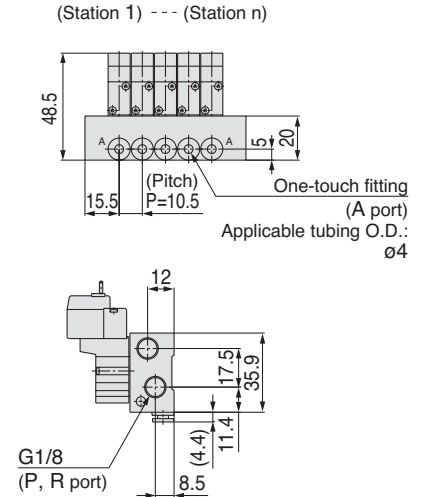
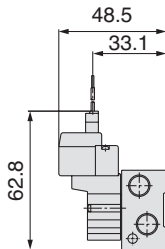
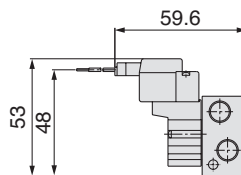
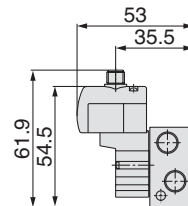
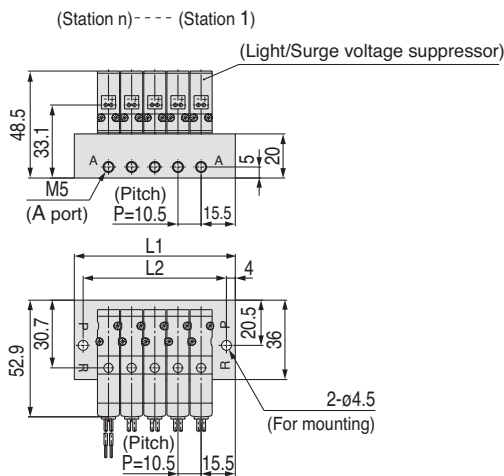
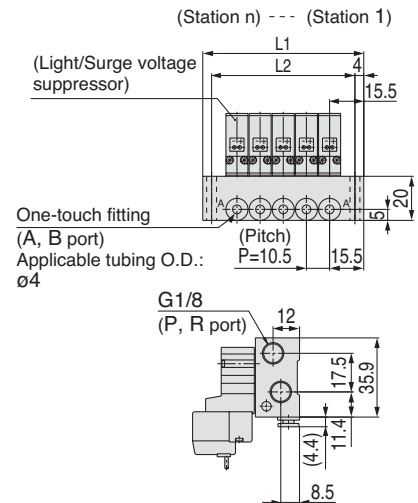
M plug connector (M)



M8 connector (WO)



Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
L1	35.5	46	56.5	67	77.5	88	98.5	109	119.5	130	140.5	151	161.5	172	182.5	193	203.5	214	224.5
L2	28.5	39	49.5	60	70.5	81	91.5	102	112.5	123	133.5	144	154.5	165	175.5	186	196.5	207	217.5

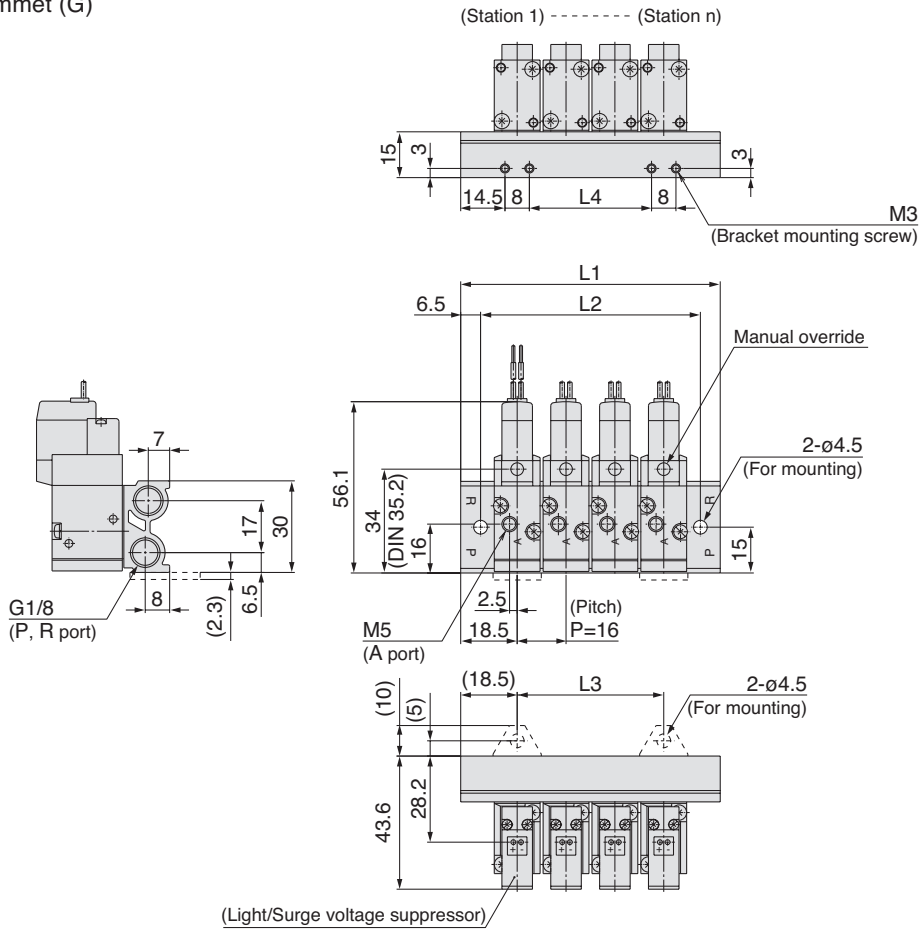
Dimensions
Type 42 Manifold: Side Ported/SS3YJ3-42- Stations -M5, C4-Q
**Grommet (G)
For M5**

For C4 (Built-in One-touch fitting)

L plug connector (L)

M plug connector (M)

M8 connector (WO)

Type 42 Manifold: Side Ported (Pilot valve is on the A port side)/SS3YJ3-S42- Stations -M5, C4-Q
**Grommet (G)
For M5**

For C4 (Built-in One-touch fitting)


Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
L1	41.5	52	62.5	73	83.5	94	104.5	115	125.5	136	146.5	157	167.5	178	188.5	199	209.5	220	230.5
L2	33.5	44	54.5	65	75.5	86	96.5	107	117.5	128	138.5	149	159.5	170	180.5	191	201.5	212	222.5



Dimensions

Type 20 Manifold: Top Ported/SS3YJ5-20- Stations -Q
Grommet (G)

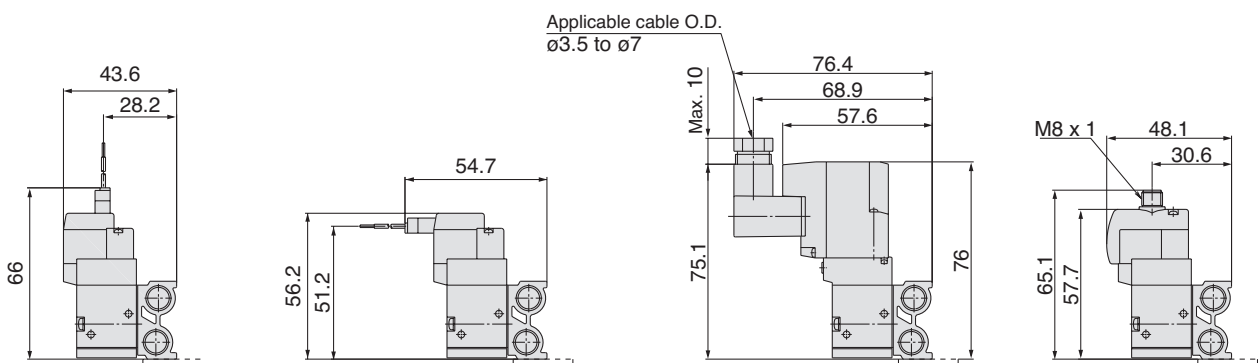


L plug connector (L)

M plug connector (M)

DIN terminal (D)

M8 connector (WO)

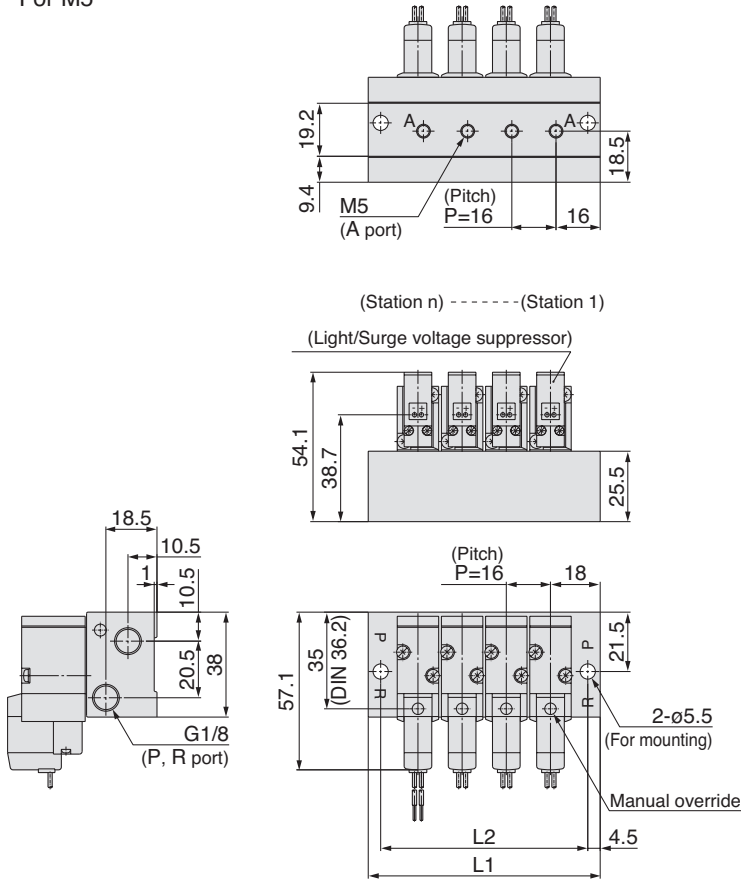


Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
L1	53	69	85	101	117	133	149	165	181	197	213	229	245	261	277	293	309	325	341
L2	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296	312	328
L3	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304
L4	8	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296

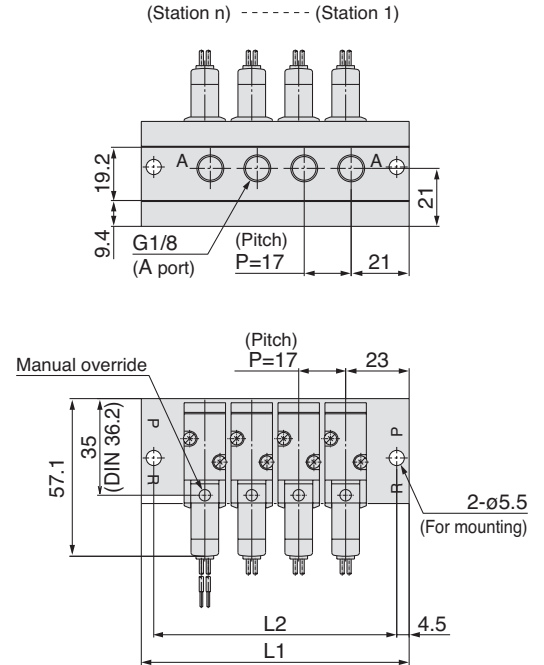
Dimensions

Type 40 Manifold: Bottom Ported/SS3YJ5-40-Stations -M5, 01F-Q
Grommet (G)

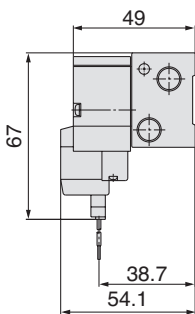
For M5



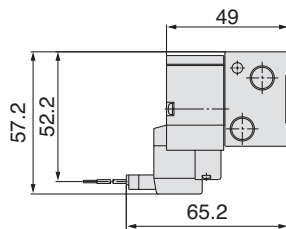
For G1/8



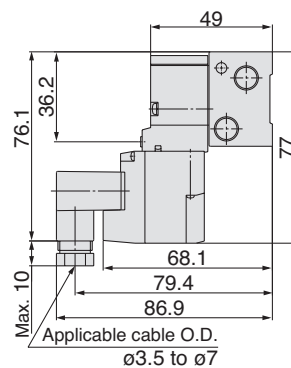
L plug connector (L)



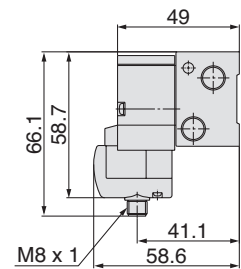
M plug connector (M)



DIN terminal (D)



M8 connector (WO)

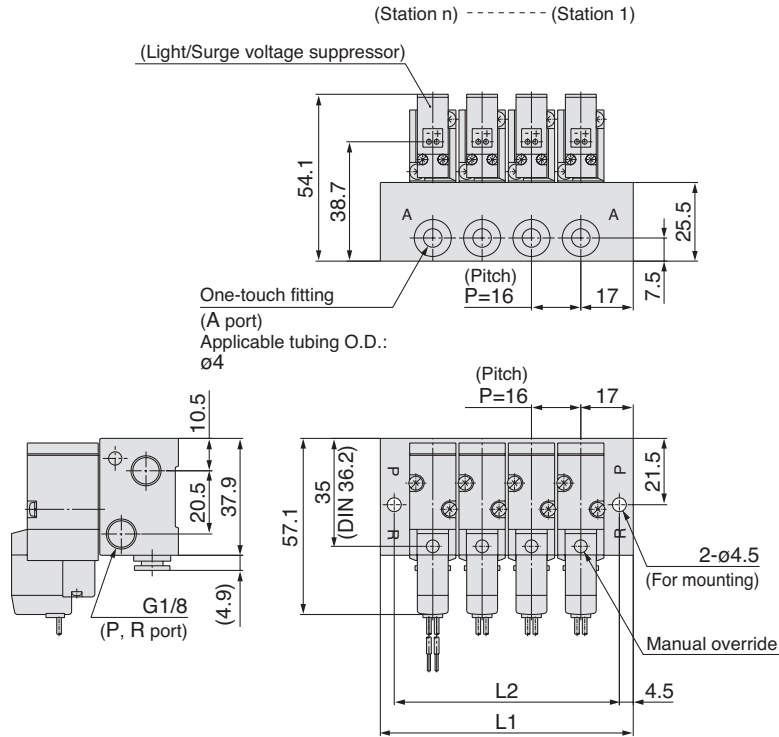


Port size	Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
M5	L1	52	68	84	100	116	132	148	164	180	196	212	228	244	260	276	292	308	324	340
	L2	43	59	75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331
1/8	L1	63	80	97	114	131	148	165	182	199	216	233	250	267	284	301	318	335	352	369
	L2	54	71	88	105	122	139	156	173	190	207	224	241	258	275	292	309	326	343	360



Dimensions

Type 41 Manifold: Side Ported/SS3YJ5-41-Stations- $\begin{matrix} C4 \\ C6 \end{matrix}$ -Q
Grommet (G)

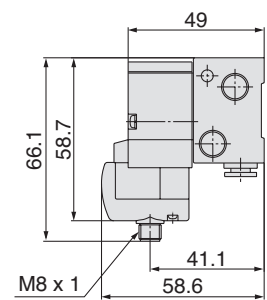
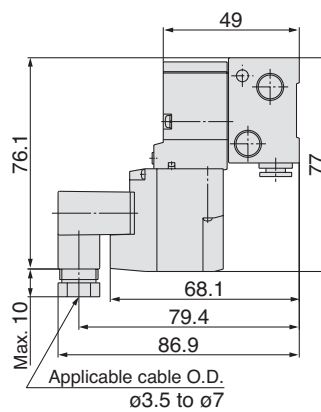
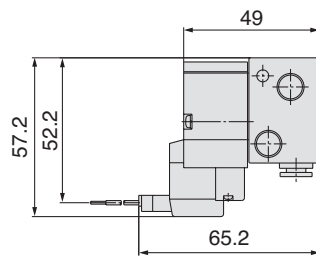
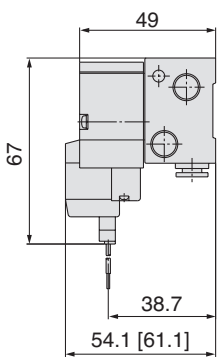


L plug connector (L)

M plug connector (M)

DIN terminal (D)

M8 connector (WO)



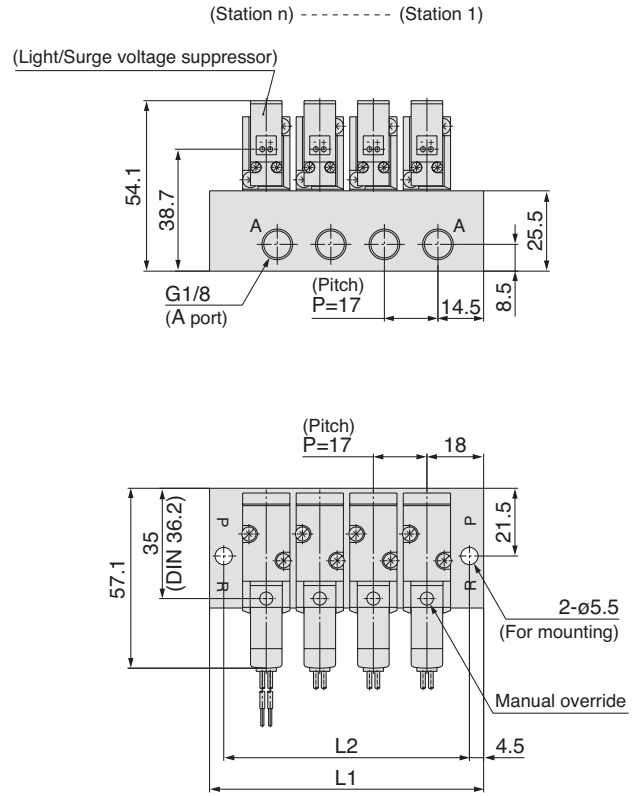
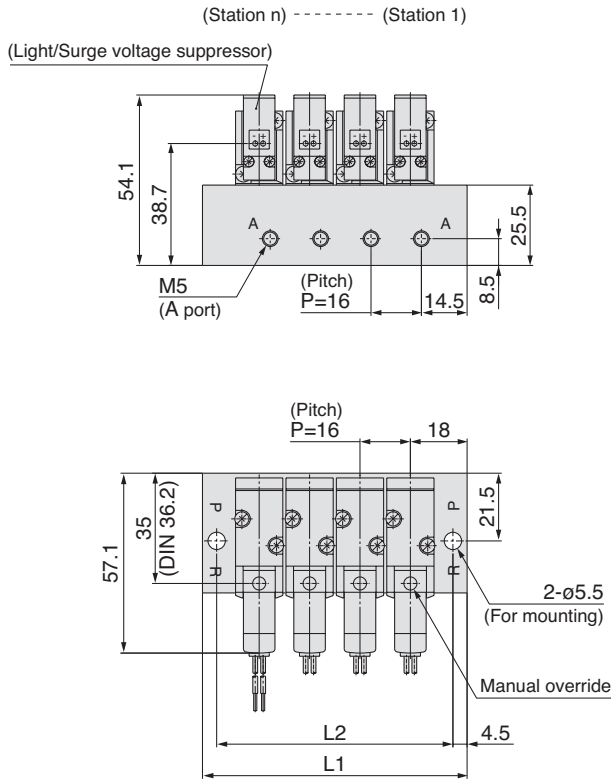
Port size	Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
One-touch fitting	L1	50	66	82	98	114	130	146	162	178	194	210	226	242	258	274	290	306	322	338
	L2	41	57	73	89	105	121	137	153	169	185	201	217	233	249	265	281	297	313	329

Dimensions

Type 41 Manifold: Side Ported/SS3YJ5-41-Stations -M5, 01F-Q

Grommet (G)
For M5

For G1/8

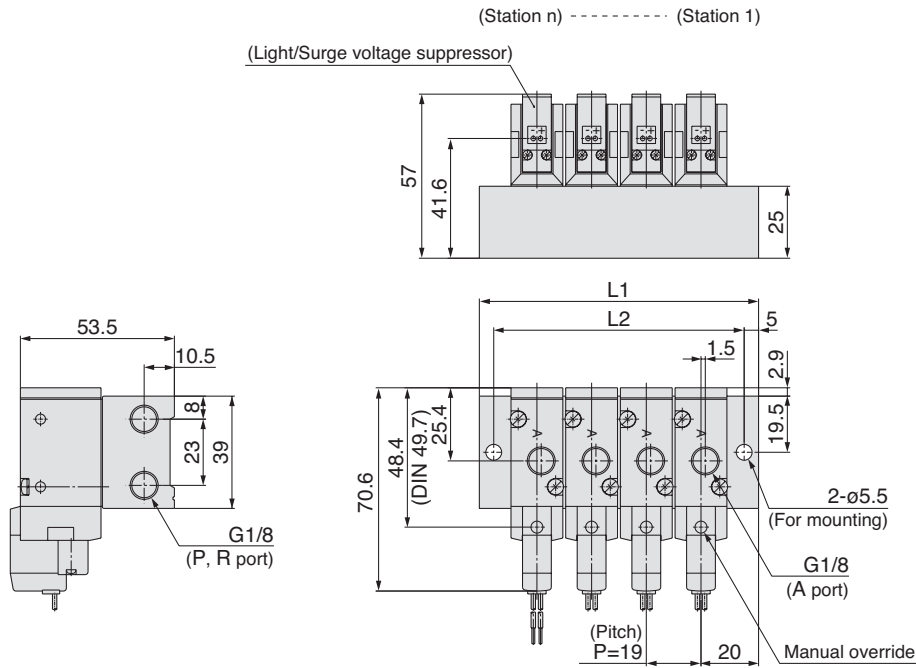


Port size	Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
M5	L1	52	68	84	100	116	132	148	164	180	196	212	228	244	260	276	292	308	324	340
	L2	43	59	75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331
1/8	L1	53	70	87	104	121	138	155	172	189	206	223	240	257	274	291	308	325	342	359
	L2	44	61	78	95	112	129	146	163	180	197	214	231	248	265	282	299	316	333	350

Dimensions

Type 20 Manifold: Top Ported/SS3YJ7-20-Stations -00F-Q

Grommet (G)

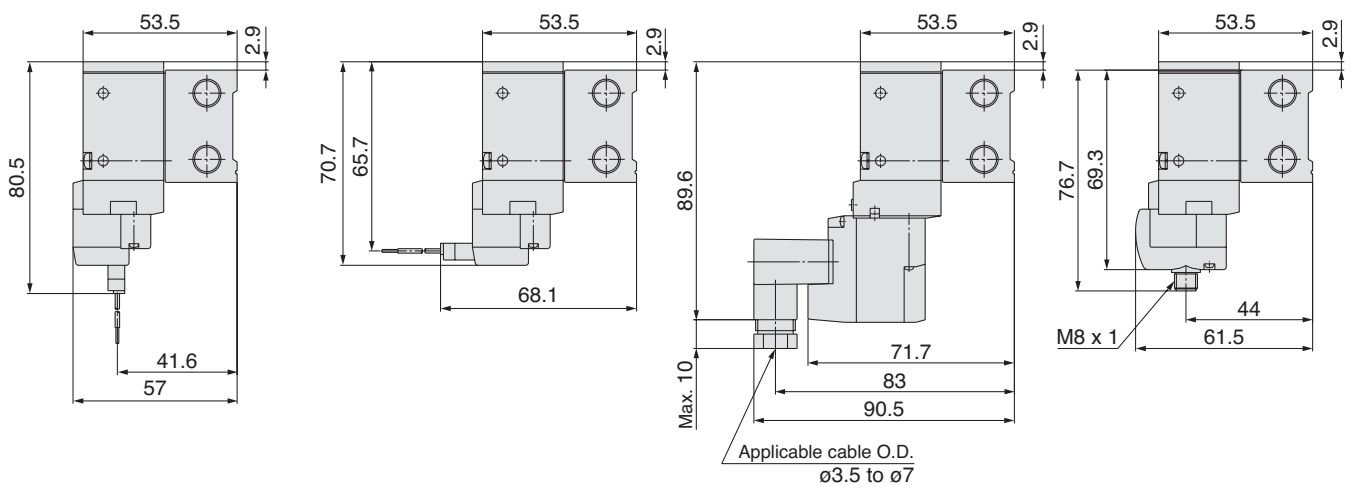


L plug connector (L)

M plug connector (M)

DIN terminal (D)

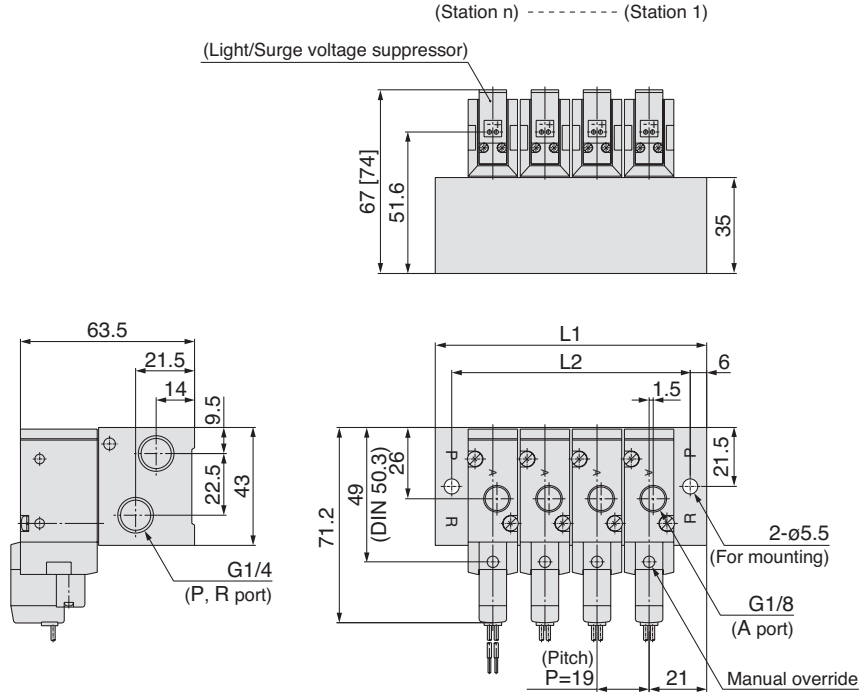
M8 connector (WO)



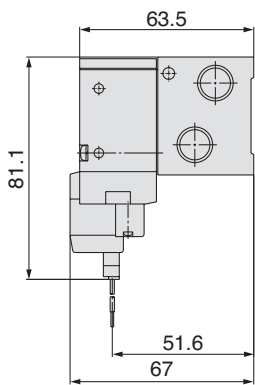
Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
L1	59	78	97	116	135	154	173	192	211	230	249	268	287	306	325	344	363	382	401
L2	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315	334	353	372	391

Dimensions

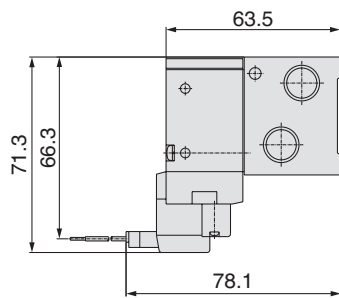
Type 21 Manifold: Top Ported/SS3YJ7-21-Stations -00F-Q
Grommet (G)



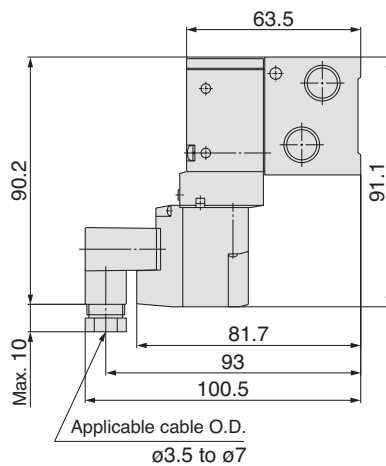
L plug connector (L)



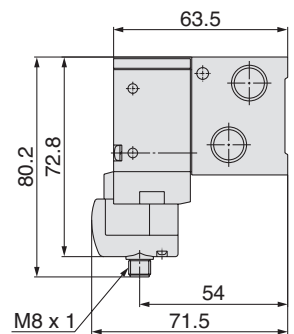
M plug connector (M)



DIN terminal (D)



M8 connector (WO)



* Refer to catalog for dimensions with connector cable.

Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
L1	61	80	99	118	137	156	175	194	213	232	251	270	289	308	327	346	365	384	403
L2	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315	334	353	372	391

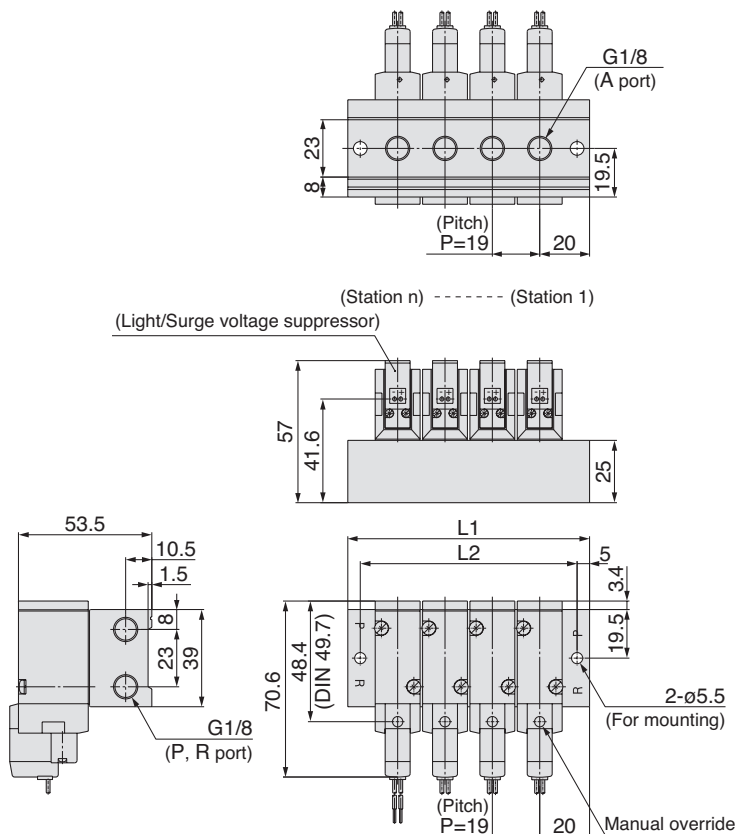


Dimensions

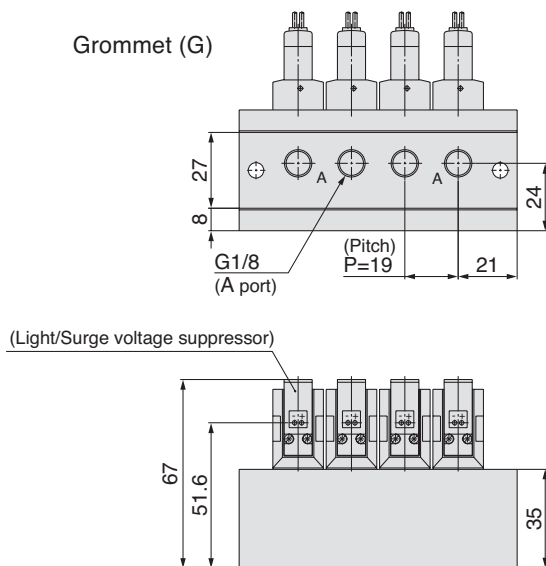
Type 40 Manifold: Bottom Ported/
SS3YJ7-40-[Stations]-01F-Q

Type 41 Manifold: Bottom Ported/
SS3YJ7-41-[Stations]-01F-Q

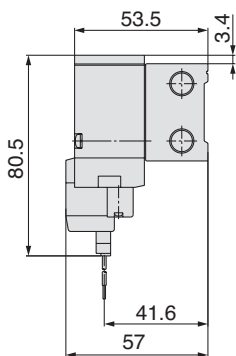
Grommet (G)



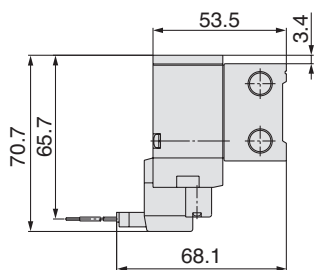
Grommet (G)



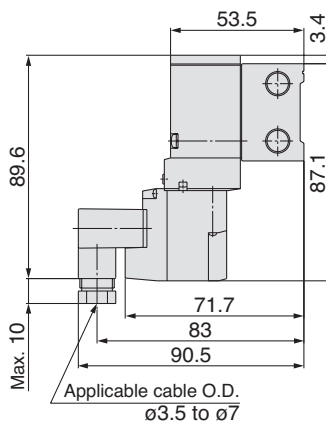
L plug connector (L)



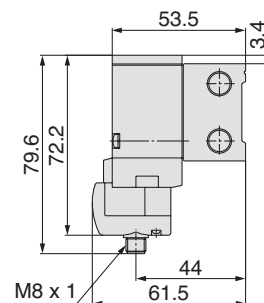
M plug connector (M)



DIN terminal (D)



M8 connector (WO)



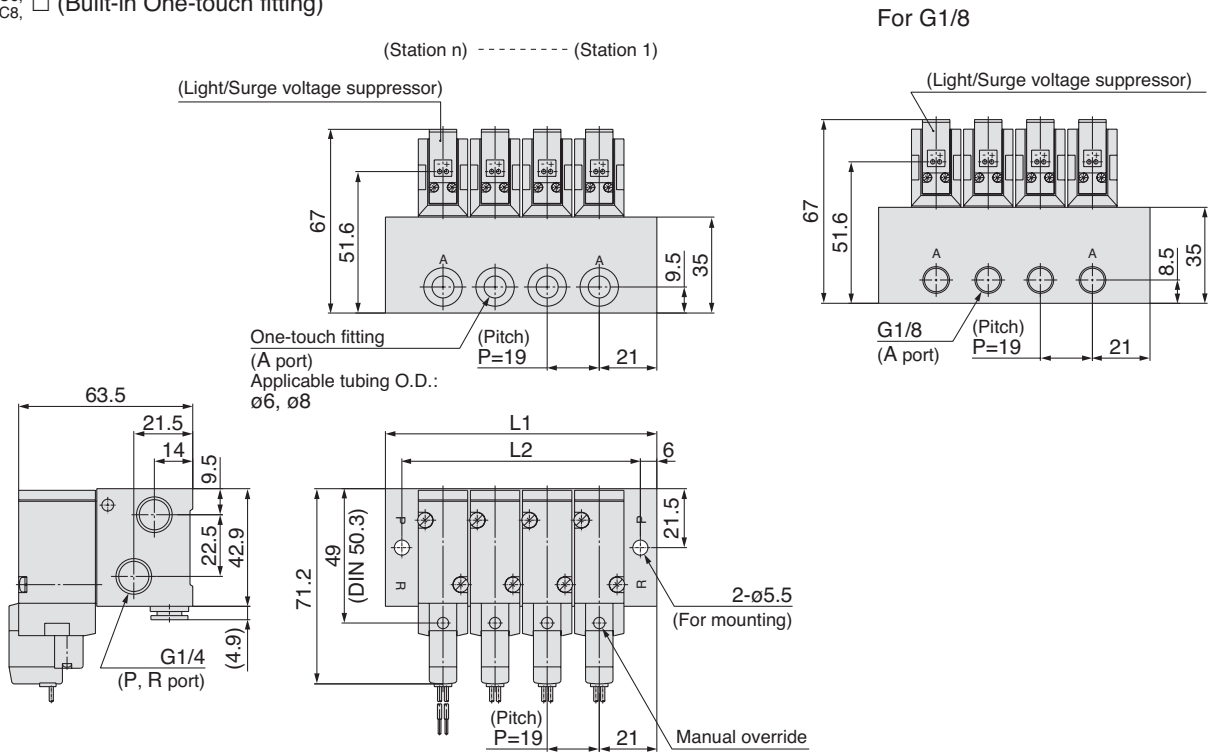
Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
L1	59	78	97	116	135	154	173	192	211	230	249	268	287	306	325	344	363	382	401
L2	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315	334	353	372	391

Dimensions

Type 42 Manifold: Side Ported/SS3YJ7-42-[Stations]-01, ^{C6}/_{C8}-Q

Grommet (G)

For ^{C6}/_{C8}, □ (Built-in One-touch fitting)

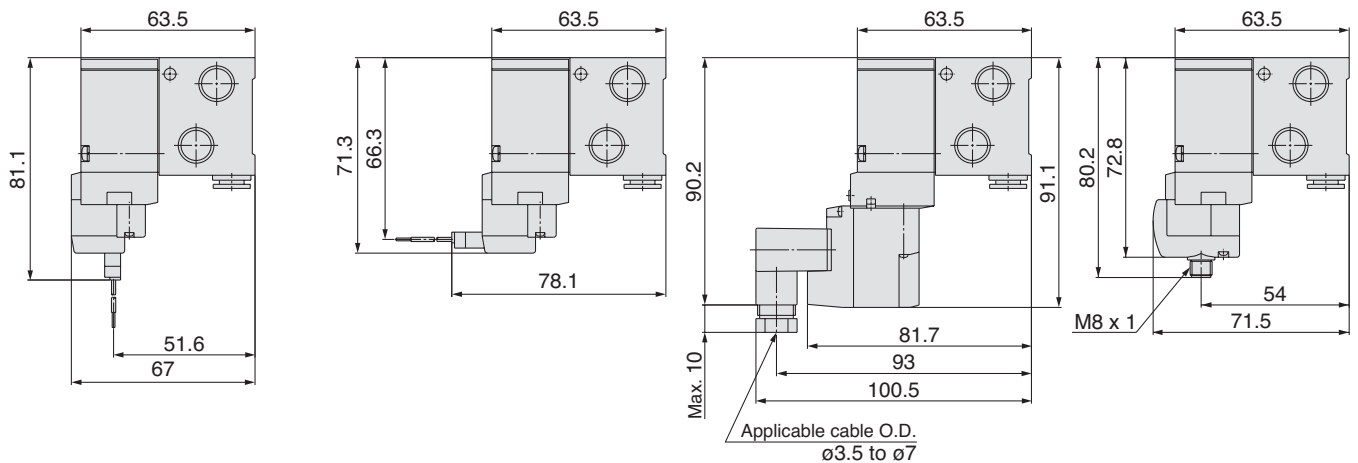


L plug connector (L)

M plug connector (M)

DIN terminal (D)

M8 connector (WO)



Station n	Station 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Station 20
L1	61	80	99	118	137	156	175	194	213	232	251	270	289	308	327	346	365	384	403
L2	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315	334	353	372	391



3 Port Solenoid Valve Direct Operated Poppet Type-Rubber Seal Body ported 1/8 Series VT307

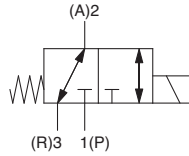
RoHS



Features

- 3 Port poppet valve.
- Robust construction.
- Universal porting.
- Suitable for vacuum applications.
- Energy saving (1.8W power consumption)

Symbol



How to Order

V T 307 [] [] - 5 D [] 1 - 01F - Q

Body type

T	Body ported
O	For manifold

Valve option

-	Standard type
E	Continuous duty type
Y	Energy-saving type
V	Vacuum specification type
W	Energy-saving type, Vacuum specification type

Pressure specifications

-	Standard type (0.7 MPa)
K	High-pressure type (1 MPa)

Rated voltage

1	100 VAC, 50/60 Hz
2	200 VAC, 50/60 Hz
3	110 VAC, 50/60 Hz
4	220 VAC, 50/60 Hz
5	24 VDC
6	12 VDC
7	240 VAC, 50/60 Hz
B	24 VAC

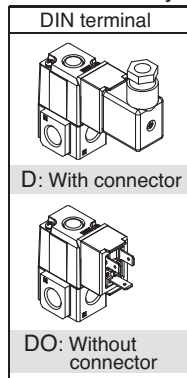
Port size

-	Without port (For manifold)
01F	G1/8 (6A)
02F	G1/4 (8A)

Light/Surge voltage suppressor

-	None
Z	With light/surge voltage suppressor

Electrical entry



Manifold

Model	Applicable manifold type	Accessories
VO307□-Q	Common or individual exhaust	Function plate (DXT152-14-1A) ^{Note)} Mounting screw (NXT013-3)

Note) It is not applicable to the continuous duty type.

Option

Description	Part no.
Bracket	DXT152-25-1A (With screw)



Related Products

- Series AN - Silencers - page 556
- Series AC - Air preparation - page 1076
- Series TU - Tubing - page 1223
- Series KQ2 - Fittings - page 1184

Product Recommendation



Stocked items for fast delivery (Body Ported Valves)

VT307-1D1-01F-Q	VT307-4D1-01F-Q	VT307-5D1-02F-Q	VT307-6D01-02F-Q	VT307-BD1-01F-Q	VT307V-5D1-01F-Q
VT307-3D1-01F-Q	VT307-4D1-02F-Q	VT307-5D01-02F-Q	VT307-6DZ1-01F-Q	VT307-BD01-01F-Q	VT307V-5D01-01F-Q
VT307-3D1-02F-Q	VT307-4D01-01F-Q	VT307-5DZ1-01F-Q	VT307-7D1-01F-Q	VT307-BD01-02F-Q	VT307V-5D01-02F-Q
VT307-3D01-01F-Q	VT307-4D01-02F-Q	VT307-5DZ1-02F-Q	VT307-7D01-01F-Q	VT307E-5D1-01F-Q	VT307V-5DZ1-01F-Q
VT307-3D01-02F-Q	VT307-4DZ1-01F-Q	VT307-6D1-01F-Q	VT307-7DZ1-01F-Q	VT307E-5D01-01F-Q	VT307V-6D01-01F-Q
VT307-3DZ1-01F-Q	VT307-4DZ1-02F-Q	VT307-6D1-02F-Q	VT307-7DZ1-02F-Q	VT307E-5D01-02F-Q	VT307Y-5D01-01F-Q
VT307-3DZ1-02F-Q	VT307-5D1-01F-Q	VT307-6D01-01F-Q			



Stocked items for fast delivery (Valves for Manifold)

VO307-BD01-Q	VO307-4D01-Q	VO307-5DZ1-Q	VO307Y-5DZ1-Q
VO307-3DZ1-Q	VO307-5D1-Q	VO307V-5D01-Q	

Specifications

Type of actuation	Direct operated type 2 position single solenoid		
Fluid	Air		
Operating pressure range	0 to 1 MPa (High-pressure type), 0 to 0.7 MPa (Standard type)		
Ambient and fluid temperature	-10 to 50°C (No freezing)		
Response time	20 ms or less (at 0.5 MPa)		
Max. operating frequency	10 Hz		
Lubrication	Not required (Use turbine oil Class 1 ISO VG32, if lubricated.)		
Manual override	Non-locking push type		
Mounting orientation	Unrestricted		
Impact/Vibration resistance	150/50 m/s ²		
Enclosure	Dustproof		
Electrical entry	DIN terminal		
Coil rated voltage [V]	AC (50/60 Hz)	24, 100, 110, 200, 220, 240	
	DC	12, 24	
Allowable voltage fluctuation	-15 to +10% of rated voltage		
Apparent power	AC	Inrush	12.7 VA (50 Hz), 10.7 VA (60 Hz)
		Holding	7.6 VA (50 Hz), 5.4 VA (60 Hz)
Power consumption	DC	4.2 W	
Light/Surge voltage suppressor	AC	Varistor, LED	
	DC	Diode, LED	

Flow-rate Characteristics

Valve model	Port size	Flow-rate characteristics								Weight Grommet
		1 → 2 (P → A)				2 → 3 (A → R)				
		C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	
VT307	1/8	0.71	0.35	0.18	187	0.68	0.27	0.17	170	0.15 kg
VT307V (Vacuum spec. type)										
VT307E (Continuous duty type)										
VT307Y (Energy-saving type)										
VT307W (Energy-saving, Vacuum spec. type)	1/4	0.41	0.26	0.10	102	0.44	0.35	0.11	116	
VT307										
VT307V (Vacuum spec. type)										
VT307E (Continuous duty type)										
VT307Y (Energy-saving type)		0.49	0.20	0.12	117	0.44	0.34	0.11	115	
VT307W (Energy-saving, Vacuum spec. type)										

Valve model	Port size	Flow-rate characteristics								Weight Grommet
		3 → 2 (R → A)				2 → 1 (A → P)				
		C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	
VT307	1/8	0.65	0.36	0.17	172	0.63	0.35	0.17	166	0.15 kg
VT307V (Vacuum spec. type)										
VT307E (Continuous duty type)										
VT307Y (Energy-saving type)										
VT307W (Energy-saving, Vacuum spec. type)	1/4	0.48	0.27	0.12	120	0.35	0.33	0.10	91	
VT307										
VT307V (Vacuum spec. type)										
VT307E (Continuous duty type)										
VT307Y (Energy-saving type)		0.68	0.33	0.17	176	0.71	0.26	0.18	176	
VT307W (Energy-saving, Vacuum spec. type)		0.48	0.17	0.12	113	0.46	0.28	0.11	116	

Note 1) Values for a single valve unit. It is not applicable to the manifold. Refer to the manifold specifications.

Note 2) These valves have been calculated according to ISO 6368.

Valve Options

Continuous duty type: VT307E

Specifications different from standard are as follows.

Apparent power/	Inrush	7.9 VA (50 Hz), 6.2 VA (60 Hz)
AC	Holding	5.8 VA (50 Hz), 3.5 VA (60 Hz)
Power consumption/DC	2 W	
Response time	30 ms or less (at 0.5 MPa)	

Energy-saving type: VT307Y (VT307W)

Specifications different from standard are as follows.

Power consumption/DC	2 W
Response time	25 ms or less (at 0.5 MPa)

Vacuum spec. type: VT307V (VT307W)

Specifications different from standard are as follows.

Operating pressure range	-101.2 kPa to 0.1 MPa
--------------------------	-----------------------

Connector for DIN Terminal

Description	Part no.
DIN connector	GM209NJ-B17

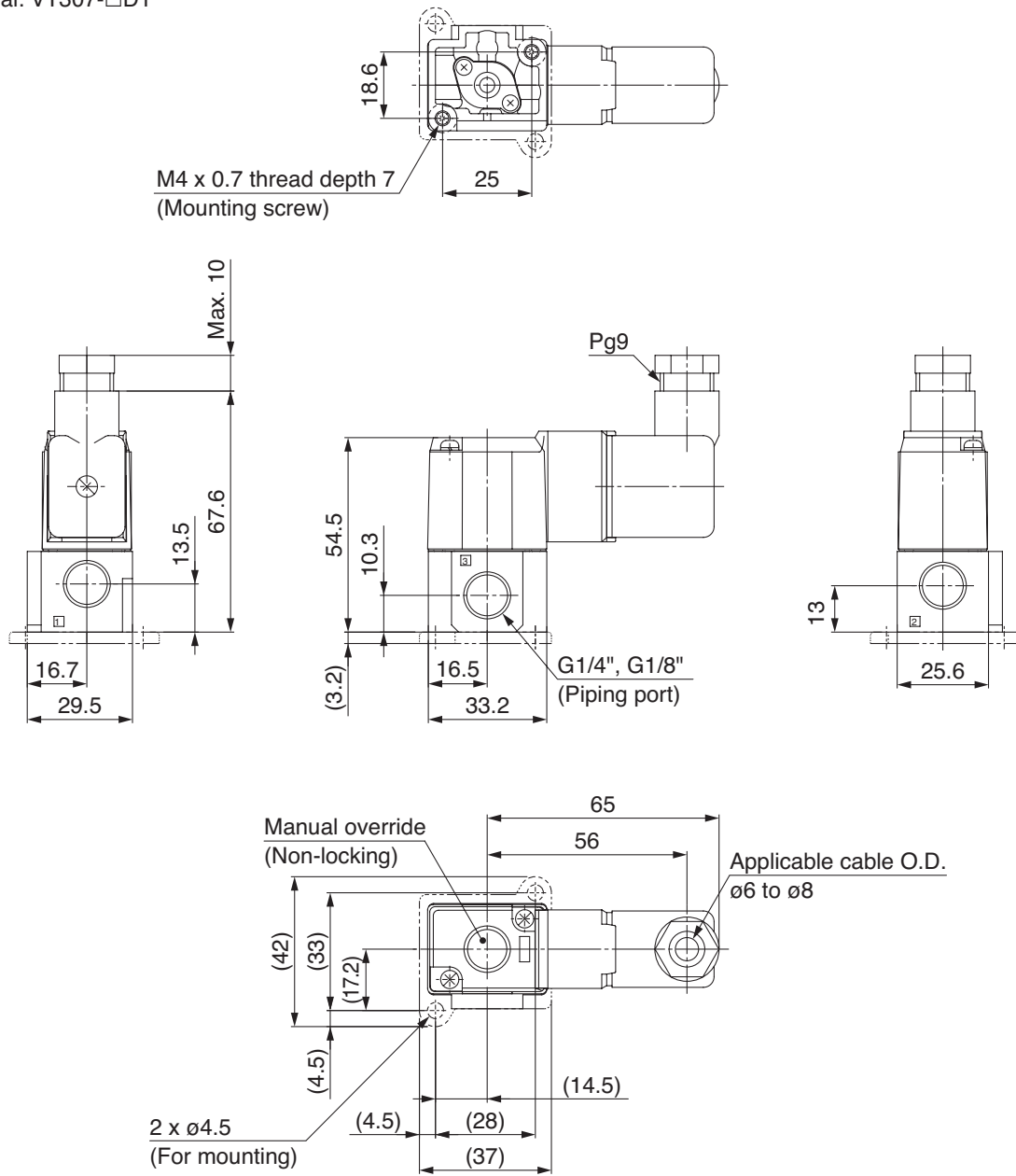


For more product options and details see our specific catalogues or on-line information.

Dimensions

DIN terminal: VT307-□D1

Valves



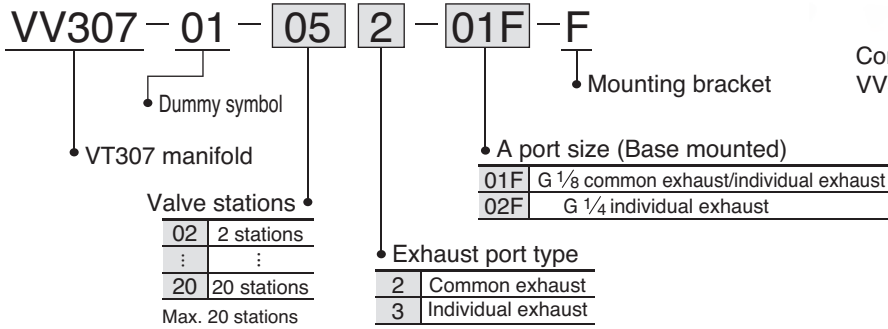
Manifold Specifications Series VT307



Common exhaust
VV307-01-052-□-F

Individual exhaust
VV307-01-053-□-F

How to Order Manifold Base



Manifold Specifications

Manifold type	B mount			
Max. number of stations	20 stations ^{Note)}			
Applicable solenoid valve	VO307□-□□□□-Q			
Exhaust port	Port location (Direction)/Port size			
Symbol	Type	P	A	R
2	Common	Base (Side) 1/8	Base (Side) 1/8	Base (Side) 1/8
3	Individual	Base (Side) 1/4	Base (Side) 1/8, 1/4	Base (Top) 1/8

Note) For 6 stations or more, supply air both sides of P port. The common exhaust type should exhaust from both of the R port.

Blanking Plate

Description	Part no.
Blanking plate (With gasket, screw) ^{Note)}	DXT060-51-13 ^A _B

Accessories

Description	Part no.	Qty.
Function plate (With gasket) ^{Note)}	DXT152-14-1 ^A _B	1 pc.
Mounting screws	NXT013-3	2 pcs.

Note) DXT060-51-13B, DXT152-14-1B are for the continuous duty type.

Flow-rate Characteristics

Valve model	Flow-rate characteristics								Weight
	1 → 2 (P → A)				2 → 3 (A → R)				
	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	
VO307	0.34	0.28	0.089	85	0.34	0.22	0.082	82	0.15 kg
VO307V (Vacuum spec. type)									
VO307E (Continuous duty type)									
VO307Y (Energy-saving type)	0.30	0.18	0.070	71	0.30	0.15	0.072	70	
VO307W (Energy-saving, Vacuum spec. type)									

Valve model	Flow-rate characteristics								Weight
	3 → 2 (R → A)				2 → 1 (A → P)				
	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	
VO307	0.36	0.28	0.091	90	0.34	0.18	0.080	81	0.15 kg
VO307V (Vacuum spec. type)									
VO307E (Continuous duty type)									
VO307Y (Energy-saving type)	0.32	0.20	0.075	77	0.30	0.15	0.069	70	
VO307W (Energy-saving, Vacuum spec. type)									

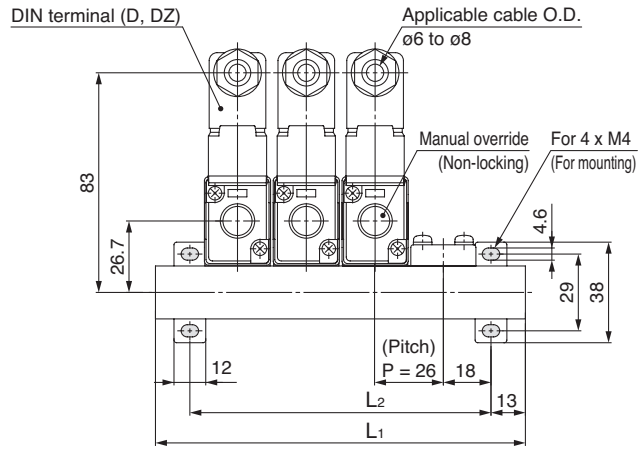
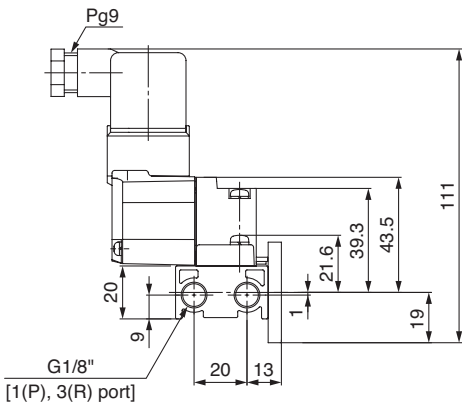
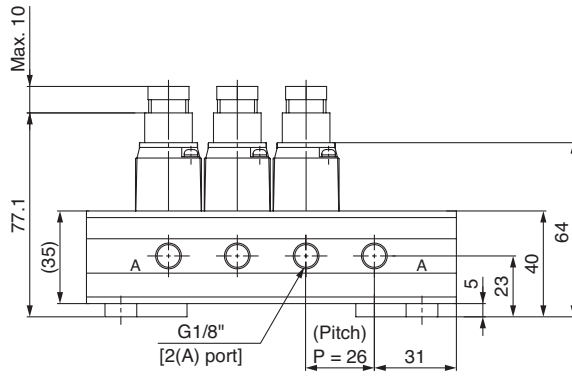
* These valves have been calculated according to ISO 6368.



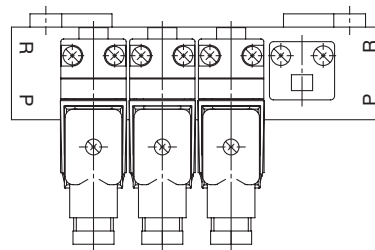
For more product options and details see our specific catalogues or on-line information.

Dimensions

Common Exhaust
VV307-01-□2-01-F



(Station n) (Station 1)



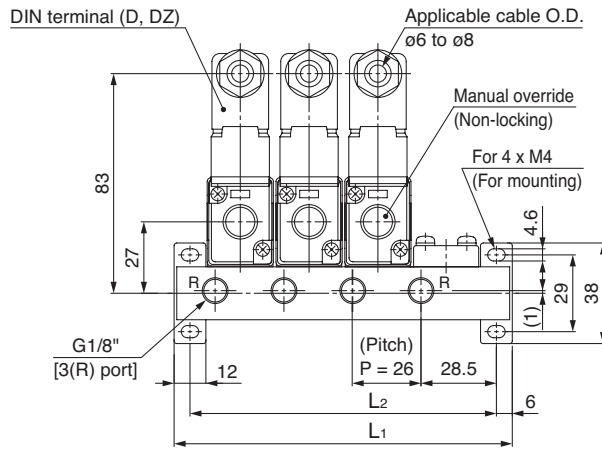
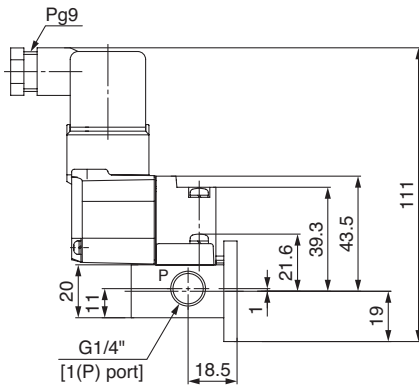
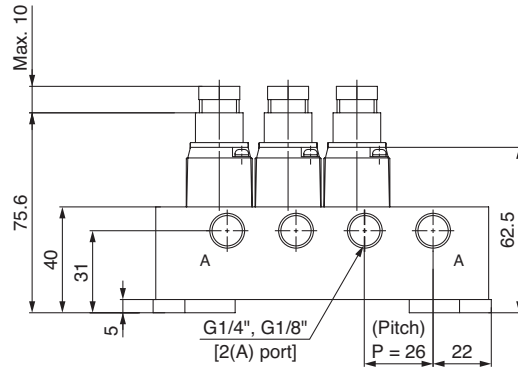
L Dimension

n: Stations

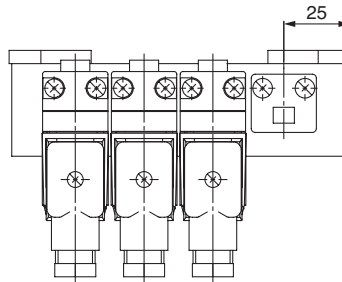
L \ n	2	3	4	5	6	7	8	9	10	Formula
L ₁	88	114	140	166	192	218	244	270	296	$L_1 = 26 \times n + 36$
L ₂	62	88	114	140	166	192	218	244	270	$L_2 = 26 \times n + 10$

Dimensions

Individual Exhaust
VV307-01-□3-□-F



(Station n) (Station 1)



L Dimension

n: Stations

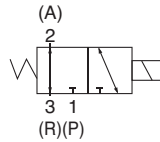
L \ n	2	3	4	5	6	7	8	9	10	Formula
L ₁	76	102	128	154	180	206	232	258	284	L ₁ = 26 x n + 24
L ₂	64	90	116	142	168	194	220	246	272	L ₂ = 26 x n + 12



3 Port Direct Operated Poppet Type-Rubber Seal Body ported 1/4 Series EVT317 (VT317)



Symbol



Features

- 3 Port Poppet valve.
- Robust construction.
- Universal porting.
- Suitable for vacuum applications.

Note: Part numbering for Europe is EVT317. The Japanese standard series is VT317, the only difference is the Rc (taper thread) port in the Japanese version. The manifold mounted valves VO317 do not use the E prefix.

How to Order

EVT 3 1 7 – **5 D** – **02F** – **Q**

Body type	
EVT	Body ported
VO	For Manifold

Body size	
1	1/4 Body ported

Valve option	
–	Standard type
E	Continuous duty type
Y	Energy saving
V	Vacuum
W	Energy saving/Vacuum

Rated voltage	
1	100 VAC, 50/60 Hz
2	200 VAC, 50/60 Hz
3	110 VAC, 50/60 Hz
4	220, 230 VAC, 50/60 Hz
5	24 VDC
6	12 VDC
7	240 VAC, 50/60 Hz
B	24 VAC

Port size	
–	Without port (For manifold)
02F	G1/4

Light/Surge voltage suppressor	
–	None
Z	With light/surge voltage suppressor

Electrical entry	
D	DIN connector (with connector)
DO	DIN connector (without connector)

Product Recommendation



Stocked items for fast delivery/Body Ported Valves

EVT317-3D-02F-Q	EVT317-6D-02F-Q	EVT317V-4DO-02F-Q
EVT317-3DO-02F-Q	EVT317-6DO-02F-Q	EVT317V-5DO-02F-Q
EVT317-3DZ-02F-Q	EVT317-6DZ-02F-Q	EVT317V-5DZ-02F-Q
EVT317-4D-02F-Q	EVT317-BD-02F-Q	EVT317V-BDO-02F-Q
EVT317-4DO-02F-Q	EVT317-BDO-02F-Q	
EVT317-4DZ-02F-Q	EVT317-BDZ-02F-Q	
EVT317-5D-02F-Q	EVT317E-5D-02F-Q	
EVT317-5DO-02F-Q	EVT317E-5DO-02F-Q	
EVT317-5DZ-02F-Q	EVT317E-5DZ-02F-Q	



Related Products

- Series AN - Silencers - page 556
- Series AC - Air preparation - page 1076
- Series TU - Tubing - page 1223
- Series KQ2 - Fittings - page 1184



Stocked items for fast delivery/Valves for Manifold

VO317-3DO-Q	VO317-5DZ-Q	VO317V-5DO-Q
VO317-4DO-Q	VO317E-5DZ-Q	VO317V-5D-Q
VO317-5DO-Q		

Specifications

Valve model	EVT317, VO317		
Type of actuation	Direct operated type 2 position single solenoid		
Fluid	Air		
Operating pressure range	0 to 0.9 MPa		
Ambient and fluid temperature	-10 to 50°C (No freezing)		
Response time	30 ms or less (at the pressure of 0.5 MPa)		
Max. operating frequency	10 Hz		
Lubrication	Not required (Use turbine oil Class 1 ISO VG32, if lubricated.)		
Mounting orientation	Unrestricted		
Enclosure	Dustproof		
Electrical entry	DIN terminal		
Coil rated voltage [V]	AC (50/60 Hz)	24, 100, 110, 200, 220, 240	
	DC	12, 24	
Allowable voltage fluctuation	-15 to +10% of rated voltage		
Apparent power	AC	Inrush	19 VA (50 Hz)
		Holding	11 VA (50 Hz)
Power consumption	DC	Without indicator light: 6 W, With indicator light: 6.3 W	

Universal Porting

Valve function	3-way normally closed	3-way normally open	2-way normally closed	2-way normally open	Selector	Diverter
De-energized						
Energized						

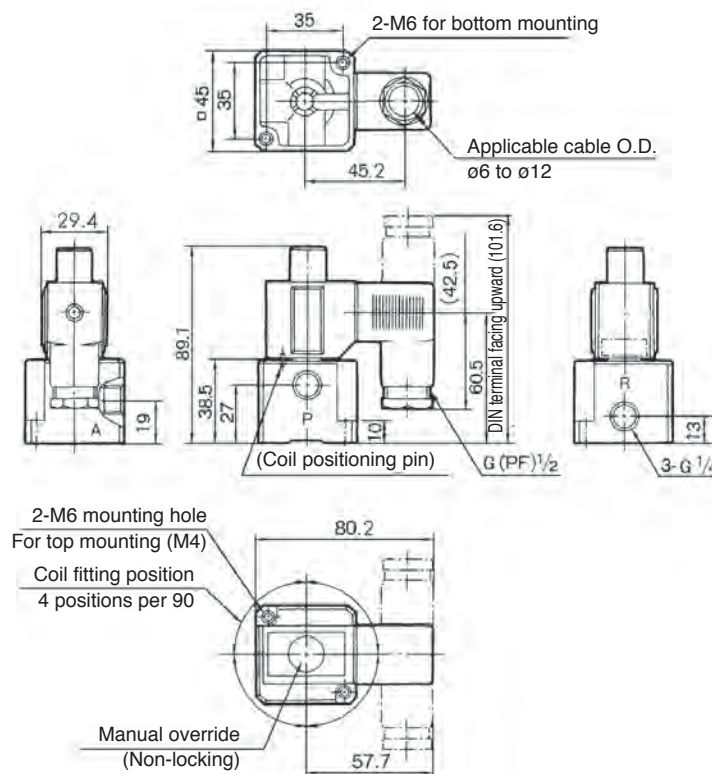
Flow Characteristics/Weight for EVT317

Valve model	Flow characteristics												Weight Grommet
	1 → 2 (P → A)			2 → 3 (A → R)			3 → 2 (R → A)			2 → 1 (A → P)			
	C [dm ³ /(sbar)]	b	Cv	C [dm ³ /(sbar)]	b	Cv	C [dm ³ /(sbar)]	b	Cv	C [dm ³ /(sbar)]	b	Cv	
EVT317	2.4	0.26	0.62	2.6	0.34	0.67	2.8	0.25	0.67	2.5	0.37	0.66	0.29 kg
EVT317E (Continuous duty type)													

Note) Values for a single valve unit. It differs in the manifold case. Refer to manifold specifications.

Dimensions

EVT317-□D



Manifold Specifications Series EVT317

How to order

Manifold for VO317 **EVV317-02-05 1 - 02 F**

Valve stations	
02	2 stations
⋮	⋮
20	20 stations

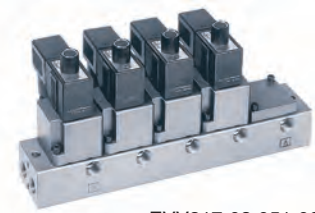
Max. 20 stations.

Exhaust port type	
1	Common exhaust
3	Individual exhaust (see table below)

A port size (Base mounted)

01	1/8 common exhaust/individual exhaust (for VO307 only)
02	1/4 individual exhaust

VO317 manifold valve can be easily converted from N.C. (Normally Closed) to N.O. (Normally Open) by rotating the valve 180° on the manifold.



EVV317-02-051-02

Product Recommendation



Stocked items for fast delivery/Manifold

EVV317-02-021-02F	EVV317-02-031-02F	EVV317-02-061-02F
EVV317-02-023-02F	EVV317-02-041-02F	EVV317-02-101-02F

Specifications

Manifold type		B mount		
Max. number of stations		20 stations ^{Note 1)}		
Exhaust port		Port location (Direction)/Port size		
Symbol	Type	P	A	R
1	Common ^{Note 2)}	Base (Side)	Base (Side)	Base (Side)
		1/4 (3/8)	1/4	1/4 (3/8)
3	Individual	Base (Side)	Base (Side)	Base (Top)
		1/4	1/4	1/4

Note 1) If operating with 3 valves or more, apply supply pressure to both of the P ports of the manifold.

The common exhaust style should exhaust from both of the R ports.

Note 2) If the case of common exhaust type, R and P port sizes can be 3/8 by using a mounting adaptor.

Blanking Plates

Description	Part no.
Blanking plate (With gasket, screw)	PVT317-53-1A

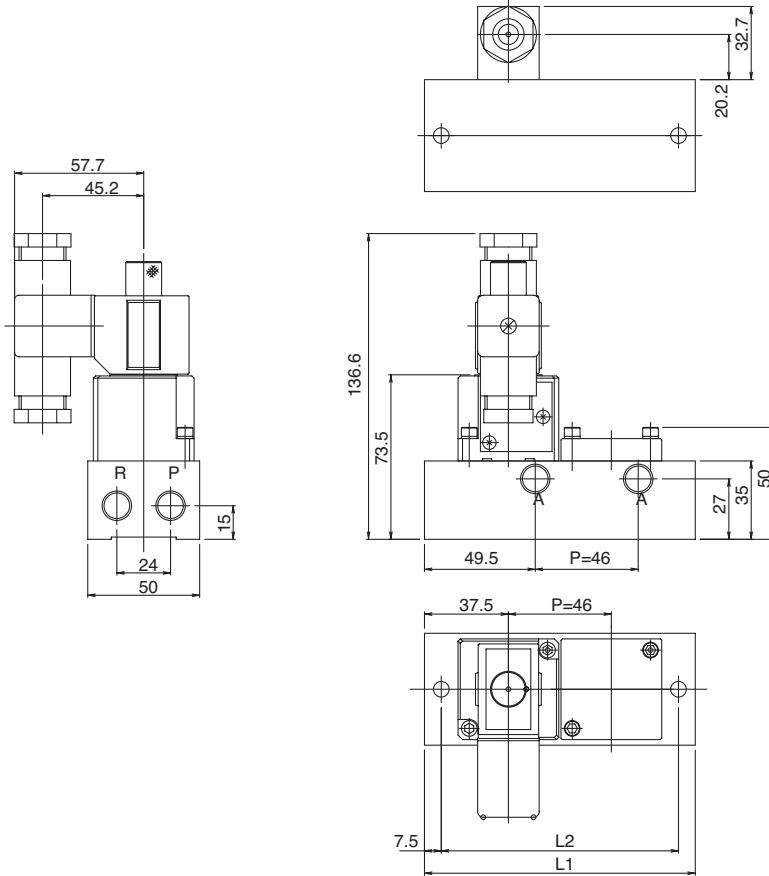
Flow Characteristics/Weight

Valve model	Flow characteristics												Weight
	1 → 2 (P → A)			2 → 3 (A → R)			3 → 2 (R → A)			2 → 1 (A → P)			
	C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv	Grommet
VO317	2.0	0.11	0.47	2.2	0.12	0.49	2.0	0.14	0.45	2.1	0.14	0.48	0.32 kg
VO317E (Continuous duty type)													

Dimensions: Common Exhaust

Note: Grommet, Grommet terminal and conduit terminal valve types shown, are not available in Europe.

Without mounting bracket: VV317-02-□1-02



L Dimension

n: Stations

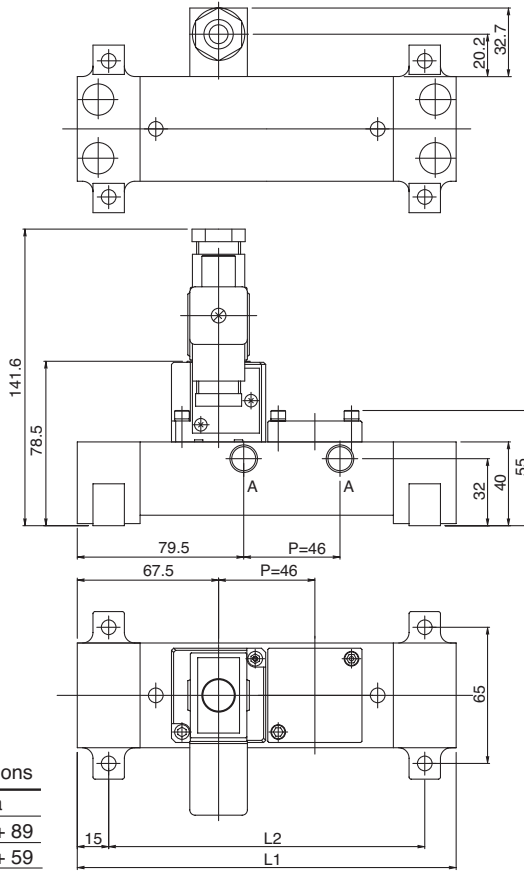
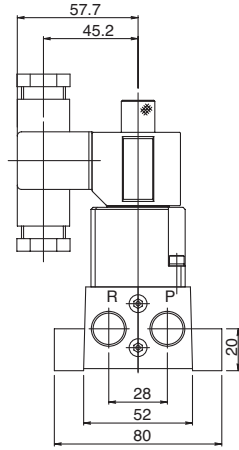
Stations	2	3	4	5	6	7	8	9	10	Formula
L ₁	121	167	213	259	305	351	397	443	489	L ₁ = 46 x n + 29
L ₂	106	152	198	244	290	336	382	428	474	L ₂ = 46 x n + 14



Dimensions: Common Exhaust

Note: Grommet, Grommet terminal and conduit terminal valve types shown, are not available in Europe.

With mounting adaptor: VV317-02-□1-02-A

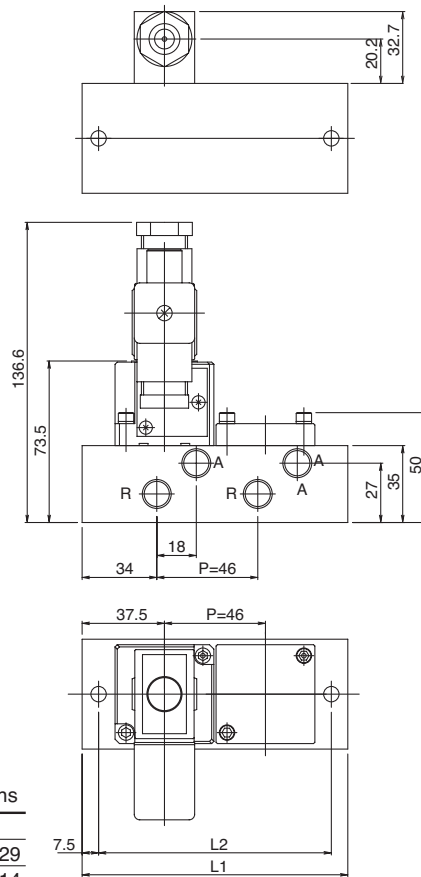
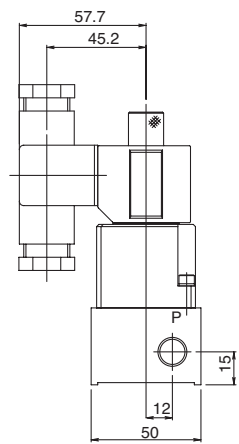


L Dimension		n: Stations									
Stations	2	3	4	5	6	7	8	9	10	Formula	
L ₁	181	227	273	319	365	411	457	503	549	L ₁ = 46 x n + 89	
L ₂	151	197	243	289	335	381	427	473	519	L ₂ = 46 x n + 59	

Dimensions: Individual Exhaust

Note: Grommet, Grommet terminal and conduit terminal valve types shown, are not available in Europe.

Without mounting bracket/VV317-02-□3-02



L Dimension		n: Stations									
Stations	2	3	4	5	6	7	8	9	10	Formula	
L ₁	121	167	213	259	305	351	397	443	489	L ₁ = 46 x n + 29	
L ₂	106	152	198	244	290	336	382	428	474	L ₂ = 46 x n + 14	

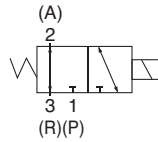
3 Port Direct Operated Poppet Type - Rubber Seal Series EVT325



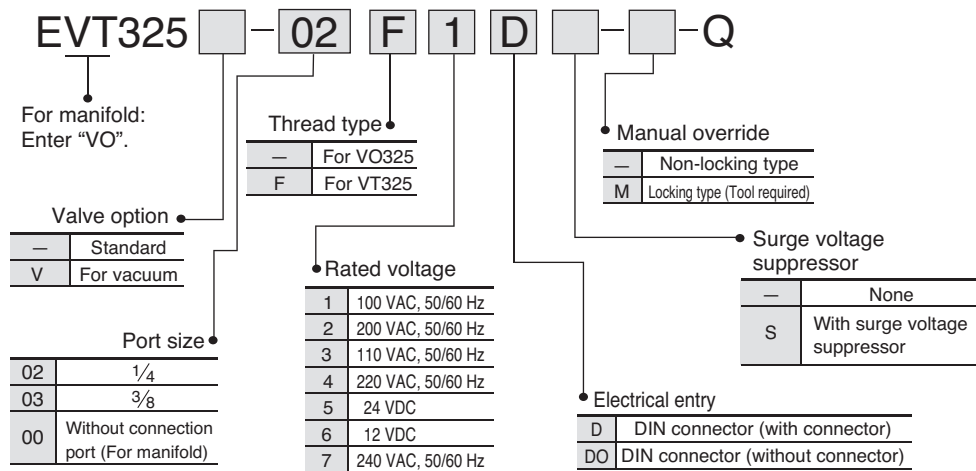
Features

- Robust construction.
- Universal porting.
- Suitable for vacuum applications.
- Integral mounting bracket.
- Energy saving (1.8W power consumption).

Symbol



How to Order



Product Recommendation



Stocked items for fast delivery (Valves)

EVT325-03F4D-Q EVT325-03F4D-Q EVT325-03F4D-Q



Related Products

Series AN - Silencers - page 556
Series AC - Air preparation - page 1076
Series TU - Tubing - page 1223
Series KQ2 - Fittings - page 1184

Specifications

Type of actuation	Direct operated type 2 position single solenoid			
Fluid	Air			
Operating pressure range	0 to 1.0 MPa			
Ambient and fluid temperature	-10 to 50°C (No freezing.)			
Max. operating frequency	5 Hz			
Response time	30 ms or less (at the pressure of 0.5 MPa)			
Lubrication	Not required (Use turbine oil Class 1 ISO VG32, if lubricated.)			
Manual override	Non-locking push type			
Enclosure	Dustproof			
Electrical entry	DIN terminal			
Coil rated voltage	100, 200 VAC, 50/60 Hz, 24 VDC			
Allowable voltage fluctuation	-15 to +10% of rated voltage			
Apparent power	AC	Inrush	50 Hz	75 VA
			60 Hz	60 VA
		Holding	50 Hz	27 VA
			60 Hz	17 VA
Power consumption	DC	12 W		

Universal Porting

Valve function	3-way normally closed	3-way normally open	2-way normally closed
De-energized			
Energized			
Valve function	2-way normally open	Selector	Diverter
De-energized			
Energized			



For more product options and details see our specific catalogues or on-line information.

Flow Characteristics/Weight

Valve model	Port size	Flow characteristics								Weight	
		1 → 2 (P → A)				2 → 3 (A → R)				Grommet	
		C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*		
EVT325	1/4	5.5	0.37	1.4	1465	5.9	0.35	1.5	1550	0.55 kg (For AC)	
EVT325V (Vacuum spec. type)											
EVT325	3/8	5.5	0.37	1.4	1465	6.1	0.37	1.6	1625	0.60 kg (For DC)	
EVT325V (Vacuum spec. type)											

Valve model	Port size	Flow characteristics								Weight	
		3 → 2 (R → A)				2 → 1 (A → P)				Grommet	
		C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*		
EVT325	1/4	5.5	0.33	1.4	1426	5.7	0.32	1.4	1468	0.55 kg (For AC)	
EVT325V (Vacuum spec. type)											
EVT325	3/8	5.7	0.34	1.4	1487	6.6	0.25	1.5	1627	0.60 kg (For DC)	
EVT325V (Vacuum spec. type)											

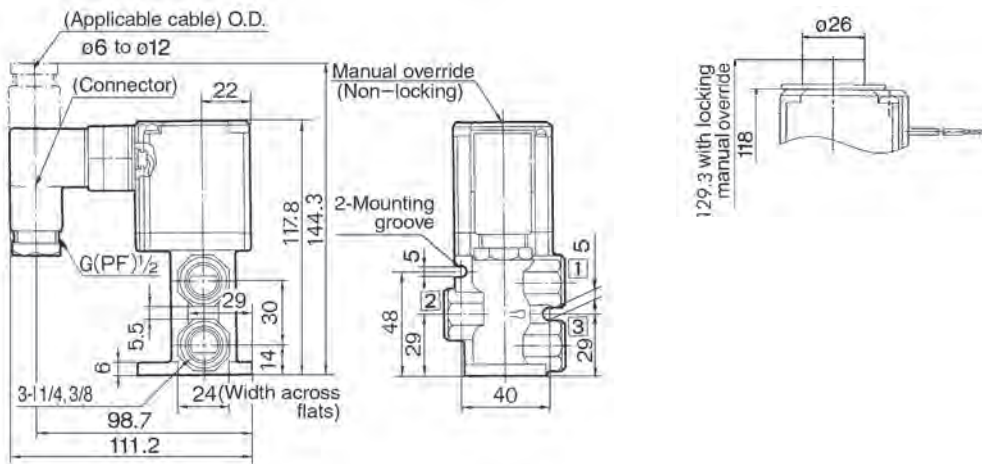
Note) Values for a single valve unit. It differs in the manifold case. Refer to manifold specifications.
 * These valves have been calculated according to ISO 6368.

Valves

Dimensions

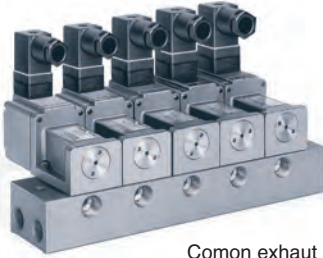
EVT325-□D
 DIN terminal (D)

With locking manual override



Manifold Specifications Series EVT325

How to Order Manifold



Comon exhaust

EVVT34 0-05 1-02 F

Porting specifications

Symbol	P	A	R
0	Side	Side	Side
1	Side	Bottom	Side

Valve stations

02	2 stations
⋮	⋮
17	17 stations

Port size

Symbol	Port size
02	1/4
03	3/8

Exhaust port type

1	Common exhaust
---	----------------

Note)

The valve function is changed from N.C. (Normally Closed) to N.O. (Normally Open) by rotating the valve 180° on the manifold.

Specifications

Exhaust port type	Port location/Port size			Port direction		
	P	A	R	P	A	R
Common	Base 1/4, 3/8	Base 1/4, 3/8	Base 1/4, 3/8	Side	Side/Bottom	Side
Option	Blanking plate (With seal, screw)			DXT083-21A		

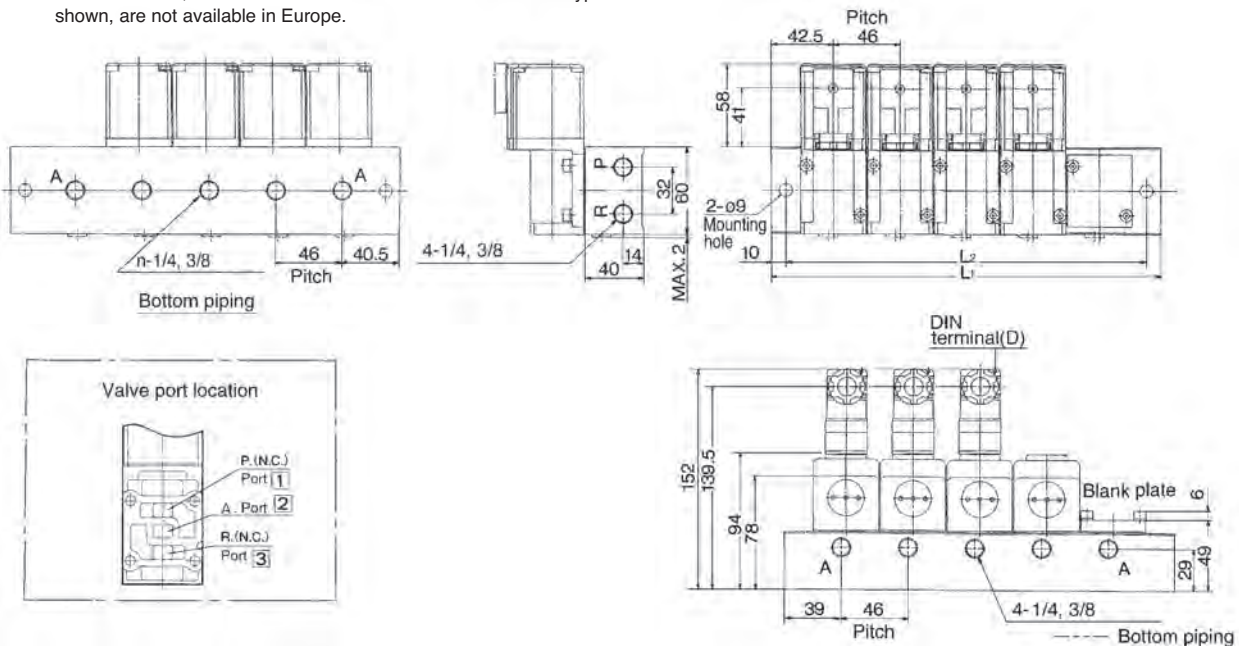
Flow characteristics/Weight

Valve model	Flow characteristics															Weight	
	1 → 2 (P → A)			2 → 3 (A → R)			3 → 2 (R → A)			2 → 1 (A → P)			Grommet				
	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*		C [dm ³ /(s·bar)]	b		Cv
VO325	4.1	0.24	1.0	1005	4.4	0.18	1.0	1042	4.5	0.15	1.0	1049	4.3	0.23	1.0	1048	0.58 kg (For AC) 0.63 kg (For DC)
VO325V (Vacuum spec. type)																	

* These valves have been calculated according to ISO 6368.

Dimensions: Common exhaust

Note: Grommet, Grommet terminal and conduit terminal valve types shown, are not available in Europe.



n: Stations

Symbol	n	2	3	4	5	6	7	8	9	10
L1		131	177	223	269	315	361	407	453	499
L2		111	157	203	249	295	341	387	433	479

Formula: L1 = 46n + 39, L2 = 46n + 19

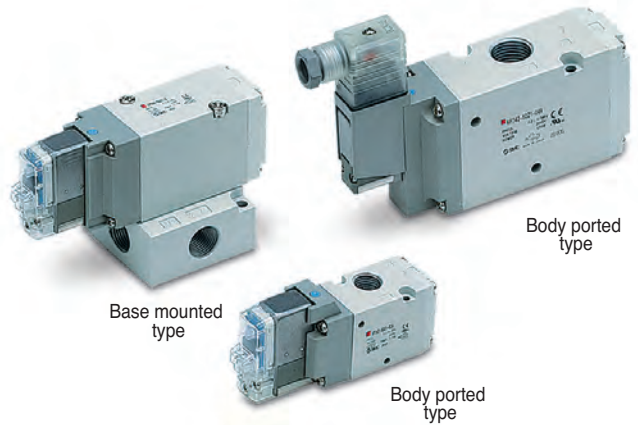


For more product options and details see our specific catalogues or on-line information.

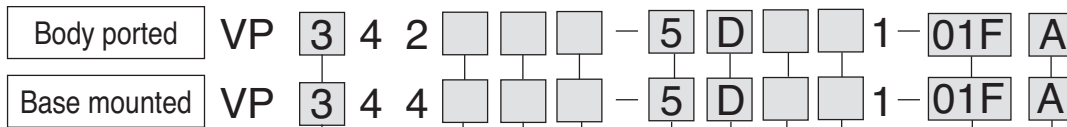
3 Port Pilot Operated Poppet Type Rubber Seal Series VP300/500/700

Features

- Low power consumption 1.55W (Standard), 0.55W (with power saving circuit).
- Possible to use as either a selector or divider valve.
- Changeable from normally closed type to normally open type.
- Suitable for use in vacuum applications Up to -100.0 kPa
- Longer life expectancy: 50 million cycles or more



How to Order



Series	3 VP300 5 VP500 7 VP700	Pilot type	- Internal pilot R External pilot
Pressure specification	- Standard (0.7 MPa) K High-pressure type (1.0 MPa)		

Coil specification	- Standard T With power saving circuit (DC only)
--------------------	---

Note 1) Be sure to select the power saving circuit type when it is continuously energized for a long time. Note 2) T type is only available for DC mode. When T is selected, only Z type of light/surge voltage suppressor is available.

Rated voltage

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

Note) Only DIN terminal type can be set for AC mode. Refer to the electrical entry for details.

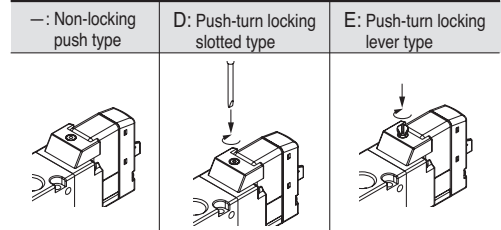
Type of actuation	A N.C. (Normally closed) B N.O. (Normally open)
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Port size

Symbol	Port size	VP300	VP500	VP700
-	Without sub-plate*	○	○	○
01F	G1/8	○	-	-
02F	G1/4	○	○	-
03F	G3/8	-	○	○
04F	G1/2	-	-	○

* Base mounted type only (VP344, VP544, VP744). With a gasket and two mounting bolts.

Manual override



Light/surge voltage suppressor

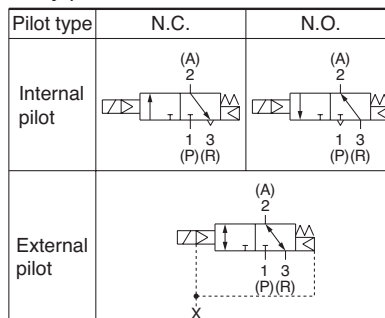
	- Without light/surge voltage suppressor Z With light/surge voltage suppressor
--	---

Electrical entry

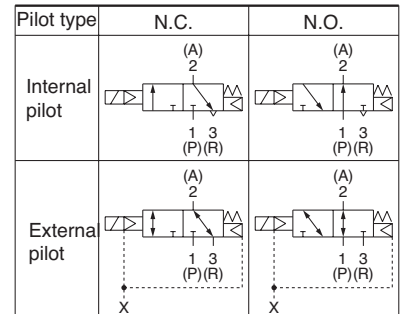
	Grommet	L-type plug connector	DIN terminal (IP65 compatible)	DIN (EN175301-803) terminal (IP65 compatible)
	G: Lead wire length 300 mm	LO: Without connector	D: With connector DO: Without connector	Y: With connector YO: Without connector
DC	●	●	●	●
AC	-	-	●	●

Symbol

Body ported



Base Mounted



Product Recommendation



Stocked items for fast delivery (Body Ported Valves)

VP342-3YD1-02FA	VP342-5YD1-02FA	VP342R-5Y01-02FA	VP542-5Y01-02FA	VP542R-5Y01-03FA	VP742-5Y01-04FA
VP342-3Y01-02FA	VP342-5Y01-01FA	VP342R-5YOD1-02FA	VP542-5Y01-03FA	VP742-3YD1-04FA	VP742-5YOD1-04FA
VP342-3YOD1-02FA	VP342-5Y01-02FA	VP542-3YD1-03FA	VP542-5Y01-03FB	VP742-3Y01-04FA	VP742R-3YD1-04FA
VP342-4YD1-02FA	VP342-5YOD1-01FA	VP542-3Y01-03FA	VP542-5YOD1-02FA	VP742-3YOD1-04FA	VP742R-5DD1-04FA
VP342-4Y01-02FA	VP342-5YOD1-02FA	VP542-3YOD1-03FA	VP542-5YOD1-03FA	VP742-4YD1-04FA	VP742R-5YD1-04FA
VP342-4YOE1-02FA	VP342K-5YOD1-02FA	VP542-4YD1-03FA	VP542R-4YD1-03FA	VP742-4YOD1-04FA	VP742R-5Y01-04FA
VP342-4YZD1-02FA	VP342R-4YD1-02FA	VP542-4Y01-03FA	VP542R-5YD1-03FA	VP742-5YD1-04FA	VP742R-5YOD1-04FA
VP342-5DD1-02FA	VP342R-5YD1-02FA	VP542-5YD1-03FA			



Stocked items for fast delivery (Base Mounted Valves)

VP344-5Y01-02FA	VP344-5Y01-A	VP344-5YOD1-02FA	VP344-5YOD1-A	VP344R-5Y01-A	VP544-5D01-03FA
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Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air preparation - page 1076

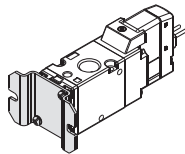
Series TU - Tubing - page 1223

Series KQ2 - Fittings - page 1184

Accessories

Brackets (for body ported type)

Description	Series	Part no.
Bracket (With 2 screws)	VP342	VP300-227-1A
	VP542	VP500-227-1A
	VP742	VP700-227-1A



Sub-plates (for base mounted type)

Series	Sub-plate part no.	Port size	Sub-plate gasket
VP344	VP300-202-1F	G1/8	VP300-217-1
	VP300-202-2F	G1/4	
VP544	VP500-202-1F	G1/4	VP500-217-1
	VP500-202-2F	G3/8	
VP744	VP700-202-1F	G3/8	VP700-217-1
	VP700-202-2F	G1/2	



Standard Specifications

Fluid	Air		
Type of actuation	N.C. or N.O. (Convertible)		
Pilot type	Internal pilot	External pilot	
Operating pressure range [MPa]	Internal pilot	Standard	0.2 to 0.7
		High-pressure type	0.2 to 1.0
	External pilot	Standard	-100 kPa to 0.7
		High-pressure type	-100 kPa to 1.0
		Pilot pressure range	Same as operating pressure (min 0.2 MPa)
Ambient and fluid temperature [°C]	-10 to 50 (No freezing)		
Response time [ms]	from 13 to 47 or less (at 0.5 MPa)		
Max. operating frequency [Hz]	5		
Lubrication	Not required		
Manual override	Non-locking push type		
	Locking type (Slotted), Locking type (Manual)		
Mounting orientation	Unrestricted		
Pilot exhaust type	Individual exhaust		
Impact/Vibration Resistance [m/s ²]	300/500		
Enclosure	Dust-tight (IP65 for D, Y)		

External Pilot (Option)

Use external pilot model in the following cases:

- For vacuum or for low pressure 0.2 MPa or less
- Please consult with SMC for use in a vacuum hold application.
- When having P port downsized in diameter
- When using A port as the atmospheric releasing port, e.g. air blower

Electrical Specifications

Electrical entry	Grommet (G) L-type plug connector (L)		DIN terminal (D) DIN (EN175301-803) terminal (Y)	
	G, L		D, Y	
Coil rated voltage [V]	DC	24, 12		
	AC (50/60 Hz)	24, 100, 110, 200, 220, 240		
Allowable voltage fluctuation	10% of rated voltage			
Power consumption [W]	DC	Standard	1.5 (With light: 1.55)	1.5 (With light: 1.75)
		With power saving circuit	0.55 (With light only)	0.75 (With light only)
Apparent power [VA] <small>Notes</small>	AC	100 V	1.55 (With light: 1.65)	1.55 (With light: 1.7)
		110 V [115 V]		
		200 V		
		220 V [230 V]		
		240 V		
Surge voltage suppressor	Diode (Non-polar type: Varistor)			
Indicator light	LED (Neon bulb is used for AC mode of D, Y)			

- Note 1) It is in common between 110 VAC and 115 VAC, and between 220 VAC and 230 VAC.
 Note 2) Allowable voltage fluctuation is -15% to +5% of the rated voltage for 115 VAC or 230 VAC.
 Note 3) Since voltage drops due to the internal circuit in Z, T types (with power saving circuit), the allowable voltage fluctuation should be within the following range.
 24 VDC: -7% to +10%
 12 VDC: -4% to +10%

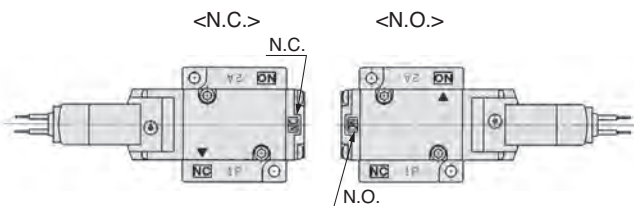
Valve Specification

Change of Actuation

⚠ Caution

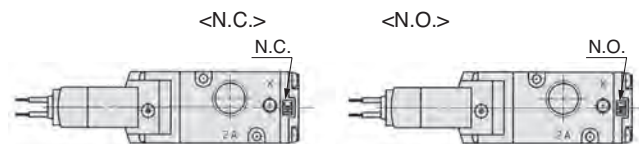
When changing the actuation from N.C. to N.O. follow instructions below

1) Base mounted



1. Remove the body from the sub-plate and reset the "▼" mark on the body corresponding to the "N.O." mark on the sub-plate as shown in the figure above.
 2. Remove the end plate from the body and rotate the end plate by 180 so that the "N.O." mark on the end plate is at the top of the valve.
- * It is not necessary to change the piping when this is done.

2) Body ported



1. Remove the end plate from the body and rotate the end plate by 180 to correspond the "N.O." mark on the end plate to the top of the valve.

* Piping should be arranged as follows.

Type of actuation \ Port	Port		
	1P	2A	3R
N.C.	Inlet side	Outlet side	Exhaust side
N.O.	Exhaust side	Outlet side	Inlet side

Flow Characteristics/Weight

Body Ported Type

Model	Port size	1 → 2 (P → A)				2 → 3 (A → R)				Weight [g] ^{Note)}	
		C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	Grommet	DIN terminal
VP342	G1/8	3.5	0.26	0.8	868	3.6	0.26	0.9	893	149	185
	G1/4	4.2	0.22	1.0	1018	4.2	0.23	1.0	1023	145	181
VP542	G1/4	7.9	0.21	1.8	1903	7.2	0.27	1.8	1797	249	285
	G3/8	8.9	0.16	2.2	2085	8.9	0.20	2.1	2132	241	277
VP742	G3/8	11.9	0.21	2.7	2867	11.8	0.20	2.7	2826	484	520
	G1/2	15.1	0.21	3.6	3637	15.3	0.22	3.7	3707	467	503

Note) Values without bracket

* These valves have been calculated according to ISO 6368.

Base Mounted Type

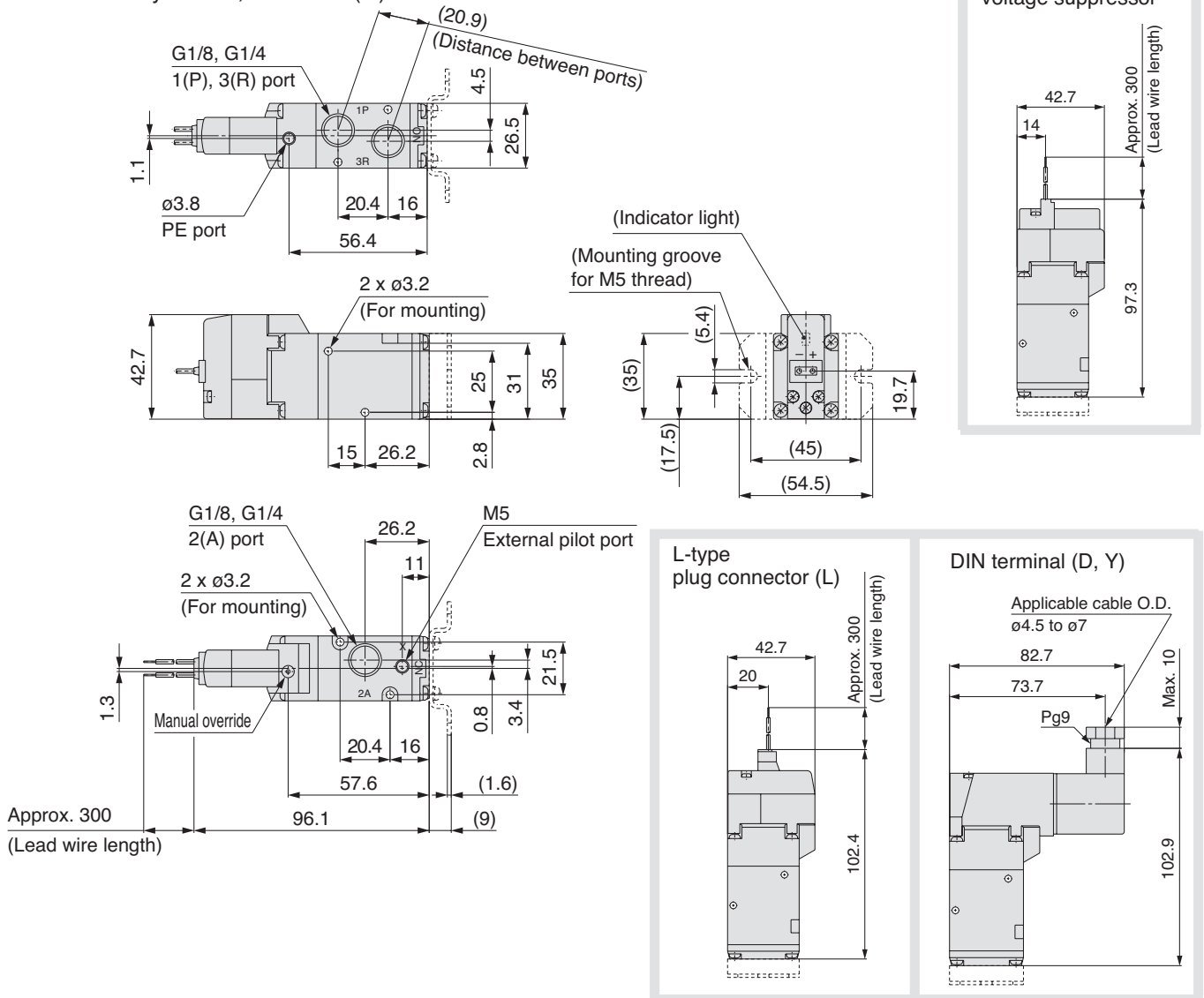
Model	Port size	1 → 2 (P → A)				2 → 3 (A → R)				Weight [g] ^{Note)}	
		C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	C [dm ³ /(s·bar)]	b	Cv	Q [L/min] (ANR)*	Grommet	DIN terminal
VP344	G1/8	3.6	0.22	0.8	872	3.5	0.24	0.8	858	216 (149)	252 (185)
	G1/4	3.9	0.22	0.9	945	3.8	0.14	0.9	881	211 (149)	247 (185)
VP544	G1/4	7.5	0.16	1.7	1757	7.3	0.20	1.7	1749	370 (245)	406 (281)
	G3/8	8.8	0.07	2.0	1968	8.8	0.13	2.0	2029	362 (245)	398 (281)
VP744	G3/8	12.9	0.10	2.9	2929	13.3	0.24	3.1	3260	676 (459)	712 (495)
	G1/2	14.7	0.05	3.3	3256	15.0	0.17	3.4	3534	658 (459)	694 (495)

Note) Values without sub-plate

* These valves have been calculated according to ISO 6368.

Dimensions

VP300/Body Ported, Grommet (G)



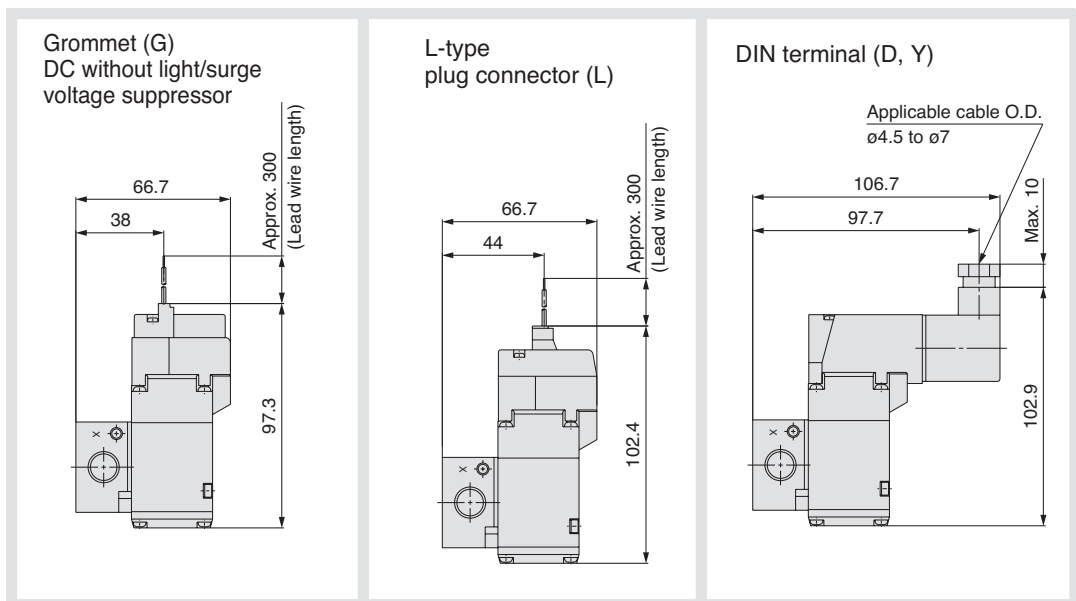
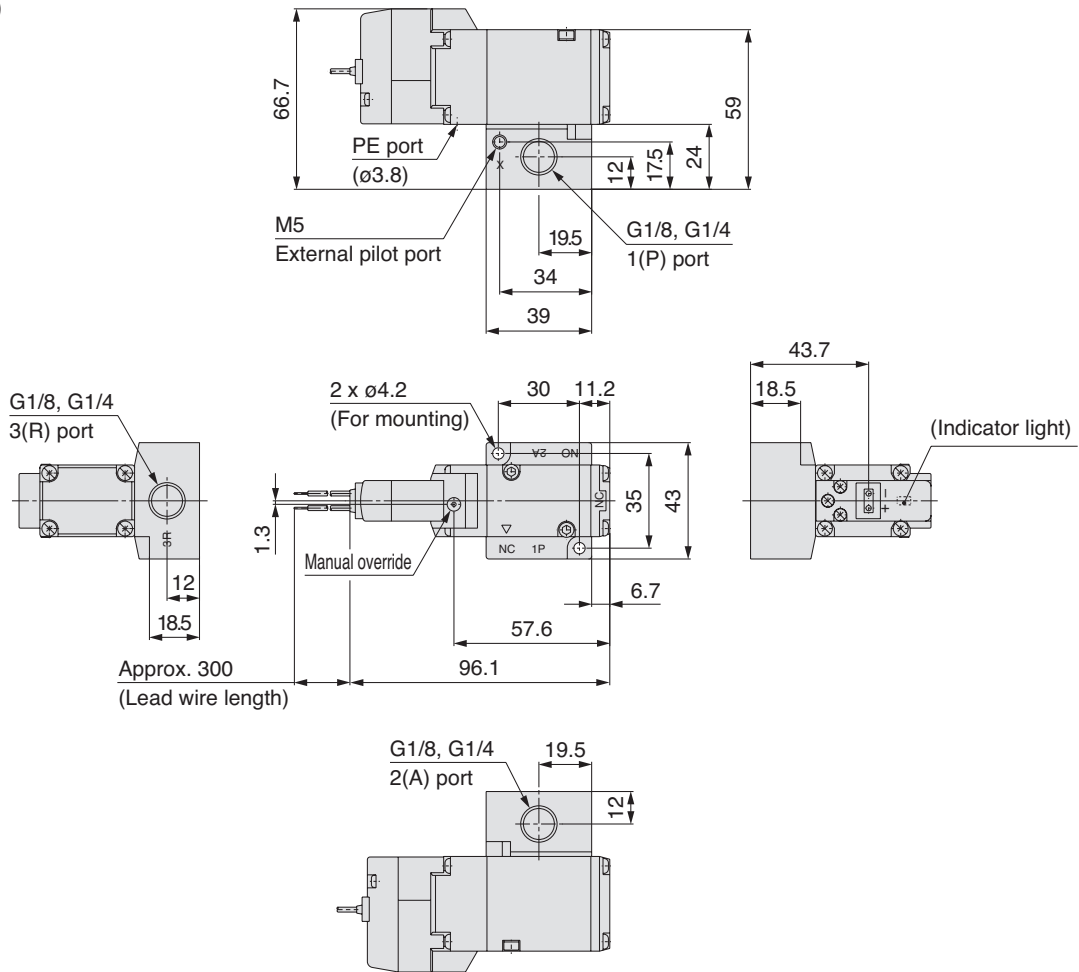
Unless otherwise indicated dimensions are the same as Grommet (G)



For more product options and details see our specific catalogues or on-line information.

Dimensions

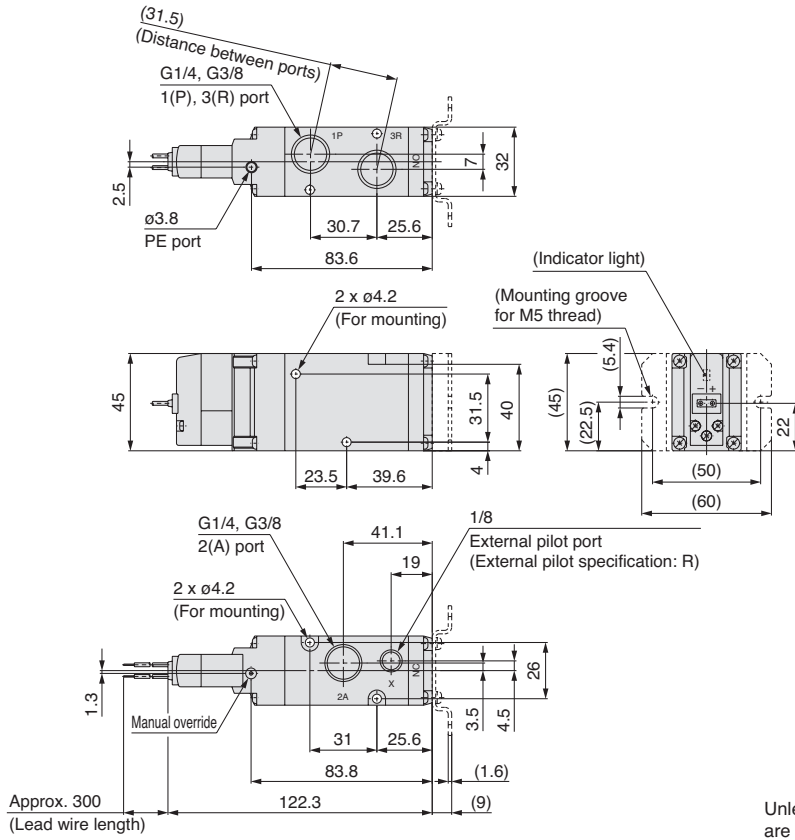
VP300/Base Mounted Grommet (G)



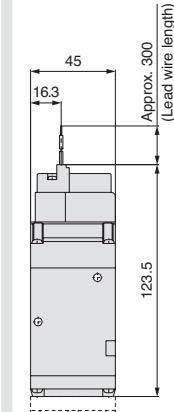
Unless otherwise indicated dimensions are the same as Grommet (G)

Dimensions

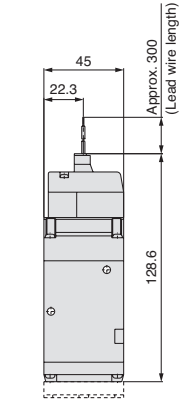
VP500/Body Ported, Grommet (G)



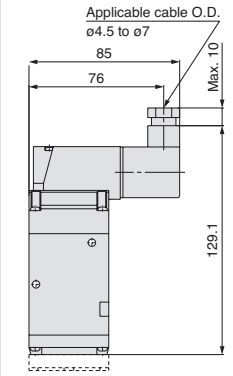
Grommet (G)
DC without light/surge
voltage suppressor



L-type
plug connector (L)



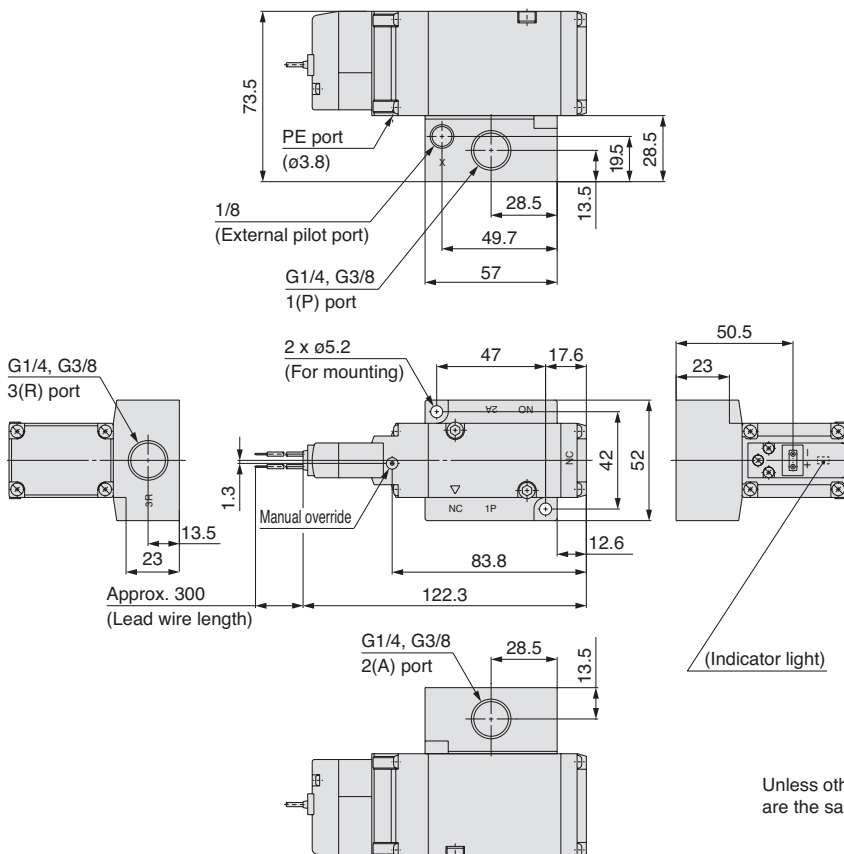
DIN terminal (D, Y)



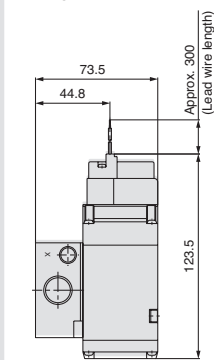
Unless otherwise indicated dimensions are the same as Grommet (G)

Dimensions

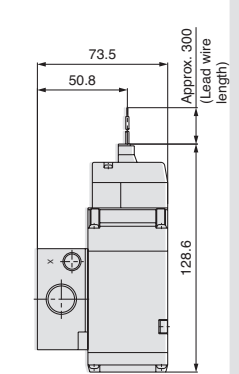
VP500/Base Mounted, Grommet (G)



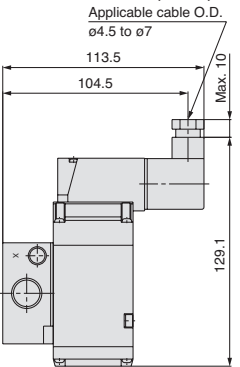
Grommet (G)
DC without light/surge
voltage suppressor



L-type
plug connector (L)



DIN terminal (D, Y)

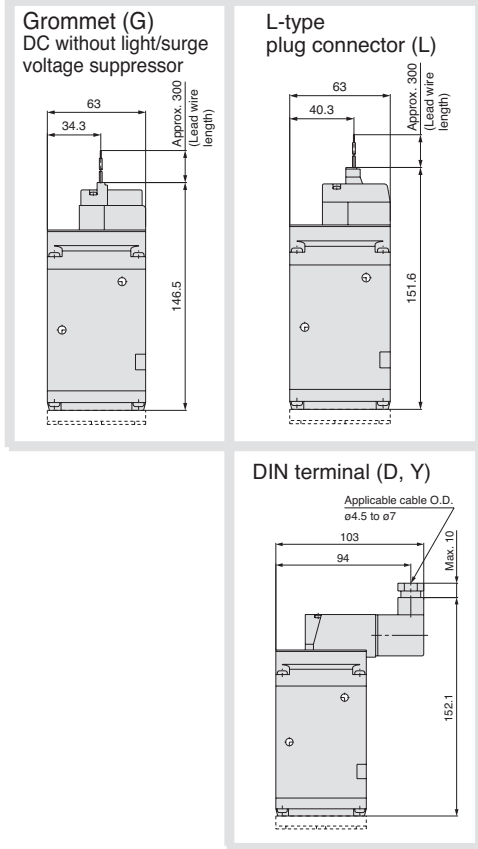
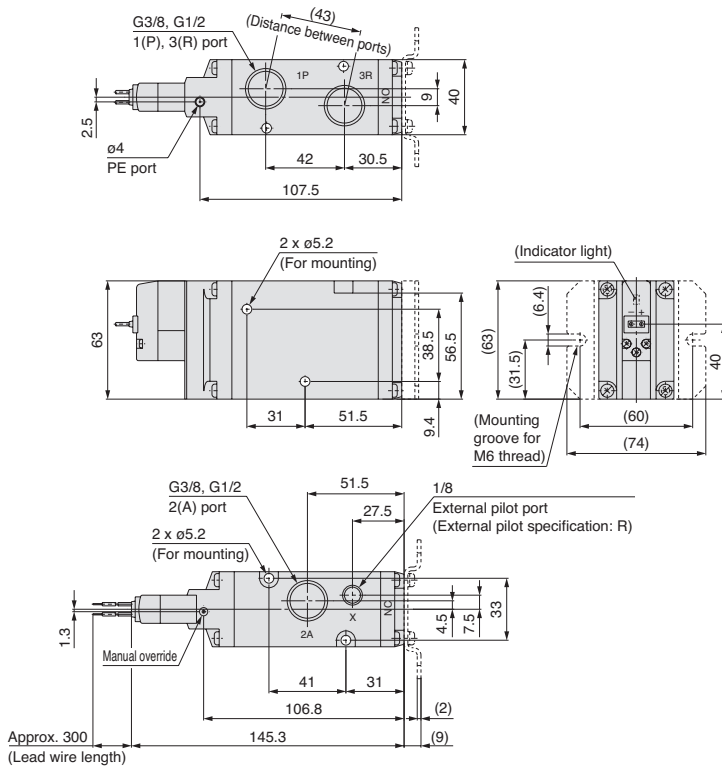


Unless otherwise indicated dimensions are the same as Grommet (G)



Dimensions

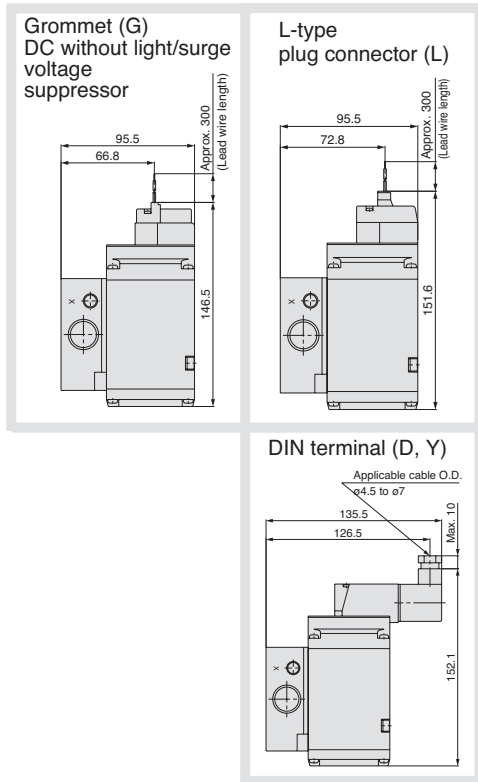
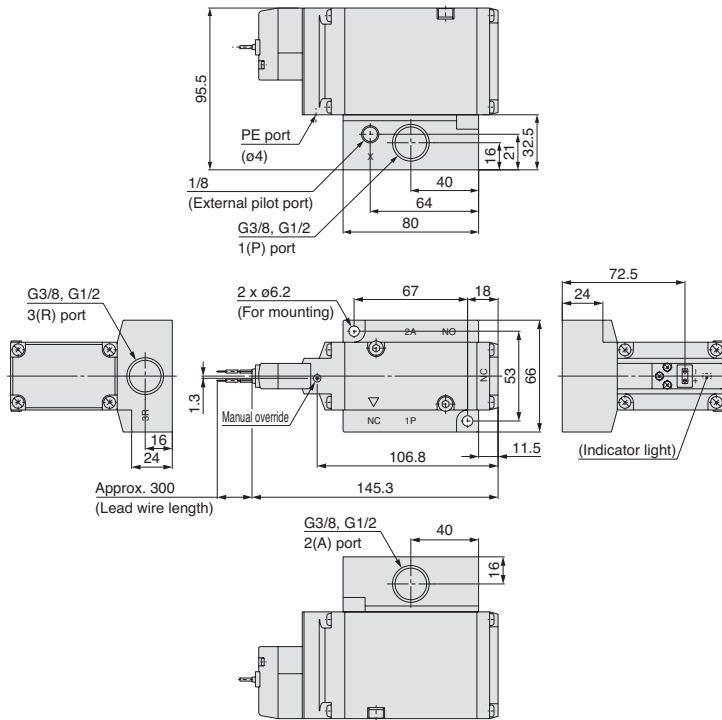
VP700/Body Ported, Grommet (G)



Unless otherwise indicated dimensions are the same as Grommet (G)

Dimensions

VP700/Base Mounted, Grommet (G)



Unless otherwise indicated dimensions are the same as Grommet (G)

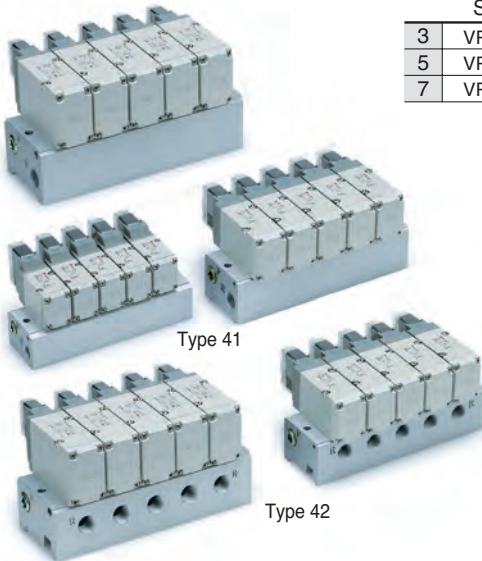
Manifold Specifications Series VP300/500/700

How to Order Manifold

Type 41/Common exhaust

VV3P 3 – 41 – **04** 1 – **02** **F**

Type 42/Individual exhaust

VV3P 3 – 42 – **04** 3 – **02** **F**


Series	
3	VP300
5	VP500
7	VP700

Pilot type	
–	Internal pilot
R	External pilot

Note) When the external pilot type manifold is selected, external pilot type valves are mounted.

Thread type	
F	G

Port size

Symbol	Port size	Applicable series
02	1/4	VP300
03	3/8	VP500
04	1/2	VP700

Stations

02	2 stations
⋮	⋮
20	20 stations

Option

Description	Part no.	Applicable manifold base model
Blanking plate assembly (With gasket and two mounting bolts)	VP300-25-1A	VV3P3
	VP500-25-1A	VV3P5
	VP700-25-1A	VV3P7

Manifold Specifications

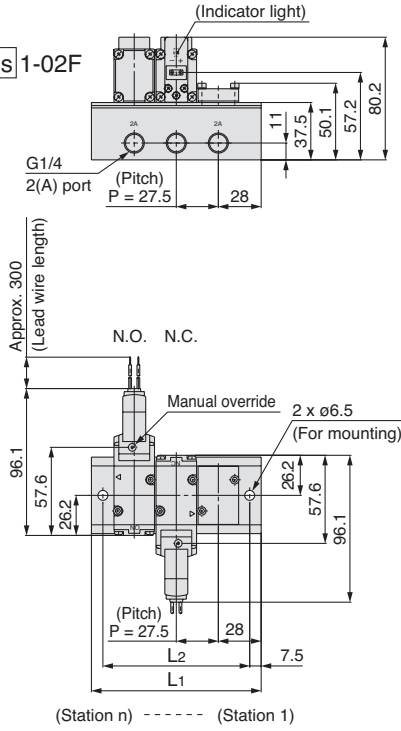
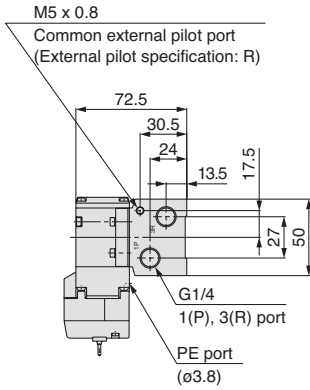
Series	Base model	Piping specifications			Applicable valve	Applicable stations ^{Note)}	Manifold base Weight: W [g] Stations: n
		1P (SUP) port type	3R (EXH) port type	Port size			
VP300	VV3P3-41	Common	Common	1/4	VP344	2 to 20 stations	W = 110n + 90
	VV3P3-42		Individual				
VP500	VV3P5-41		Common	3/8	VP544	2 to 20 stations	W = 190n + 150
	VV3P5-42		Individual				
VP700	VV3P7-41		Common	1/2	VP744	2 to 20 stations	W = 410n + 380
	VV3P7-42		Individual				

Note) Supply pressure to 1(P) ports and exhaust pressure from 3(R) ports on both sides for 10 stations or more.



Dimensions

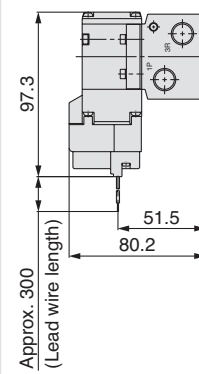
Common exhaust: VV3P3-41□-Stations 1-02F
Grommet (G)



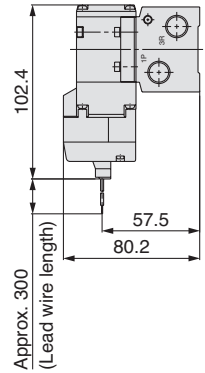
Station n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	83.5	111	138.5	166	193.5	221	248.5	276	303.5	331	358.5	386	413.5	441	468.5	496	523.5	551	578.5
L2	68.5	96	123.5	151	178.5	206	233.5	261	288.5	316	343.5	371	398.5	426	453.5	481	508.5	536	563.5

Unless otherwise indicated dimensions are the same as Grommet (G)

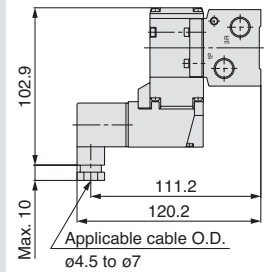
Grommet (G)
DC without light/surge
voltage suppressor



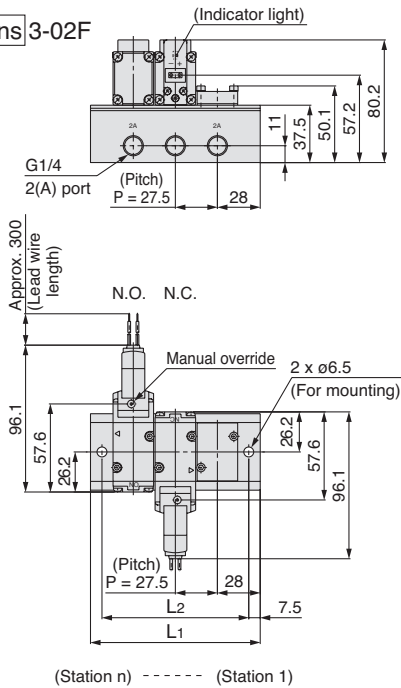
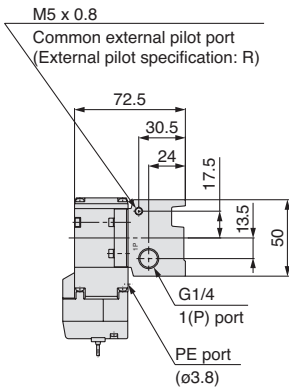
L-type
plug connector (L)



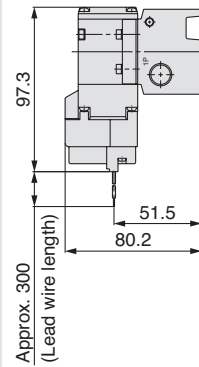
DIN terminal (D, Y)



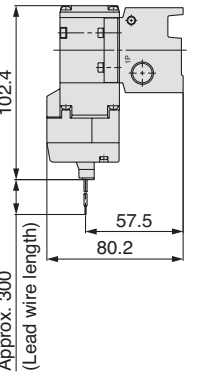
Individual exhaust: VV3P3-42□-Stations 3-02F
Grommet (G)



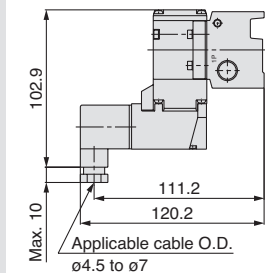
Grommet (G)
DC without light/surge
voltage suppressor



L-type
plug connector (L)



DIN terminal (D, Y)



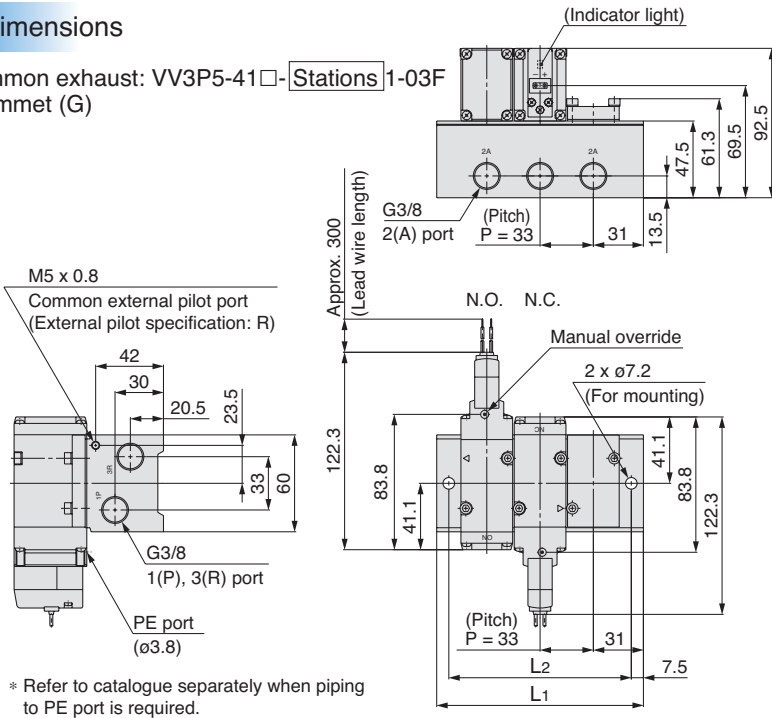
Station n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	83.5	111	138.5	166	193.5	221	248.5	276	303.5	331	358.5	386	413.5	441	468.5	496	523.5	551	578.5
L2	68.5	96	123.5	151	178.5	206	233.5	261	288.5	316	343.5	371	398.5	426	453.5	481	508.5	536	563.5

Unless otherwise indicated dimensions are the same as Grommet (G)

* Refer to catalogue separately when piping to PE port is required.

Dimensions

Common exhaust: VV3P5-41□ - Stations 1-03F
Grommet (G)

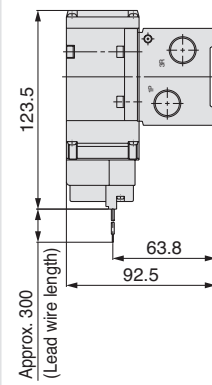


* Refer to catalogue separately when piping to PE port is required.

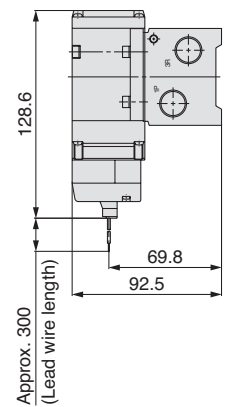
Station n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	95	128	161	194	227	260	293	326	359	392	425	458	491	524	557	590	623	656	689
L2	80	113	146	179	212	245	278	311	344	377	410	443	476	509	542	575	608	641	674

Unless otherwise indicated dimensions are the same as Grommet (G)

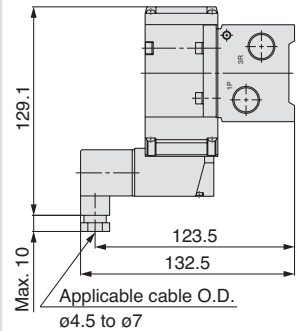
Grommet (G)
DC without light/surge voltage suppressor



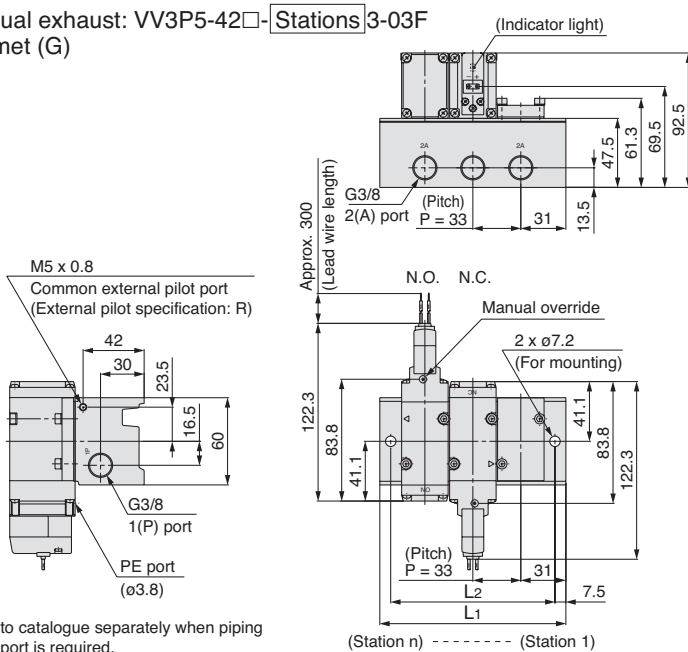
L-type plug connector (L)



DIN terminal (D, Y)



Individual exhaust: VV3P5-42□ - Stations 3-03F
Grommet (G)

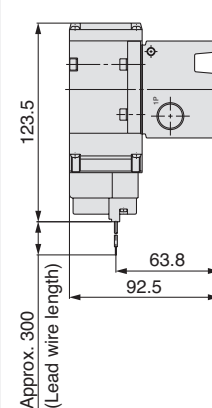


* Refer to catalogue separately when piping to PE port is required.

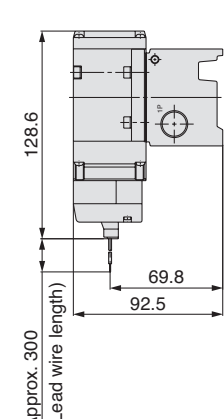
Station n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	95	128	161	194	227	260	293	326	359	392	425	458	491	524	557	590	623	656	689
L2	80	113	146	179	212	245	278	311	344	377	410	443	476	509	542	575	608	641	674

Unless otherwise indicated dimensions are the same as Grommet (G)

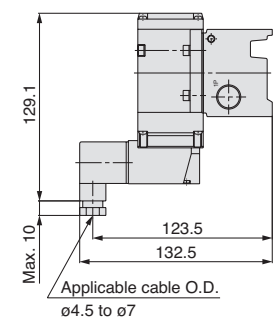
Grommet (G)
DC without light/surge voltage suppressor



L-type plug connector (L)

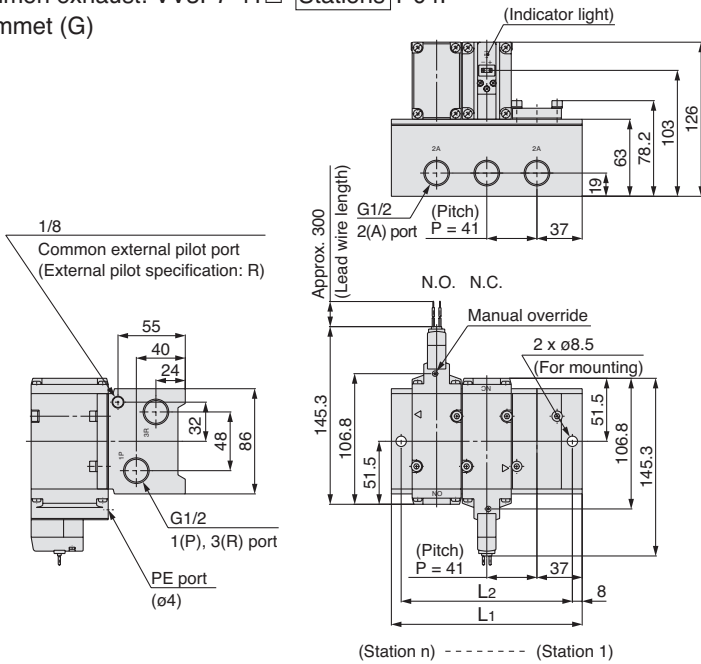


DIN terminal (D, Y)



Dimensions: VV3P7 (For N.C.)

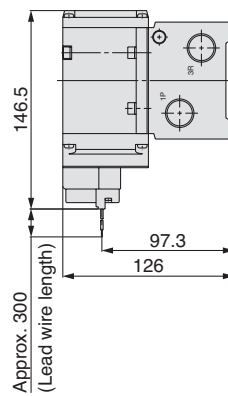
Common exhaust: VV3P7-41□- Stations 1-04F
Grommet (G)



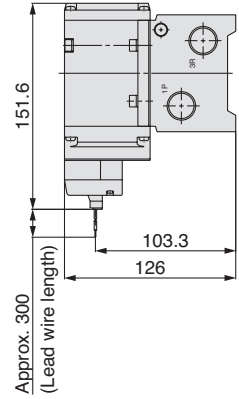
Station n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	115	156	197	238	279	320	361	402	443	484	525	566	607	648	689	730	771	812	853
L2	99	140	181	222	263	304	345	386	427	468	509	550	591	632	673	714	755	796	837

Unless otherwise indicated dimensions are the same as Grommet (G)

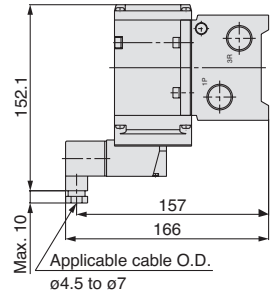
Grommet (G)
DC without light/surge
voltage suppressor



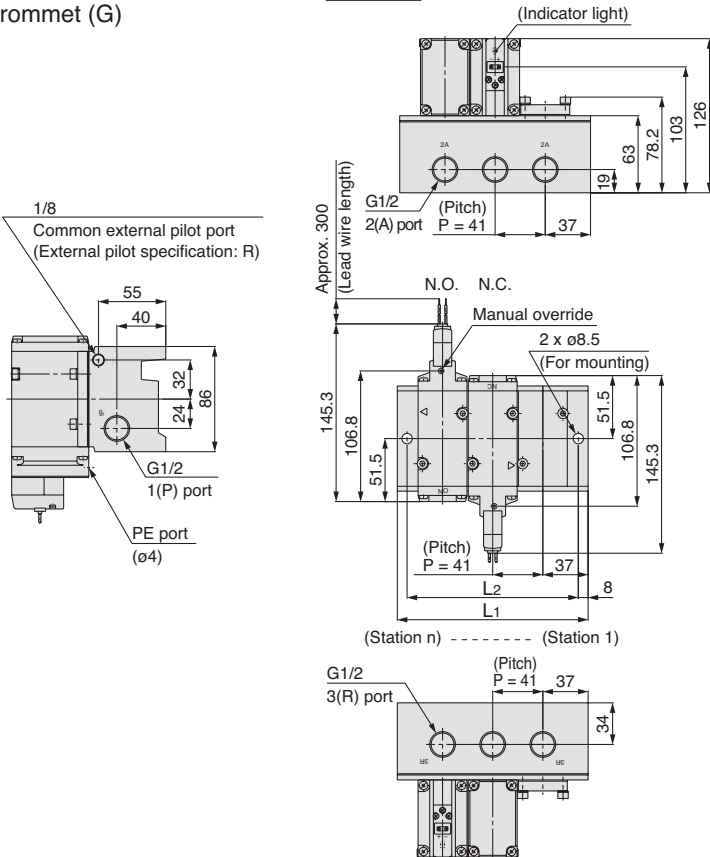
L-type
plug connector (L)



DIN terminal (D, Y)



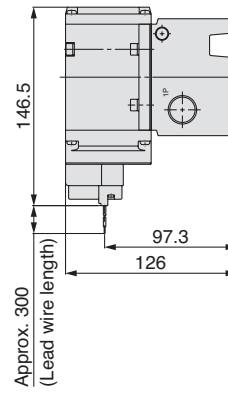
Individual exhaust: VV3P7-42□- Stations 3-04F
Grommet (G)



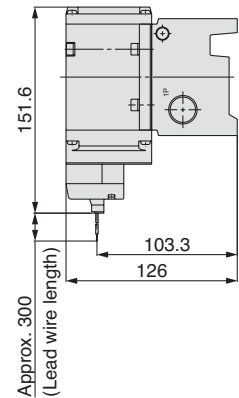
Station n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	115	156	197	238	279	320	361	402	443	484	525	566	607	648	689	730	771	812	853
L2	99	140	181	222	263	304	345	386	427	468	509	550	591	632	673	714	755	796	837

Unless otherwise indicated dimensions are the same as Grommet (G)

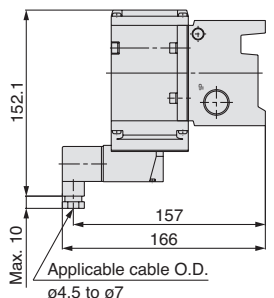
Grommet (G)
DC without light/surge
voltage suppressor



L-type
plug connector (L)



DIN terminal (D, Y)



3 Port Solenoid Valve Series SY100

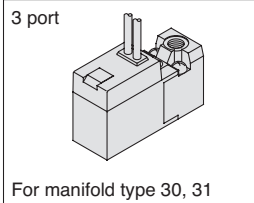
Features

- Extremely compact.
- Long life.
- Suitable for vacuum applications.
- Low power consumption.

How to Order

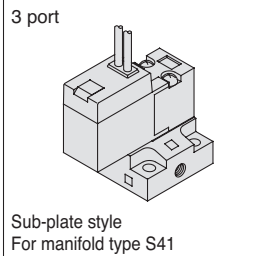
Light and surge voltage suppressor

—	Without light and surge voltage suppressor
S	With surge voltage suppressor
Z	With light and surge voltage suppressor
U	With light and surge voltage suppressor (Non-polar style)



Body ported

Base mounted



Actuation

1	Normally closed
2	Normally open

SY1 1 3 A — 5 L — — — M3-Q

SY1 1 4 A — 5 M — — — -Q

Rated voltage

5	24V DC
6	12V DC
V	6V DC
S	5V DC
R	3V DC
9	50V or less

Contact SMC for other voltages

Flow capacity

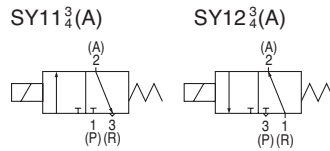
—	Standard (7.85 Nl/min)
A	Large (11.78 Nl/min)

Electrical entry

24V, 12V, 6V, 5V, 3V DC			
Grommet	L plug connector	M plug connector	
G: 300mm lead wire	L: 300mm lead wire	M: 300mm lead wire	MN: Without lead wire
H: 600mm lead wire	LN: Without lead wire	LO: Without connector	MO: Without connector

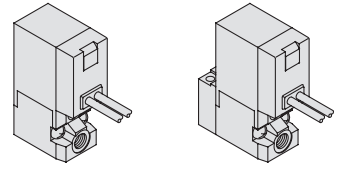
*LN or MN option includes 2 sockets.

Symbols



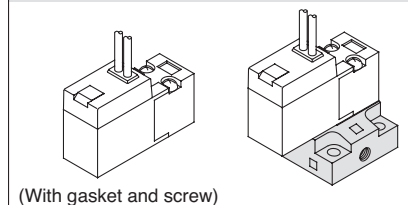
Piping

—: For manifold P: For body ported style to P, R, A port



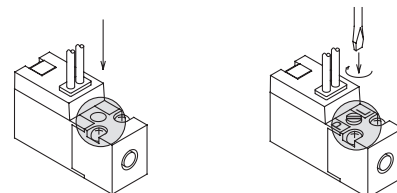
Piping port

—: Without sub-plate M3: With sub-plate



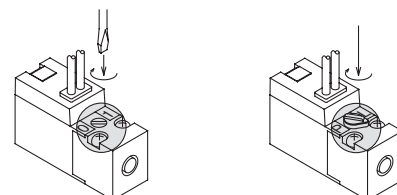
Manual override

—: Non-locking push style D: Push-locking slotted style



B: Locking slotted style

E: Push-locking lever style



SY114/SY124, SY114A/SY124A only.

Protective class class III (Mark: ⚡)



For more product options and details see our specific catalogues or on-line information.

Product Recommendation



Stocked items for fast delivery (Valves)

SY113-5G-PM3-Q	SY113-SG-PM3-Q	SY114-5LOU-Q	SY114-6LOU-Q	SY114A-5LOZ-Q	SY124-5LOU-Q
SY113-5GS-PM3-Q	SY114-5G-M3-Q	SY114-5LOZ-Q	SY114-6LOZ-Q	SY114A-5MNZ-Q	SY124-5MO-Q
SY113-5LOU-M3-Q	SY114-5G-Q	SY114-5MNZ-Q	SY114-6MO-Q	SY114A-5MOU-Q	SY124-5MOU-Q
SY113-5LOU-PM3-Q	SY114-5GS-Q	SY114-5MO-Q	SY114-6MOU-Q	SY114A-5MOZ-Q	SY124A-5LOU-Q
SY113-5MOU-PM3-Q	SY114-5GU-Q	SY114-5MOU-Q	SY114-6MOZ-Q	SY114A-6LOZ-Q	SY124A-5LOZ-Q
SY113-6GS-PM3-Q	SY114-5H-Q	SY114-5MOZ-Q	SY114A-5G-Q	SY123-5LOU-PM3-Q	SY124A-5MOU-Q
SY113A-5LOU-PM3-Q	SY114-5LNZ-Q	SY114-6G-Q	SY114A-5LOU-Q	SY124-5G-Q	SY124A-5MOZ-Q
SY113A-5MOU-PM3-Q	SY114-5LO-Q				



Accessories and Related Products

(Accessories)

Series AN - Silencers - page 556

(Related Products)

Series AC - Air Preparation - page 1076

Series TU - Tubing - page 1223

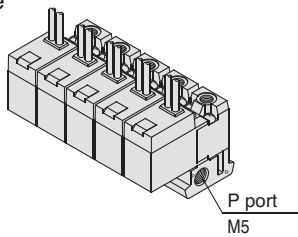
Series KQ2 - Fittings - page 1184

Series M - Miniature Fittings - page 1201

Valves

Common SUP/Common EXH

30 Type



How to Order

SS3Y1 – 30 – 05 – F-Q

Stations	
02	2 stations
⋮	⋮
10	10 stations

Applicable solenoid valve ⁽¹⁾

SY113-□□□□-M3-Q

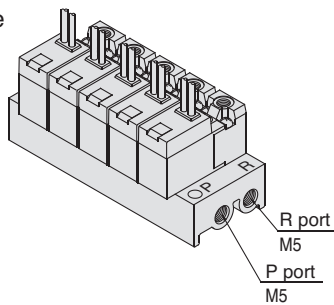
SY113A-□□□□-M3-Q

Applicable blank plate assembly

SY100-77-1A-Q

Note 1) Piping to exhaust port not possible.

31 Type



How to Order

SS3Y1 – 31 – 05 -Q

Stations	
02	2 stations
⋮	⋮
20	20 stations

Applicable solenoid valve ⁽¹⁾

SY113-□□□□-M3-Q

SY113A-□□□□-M3-Q

SY123-□□□□-M3-Q

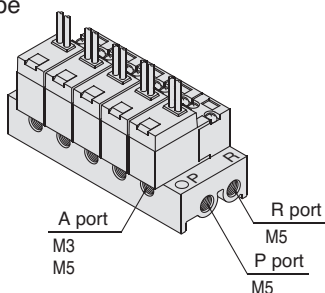
SY123A-□□□□-M3-Q

Applicable blank plate assembly

SY100-77-1A-Q

Note 1) SY113 (A) and SY123 (A) cannot be mounted on the same manifold.

S41 Type



How to Order

SS3Y1 – S41 – 05 – M3 -Q

Stations		A port size	
02	2 stations	M3	M3
⋮	⋮	M5	M5
20	20 stations		

Applicable solenoid valve ⁽¹⁾

SY114-□□□□-Q

SY114A-□□□□-Q

SY124-□□□□-Q

SY124A-□□□□-Q

Applicable blank plate assembly

SY100-77-1A-Q

Note 1) SY114 (A) and SY124 (A) cannot be mounted on the same manifold.

Protective class class III (Mark: ⚠)



Stocked items for fast delivery (Manifold)

SS3Y1-31-04-Q	SS3Y1-S41-03-M5-Q	SS3Y1-S41-05-M5-Q	SS3Y1-S41-07-M5-Q	SS3Y1-S41-10-M5-Q	SS3Y1-S41-14-M5-Q
SS3Y1-S41-02-M5-Q	SS3Y1-S41-04-M5-Q	SS3Y1-S41-06-M5-Q	SS3Y1-S41-08-M5-Q	SS3Y1-S41-12-M5-Q	

Specifications

Fluid	Air
Ambient and fluid temperature [°C]	Max. 50°C
Response time [ms]	10ms or less
Max. operating frequency [Hz]	20
Manual override	Non-locking push, Locking slotted, Push-locking slotted, Push-locking lever
Lubrication	Not required
Mounting position	Free
Impact/Vibration resistance [m/s ²]	150/30
Enclosure	Dust-proof

Accessories

How to Order Connector Assembly

For DC: SY100 – 30 – 4A

Without lead wire: SY100 – 30 – A
(Only with a connector and two sockets.)



• Lead wire length

—	300mm
6	600mm
10	1000mm
15	1500mm
20	2000mm
25	2500mm
30	3000mm
50	5000mm

Model

Actuation	Model	Style	Operating pressure range [MPa]	Vacuum application [MPa]		Effective area [mm ²] [Nl/min]	Weight [g]	
				P port	R port		Grommet style	L, M Plug connector
N.C.	SY11 ₄ ³	Standard	0 to 0.7	-100kPa to 0.6	-100kPa to 0	0.14 (7.85)		
N.C.	SY11 ₄ ³ A	Large flow capacity	0 to 0.7	-100kPa to 0.6	-100kPa to 0	0.22 (11.78)	SY1□3 (A): 13 SY1□4 (A): 24	SY1□3 (A): 15 SY1□4 (A): 26
N.O.	SY12 ₄ ³	Standard	0 to 0.7	-100kPa to 0	-100kPa to 0.6	0.14 (7.85)	(Without sub-plate 12)	(Without sub-plate 14)
N.O.	SY12 ₄ ³ A	Large flow capacity	0 to 0.7	-100kPa to 0	-100kPa to 0.6	0.22 (11.78)		



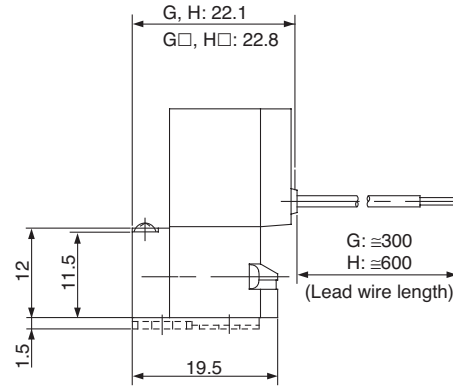
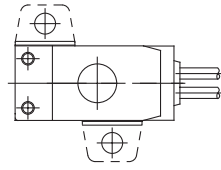
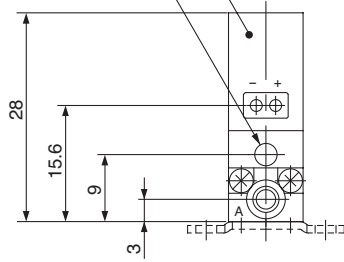
Dimensions

Body Ported

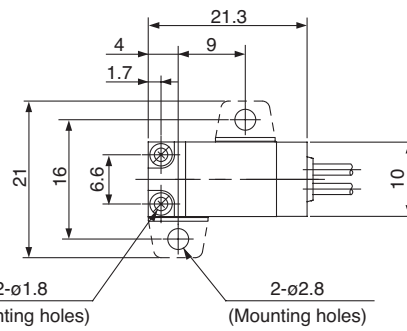
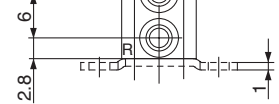
Grommet (G), (H): SY1₂3 (A)-□^G□□-PM3-Q

(Indicator light and surge suppressor)

Manual override

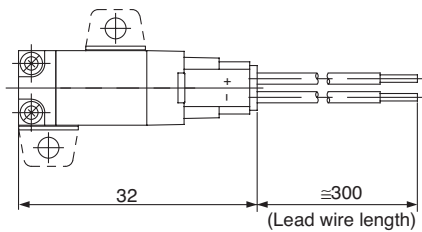
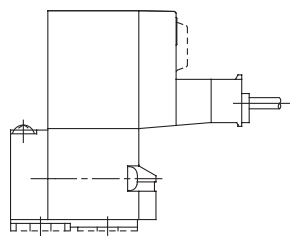
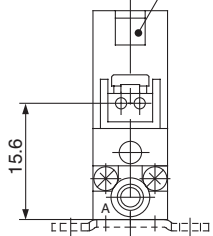


3-M3
(Piping port)



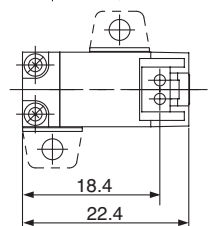
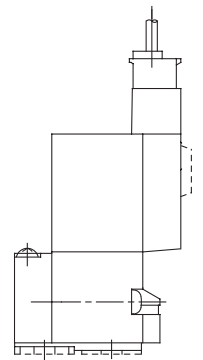
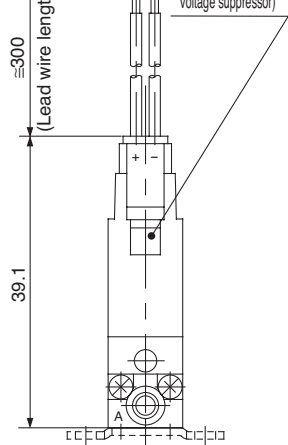
L plug connector (L): SY1₂3 (A)-□L□□-PM3-Q

(Indicator light and surge voltage suppressor)



M plug connector (M): SY1₂3 (A)-□M□□-PM3-Q

(Indicator light and surge voltage suppressor)



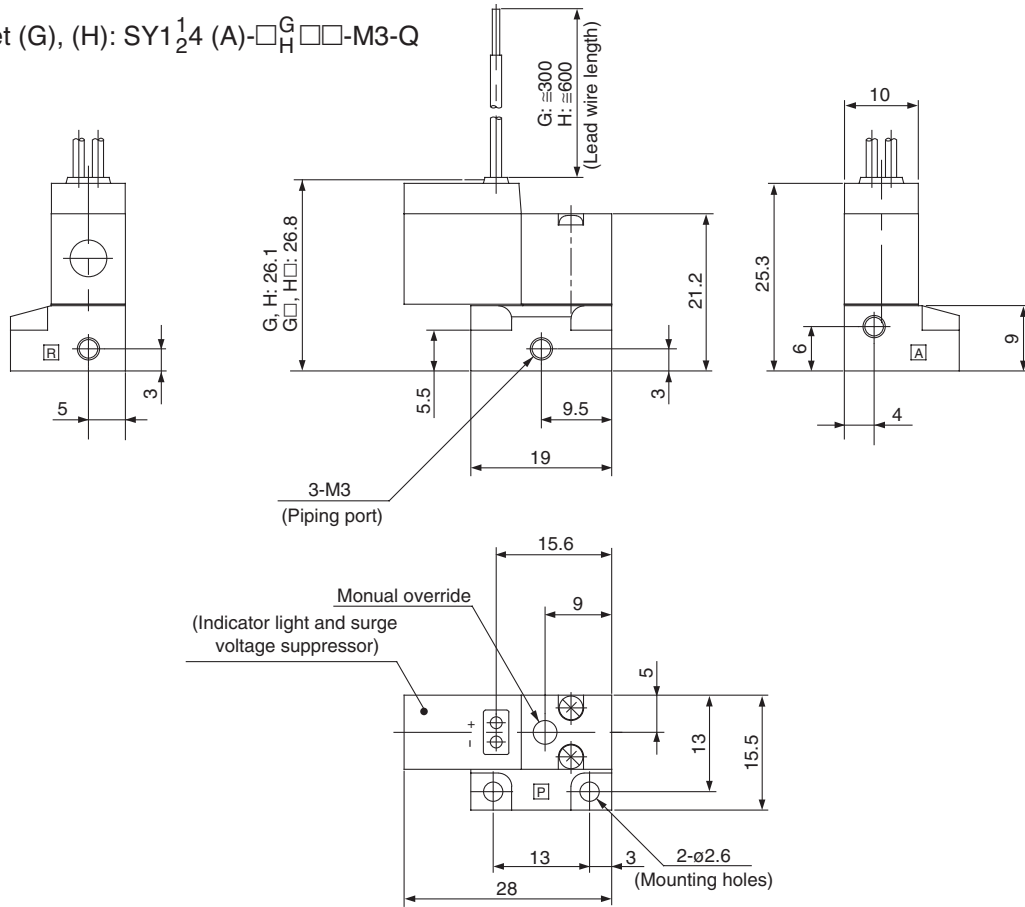
* Other dimensions are same as grommet style.

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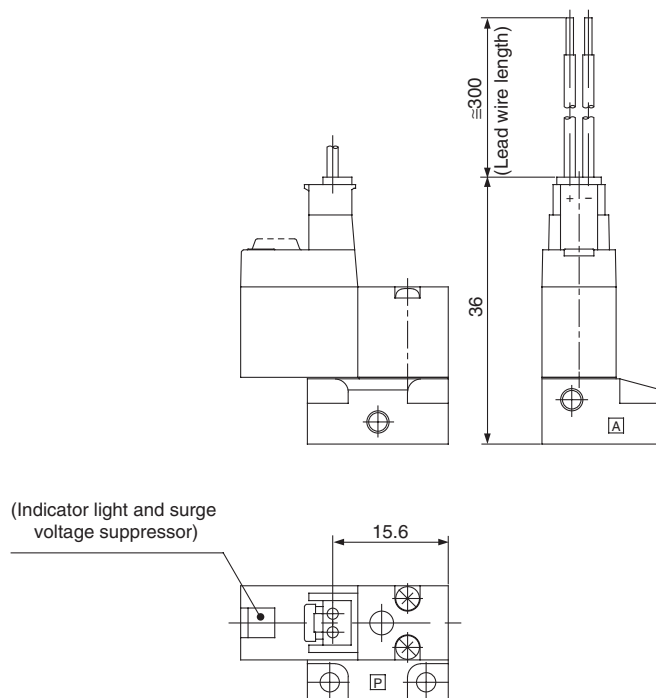
Dimensions

Base Mounted (With Sub-plate)

Grommet (G), (H): SY1 $\frac{1}{2}$ 4 (A)-□ $\frac{G}{H}$ □□-M3-Q

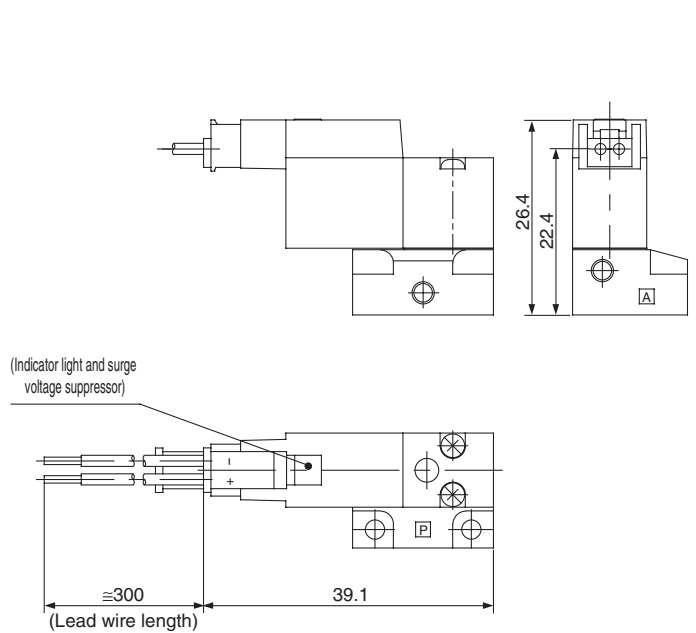


L plug connector (L): SY1 $\frac{1}{2}$ 4 (A)-□L□□-M3-Q



* Other dimensions are same as grommet style.

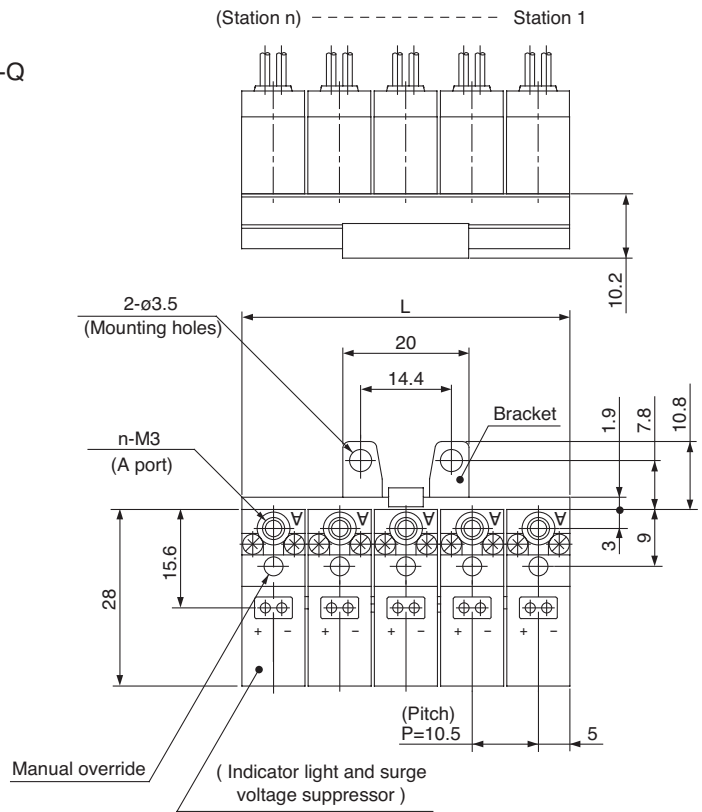
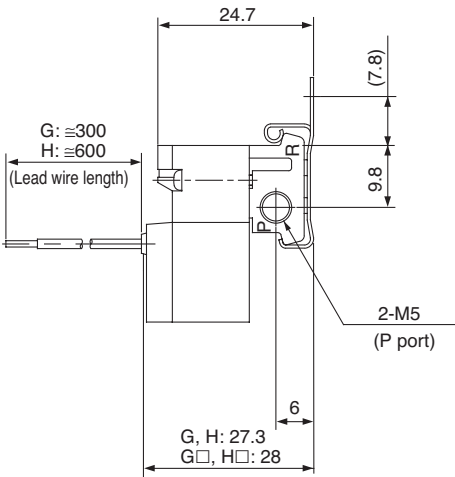
M plug connector (M): SY1 $\frac{1}{2}$ 4 (A)-□M□□-M3-Q



* Other dimensions are same as grommet style.

Dimensions

30 Type Manifold: Top Ported/SS3Y1-30-Station-F-Q
Grommet (G), (H)



* No bracket is assembled prior to delivery. Mount one to the appropriate position. (Attach two brackets if more than five stations.)

Dimensions

31 Type Manifold: Top Ported/SS3Y1-31-Station-Q
Grommet (G), (H)

