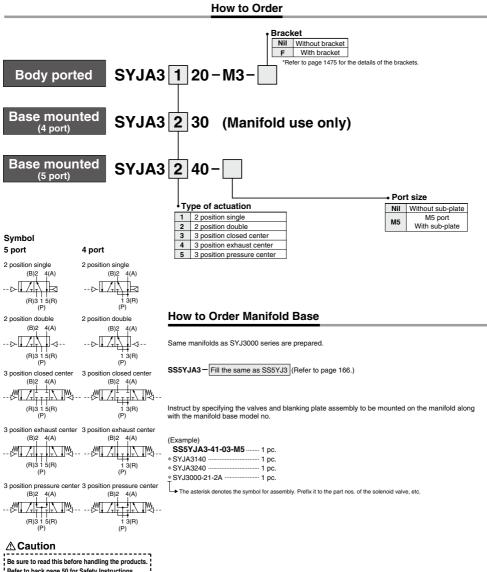
4/5 Port Air Operated Valve SYJA3000 Series



Refer to back page 50 for Safety Instructions and pages 3 to 9 for 3/4/5 Port Solenoid Valve Precautions.

SMC

4/5 Port Air Operated Valve SYJA3000 Series

Specifications

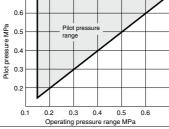


Base mounted



Body ported

Fluid		Air			
Operating pressure	2 position single	0.15 to 0.7			
range	2 position double	-100 kPa to 0.7			
MPa	3 position	-100 kPa to 0.7			
Note 1)	2 position single	Operating pressure to 0.7			
Pilot pressure range MPa	2 position double	0.1 to 0.7			
WPa	3 position	0.2 to 0.7			
Ambient and fluid tem	perature °C	-10 to 60 (No freezing.)			
Lubrication		Not required			
Mounting orientation		Unrestricted			
Impact/Vibration resist	tance (m/s ²) Note 2)	300/50			
port, because return	pressure is introduced from	within operating pressure range be supplied to supply m supply port {1(P)} for activation.			
ote 2) Impact resistance:	The test was performed of main valve, when pilot sig	rom the impact test using a drop impact tester. In the axis and right angle directions of the Inal is ON and OFF. (Value in the initial state)			
Vibration resistance:	Test was performed to ax	in one sweep test between 45 and 2000 Hz. is and right angle directions of the main valve nd OFF. (Value in the initial state)			
ilot Pressure Ran	ge (Single pilot)	With Bracket			
0.6					
0.0					



Air operated valve

SYJA3⊡20-M3-F

VGA

VPA

VPA3

The mounting bracket for the 2 position double solenoid and 3 position is supplied unattached.

Flow Rate Characteristics/Weight

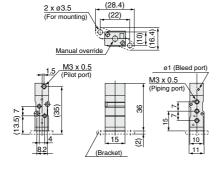
									Flo	w rate cha	racteristic	S Note 2)		
	Valve model	Turne of option?		_	Pilot	Note 3)	Effective	1→4/2 (P→A/B)			4/2→5/3 (A/B→EA/EB)			
valve model		Type of actuation		Port size	port size	Weight (g)	area mm²	C [dm ³ / (s•bar)]	b	Cv	C [dm ³ / (s•bar)]	b	Cv	
σ			Single			48 (22)								
nte		2 position	Double		M3 x 0.5	51 (25)		0.46	0.36	0.12	0.46	0.35	0.12	
e) Jou			Closed				- (28)	0.47	0.00	0.40	0.47	0.04	0.40	
e n	SYJA3⊡40-M5		center	MENOO				0.47	0.33	0.12	0.47	0.31	0.12	
as dr	31JA3_40-W3		Exhaust	M5 x 0.8		54 (28)		0.36	0.39	0.10	0.59	0.43	0.16	
5 port Base mounted (with sub-plate)		3 position	center						0.39	0.10	[0.40]	[0.33]	[0.11]	
а та			Pressure					0.58	0.42	0.16	0.46	0.32	0.11	
w U			center					[0.32]	[0.33]	[0.080]	0.46	0.32	0.11	
		2 position	Single	- - M3 x 0.5	M3 x 0.5	22								
_	SYJA3⊡20-M3		Double			25								
3ody ported		//3 3 position	Closed			28								
ā			center				0.9							
₹			Exhaust				0.9							
l B			center											
			Pressure											
			center											
σ		2 position	Single			22								
e te		2 position	Double			25								
10U			Closed											
l ≥ G	SYJA3⊡30		center	_	M3 x 0.5									
3as unife		3 position	Exhaust		W3 X 0.5	28					d. Refer to p	bage 1474	for details.	
E E		5 position	center) []: denote						
4 Port Base Mounted (For manifold) Note 1)			Pressure					3) (): Without sub-plate. 4) 5 port, base mounted without sub-plate: SYJA3⊡40						
4 9			center				11010 4	, o port, ba	se mounte	a winitout 5	uo piate. O	10/10/240		



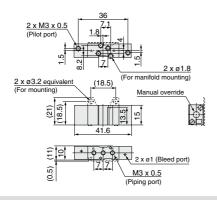
SYJA3000 Series

Dimensions/Body Ported

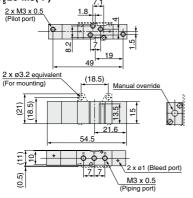
2 position single: SYJA3120-M3(-F)



2 position double: SYJA3220-M3(-F)

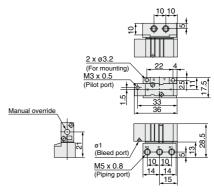


3 position closed center/exhaust center/pressure center SYJA3 $\frac{4}{5}$ 20-M3(-F) 7.1

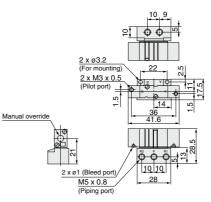


Dimensions/Base Mounted

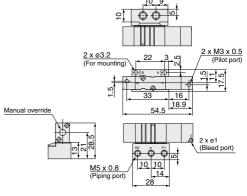
2 position single: SYJA3140-M5





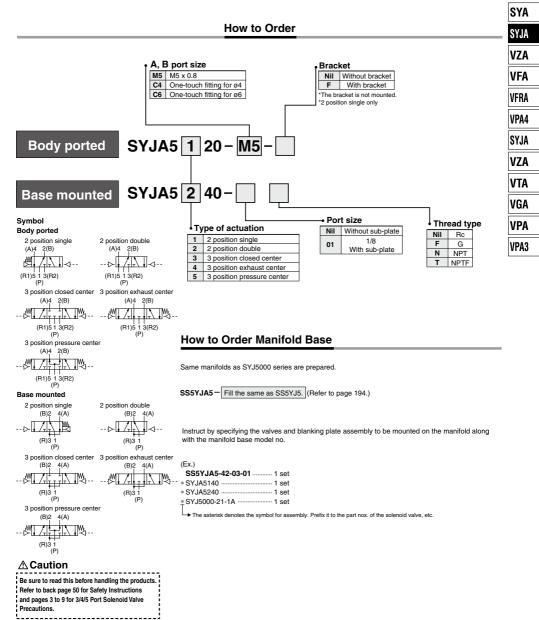


3 position closed center/exhaust center/pressure center SYJA3 $\frac{3}{4}$ 40-M5



SMC

4/5 Port Air Operated Valve SYJA5000 Series



SYJA5000 Series



Base mounted



Body ported

Specifications

Fluid		Air			
Operating pressure	2 position single	0.15 to 0.7			
range MPa	2 position double	-100 kPa to 0.7			
	3 position	-100 kPa to 0.7			
Note 1)	2 position single	(0.4 x P+0.1) to 0.7 P: Operating pressure			
Pilot pressure range MPa	2 position double	0.1 to 0.7			
MPa	3 position	0.15 to 0.7			
Ambient and fluid temp	perature °C	-10 to 60 (No freezing.)			
Lubrication		Not required			
Mounting orientation		Unrestricted			
Impact/Vibration resist	ance (m/s²) Note 2)	300/50			

Note 1) In case of single type, be certain that pressure within operating pressure range be supplied to supply port, because return pressure is introduced from supply port {1(P)} for activation.

Note 2) Impact resistance: No maifunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve, when pluts signal is ON and OFF. (Value in the initial state) Vibration resistance: No maifunction occurred in one sweep test between 45 and 2000 Hz.

Test was performed to axis and right angle directions of the main valve when pilot signal is ON and OFF. (Value in the initial state)

Pilot Pressure Range (Single pilot)

0.6 Pilot pressure MPa 0.5 Pilot pressure range 0.4 0.3 0.2 0.1 0.2 0.3 0.4 0.5 0.6 Operating pressure range MPa

With Bracket

Air operated

valve

SYJA5120-M5-F

The mounting brcket is supplied unttached.

Bracket SYJ5000-13-3A Assembly

Mounting screws included.

Flow Rate Characteristics/Weight

		Type of actuation				FI	low rate ch	aracteristic	CS Note 1)			
	Valve model			Port size	1→4/2 (P→A/B)			4/2→5/3 (A/B→EA/EB)			Pilot	Weight (g)
				1 011 0120	C [dm ³ / (s·bar)]	b	Cv	C [dm ³ / (s·bar)]	b	Cv	port size	0 10/
		2 position	Single Double		0.47	0.41	0.13	0.47	0.41	0.13	-	34 38
			Closed center	M5 x 0.8	0.49	0.44	0.13	0.44	0.40	0.12		
	SYJA5⊡20-M5	3 position	Center	8.0 X CIVI	0.46	0.37	0.12	0.47 [0.39]	0.43 [0.35]	0.13 [0.10]		48
			Pressure center		0.49 [0.39]	0.51 [0.38]	0.14 [0.10]	0.45	0.42	0.12		
-	SYJA5⊡20-C4	2 position	Single Double		0.69	0.39	0.18	0.44	0.39	0.12		41
portec			Closed center	A, B port: C4 (One-touch	0.69	0.40	0.19	0.43	0.40	0.12		45
Body ported		3 position	Exhaust center	fitting for ø4) P, R port: M5 x 0.8	0.56	0.40	0.15	0.41 [0.41]	0.37 [0.37]	0.10 [0.11]	M5 x 0.8	55
			Pressure center		0.57 [0.41]	0.40 [0.37]	0.15 [0.10]	0.41	0.37	0.10		
	SYJA5⊡20-C6	2 position	Single Double	A. B port: C6	0.70	0.36	0.19	0.47	0.40	0.12		41 45
			Closed center	(One-touch	0.72	0.37	0.19	0.44	0.34	0.12		
		3 position	Exhaust center	fitting for ø6) P, R port: M5 x 0.8	0.67	0.54	0.19	0.41 [0.41]	0.38 [0.38]	0.11 [0.11]		55
			Pressure center	WI5 X 0.6	0.82 [0.44]	0.41 [0.39]	0.23 [0.12]	0.41	0.36	0.11		
ed (te)	<u> </u>	2 position	Single Double		0.79	0.21	0.19	0.83	0.32	0.21		68 (34) 72 (38)
Base mounted (with sub-plate)			Closed center	1/8	0.80	0.28	0.18	0.86	0.34	0.20	M5 x 0.8	
	SYJA5⊡40-01	3 position	Center	1/0	0.71	0.26	0.18	1.1 [0.60]	0.24 [0.44]	0.26 [0.18]	IVIS X 0.0	82 (48)
			Pressure center		0.99 [0.47]	0.29 [0.38]	0.24 [0.12]	0.72	0.38	0.18		

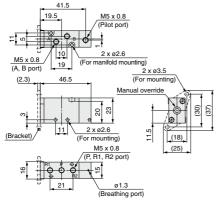
Note 1) []: denotes normal position. Note 2) (): Without sub-plate.

Note 3) Model No. for 5 port base mounted type without sub-plate is SYJA5
40.

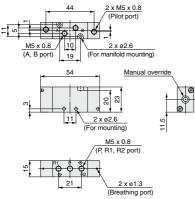


Dimensions/Body Ported

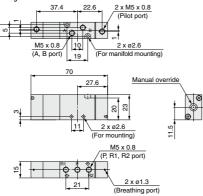
2 position single: SYJA5120-M5(-F)



2 position double: SYJA5220-M5

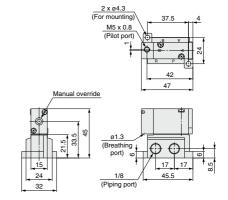


3 position closed center/exhaust center/pressure center SYJA5 $\frac{3}{2}$ 20-M5

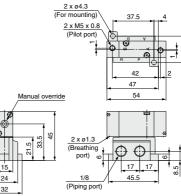


Dimensions/Base Mounted

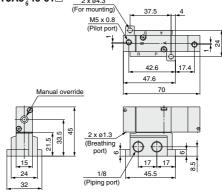
2 position single: SYJA5140-01



2 position double: SYJA5240-01



3 position closed center/exhaust center/pressure center SYJA5 $\frac{3}{4}$ 40-01 _ __2 x 04.3 _



VPA4 SYJA VZA VTA VGA VPA

VPA3

SYA

SYJA

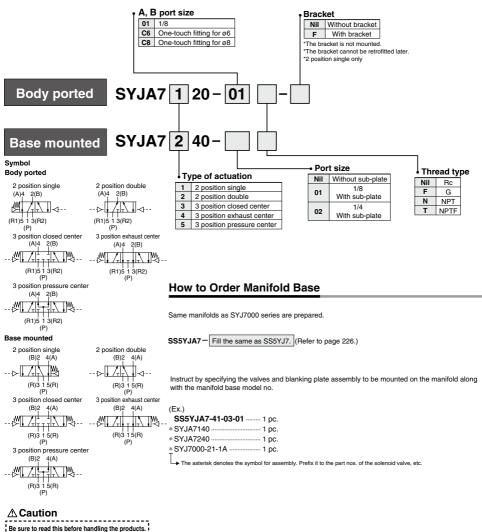
VZA

VFA

VFRA

4/5 Port Air Operated Valve SYJA7000 Series

How to Order



SMC

Be sure to read this before handling the products Refer to back page 50 for Safety Instructions and pages 3 to 9 for 3/4/5 Port Solenoid Valve Precautions.

1480

4/5 Port Air Operated Valve SYJA7000 Series

Specifications



Base mounted

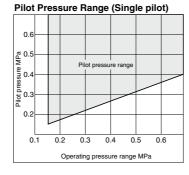


Body ported

Fluid		Air			
Operating pressure	2 position single	0.15 to 0.7			
range	2 position double	-100 kPa to 0.7			
MPa	3 position	-100 kPa to 0.7			
Note 1)	2 position single	(0.4 x P+0.1) to 0.7 P: Operating pressure			
Pilot pressure range MPa	2 position double	0.1 to 0.7			
wPa	3 position	0.15 to 0.7			
Ambient and fluid tem	perature °C	-10 to 60 (No freezing.)			
Lubrication		Not required			
Mounting orientation		Unrestricted			
Impact/Vibration resist	ance (m/s²) Note 2)	300/50			

Note 1) in case of single type, be certain that pressure within operating pressure range of supplied to supply port, because return pressure is inroduced from the impact test using a drop impact tester. No maifunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve, when pilot signal is ON and OFF, (Value in the initial state)
 Vibration resistance: No maifunction occurred in one sweep test between 45 and 2000 Hz.

Test was performed to axis and right angle directions of the main valve when pilot signal is ON and OFF. (Value in the initial state)



With Bracket

Air operated valve	SYJA7120-01-F							
As a bracket is designed for a body, be sure								

ached when ordering and that a bi operating.

SYJA7000 Series

Flow Rate Characteristics/Weight

						F		Note 3)				
	Valve model	Type of	actuation	Port size	1→4/2 (P→A/B)			4/2→5/3 (A/B→EA/EB)			Pilot	Weight
	valve model			1 011 0120	C [dm ³ / (s•bar)]	b	Cv	C [dm ³ / (s•bar)]	b	Cv	port size	(g)
		2 position	Single		2.2	0.36	0.58	2.4	0.34	0.63		71
		2 position	Double					2.4	0.34	0.63		72
			Closed	1/8	1.8	0.37	0.45	2.0	0.35	0.49		
	SYJA7⊡20-01		center		1.0	0.07						
	51JA/ 20-01	3 position	Exhaust		1.2	0.50	0.34	3.0	0.35	0.73		82
			center					[1.3]	[0.52]	[0.39]		02
			Pressure		3.0	0.37	0.78	1.8	0.37	0.45		
			center		[0.83]	[0.50]	[0.25]		0.07	0.10		
		2 position	Single	A, B port: C6 (One-touch fitting for ø6)	1.6	0.33	0.4	2.2	0.32	0.53		82
			Double									83
eq	SYJA7⊡20-C6		Closed		1.4	0.27	0.35	1.9	0.33	0.49	- M5 x 0.8 -	
Body ported		26	center			-						
		3 position	Exhaust	P, R port: 1/8	1.1	0.37	0.27	2.5	0.32	0.61		93
			center					[1.3]	[0.54]	[0.38]		
			Pressure		1.8	0.36	0.45	1.6	0.30	0.39		
		3 position	center	A, B port: C8 (One-touch fitting for ø8) P, R port: 1/8	[0.78]	[0.40]	[0.22]					
	SYJA7⊡20-C8		Single		2.0	0.39	0.52	2.3	0.34	0.61		82
			Double									83
			Closed		1.7	7 0.35	0.35 0.42	0.42 2.0 0.33 2.6 [1.3]	2.0 0.29	0.49		
			center Exhaust						0.35			
			center		1.2	0.38	0.33		[0.49]	[0.38]		93
			Pressure		1.9	0.57	0.59	[1.3]	[0.49]	[0.30]		
			center		[0.86]	[0.46]	[0.25]	1.7	0.39	0.42		
			Single		[0.00]	[0.40]	[0.23]					151 (71)
		2 position Double			2.3	0.45	0.57	2.8	0.37	0.71		152 (72)
										-	102 (12)	
~					1.9	0.36	0.36 0.48	0.48 2.1	2.1 0.46	0.57		
late	SYJA7⊡40-01		Exhaust	1/8 Note 1)				34	3.4 0.36 [1.3] [0.57]	0.86	M5 x 0.8	
d-d		3 position	center		1.2	0.48	0.35	0.35		[0.41]		162 (82)
ns u			Pressure		3.3	0.43	0.78				-	
with			center		[0.85]	[0.54]	[0.25]	2.1	0.45	0.56		
be			Single		<u> </u>		<u> </u>					151 (71)
nut		2 position	Double		2.3	2.3 0.41	0.61	2.9	0.35	0.74		152 (72)
в			Closed	. Note 1)							1	
Base mounted (with sub-plate)			center		1.9	0.46	0.50	2.2	0.44	0.60		
ñ	SYJA7□40-02	0	Exhaust	1/4 Note 1)			0.05	3.7	0.27	0.87	M5 x 0.8	100 (07)
		3 position	center		1.3	0.45	0.35	[1.4]	[0.56]	[0.43]		162 (82)
			Pressure	1	3.6	36 023 084		1				
			center		[0.83]	[0.55]	[0.25]	2.1	0.47	0.58		

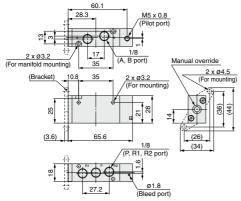
Note 1) P, A, B port: 1/8 is R1, R2 port: 1/4

Note 2) []: for nomal position Note 3) (): without sub-plate

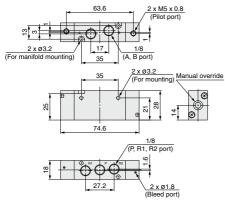
Note 4) Model No. for base mounted type without sub-plate is SYJA7 40.

Dimensions/Body Ported

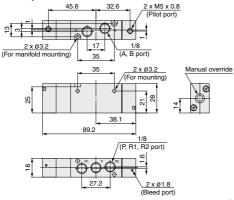
2 position single: SYJA7120-01 (-F)



2 position double: SYJA7220-01

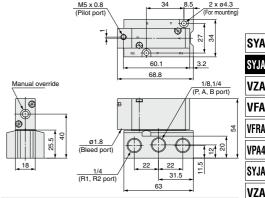


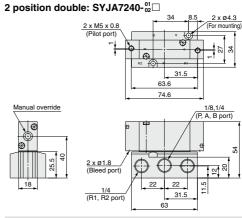
3 position closed center/exhaust center/pressure center SYJA7 20-01



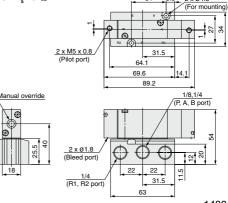
Dimensions/Base Mounted

2 position single: SYJA7140-02





3 position closed center/exhaust center/pressure center SYJA7 40-01 02 2 x Ø4.3



VFA VFRA VPA4 SYJA VZA VTA VGA

VPA

VPA3

SMC