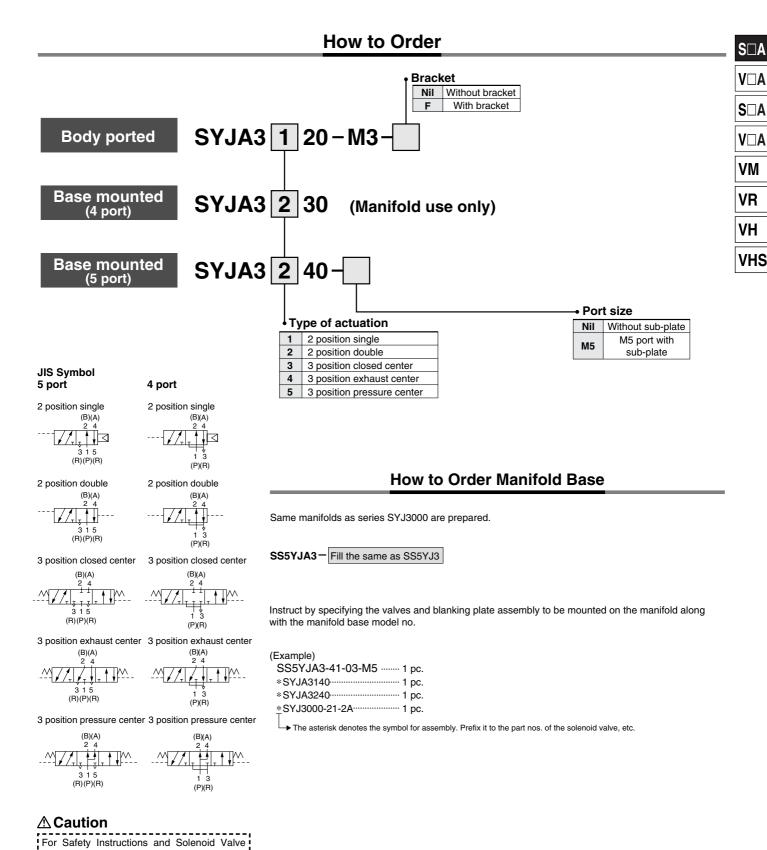
4/5 Port Air Operated Valve

Series SYJA3000

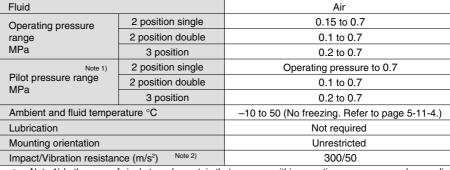


Precautions, refer to pages 5-11-2 to 6.

Specifications



Base mounted





Note 1) In the 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 malfunction resulted from the impact test using a drop impact tester.

Impact resistance:

No malfunction 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)

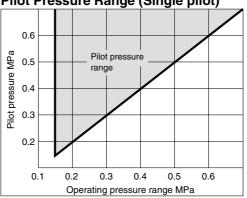
Vibration resistance:

No malfunction or suited from the impact test using a drop impact tester. The test was performed 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)



Body ported

Pilot Pressure Range (Single pilot)



With Bracket

valve type SYJA3□20-M3-F	Air operated valve type	SYJA3□20-M3-F
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The mounting bracket for the 2 position double solenoid and 3 position is supplied unattached.

Flow Characteristics/Weight

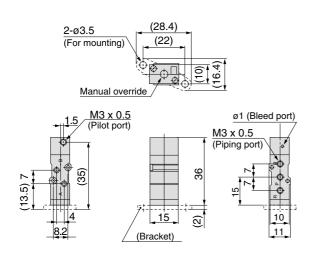
* Refer to memo for contents that have been changed.

						Note 3)		Flow characteristics Note 2)							
Valve model		Type of actuation		Port size	Pilot	Weight (g)	Effective area	$1 \rightarrow 4/2 \ (P \rightarrow A/B)$			$4/2 \rightarrow 5/3 \text{ (A/B} \rightarrow$		EA/EB)		
				Port size	port size	Grommet		C [dm ³ / (s•bar)]	b	Cv	C [dm ³ / (s•bar)]	b	Cv		
	(with sub-location (with sub-loc		Single		M3 x 0.5	48 (22)		, ,,			/ /2				
ted		2 position	Double	1		51 (25)		0.46	0.36	0.12	0.46	0.35	0.12		
our (e			Closed	1		01 (=0)									
n m			center					0.47	0.33	0.12	0.47	0.31	0.12		
ase lb-p			Exhaust	M5 x 0.8			_				0.59	0.43	0.16		
nt b		3 position	center	-		54 (28)		0.36	0.39	0.10	[0.40]	[0.33]	[0.11]		
g ≢			Pressure					0.58	0.42	0.16	0.40	0.00			
5			center					[0.32]	[0.33]	[0.080]	0.46	0.32	0.11		
		0	Single			22									
Body ported	SYJA3□20-M3	2 position	Double	M3 x 0.5	M3 x 0.5	25	0.9								
		M3 3 position	Closed			28									
por			center												
₹			Exhaust												
B			center												
			Pressure												
			center												
-		2 position	Single			22									
of ()		2 position	Double			25									
ou i			Closed												
m (plc	SYJA3□30		center	_	M3 x 0.5										
ase	0.10110=00	3 position	Exhaust	_	IVIO X 0.5	28	Note	1) Value w	hen used	on a manif	old. Refer t	o page 5-2	2-19 for		
T t		o position	center			20	٠ الشر	details.				=			
4 Port base mounted (For manifold)			Pressure					2) []: Denc 3) (): With							
4 P			center					4) 5 port ba			sub-plate:	SYJA3□4	0		

4/5 Port Air Operated Valve Series SYJA3000

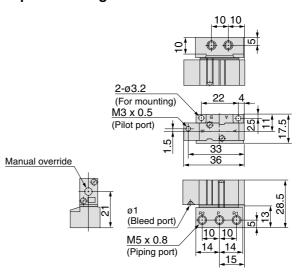
Dimesions: Body Ported

2 position single: SYJA3120-M3(-F)

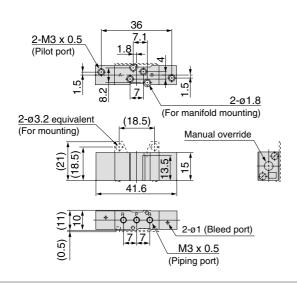


Dimensions: Base Mounted

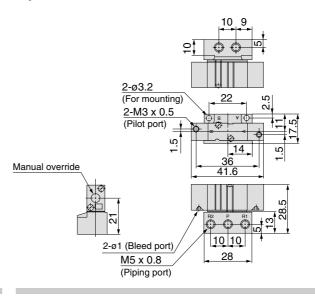
2 position single: SYJA3140-M5



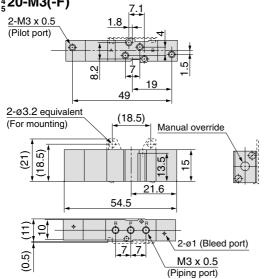
2 position double: SYJA3220-M3(-F)



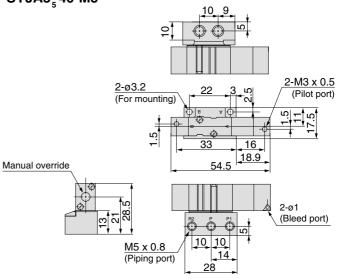
2 position double: SYJA3240-M5



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



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





5-2-21

S

V□A

S

V□A

VM

VR

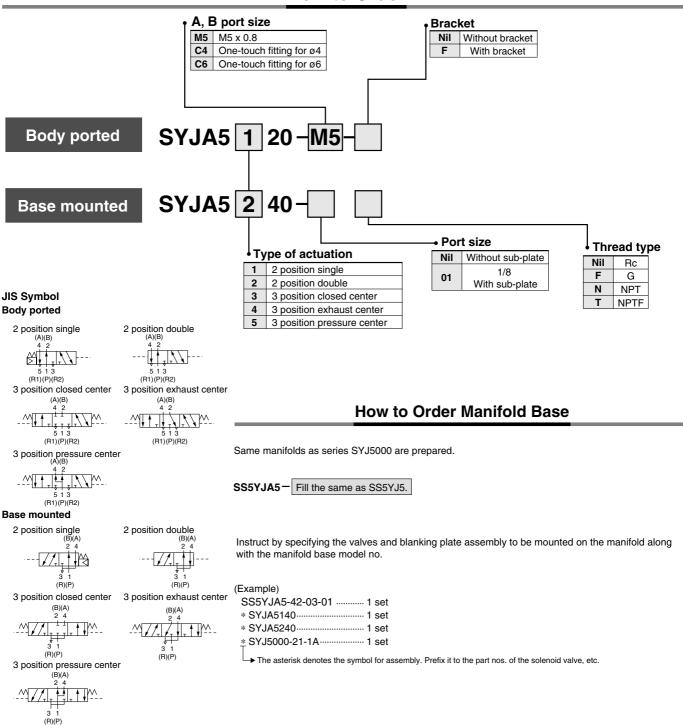
VH

VHS

4/5 Port Air Operated Valve

Series SYJA5000

How to Order



⚠ Caution

For Safety Instructions and Solenoid Valve Precautions, refer to pages 5-11-2 to 5-11-6.

4/5 Port Air Operated Valve Series SYJA5000

Specifications



Base mounted

Fluid		Air				
Operating pressure	2 position single	0.15 to 0.7				
range	2 position double	0.1 to 0.7				
MPa	3 position	0.15 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				
IVIFA	3 position	0.15 to 0.7				
Ambient and fluid tempe	rature °C	-10 to 50 (No freezing. Refer to page 5-11-4.)				
Lubrication		Not required				
Mounting orientation		Unrestricted				
Impact/Vibration resistar	nce (m/s²) Note 2)	300/50				

Note 1) In the 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 malfunction 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 malfunction occurred in one sweep test between 45 and 2000 Hz.

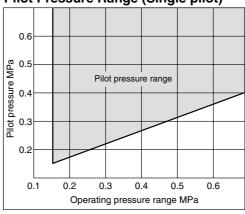
Test was performed to axis and right angle directions of the main valve when pilot signal is ON and OFF. (Value in the initial state)





Body ported

Pilot Pressure Range (Single pilot)



With Bracket

Air operated valve type	SYJA5120-M5-F

SDA

V□A

S

V□A

VM

VR

VH

VHS

The mounting bracket is supplied unattached.

Flow Characteristics/Weight

							Elow char	acteristics	Note 1)			
		Type of actuation		Port size	1 →	4/2 (P → /			5/3 (A/B →	EA/EB)	Pilot port size	Note 2)
	Valve model				C [dm³/ (s·bar)]	b	Cv	C [dm³/ (s·bar)]	b	Cv		Weight (g)
	SYJA5□20-M5	2 position	Single Double	M5 x 0.8	0.47	0.41	0.13	0.47	0.41	0.13	-	45 60
			Closed center		0.49	0.44	0.13	0.44	0.40	0.12		
		YJA5□20-M5 3 position	Exhaust center		0.46	0.37	0.12	0.47 [0.39]	0.43 [0.35]	0.13 [0.10]		70
			Pressure center		0.49 [0.39]	0.51 [0.38]	0.14 [0.10]	0.45	0.42	0.12		
9		2 position	Single Double		0.69	0.39	0.18	0.44	0.39	0.12		52 67
Body ported			Closed center	A, B port: C4 (One-touch	0.69	0.40	0.19	0.43	0.40	0.12		
	SYJA5□20-C4	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	77
			Pressure center		0.57 [0.41]	0.40 [0.37]	0.15 [0.10]	0.41	0.37	0.10		
		2 position	Single Double	A, B port: C6	0.70	0.36	0.19	0.47	0.40	0.12		52 67
	07.145=00.00		Closed center	(One-touch fitting for Ø6)	0.72	0.37	0.19	0.44	0.34	0.12		
	SYJA5□20-C6	3 position	Exhaust center	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]		77
			Pressure center	IVIO X U.O	0.82 [0.44]	0.41 [0.39]	0.23 [0.12]	0.41	0.36	0.11		
ed (e)		2 position	Single Double		0.79	0.21	0.19	0.83	0.32	0.21		79 (45) 94 (60)
ounte o-pla			Closed center	1/0	0.80	0.28	0.18	0.86	0.34	0.20	MEVOO	
Base mounted (with sub-plate)	SYJA5□40-01	3 position	Exhaust center	1/8	0.71	0.26	0.18 1.1 0.24 [0.60] [0.44]		0.26 [0.18]	M5 x 0.8	104(70)	
			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) 5 port base mounted without sub-plate: SYJA5□40

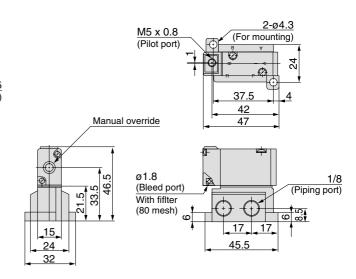
Dimesions: Body Ported

2 position single: SYJA5120-M5(-F)

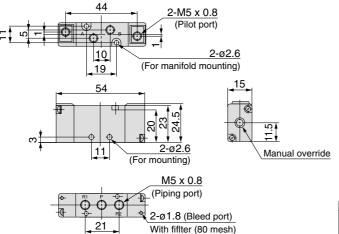
Manual override M5 x 0.8 10 (Pilot port) 19 2-ø3.5 2-ø2.6 (Bracket) (For manifold mounting) (For mounting) ک آ (30)(37)^시입 설 3.5 3 4 11 2-ø2.6 (18)(For mounting) 19.5 (25) (46.5)M5 x 0.8 (Piping port) Ø1.8 (Bleed port) With fiflter (80 mesh)

Dimensions: Base Mounted

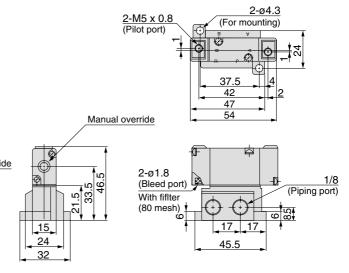
2 position single: SYJA5140-01□



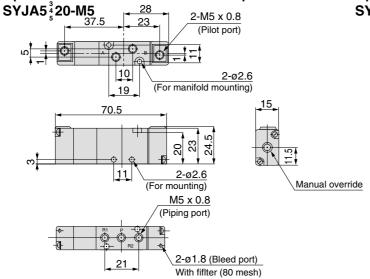
2 position double: SYJA5220-M5



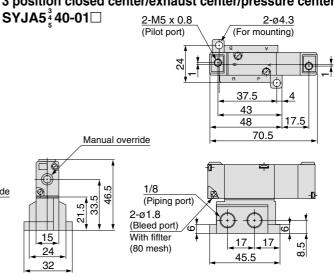
2 position double: SYJA5240-01□



3 position closed center/exhaust center/pressure center

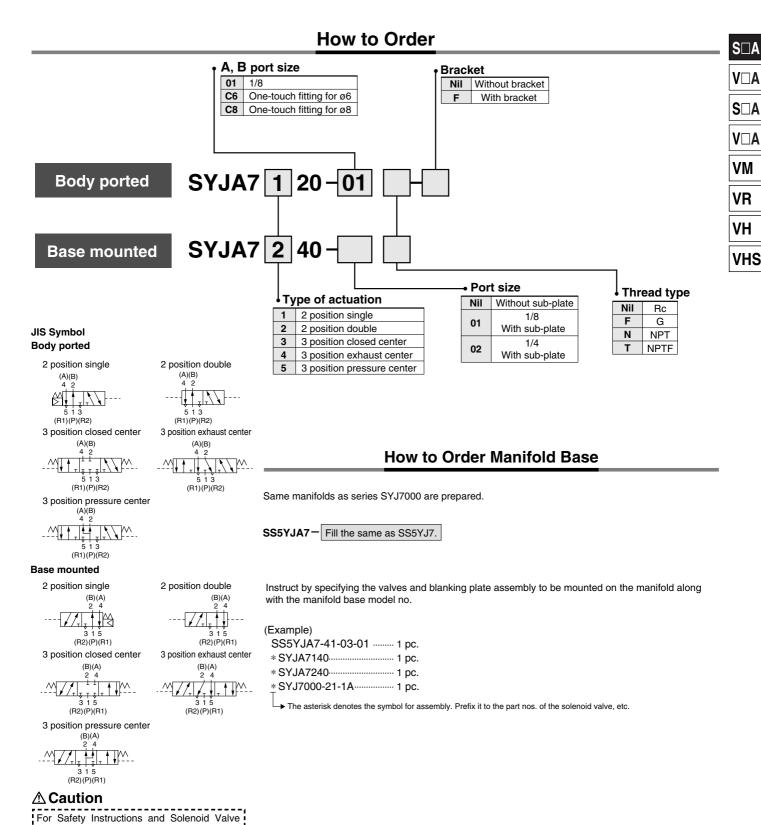


3 position closed center/exhaust center/pressure center



4/5 Port Air Operated Valve

Series SYJA7000

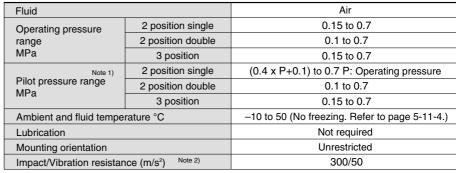


Precautions, refer to pages 5-11-2 to 5-11-6.

Specifications



Base mounted





Note 1) In the 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:

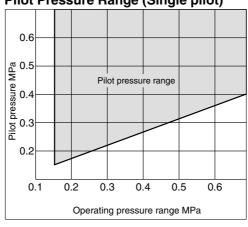
No malfunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve, when pilot signal is ON and OFF. (Value in the initial state) Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000 Hz.

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)



Body ported

Pilot Pressure Range (Single pilot)



With Bracket

Air operated valve type	SYJA7120-01-F
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As a bracket is designed for a body, be sure that a bracket is attached when ordering and

4/5 Port Air Operated Valve Series SYJA7000

Flow Characteristics/Weight

Valve model					Flow characteristics Note 2)							Note 3)
		Type of actuation		Port size	1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → EA/EB)			Pilot	Weight
				i oit size	C [dm³/ (s•bar)]	b	Cv	C [dm³/ (s•bar)]	b	Cv	port size	(g)
	SYJA7□20-01	2 position	Single Double		2.2	0.36	0.58	2.4	0.34	0.63		90 110
			Closed		1.8	0.37	0.45	2.0	0.35	0.49		
		3 position	Exhaust	1/8	1.2	0.50	0.34	3.0	0.35	0.73		120
Body ported			Pressure		3.0	0.37	0.78	1.8	0.37	0.45		
		2 position	Single		1.6	0.33	0.4	2.2	0.32	0.53		101
			Closed	A, B port: C6 (One-touch	1.4	0.27	0.35	1.9	0.33	0.49		12.
	SYJA7□20-C6	3 position	Exhaust center	fitting for ø6) P, R port: 1/8	1.1	0.37	0.27	2.5	0.32	0.61	M5 x 0.8	131
			Pressure center		1.8 [0.78]	0.36	0.45	1.6	0.30	0.39		
	SYJA7□20-C8	2 position	Single Double	A, B port: C8 (One-touch fitting for ø8) P, R port: 1/8	2.0	0.39	0.52	2.3	0.34	0.61		101 121
			Closed		1.7	0.35	0.42	2.0	0.29	0.49		
		3 position	Exhaust center		1.2	0.38	0.33	2.6 [1.3]	0.35 [0.49]	0.67 [0.38]		131
			Pressure center		1.9 [0.86]	0.57 [0.46]	0.59 [0.25]	1.7	0.39	0.42		
		2 position	Single Double		2.3	0.45	0.57	2.8	0.37	0.71		170 (90) 190 (110)
(e)			Closed center	4 (a Note 1)	1.9 0.36 0.48 2.1 0.46	0.46	0.57					
ub-plat	SYJA7□40-01	3 position	Exhaust center	1/8 Note 1)	1.2	0.48	0.35	3.4 [1.3]	0.36 [0.57]	0.86 [0.41]	M5 X U.8	200 (120)
(With s			Pressure center		3.3 [0.85]	0.43 [0.54]	0.78 [0.25]	2.1	0.45	0.56	M5 x 0.8	
Base mounted (With sub-plate)		2 position	Single Double		2.3	0.41	0.61	2.9	0.35	0.74		170 (90) 190 (110)
ase mc			Closed center	A (A Note 1)	1.9	0.46	0.50	2.2	0.44	0.60	MENOS	
Ba	SYJA7□40-02	3 position	ition Exhaust 1/4 Note 1) 1.3 0.45 0.35 3.7	3.7 [1.4]	0.27 [0.56]	0.87 [0.43]	- M5 x 0.8	200 (120)				
			Pressure center		3.6 [0.83]	0.23 [0.55]	0.84 [0.25]	2.1	0.47	0.58		

Note 1) P, A, B Port: Rc1/8 is R1, R2 port: Rc (PT) 1/4

Note 1) F, A, D Folt holds of the Note 2) []: Denotes normal position Note 3) (): Without sub-plate Note 4) 5 port base mounted without sub-plate: SYJA□40

SMC

S□A

 $V\Box A$ $S\square A$

 $V\Box A$

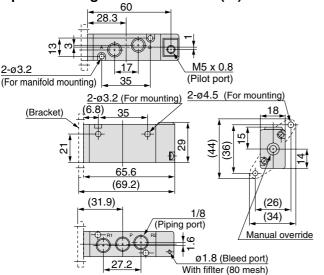
VM **VR**

VH

VHS

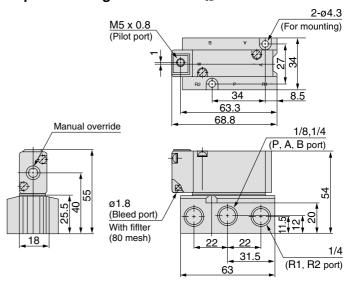
Dimesions: Body Ported

2 position single: SYJA7120-01□(-F)

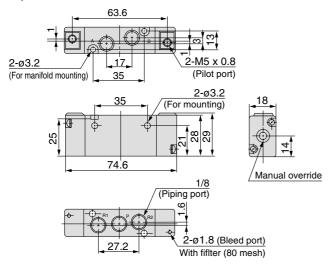


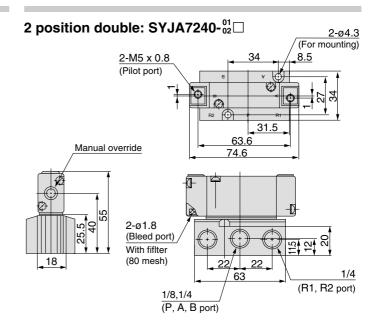
Dimensions: Base Mounted

2 position single: SYJA7140-01 □

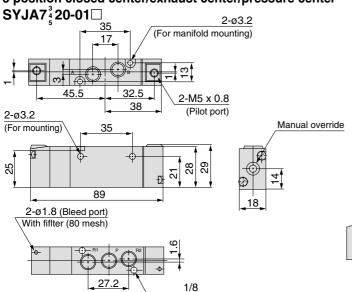


2 position double: SYJA7220-01□

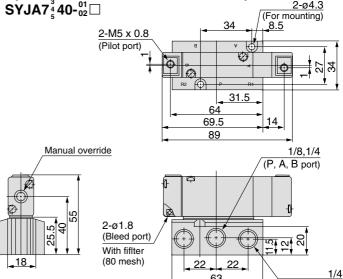




3 position closed center/exhaust center/pressure center



(Piping port)



63

(R1, R2 port)

3 position closed center/exhaust center/pressure center