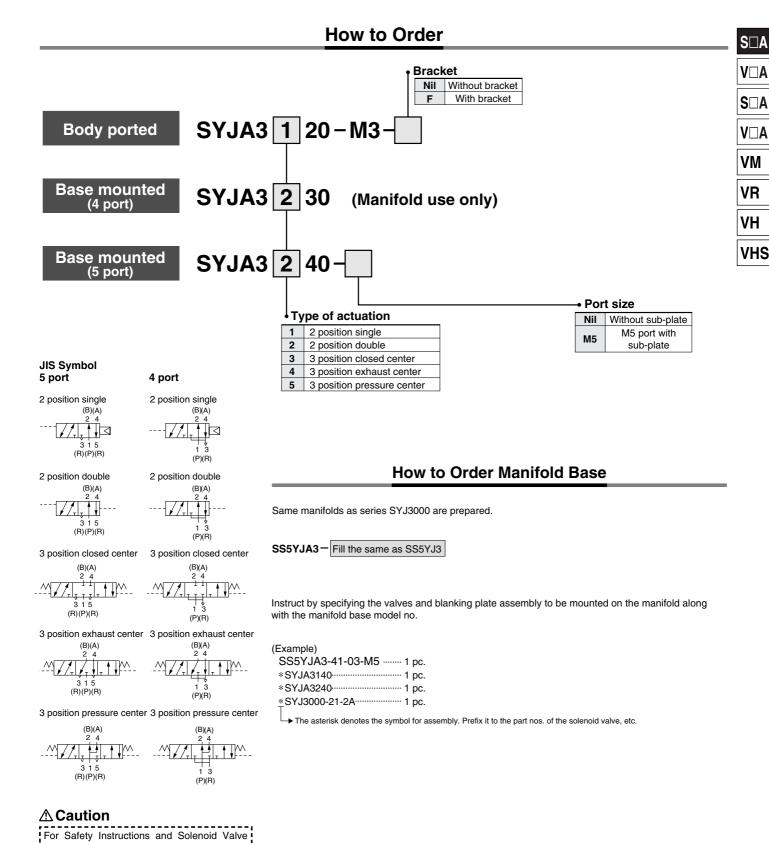
4/5 Port Air Operated Valve

Series SYJA3000

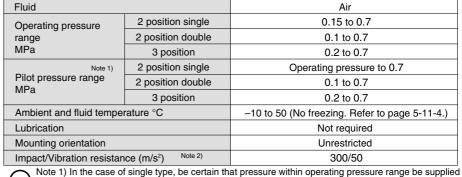


Precautions, refer to pages 5-11-2 to 6.

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.

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)

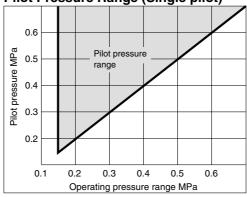
main valve, when pilot signal is ON and OFF. (Value in the initial state)
Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000 Hz.

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 syJA3□20-M3-F

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.

		Type of actuation			Pilot	Note 3) Weight (g)		Flow characteristics Note 2)						
	Valve model			Port size			Effective	$1 \rightarrow 4/2 \ (P \rightarrow A/B)$			$4/2 \rightarrow 5/3 \text{ (A/B} \rightarrow$		EA/EB)	
vaivo modoi		Type of actuation		FOIL SIZE	port size	Grommet	area mm²	C [dm ³ / (s•bar)]	b	Cv	C [dm³/ (s•bar)]	b	Cv	
5 port base mounted (with sub-plate)		2 position	Single Double			48 (22) 51 (25)		0.46	0.36	0.12	0.46	0.35	0.12	
			Closed			01 (20)		0.47 0.33 0.12 0.36 0.39 0.10	0.47	0.31	0.12			
	SYJA3□40-M5	3 position	Exhaust center	M5 x 0.8	M3 x 0.5	54 (28)	_		0.39	0.10	0.59 [0.40]	0.43	0.16 [0.11]	
			Pressure center	-				0.58 [0.32]	0.42 [0.33]	0.16 [0.080]	0.46	0.32	0.11	
		2 position	Single	M3 x 0.5	M3 x 0.5	22	0.9			-				
			Double			25								
fed			Closed											
Sor			center			28								
Body ported	SYJA3□20-M3	0 141	Exhaust											
B		3 position	center											
			Pressure											
			center											
-		2 position	Single			22								
nte e 1)		2 position	Double			25								
nou S			Closed											
e r	SYJA3□30		center	_	M3 x 0.5		Note 1) Value when used on a manifold. Refer to page 5-2-19 for details. Note 2) []: Denotes normal position. Note 3) (): Without sub-plate.							
4 Port base mounted (For manifold) Note 1)	3.0.020	3 position	Exhaust		WI3 X 0.5	28								
		o position	center											
For F			Pressure											
4 =			center					4) 5 port ba			sub-plate:	SYJA3□4	0	

S

V□A

S

V□A

VM

VR

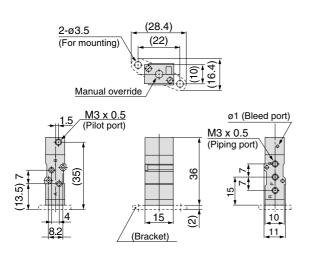
VH

VHS

4/5 Port Air Operated Valve Series SYJA3000

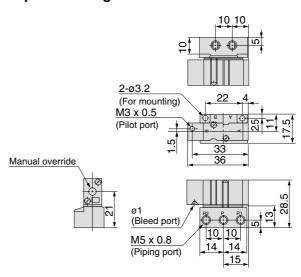
Dimesions: Body Ported

2 position single: SYJA3120-M3(-F)

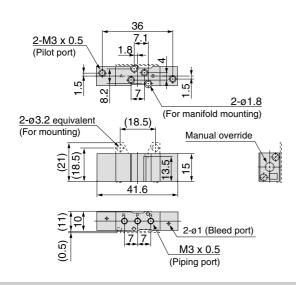


Dimensions: Base Mounted

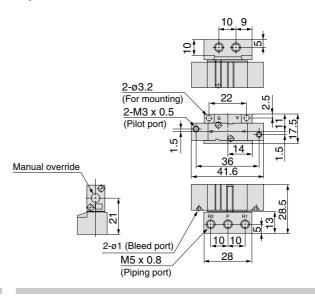
2 position single: SYJA3140-M5



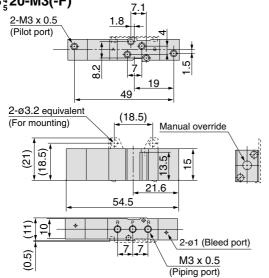
2 position double: SYJA3220-M3(-F)



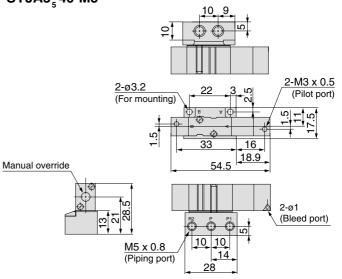
2 position double: SYJA3240-M5



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



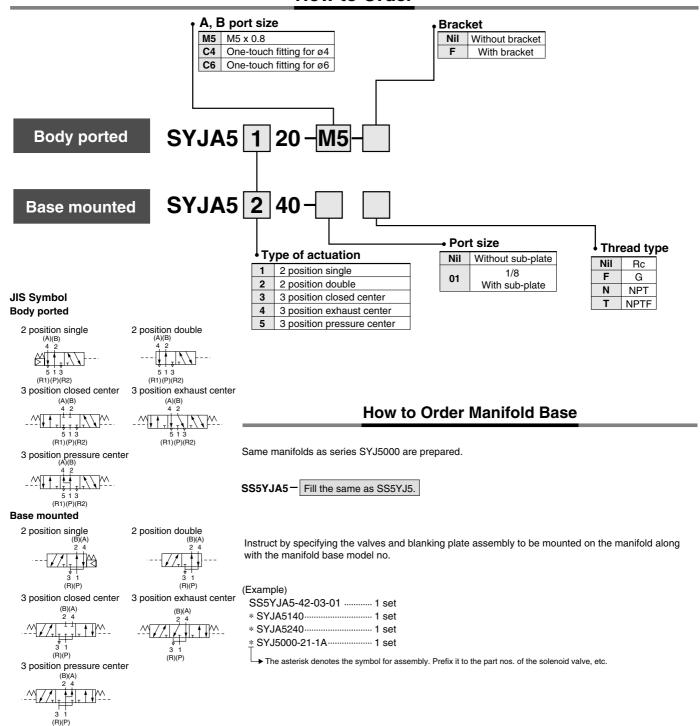
3 position closed center/exhaust center/pressure center SYJA3 $\frac{3}{4}$ 40-M5



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.

S

V□A

S□A

V□A

VM

VR

VH

VHS

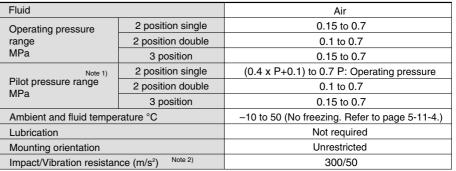
4/5 Port Air Operated Valve Series SYJA5000

Specifications



Base mounted

Body ported



0.6

0.5

0.4

0.3

0.2

0.1

Pilot pressure MPa

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

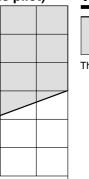
Note 2) Impact resistance: No malfunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve, when pilot signal is ON and OFF. (Value in the initial state)

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)

Pilot Pressure Range (Single pilot)

Pilot pressure range

Operating pressure range MPa



With Bracket

Air operated valve type	SYJA5120-M5-F

The mounting bracket is supplied unattached.

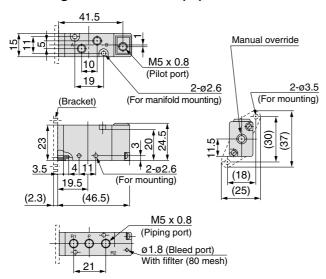
Flow Characteristics/Weight

				Port size				Note 2)				
	Valve model	Type of actuation			$1 \rightarrow 4/2 \ (P \rightarrow A/B)$				$4/2 \rightarrow 5/3 \text{ (A/B} \rightarrow \text{EA/EB)}$			Pilot
valvo model		Type of actuation		T UIT SIZE	C [dm³/ (s·bar)]	b	Cv	C [dm³/ (s·bar)]	b	Cv	port size	Weight (g)
	SYJA5□20-M5	2 position	Single Double		0.47	0.41	0.13	0.47	0.41	0.13		45 60
			Closed center	ME v O 9	0.49	0.44	0.13	0.44	0.40	0.12		
		3 position	Exhaust center	M5 x 0.8	0.46	0.37	0.12	0.47 [0.39]	0.43 [0.35]	0.13 [0.10]	M5 x 0.8	70
			Pressure center		0.49 [0.39]	0.51 [0.38]	0.14 [0.10]	0.45	0.42	0.12		
p	SYJA5□20-C4	2 position	Single Double	A D ======== 0.4	0.69	0.39	0.18	0.44	0.39	0.12		52 67
oorte		3 position	Closed center	A, B port: C4 (One-touch fitting for Ø4) P, R port: M5 x 0.8	0.69	0.40	0.19	0.43	0.40	0.12		
Body ported			Exhaust center		0.56	0.40	0.15	0.41 [0.41]	0.37 [0.37]	0.10 [0.11]		77
			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 (One-touch fitting for ø6) P, R port: M5 x 0.8	0.70	0.36	0.19	0.47	0.40	0.12		52 67
		5 □ 20-C6 3 position	Closed center		0.72	0.37	0.19	0.44	0.34	0.12		
			Exhaust center		0.67	0.54	0.19	0.41 [0.41]	0.38 [0.38]	0.11 [0.11]		77
			Pressure center		0.82 [0.44]	0.41 [0.39]	0.23 [0.12]	0.41	0.36	0.11		
Base mounted (with sub-plate)	SYJA5□40-01	2 position	Single Double		0.79	0.21	0.19	0.83	0.32	0.21		79 (45) 94 (60)
			Closed center	0.80	0.28	0.18	0.86	0.34	0.20	M5 x 0.8		
		3 position	Exhaust center	1/8	0.71	0.26	0.18	1.1 [0.60]	0.24 [0.44]	0.26 [0.18]	IVIS X U.O	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

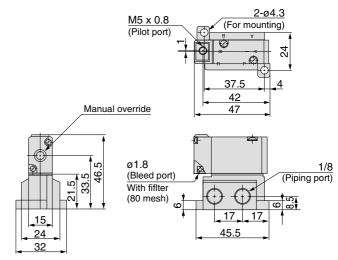
Dimesions: Body Ported

2 position single: SYJA5120-M5(-F)



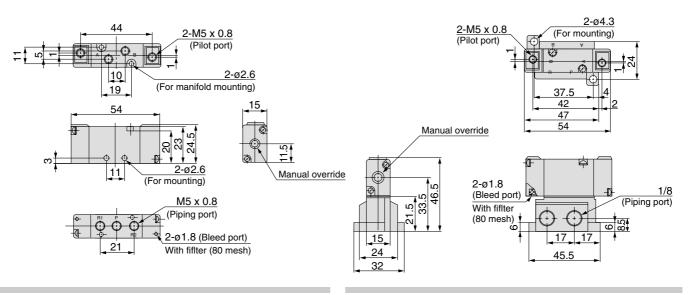
Dimensions: Base Mounted

2 position single: SYJA5140-01□

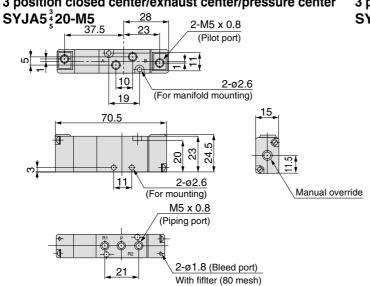


2 position double: SYJA5220-M5

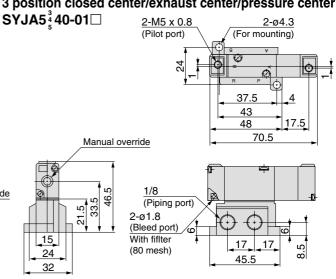
2 position double: SYJA5240-01□





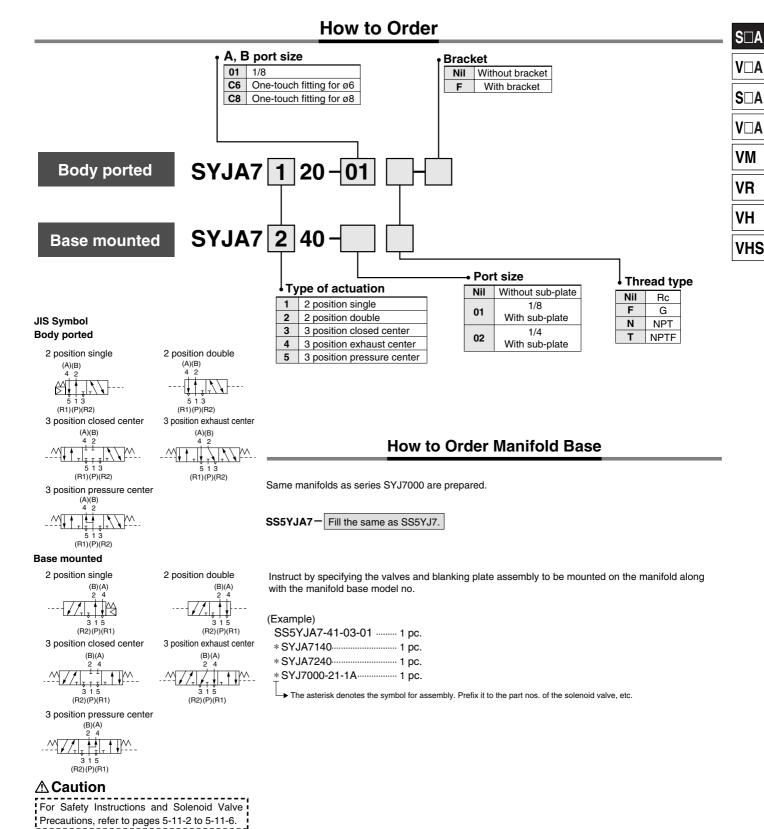


3 position closed center/exhaust center/pressure center



4/5 Port Air Operated Valve

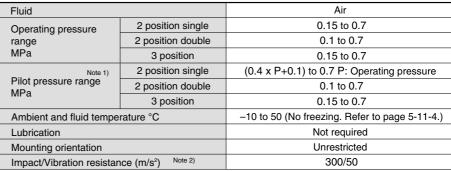
Series SYJA7000



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.

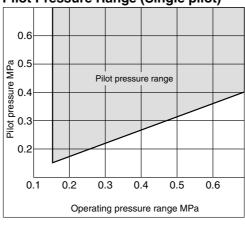
Note 2) Impact resistance:

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





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

S□A

 $V\Box A$

 $S\square A$

 $V\Box A$

VM

VR

VH

VHS

4/5 Port Air Operated Valve Series SYJA7000

Flow Characteristics/Weight

							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
	vaive model				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
		3 position	Closed	1/8	1.8	0.37	0.45	2.0	0.35	0.49		
			Exhaust center		1.2	0.50	0.34	3.0 [1.3]	0.35 [0.52]	0.73		120
			Pressure center		3.0 [0.83]	0.37	0.78 [0.25]	1.8	0.37	0.45		
	SYJA7□20-C6	2 position	Single Double		1.6	0.33	0.4	2.2	0.32	0.53		101 121
orted			Closed center	A, B port: C6 (One-touch	1.4	0.27	0.35	1.9	0.33	0.49	ME v O C	
Body ported		3 position	Exhaust center	fitting for ø6) P, R port: 1/8	1.1	0.37	0.27	2.5 [1.3]	0.32 [0.54]	0.61 [0.38]	M5 x 0.8	131
			Pressure center		1.8 [0.78]	0.36 [0.40]	0.45 [0.22]	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
		8 3 position	Closed center		1.7	0.35	0.42	2.0	0.29	0.49		
			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)
te (SYJA7□40-01	7□40-01 3 position Closed center Exhaust center Pressure center	1.9	0.36	0.48	2.1	0.46	0.57	MENOO			
ub-pla				1/8	1.2	0.48	0.35	3.4 [1.3]	0.36 [0.57]	0.86 [0.41]	M5 x 0.8	200 (120)
(With s					3.3 [0.85]	0.43 [0.54]	0.78 [0.25]	2.1	0.45	0.56		
Base mounted (With sub-plate)		2 position	Single Double	1/4 ^{Note 1)}	2.3	0.41	0.61	2.9	0.35	0.74	Mayoo	170 (90) 190 (110)
ase mo	CV 147 - 40 00		Closed center		1.9	0.46	0.50	2.2	0.44	0.60		
В	SYJA7□40-02	3 position	Exhaust center		1.3	0.45	0.35	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 2) []: Denotes normal position
Note 3) (): Without sub-plate

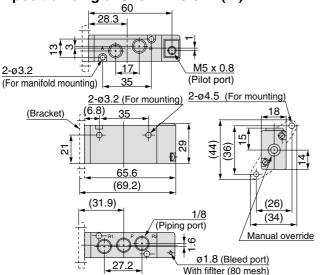
Note 4) 5 port base mounted without sub-plate: SYJA□40



5-2-27

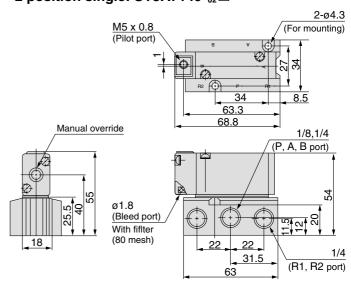
Dimesions: Body Ported

2 position single: SYJA7120-01□(-F)

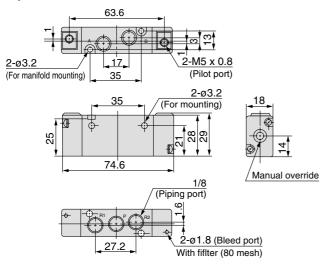


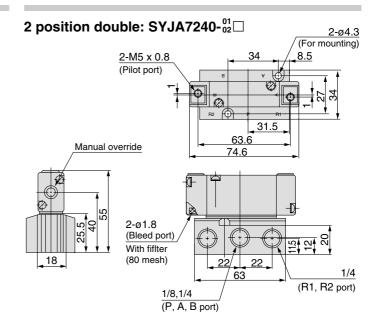
Dimensions: Base Mounted

2 position single: SYJA7140-01 □

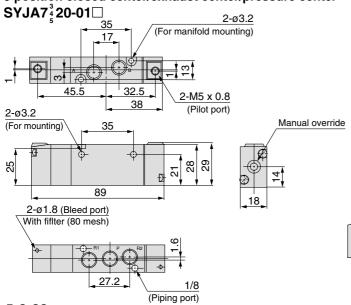


2 position double: SYJA7220-01□

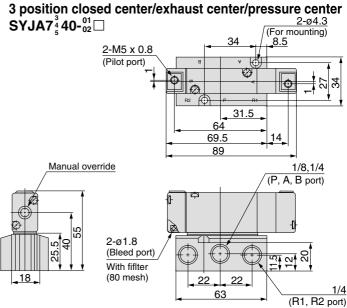




3 position closed center/exhaust center/pressure center



5-2-28



SMC