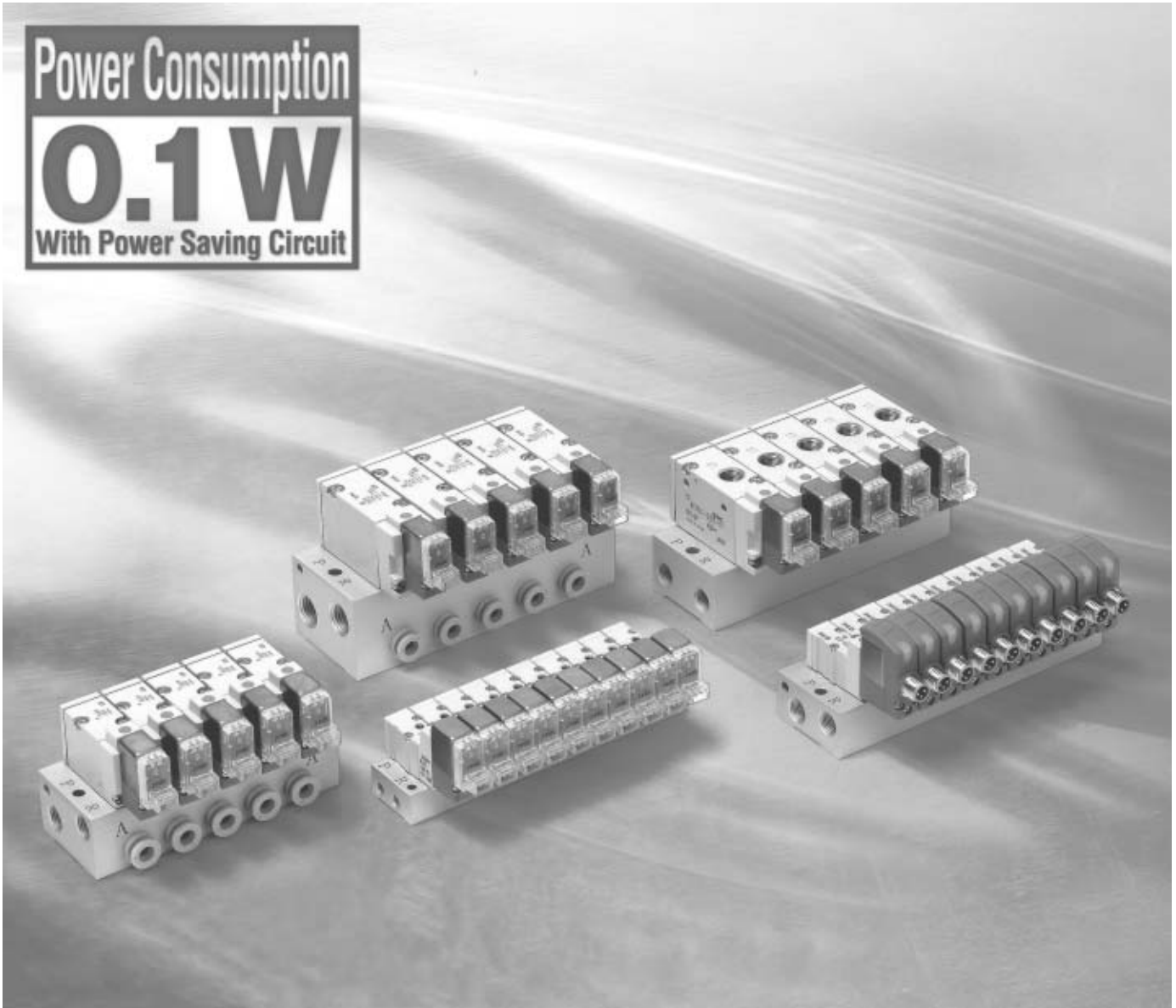


3 Port Solenoid Valve

Series SYJ300/500/700

Power Consumption
0.1 W
 With Power Saving Circuit



- V100
- SY
- SYJ**
- VK
- VZ
- VT
- VP
- VG
- VP
- S070
- VQ
- VKF
- VQZ
- VZ
- VS
- VFN



Cover (stainless steel)

Improved pilot valve

Pilot valve cover is stronger using stainless steel.
 Mounting thread is also reinforced from size M1.7 to M2.


Flow Characteristics

Series	Flow characteristics		
	C [dm ³ /(s·bar)]	b	Cv
SYJ300	0.36	0.31	0.089
SYJ500	1.2	0.41	0.32
SYJ700	2.7	0.38	0.72

3 Port Pilot Operated Solenoid Valve Rubber Seal Series SYJ500

Flow Characteristics/Weight

Valve model		Type of actuation	Port size	Flow characteristics						Weight (g) ^{Note)}			
				1 → 2 (P → A)			2 → 3 (A → R)			Grommet	L/M plug connector	DIN terminal	M8 connector
				C [dm ³ /(s bar)]	b	Cv	C [dm ³ /(s bar)]	b	Cv				
Body ported	SYJ512	N.C.	M5 x 0.8	0.53	0.45	0.14	0.47	0.39	0.12	46	47	68	51
	SYJ522	N.O.		0.66	0.45	0.18	0.66	0.45	0.18				
Base mounted (with sub-plate)	SYJ514	N.C.	1/8	1.2	0.41	0.32	1.1	0.46	0.32	60 (46)	61 (47)	82 (68)	65 (51)
	SYJ524	N.O.		1.3	0.37	0.33	1.2	0.48	0.34				

 Note) Value for DC. Add 1 g for AC. (): Without sub-plate.

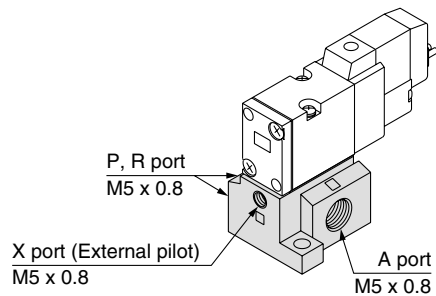
External Pilot

SYJ500R

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 (SYJ514R, SYJ524R)	
Operating pressure range MPa	Main pressure	-100 kPa to 0.7
	External pilot pressure	0.15 to 0.7



Note 1) For manifold base, refer to page 4-4-24.

Note 2) External pilot type body ported valves (SYJ5□2R) can only be used on the manifold. For body ported models with the external pilot option, please refer to page 4-4-55.

V100

SY

SYJ

VK

VZ

VT

VP

VG

VP

S070

VQ

VKF

VQZ

VZ

VS

VFN

How to Order

Rated voltage

DC

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

* DC specifications of type D and DO is only available with 12 and 24 VDC.

AC (50/60 Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

* For type "W□", DC voltage is only available.

Light/Surge voltage suppressor

Electrical entry for G, H, L, W

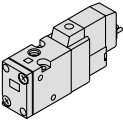
Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.
* For type "R" and "U", DC voltage is only available.
* Power saving circuit is only available in the "Z" type.

Electrical entry for D

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

* "DOZ" is not available.
* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.



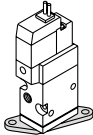
3 port
(For manifold type 20, 21R)

Type of actuation

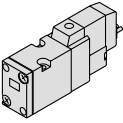
1	Normally closed
2	Normally open

Bracket

Nil	Without bracket
F	With bracket



* Bracket is mounted.
* External pilot type is not available.



3 port
(For sub-plate type, manifold type 40, 40R, 41, 41R)

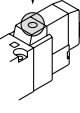
Coil specifications

Nil	Standard
T	With power saving circuit (24, 12 VDC only)

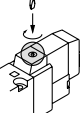
* Power saving circuit is not available in the case of "D", "DO", "W□" type.

Manual override

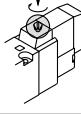
Nil: Non-locking push type



D: Push-turn locking slotted type

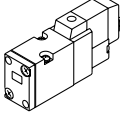
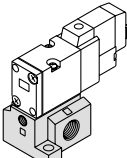


E: Push-turn locking lever type



Port size

Nil: Without sub-plate 01: 1/8 port With sub-plate

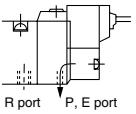
(With gasket and screws)

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

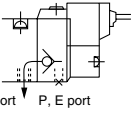
Body option

Nil: Individual pilot exhaust type



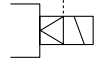
R port P, E port

M: Common exhaust for the pilot and main valve



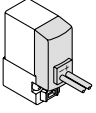
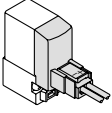
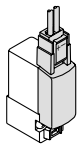
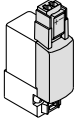
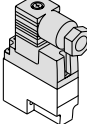
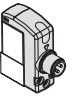
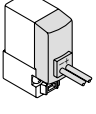
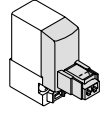
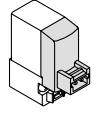
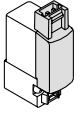
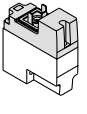
R port P, E port

R: External pilot type*



* SYJ5□2R is only for manifold use.

Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC				24, 12 VDC/100, 110, 200, 220 VAC	24, 12, 6, 5, 3 VDC
Grommet	L plug 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) 	MN: Without lead wire 	D: With connector 	WO: Without connector cable 
H: Lead wire length 600 mm 	LN: Without lead wire 	LO: Without connector 	MO: Without connector 	DO: Without connector 	

Note) When placing an order for body ported solenoid valve as a single unit, mounting bolt for manifold and gasket are not attached. Order them separately, if necessary. (For details, refer to page 4-4-25.)

* "LN", "MN" type: with 2 sockets.
* DIN terminal "Type Y" conforming to DIN43650C standard is also available. For details, refer to page 4-4-54.
* For connector cable of M8 connector, refer to page 4-4-60.