Pilot solenoid valve with 2/3/5 ports (Stand-alone type, Manifold type)

ASafety instructions for this product

Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation of SVA21 Sub-base piping type (Example)



(1) Solenoid Valve SVA

(2) Valve series

21: Sub-base piping type (16mm width valve)

(3) Output port size

			mm siz	e (mm)			inch size (inch)						
Port style		Side			Тор			Side		Тор			
Code	6C	8C	OC	6L	8L	OL	1/4C	5/16C	3/8C	1/4L	5/16L	3/8L	
Tube O.D.	ø6	ø8	ø10	ø6	ø8	ø10	ø1/4	ø5/16	ø3/8	ø1/4 ø5/16 ø3/8			

(4) Intake port size

			mm siz	e (mm)		inch size (inch)							
Port style		Side			Тор			Side		Тор			
Code	6C	8C	OC	6L	8L	OL	1/4C	5/16C	3/8C	1/4L	5/16L	3/8L	
Tube O.D.	ø6	ø8	ø10	ø6	ø8	ø10	ø1/4	ø5/16	ø3/8	ø1/4	ø5/16	ø3/8	

* When a silencer is selected for Exhaust port, port style should be side.

(5) Exhaust port size

l

	mm	n size (m	nm)	inch	n size (in	ich)	Silencer (Open-Air Exhaust)			
Code	6	8	0	1/4	5/16	3/8	S			
Tube O.D.	ø6	ø8	ø10	ø1/4	ø5/16	ø3/8	—			

*1. Port style of Exhaust port is the same as that of Intake port.

*2. When tube exhaust port is selected and Valve type T or U for (6), do not plug the exhaust port for any reason since the pilot air is discharged through the port. Plugging of exhaust port will cause malfunction.

(6) Mounting valve type

	.)po						
No. of ports	No. of positions	Valve type					
5	2	Single solenoid					
5	2	Double solenoid					
		4 (A), 2 (B) port: Normally Closed (Twin 3-way valve)					
	2	4 (A), 2 (B) port: Normally Open (Twin 3-way valve)					
3	2	4 (A) port: Normally Closed, 2 (B) port: Normally Open (Twin 3-way valve)					
		4 (A) port: Normally Open, 2(B) port: Normally Closed (Twin 3-way valve)					
		Closed Center					
5	3	Exhaust Center					
		Pressure Center					
2	2	Single solenoid (Vacuum-operatable valve)					
2	2	Double solenoid (Vacuum-operatable valve)					
2	2	Single solenoid (Vacuum-operatable valve)					
3	2	Double solenoid (Vacuum-operatable valve)					
	No. of ports 5 3	No. of positions523253222					

(7) Body color

B: Black

(8) Voltage

Code	D24	100
Coil voltage	24VDC	100VAC

Mounting Valve type JIS symbol



>>>> https://www.pisco.co.jp/en/

F

Model Designation of Sub-base Mounting Valve Unit (Example)



(1) Solenoid Valve SVA

(2) Valve series

21: Sub-base piping type (16mm width valve)

(3) Mounting Valve type

Code	No. of ports	No. of positions	Valve type
S	5	2	Single solenoid
D		2	Double solenoid
E			4 (A), 2 (B) port: Normally Closed (Twin 3-way valve)
F	3	2	4 (A), 2 (B) port: Normally Open (Twin 3-way valve)
G		2	4 (A) port: Normally Closed, 2 (B) port: Normally Open (Twin 3-way valve)
Н			4 (A) port: Normally Open, 2(B) port: Normally Closed (Twin 3-way valve)
Α			Closed Center
R	5	3	Exhaust Center
Р			Pressure Center
Т	2	2	Single solenoid (Vacuum-operatable valve)
U	2	2	Double solenoid (Vacuum-operatable valve)
V	3	2	Single solenoid (Vacuum-operatable valve)
W	3	2	Double solenoid (Vacuum-operatable valve)

 * Valve type JIS symbol in on the previous page.

(4) Voltage

Code	D24	100	
Coil voltage	24VDC	100VAC	

(5) Body color

B: Black

Model Designation of Manifold piping type (Example)



(1) Solenoid Valve SVA

(2) Valve series

20: Manifold piping type (16mm width valve)

(3) No. of stations

Code	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
No. of stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

(4) Intake & Exhaust block





A: Intake & Exhaust block on Both sides B: Intake & Exhaust block on One side

(5) Output port size

		m		inch size (inch)					
Port style	Side			Тор	Si	de	Тор		
Code	1C	6C	8C	1L	8L	1/4C	5/16C	1/4L	5/16L
Tube O.D.	Combination in different sizes	ø6	ø8	Combination in different sizes	ø8	ø1/4	ø5/16	ø1/4	ø5/16



(6) Intake port size

			mm siz	e (mm)			inch size (inch)						
Port style		Side			Тор			Side		Тор			
Code	8C	OC	20	8L	OL	2L	5/16C	3/8C	1/2C	5/16L	3/8L	1/2L	
Tube O.D.	ø8	ø10	ø12	ø8	ø10	ø12	ø5/16 ø3/8 ø1/2 ø5/16 ø3/8					ø1/2	

(7) Exhaust check valve

Code	A01	A02	A03	A04	A05	A06	A07	A08	A09	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	No code
No. of stations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	without check valve

(8) Exhaust port size

	mn	n size (m	nm)	inch	n size (ir	nch)	Silencer (Open-Air Exhaust)			
Code	8	0	2	5/16	3/8	1/2	S			
Tube O.D.	ø8	ø10	ø12	ø5/16	ø3/8	ø1/2	—			

*1. Port style of Exhaust port is the same as that of Intake port.

When tube exhaust port one data wat of match port.
 When tube exhaust port is selected and Valve type T or U for (11), do not plug the exhaust port for any reason since the pilot air is discharged through the port. Plugging of exhaust port will cause malfunction.

Connector

Exhaust port

Silencer exhaust

Tube exhaust

(9) Wiring type

Code	D	S	F
Wiring type	Sub-D Connector	Individual Plug-in Connector	Flat cable (ribbon-cable) connector





Sub-D Connector

Flat cable (ribbon-cable) connector

(10) Body color

B: Black

(11) Mounting valve type

/	,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Code	No. of ports	No. of positions	Valve type		
S	5	2	Single solenoid		
D	5	2	Double solenoid		
E			4 (A), 2 (B) port: Normally Closed (Twin 3-way valve)		
F	3	2	4 (A), 2 (B) port: Normally Open (Twin 3-way valve)		
G	3	2	4 (A) port: Normally Closed, 2 (B) port: Normally Open (Twin 3-way valve)		
Н			4 (A) port: Normally Open, 2(B) port: Normally Closed (Twin 3-way valve)		
Α			Closed Center		
R	5	3	Exhaust Center		
Р			Pressure Center		
Т	2	2	Single solenoid (Vacuum-operatable valve)		
U	2	2	Double solenoid (Vacuum-operatable valve)		
V	3	2	Single solenoid (Vacuum-operatable valve)		
W	3	2	Double solenoid (Vacuum-operatable valve)		
К		Combination of Valves			
В	Blank Plate				
М	Manifold-base only				

(12) Voltage

Code D24 100							
Coil voltage 24VDC 100VAC							
* No entry when mounting valve type is B (Blank							

No entry when mounting valve ty plate) or M (Manifold-base only) type is B (Blani

(13) Dual pressure option

Code	No code	Р
Supply pressure	Single pressure	Double pressure *1, 2

*1. Please specify pressure separating position by an order form.

*2. Intake & Exhaust Block for Dual Pressure is "A" type (Intake & Exhaust Block on Both sides) only.

(14) DIN-rail mounting bracket

Code	No code	D						
DIN-rail mounting bracket Without bracket With DIN-rail brack								
* 1set of DIN-rail bracket contains 2pcs.								



P

Mounting Valve type code: W

Model Designation of Manifold mounting valve unit alone (Example)



(1) Solenoid Valve SVA

(2) Valve series

20: Manifold piping type (16mm width valve)

(3) Mounting valve type

wounting	vaivei	yhe				
Code	No. of ports	No. of positions	Valve type			
S	5	2	Single solenoid			
D	5	2	Double solenoid			
E			4 (A), 2 (B) port: Normally Closed (Twin 3-way valve)			
F	2	2	4 (A), 2 (B) port: Normally Open (Twin 3-way valve)			
G	3	2	4 (A) port: Normally Closed, 2 (B) port: Normally Open (Twin 3-way valve)			
Н			4 (A) port: Normally Open, 2(B) port: Normally Closed (Twin 3-way valve)			
Α			Closed Center			
R	5	3	Exhaust Center			
Р			Pressure Center			
Т	2	2	Single solenoid (Vacuum-operatable valve)			
U	U		Double solenoid (Vacuum-operatable valve)			
V	2	2	Single solenoid (Vacuum-operatable valve)			
W	3	2	Double solenoid (Vacuum-operatable valve)			

(4) Voltage

Code	D24	100
Coil voltage	24VDC	100VAC

(5) Wiring type

Code	D	S
Wiring type	Concentrated wiring (Sub-D connector, Flat cable connector)	Individual wiring (Individual Plug-in Connector)

(6) Body color

B: Black



Model Designation of DIN-rail mounting bracket



(1) DIN-rail mounting bracket

Model Designation of Blank plate (Example)



(1) Solenoid Valve SVA

(2) Series 20 : For 20 series

Model Designation of Silencer element (Example)



(1) Solenoid Valve SVA

(2) Series 20: For 20 series 21: For 21 series

JVA	20	00		- 10	20			-	Ы	- K	- 024			_
												,	l	
				3		ſ	Station N	lo.	Out-port	Check valve	Mounting v	alve f	type	
			æ ^æ .	=		[St. 1		6		SVA20		S	┝
	E					[St. 2		6		SVA20		S	╞
				600			St. 3		6		SVA20		S	╞
			6002	26		[St. 4		6		SVA20		S	╞
	N. M.	686	600				St. 5		8	A	SVA20		D	╞
	P	St	1, St. 2, St. 3	St. 8			St. 6		8	A	SVA20		D	╞
* Statior	No. is counted				with the		St. 7		8	A	SVA20		D	╞
	tings at the from						St. 8		8	A	SVA20		D	╞
		SVA	20 So	oleno	id Va	alve	Speci P		tion C		orm			
То	: NIHON	PISCO	Co.,Ltd.											
			,											
	Distribut								TC 1					
	Distribut	tor/Deal	er addre	SS:					TEL					_
	Delivery	addres	s:										ΤE	L
	Custom	er addre	ess:						TEL					
	_								_					
	Reques	ted EX-	W PISCO	O Date:					Quar	ntity		p	CS.	_
lodel	Series	No. of stations	In 8 Ex block	Out-port	In-port	Chock v	alve Ex-port	Wiri	ng Color	Valve	Voltage	\mathbf{v}	2-pres	~
(1)	(2)	(3)	(4)	- (5)	(6)	(7)	(8)	(9)		(11)	(12)	, - ²	(13	
SVA	20	(0)	-	-	(0)	(.)	-	-	B	_	_	1-1	(/
						ſ	Station N		Out-port	Check valve	Mounting	/alve /	tvne	Γ
							St. 1		ourpoir		SVA20	arro	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	L
						ŀ	St. 2				SVA20		+	L
						ŀ	St. 3				SVA20		\square	L
						-	S.t 4				SVA20		\square	L
						-	St. 5				SVA20		\square	L
						-	St. 6				SVA20		\square	L
						-	St. 7				SVA20			Ļ
						-	St. 8				SVA20			Ļ
						-	St. 9				SVA20			L
							St. 10				SVA20			F
						-	St. 11				SVA20			F

Example of Manifold type (20 series) Model Designation

-

Out-port

(5)

1Ć

(6)

2Ć

In-port Check valve Ex-port

(7)

A04

(8)

S

Wiring

(9)

F

Color

(10)

Β

_

Valve

(11)

K

Voltage

(12)

D24

_

_

No. of stations In. & Ex. block

(4)

A

(3)

08

Model

(1)

SVA

Series

(2)

20



2-press. DIN-rail

l.....

(14)

2-press.

(13)

TEL

Model (1)	Series	No. of stations (3)	In. & Ex. block	Out-port	In-port (6)	Check valve	Ex-port _	Wiring (9)	Color (10)	_	Valve	_ `	Voltage	_ 2-press.	DIN-rail (14)
	(2)	(3)	(4)	(3)	(0)	(7)	(0)	(9)	(10)		(11)		(12)	(13)	(14)
SVA	20		-	-			-	-	В	—		-		-	

	V		V		V
Station No.	Out-port	Check valve	Mounting valve t	уре	2-press.
St. 1			SVA20		
St. 2			SVA20		
St. 3			SVA20		
S.t 4			SVA20		
St. 5			SVA20		
St. 6			SVA20		
St. 7			SVA20		
St. 8			SVA20		
St. 9			SVA20		
St. 10			SVA20		
St. 11			SVA20		
St. 12			SVA20		
St. 13			SVA20		
St. 14			SVA20		
St. 15			SVA20		
St. 16			SVA20		
St. 17			SVA20		
St. 18			SVA20		
St. 19			SVA20		

Characteristics

- Lightweight and small-sized, yet high flow. Effective Sectional Area of 18mm² with valve width 16mm
- Various valve types are available.
- 2 options of intake and output port position; Top or side
- Twin 3-way valve allows to control different 2 actuators simultaneously, but separately.

It contributes to save room where many 3-way valves are used with air-operated valves or single acting cylinders.

Vacuum-operatable 2/3-Port Solenoid Valve

Vacuum-operatable 2 or 3-way valve which does not require external piping. Same in function as the external pilot system.

Single and Double solenoid types are available.

External piping is not necessary, so that mix-mounting of different valve types is possible. * 20 series realizes easy-wiring, and piping and less room.



A check valve for each exhaust port to prevent back pressure can be installed as an option.

Dual pressure type allows 2 different pressures of supply air putting a separator between certain stations. Dual pressure type is an option.

Intake ports in a manifold are separated.



Bracket of DIN rail is available. It helps easy attachment and detachment.

With the bracket, a manifold can be firmly fixed.

Specifications

Model SVA21 Fluid medium Air Operating pressure range 0.2 to 0.7 MPa Proof pressure 1.05 MPa Operating temp. range 5 to 50°C Installing direction Universal (Conditional) No. of mountable main valve 1 pc. Tube dia. 3 (R2) port 4 (A), 2 (B) port Push-in fitting (dia.) ø6mm, ø8mm,ø10mm (*) ø1/4", ø5/16", ø3/8" (*) Wiring type Type Individual Plug-in Connector	Sub-base Specifications						
Operating pressure range 0.2 to 0.7 MPa Proof pressure 1.05 MPa Operating temp. range 5 to 50°C Installing direction Universal (Conditional) No. of mountable main valve 1 pc. Tube dia. ¹ (P), 5 (R1), ³ (R2) port ⁴ (A), 2 (B) port ⁴ (A) port ⁴ (A) port ⁴ (A) port ⁴ (A) port	Model			SVA21			
Proof pressure 1.05 MPa Operating temp. range 5 to 50°C Installing direction Universal (Conditional) No. of mountable main valve 1 pc. Tube dia. ¹ (P), 5 (R1), ³ (R2) port ⁴ (A), 2 (B) port	Fluid medium			Air			
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Operating pres	sure range	0.	2 to 0.7 MPa			
Installing directionUniversal (Conditional)No. of mountable main valve1 pc.Tube dia. $1 (P), 5 (R1),$ $3 (R2) portPush-in fitting(dia.) $	Proof pressure	•		1.05 MPa			
No. of mountable main valve1 pc.Tube dia. $1 (P), 5 (R1),$ $3 (R2) portPush-in fitting(dia.)Ø6mm, Ø8mm,Ø10mm (*)Ø1/4", Ø5/16", Ø3/8" (*)4 (A), 2 (B) portPush-in fitting(dia.)Ø6mm, Ø8mm,10mmØ1/4", Ø5/16", Ø3/8"Wiring typeTypeIndividual Plug-in Connector$	Operating tem	p. range		5 to 50°C			
Tube dia.1 (P), 5 (R1), 3 (R2) portPush-in fitting (dia.)ø6mm, ø8mm,ø10mm (*) $ø1/4"$, ø5/16", ø3/8" (*) $ø1/4"$, ø5/16", ø3/8" (*) $ø1/4"$, ø5/16", ø3/8"Wiring typeTypeIndividual Plug-in Connector	Installing direct	tion	Universal (Conditional)				
Tube dia. 3 (R2) port (A), 2 (B) port (dia.) Ø1/4", Ø5/16", Ø3/8" (*) Wiring type Type Push-in fitting (dia.) Ø6mm, Ø8mm, 10mm Ø1/4", Ø5/16", Ø3/8"	No. of mountabl	le main valve	1 pc.				
Tube dia. Push-in fitting 4(A), 2 (B) port Push-in fitting (dia.) ø6mm, ø8mm, 10mm ø1/4", ø5/16", ø3/8" Wiring type Type Individual Plug-in Connector		1 (P), 5 (R1),	Push-in fitting	ø6mm, ø8mm,ø10mm (*)			
Viring type Type Individual Plug-in Connector	Tubo dia	3 (R2) port					
(dia.) Ø1/4", Ø5/16", Ø3/8" Wiring type Individual Plug-in Connector	Tube ula.	4 (A) 2 (B) port	Push-in fitting	ø6mm, ø8mm,10mm			
Wiring type		4 (A), 2 (b) poit	(dia.)	ø1/4", ø5/16", ø3/8"			
No. of pins 3 pins	Wiring type	Туре	Individua	al Plug-in Connector			
	wining type	No. of pins	3 pins				
Silencer Standard equipment only with silencer exhaust 5 (R1) and 3 (R2) port.	Silencer		Standard equipment only with silencer exhaust 5 (R1) and 3 (R2) port.				

Manifold spec	cifications Model	SVA20AD	01//00 D D						
	Model	SVA20…AD	0.000 0 0						
			5VA20	SVA20…A·F	SVA20BF	SVA20AS	SVA20BS		
Fluid medium				A	ir				
Operating press	sure range		(0.2 to 0	.7 MPa	1			
Proof pressure				1.05	MPa				
Operating temp	. range			5 to	50°C				
Installing directi	ion		Univ	ersal (0	Conditio	onal)			
No. of mountable	No. of mountable main valve				max. '	19pcs.			
	1 (P) , 5 (R1) ,	Push-in fitting (dia.)							
		ø8mm×2	ø8mm×1	ø8mm×2	ø8mm×1	ø8mm×2	ø8mm×1		
		ø10mm×2	ø10mm×1	ø10mm×2	ø10mm×1	ø10mm×2	ø10mm×1		
		ø12mm×2	ø12mm×1	ø12mm×2	ø12mm×1	ø12mm×2	ø12mm×1		
Tube ula.	3 (R2) port	Ф5/16"×2	Ф5/16"×1	Ф5/16"×2	Ф5/16"×1	Ф5/16"×2	Ф5/16"×1		
		ф3/8"×2	ф3/8"×1	\$3/8"×2	Ф3/8"×1	\$3/8"×2	Ф3/8"×1		
		ф1/2"×2	ф1/2"×1	ф1/2"×2	ф1/2"×1	ф1/2"×2	ф1/ <u>2</u> "×1		
4	4 (A) , 2 (B) port	Push-in fitting (dia): ø6mm, ø8smm					nm		
Wiring type	Туре	Sub-D C	Sub-D Connector Flat cable (ribbon-cable) connector		Individual Plug-in Connector				
	No. of pins	9pins, 2	5pins(*1)	10pin, 26pins, 40pins(*2) 3			ins		
Silencer	Silencer			Standard equipment only with silencer exhaust 5 (R1) and 3 (R2) port.					

*1. For 2 to 4 stations, 9 pins. For 5 to 12 stations, 25 pins. *2. For 2 to 4 stations, 10 pins. For 5 to 12 stations, 26 pins. For 13 to 19 stations, 40 pins.

■ Solenoid Valve Specifications (24VDC)

Model			SVA21-D24 / SVA20-D24								
Valve type Piping spec.			D	A,R,P	E,F, G,H	т	U	V	w		
	Operating system	Direct acting operation									
	Valve structure		Rubber seal, Poppet valve								
	Rated coil voltage				24V	/DC					
Pilot valve	Tolerance of voltage range			21.	6 to 2	6.4 V	DC				
	Power consumption	1.2 W (with LED)									
	Surge protection circuit	Diode									
	Manual override	Non-lock push button									
	Operating pressure range	0.2 to 0.7 MPa									
	Operating system	Pneumatic operation by pilot valve									
	Valve structure	Rubber seal, Spool valve									
	No. of positions	2pos	itions	3 positions		2positions					
	No. of ports	Ę	5 ports	5	3 ports ×2(*1)	2 pc	orts	3ports			
	Valve function	Single	Doι	uble	Single×2	Single	Double	Single	Double		
Main valve	No. of pilot points	1		2		1	2	1	2		
	Response time(*2)	18msec	12msec	1	8mse	C	12msec	18msec	12msec		
	Max. operation cycle				51	Ηz					
	Min. excitation time		50msec				50msec		50msec		
	Lubrication			Ν	lot re	quire	d				
	Operating pressure range	0.	2 to 0	.7 M	Pa	- 0.1 to 0.7 MPa					

*1. This is a valve construction incorporating 2× 3-port valves. 1(P) is common.
*2. Values are at air pressure of 0.5MPa and from power off to on. For 3 positions valve, the value is from neutral position of closed center.

■ Solenoid Valve Specifications (100VAC)

Model			SVA21-100 / SVA20-100								
Piping spec.	Valve type	S	D	A,R,P	E,F, G,H	Т	U	v	W		
	Operating system	Direct acting operation									
	Valve structure		Rubber seal, Poppet valve								
	Rated coil voltage				100	VAC					
Pilot valve	Tolerance of voltage range			90) to 1 ⁻	10 VA	NC				
	Power consumption		1.5 VA (with LED)								
	Surge protection circuit	Diode									
	Manual override	Non-lock push button									
	Operating pressure range	0.2 to 0.7 MPa									
	Operating system	Pneumatic operation by pilot valve									
	Valve structure	Rubber seal, Spool valve									
	No. of positions	2positions 3positions				2positions					
	No. of ports		5 port	5	3 ports ×2(*1)	2 ports 3 ports		orts			
	Valve function	Single	Doι	ıble	Single×2	Single	Double	Single	Double		
Main valve	No. of pilot points	1		2		1	2	1	2		
	Response time(*2)	18msec	12msec	1	8mse	C	12msec	18msec	12msec		
	Max. operation cycle				51	Ηz					
	Min. excitation time		50msec				50msec		50msec		
	Lubrication			N	lot re	quire	d				
	Operating pressure range	0.	2 to C	.7 M	Pa	- 0	.1 to	0.7 M	Ра		

*1. This is a valve construction incorporating 2× 3-port valves. 1(P) is common.
 *2. Values are at air pressure of 0.5MPa and from power off to on. For 3 positions valve, the value is from neutral position of closed center.

■ Flow characteristics of Sub-base type

Model	SVA21							
Piping spec. Valve	S	D	A,R,P	E,F,G,H	T,U	V,W		
1(P)→4(A).2(B)(ø10mm)(*1)	S (*4)	17 (0.92)	17 (0.92)	12 (0.65)	15 (0.81)	17 (0.92)	17 (0.92)	
1(P)→4(A).2(B)(ø8mm)(*1)	S (*4)	16 (0.86)	16 (0.86)	12 (0.65)	14.5 (0.78)	13 (0.7)	13 (0.7)	
1(P)→4(A).2(B)(ø6mm)(*1)	S (*4)	10.5 (0.56)	10.5 (0.56)	9.5 (0.51)	10.5 (0.56)	8.5 (0.46)	8.5 (0.46)	
$4(A).2(B)(\emptyset 10 \text{ mm}) \rightarrow 5(R_1).3(R_2)$ Without Check valve(*2,3)	S (*4)	18 (0.97)	18 (0.97)	14 (0.75)	14 (0.75)		17.5 (0.95)	
$4(A).2(B)(Ø8 mm) \rightarrow 5(R_1).3(R_2)$ With Check valve(^{*2})	S (*4)		\square		\square	\square		
$4(A).2(B)(\emptyset 8 \text{ mm}) \rightarrow 5(R_1).3(R_2)$ Without Check valve(*2,3)	S (*4)	17 (0.92)	17 (0.92)	13.5 (0.73)	13.5 (0.73)	\sum	14 (0.76)	
$4(A).2(B)(\emptyset6 \text{ mm}) \rightarrow 5(R_1).3(R_2)$ With Check valve(*2)	S (*4)	\square	\square			\square	\sum	
$4(A).2(B)(\emptyset6 \text{ mm}) \rightarrow 5(R_1).3(R_2)$ Without Check valve(*2,3)	S (*4)	10.5 (0.56)	10.5 (0.56)	10 (0.54)	10 (0.54)	$\overline{\sum}$	9.5 (0.51)	

*1. Values of valve type T/U/V/W are with the flow direction 1(B) to 2(A).
*2. The value of open-air R port exhaust flow rate.
*3. Values of valve type V/W are with the flow direction 2(A) to 3(R).
*4. S: Effective sectional area S (mm² (CV))
*5. Refer to the flow rate of dia. 6 mm for inch port size of dia. 1/4", refer to dia. 8 mm for dia. 5/16", refer to dia. 10 mm for dia. 3/8" respectively.

Cylinder Speed Table

Cylinder						ore (
speed (mm/s)	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100	ø125	ø140
100										
200										
300										
400										
500										
600										
700										
800										

*1. The cylinder average speed is referential at 0.5 MPa of pressure, 30% of load factor and 1 m of tube length.

*3. The cylinder speed varies according to the configuration of piping and fittings.
 *3. The data in the above table represents the value when dia. 8 mm Push-in fitting is used on 4 (A) and 2 (B) ports of SVA20S-D24.

RoHS2 (2011/65/EU+EU2015/863) compliant

Double solenoid valve			Single solen	oid valve	Silencer element		
Туре		Model code	Туре	Model code		Model cod	
ube exhaust	15	SVA21-345-6B-8	Tube exhaust	SVA21-345-6B-8		SVA21EX-E * 1 set include pcs.	
Туре	1	Model code	Туре	Model code			
ilencer exha	ust	SVA21-34S-6B-8	Silencer exhaust	SVA21-34S-6B-8			
*2. Please Intake p	select each c oort size code	, 5: Exhaust port size	ce of SVA21 series. kample of model designation.1 e code, [5]: Valve type code ai Open-air exhaust) type.		t port size code, ④:		

CAD data is available (CAD) at PISCO website. 2D

Packaging specifications

Packag 1 pc. /bag

Silencer element: 2 pcs/ set (=1 bag)

Flow characteristics of Manifold type

Model	SVA20						
Valve Valve	type	S	D	A,R,P	E,F,G,H	T,U	V,W
1(P)→4(A).2(B)(ø10mm)(*1)	S (*4)		\square				
1(P)→4(A).2(B)(ø8mm)(*1)	S (*4)	16 (0.86)	16 (0.86)	12 (0.65)	14.5 (0.78)	13.5 (0.73)	13.5 (0.73)
1(P)→4(A).2(B)(ø6mm)(*1)	S (*4)	10.5 (0.56)	10.5 (0.56)	9.5 (0.51)	10.5 (0.56)	9 (0.49)	9 (0.49)
$4(A).2(B)(Ø10 \text{ mm}) \rightarrow 5(R_1).3(R_2)$ Without Check valve(*2)	S (*4)		\square	\square			
$4(A).2(B)(Ø8 mm) \rightarrow 5(R_1).3(R_2)$ With Check valve(*2,3)	S (*4)	17 (0.92)	17 (0.92)	13(0.7)	12.5 (0.67)	\square	14 (0.76)
$4(A).2(B)(\emptyset \otimes m) \rightarrow 5(R_1).3(R_2)$ Without Check valve(*2,3)	S (*4)	21(1.13)	21(1.13)	15(0.81)	13.5 (0.73)	\searrow	15.5 (0.84)
$4(A).2(B)(\emptyset6 \text{ mm}) \rightarrow 5(R_1).3(R_2)$ With Check valve(*2,3)	S (*4)	10.5 (0.56)	10.5 (0.56)	10 (0.54)	10 (0.54)		10 (0.54)
$4(A).2(B)(\emptyset6 \text{ mm}) \rightarrow 5(R_1).3(R_2)$ Without Check valve(*2,3)	S (*4)	10.5 (0.56)	10.5 (0.56)	10 (0.54)	10 (0.54)	\square	9.5 (0.51)

*1. Values of valve type T/U/V/W are with the flow direction 1(B) to 2(A).
*2. The value of open-air R port exhaust flow rate.
*3. Values of valve type V/W are with the flow direction 2(A) to 3(R).
*4. S: Effective sectional area S (mm² (CV))
*5. Refer to the flow rate of dia. 6 mm for inch port size of dia. 1/4", refer to dia. 8 mm for dia. 5/16", refer to dia. 10 mm for dia. 3/8" respectively.

Specification of DIN-rail mounting bracket

Recommended thread fixing torque	0.3 to 0.4 N·m
Max. load capacity	100 N

RoHS2 (2011/65/EU+EU2015/863) compliant

RoHS2 (2011/65/EU+EU2015/863) complian	t			
	Manifold piping	type (20 series)		
	Sub-D c	onnector		
Туре	Model code	Туре	Model code	
In. & Ex. block on both sides (Tube exhaust) SVA203A-55678-DB-11-12-1314	In. & Ex. block on one side (Tube exhaust)	SVA203B-56678-DB-11-12-1314	
Туре	Model code	Туре	Model code	
In & Ex. block on both sides (Silencer exhaust)	SVA203A-567S-DB-11-12-1314	In. & Ex. block on one side (Silencer exhaust)	SVA203B-5567S-DB-11-12-1314	
	Individual Plug-i	n Connector type		
Туре	Model code	Туре	Model code	
In. & Ex. block on both sides (Tube exhaust)) SVA203A-556778-SB-11-12-1314	In. & Ex. block on one side (Tube exhaust)	SVA203B-56778-SB-11-12-1314	
Туре	Model code	Туре	Model code	
In. & Ex. block on both sides (Silencer exhaust)	SVA203A-5677S-SB-11-12-1314	In. & Ex. block on one side (Silencer exhaust)	SVA203B-567S-SB-11-12-1314	
C C C C C C C C C C C C C C C C C C C		1 0 0000000000000000000000000000000000		
	Flat cable (ribbon-c	able) connector type		
Туре	Model code	Туре	Model code	
In. & Ex. block on both sides (Tube exhaust)) SVA203A-56778-FB-11-12-1314	In. & Ex. block on one side (Tube exhaust)	SVA203B-5678-FB-11-12-1314	
Туре	Model code	Туре	Model code	
In. & Ex. block on both sides (Silencer exhaust)	SVA203A-567S-FB-11-12-1314	In. & Ex. block on one side (Silencer exhaust)	SVA203B-567S-FB-11-12-1314	
DIN-rail mounting brack	ket	Silencer element	Notes	-
Type Mod DIN-rail mounting bracket DRF35 DRF	el code	Model code SVA20EX-E * 1 set includes 2 pcs.	above are just exa *2. Please select each of model designa No. of stations c Input port size, 7 Exhaust port size Voltage code, 13	ations and valve type in pictu mples. h code referring to the exam tion.from page 230 to 231 ode, 5: Output port size, Exhaust check valve code, code, 1: Valve type code, Dual pressure code, and
Blank plate				ilable only for Silencer (Open-
Blank plate SVA20	el code	<u>Solo (1997)</u>	exhaust) type.	ble
SVA20B-B	Package 1 pc. /bag DIN-rail n	g specifications g nounting bracket: 2 pcs/ bag element: 2 pcs/ set (=1 bag)		