

# Solenoid Valve SVA Series

## Model Designation (Example)

### SVA 10 Solenoid Valve Manifold

**SVA 10** **08** **A** - **6C** **OC** **A06** **8** - **F**

(1) (2) (3) (4) (5) (6) (7)

#### (5) Check valve option (additional charge)

Code	Check valve option	Code	Check valve option
No code	No check valve	<b>A11</b>	11 stations with check valve
<b>A01</b>	1 station with check valve	<b>A12</b>	12 stations with check valve
<b>A02</b>	2 stations with check valve	<b>A13</b>	13 stations with check valve
<b>A03</b>	3 stations with check valve	<b>A14</b>	14 stations with check valve
<b>A04</b>	4 stations with check valve	<b>A15</b>	15 stations with check valve
<b>A05</b>	5 stations with check valve	<b>A16</b>	16 stations with check valve
<b>A06</b>	6 stations with check valve	<b>A17</b>	17 stations with check valve
<b>A07</b>	7 stations with check valve	<b>A18</b>	18 stations with check valve
<b>A08</b>	8 stations with check valve	<b>A19</b>	19 stations with check valve
<b>A09</b>	9 stations with check valve	<b>A20</b>	20 stations with check valve
<b>A10</b>	10 stations with check valve		

\* Additional charge for each check valve.

\* Please specify where you want have check valve on the order form.

#### (4) Intake port size

#### (6) Exhaust port size

Possible combinations of intake & exhaust port

Intake	6C	8C	OC	1/4C	5/16C	3/8C
Exhaust	S	S	S	S	S	S
	6	6	6	1/4	1/4	1/4
	8	8	8	5/16	5/16	5/16
	O	O	-	3/8	3/8	-

Intake port spec.

<b>6C</b>	ø6mm straight
<b>8C</b>	ø8mm straight
<b>OC</b>	ø10mm straight
<b>1/4C</b>	1/4" OD straight
<b>5/16C</b>	5/16" OD straight
<b>3/8C</b>	3/8" OD straight

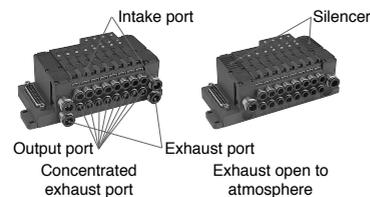
Exhaust port spec.

<b>S</b>	Silencer/muffler
<b>6</b>	ø6mm straight
<b>8</b>	ø8mm straight
<b>O</b>	ø10mm straight
<b>1/4</b>	1/4" OD straight
<b>5/16</b>	5/16" OD straight
<b>3/8</b>	3/8" OD straight

#### (3) Output port

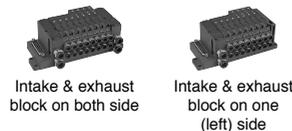
Code	Output port spec.
<b>1C</b>	Combination of below
<b>4C</b>	ø4mm straight
<b>6C</b>	ø6mm straight
<b>8C</b>	ø8mm straight
<b>5/32C</b>	5/32" OD straight
<b>1/4C</b>	1/4" OD straight
<b>5/16C</b>	5/16" OD straight

\* 5/16in. fitting is compression type due to its size.



#### (2) IN & EX. block configuration

Code	Specification
<b>A</b>	On both side (12. dual pressure option is available)
<b>B</b>	On one side (left side with port face front)



#### (1) Number of station

#### (7) Wiring type

Code	Wiring type
<b>S</b>	Individual plug-in connector
<b>D</b>	Sub-D connector
<b>F</b>	Flat cable (ribbon-cable) connector



Possible combinations of no. & wiring

Code	No. of station	Wiring type		
<b>02</b>	2 stations	S	D	F
<b>03</b>	3 stations	S	D	F
<b>04</b>	4 stations	S	D	F
<b>05</b>	5 stations	S	D	F
<b>06</b>	6 stations	S	D	F
<b>07</b>	7 stations	S	D	F
<b>08</b>	8 stations	S	D	F
<b>09</b>	9 stations	S	D	F
<b>10</b>	10 stations	S	D	F

Code	No. of station	Wiring type		
<b>11</b>	11 stations	S	D	F
<b>12</b>	12 stations	S	D	F
<b>13</b>	13 stations	S	-	-
<b>14</b>	14 stations	S	-	-
<b>15</b>	15 stations	S	-	-
<b>16</b>	16 stations	S	-	-
<b>17</b>	17 stations	S	-	-
<b>18</b>	18 stations	S	-	-
<b>19</b>	19 stations	S	-	-
<b>20</b>	20 stations	S	-	-



(14) Common  
**MC**: Negative common  
**No code**: Positive common

(13) DIN-rail mounting bracket option (additional charge)

Code	
<b>No code</b>	Standard type without DIN-rail bracket
<b>D</b>	With DIN-rail bracket, DRF35S

\* DIN-rail bracket comes with 2 pcs./set.

(12) Dual pressure option (additional charge)

Code	
<b>No code</b>	Standard type with 1 pressure/manifold
<b>P</b>	Dual pressure separation with a (both) type of In & Ex. block configuration

\* Please specify where the pressure should be separated on the order form.

(11) Solenoid valve current

Code	
<b>D24</b>	24VDC
<b>100</b>	100VAC

(10) Manifold type

Code	Output port spec.
<b>No code</b>	Manifold with solenoid valve
<b>M</b>	Manifold alone w/o solenoid valve

(9) Valve/Vacuum generator

Code	Specification
<b>S</b>	SVA10S-: 2-position, 5-ports single solenoid valve
<b>D</b>	SVA10D-: 2-position, 5-ports double solenoid valve
<b>E</b>	SVA10E-: 2-position, Twin 3-ports valve; A, B: normally closed
<b>F</b>	SVA10F-: 2-position, Twin 3-ports valve; A, B: normally open
<b>G</b>	SVA10G-: 2-position, Twin 3-ports valve; A: normally closed, B: normally open
<b>H</b>	SVA10H-: 2-position, Twin 3-ports valve; A: normally open, B: normally closed
<b>A</b>	SVA10A-: 3-position, 5-ports double solenoid valve, all port block
<b>R</b>	SVA10A-: 3-position, 5-ports double solenoid valve, ABR connection
<b>P</b>	SVA10A-: 3-position, 5-ports double solenoid valve, PAB connection
<b>T</b>	SVA10T-: 2-position, 2-ports single solenoid valve, vacuum operatable
<b>U</b>	SVA10U-: 2-position, 2-ports double solenoid valve, vacuum operatable
<b>V</b>	SVA10V-: 2-position, 3-ports single solenoid valve, vacuum operatable
<b>W</b>	SVA10W-: 2-position, 3-ports double solenoid valve, vacuum operatable
<b>B</b>	SVA10B-: Blank plate
<b>K</b>	Combination of valve/blank plate/vacuum generator. *Please specify on the order form.
<b>Q</b>	SVA-operable vacuum generators (when all the mounting valves are vacuum generators).

\* Please refer to the following chart for type Q and make entries to the order form on page 28.

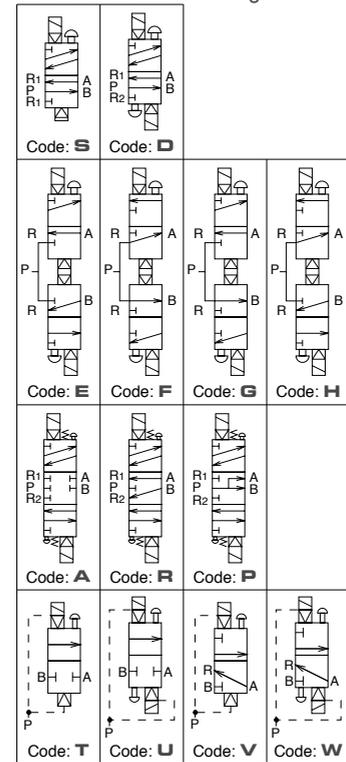
Code	Specification
<b>SVV10 H 05 S- B-</b>	High vacuum normally closed single solenoid without vacuum release valve
<b>SVV10 H 05 S-B V-</b>	High vacuum normally closed single solenoid with vacuum release valve
<b>SVV10 H 05 D- B-</b>	High vacuum normally closed double solenoid without vacuum release valve
<b>SVV10 H 05 D-B V-</b>	High vacuum normally closed double solenoid with vacuum release valve
<b>SVV10 L 05 S- B-</b>	Large flow normally closed single solenoid without vacuum release valve
<b>SVV10 L 05 S-B V-</b>	Large flow normally closed single solenoid with vacuum release valve
<b>SVV10 L 05 D- B-</b>	Large flow normally closed double solenoid without vacuum release valve
<b>SVV10 L 05 D-B V-</b>	Large flow normally closed double solenoid with vacuum release valve

\* SVV10□05□-BV- requires 2 stations/generator on manifold.

(8) Body color

Code	Body color
<b>B</b>	Black
<b>W</b>	Ivory

■ Mount valve circuit diagram



# Solenoid Valve SVA Series

## Model Designation (Example)

### SVA 10 Mounting Valve

**SVA 10** **D** - **D24** **D** - **B** - **MC** → (5) Common  
**MC**: Negative common  
**No code**: Positive common

(1) Solenoid valve

Code	Specification
<b>S</b>	SVA10S-: 2-position, 5-ports single solenoid valve
<b>D</b>	SVA10D-: 2-position, 5-ports double solenoid valve
<b>E</b>	SVA10E-: 2-position, Twin 3-ports valve; A, B: normally closed
<b>F</b>	SVA10F-: 2-position, Twin 3-ports valve; A, B: normally open
<b>G</b>	SVA10G-: 2-position, Twin 3-ports valve; A: normally closed, B: normally open
<b>H</b>	SVA10H-: 2-position, Twin 3-ports valve; A: normally open, B: normally closed
<b>A</b>	SVA10A-: 3-position, 5-ports double solenoid valve, all port block
<b>R</b>	SVA10A-: 3-position, 5-ports double solenoid valve, ABR connection
<b>P</b>	SVA10A-: 3-position, 5-ports double solenoid valve, PAB connection
<b>T</b>	SVA10T-: 2-position, 2-ports single solenoid valve, vacuum operatable
<b>U</b>	SVA10U-: 2-position, 2-ports double solenoid valve, vacuum operatable
<b>V</b>	SVA10V-: 2-position, 3-ports single solenoid valve, vacuum operatable
<b>W</b>	SVA10W-: 2-position, 3-ports double solenoid valve, vacuum operatable

(2) Solenoid valve current

Code	Current
<b>D24</b>	24VDC
<b>100</b>	100VAC

(3) Wiring type

Code	Wiring type
<b>S</b>	Individual plug-in connector
<b>D</b>	Sub-D connector
<b>F</b>	Flat cable (ribbon-cable) connector

(4) Body color

Code	Body color
<b>B</b>	Black
<b>W</b>	Ivory

### SVA 10 Blank Plate

**SVA 10 B - B** (1)

(1) Body color

Code	Body color
<b>B</b>	Black
<b>W</b>	Ivory

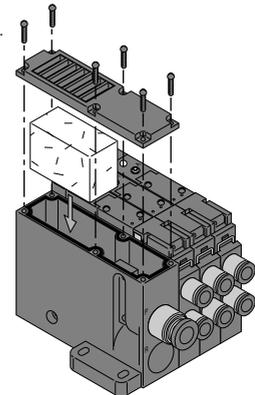
### SVA 10 DIN-rail Bracket

**DRF35S**

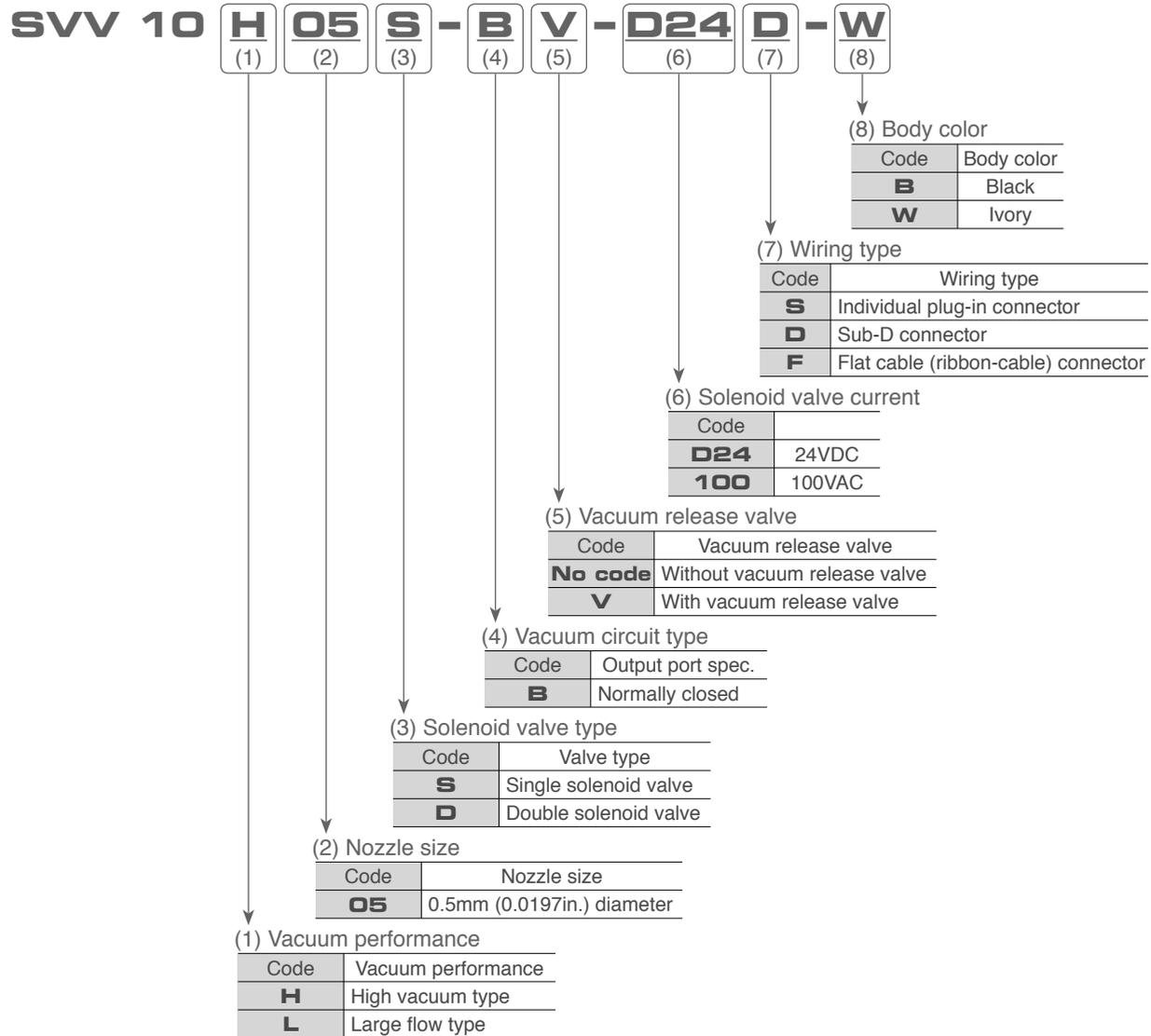
### SVA 10 Silencer Element

**SVA 10 EX - E**

(1 pc./set)  
 \* You need 2 sets for both side of intake & exhaust block.



**SVA 10 Mounting Vacuum Generator (SVV 10)**



# Solenoid Valve SVA Series

## Model Designation (Example)

### SVA 20 Solenoid Valve Manifold

**SVA 20** **08** **A** - **6C** **0C** **A06** **S** - **F**

(1) (2) (3) (4) (5) (6) (7)

#### (5) Check valve option (additional charge)

Code	Check valve option	Code	Check valve option
No code	No check valve	<b>A10</b>	10 stations with check valve
<b>A01</b>	1 station with check valve	<b>A11</b>	11 stations with check valve
<b>A02</b>	2 stations with check valve	<b>A12</b>	12 stations with check valve
<b>A03</b>	3 stations with check valve	<b>A13</b>	13 stations with check valve
<b>A04</b>	4 stations with check valve	<b>A14</b>	14 stations with check valve
<b>A05</b>	5 stations with check valve	<b>A15</b>	15 stations with check valve
<b>A06</b>	6 stations with check valve	<b>A16</b>	16 stations with check valve
<b>A07</b>	7 stations with check valve	<b>A17</b>	17 stations with check valve
<b>A08</b>	8 stations with check valve	<b>A18</b>	18 stations with check valve
<b>A09</b>	9 stations with check valve	<b>A19</b>	19 stations with check valve

\* Additional charge for each check valve.

\* Please specify where you want have check valve on the order form.

#### (4) Intake port size

#### (6) Exhaust port size

Any size combinations possible for intake & exhaust port but port directions are same except silencer.

#### Intake port spec.

<b>8C</b>	ø8mm straight	<b>5/16C</b>	5/16" OD straight
<b>8L</b>	ø8mm elbow (up)	<b>5/16L</b>	5/16" OD elbow (up)
<b>0C</b>	ø10mm straight	<b>3/8C</b>	3/8" OD straight
<b>0L</b>	ø10mm elbow (up)	<b>3/8L</b>	3/8" OD elbow (up)
<b>2C</b>	ø12mm straight	<b>1/2C</b>	1/2" OD straight
<b>2L</b>	ø12mm elbow (up)	<b>1/2L</b>	1/2" OD elbow (up)

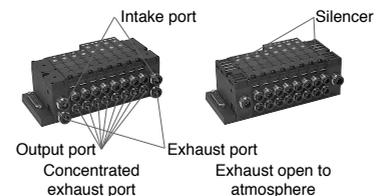
#### Exhaust port spec.

<b>S</b>	Silencer/muffler
<b>8</b>	ø8mm
<b>0</b>	ø10mm
<b>2</b>	ø12mm
<b>5/16</b>	5/16" OD
<b>3/8</b>	3/8" OD
<b>1/2</b>	1/2" OD

#### (3) Output port

Code	Output port spec.
<b>1C</b>	Combination of straight below
<b>1L</b>	Combination of elbow below
<b>6C</b>	ø6mm straight
<b>6L</b>	ø6mm elbow (up)
<b>8C</b>	ø8mm straight
<b>8L</b>	ø8mm elbow (up)

Code	Output port spec.
<b>1/4C</b>	1/4" OD straight
<b>1/4L</b>	1/4" OD elbow (up)
<b>5/16C</b>	5/16" OD straight
<b>5/16L</b>	5/16" OD elbow (up)



#### (2) IN & EX. block configuration

Code	Specification
<b>A</b>	On both side ((12) dual pressure option is available)
<b>B</b>	On one side (left side with port face front)



Intake & exhaust block on both side



Intake & exhaust block on one (left) side

#### (1) Number of station

#### (7) Wiring type

Code	Wiring type
<b>S</b>	Individual plug-in connector
<b>D</b>	Sub-D connector
<b>F</b>	Flat cable (ribbon-cable) connector



Sub-D connector



Flat-cable connector

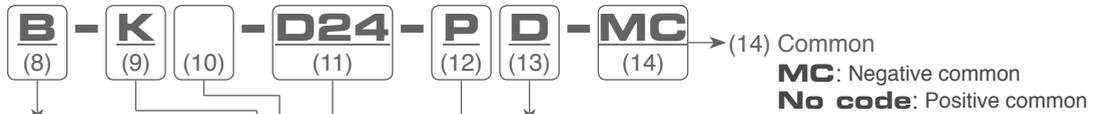


Individual plug-in connector

#### Possible combinations of no. & wiring

Code	No. of station	Wiring type		
<b>02</b>	2 stations	S	D	F
<b>03</b>	3 stations	S	D	F
<b>04</b>	4 stations	S	D	F
<b>05</b>	5 stations	S	D	F
<b>06</b>	6 stations	S	D	F
<b>07</b>	7 stations	S	D	F
<b>08</b>	8 stations	S	D	F
<b>09</b>	9 stations	S	D	F
<b>10</b>	10 stations	S	D	F

Code	No. of station	Wiring type		
<b>11</b>	11 stations	S	D	F
<b>12</b>	12 stations	S	D	F
<b>13</b>	13 stations	S	-	F
<b>14</b>	14 stations	S	-	F
<b>15</b>	15 stations	S	-	F
<b>16</b>	16 stations	S	-	F
<b>17</b>	17 stations	S	-	F
<b>18</b>	18 stations	S	-	F
<b>19</b>	19 stations	S	-	F



(8) Body color

Code	Body color
<b>B</b>	Black
<b>W</b>	Ivory

(13) DIN-rail mounting bracket option (additional charge)

Code	
<b>No code</b>	Standard type without DIN-rail bracket
<b>D</b>	With DIN-rail bracket, DRF35S

\* DIN-rail bracket comes with 2 pcs./set.

(12) Dual pressure option (additional charge)

Code	
<b>No code</b>	Standard type with 1 pressure/manifold
<b>P</b>	Dual pressure separation with a (both) type of In & Ex. block configuration

\* Please specify where the pressure should be separated on the order form.

(11) Solenoid valve current

Code	
<b>D24</b>	24VDC
<b>100</b>	100VAC

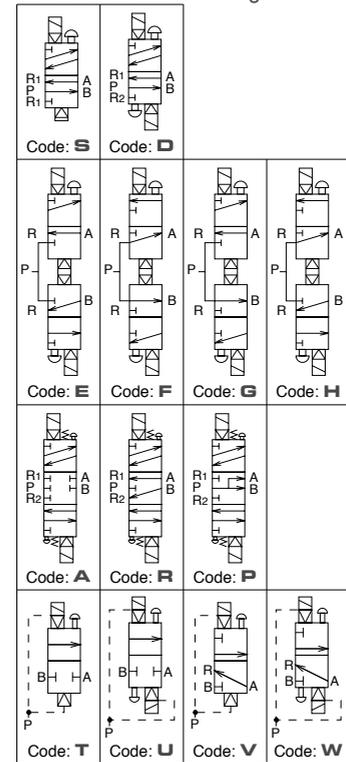
(10) Manifold type

Code	Output port spec.
<b>No code</b>	Manifold with solenoid valve
<b>M</b>	Manifold alone w/o solenoid valve

(9) Valve/Vacuum generator

Code	Specification
<b>S</b>	SVA10S-: 2-position, 5-ports single solenoid valve
<b>D</b>	SVA10D-: 2-position, 5-ports double solenoid valve
<b>E</b>	SVA10E-: 2-position, Twin 3-ports valve; A, B: normally closed
<b>F</b>	SVA10F-: 2-position, Twin 3-ports valve; A, B: normally open
<b>G</b>	SVA10G-: 2-position, Twin 3-ports valve; A: normally closed, B: normally open
<b>H</b>	SVA10H-: 2-position, Twin 3-ports valve; A: normally open, B: normally closed
<b>A</b>	SVA10A-: 3-position, 5-ports double solenoid valve, all port block
<b>R</b>	SVA10A-: 3-position, 5-ports double solenoid valve, ABR connection
<b>P</b>	SVA10A-: 3-position, 5-ports double solenoid valve, PAB connection
<b>T</b>	SVA10T-: 2-position, 2-ports single solenoid valve, vacuum operatable
<b>U</b>	SVA10U-: 2-position, 2-ports double solenoid valve, vacuum operatable
<b>V</b>	SVA10V-: 2-position, 3-ports single solenoid valve, vacuum operatable
<b>W</b>	SVA10W-: 2-position, 3-ports double solenoid valve, vacuum operatable
<b>B</b>	SVA10B-: Blank plate
<b>K</b>	Combination of valve/blank plate/vacuum generator. *Please specify on the order form.
<b>Q</b>	SVA-operable vacuum generators (when all the mounting valves are vacuum generators).

■ Mount valve circuit diagram



\* Please refer to the following chart for type Q and make entries to the order form on page 28.

Code	Specification
<b>SVV20 H 07 S- B-</b>	High vacuum normally closed single solenoid without vacuum release valve (*1)
<b>SVV20 H 07 S-B V-</b>	High vacuum normally closed single solenoid with vacuum release valve (*2)
<b>SVV20 H 07 D- A-</b>	High vacuum normally open single solenoid without vacuum release valve (*1)
<b>SVV20 H 07 D-A V-</b>	High vacuum normally open single solenoid with vacuum release valve (*2)
<b>SVV20 L 07 S- B-</b>	Large flow normally closed single solenoid without vacuum release valve (*1)
<b>SVV20 L 07 S-B V-</b>	Large flow normally closed single solenoid with vacuum release valve (*2)
<b>SVV20 L 07 D- A-</b>	Large flow normally open single solenoid without vacuum release valve (*1)
<b>SVV20 L 07 D-A V-</b>	Large flow normally open single solenoid with vacuum release valve (*2)
<b>SVV20 H 10 S- B-</b>	High vacuum normally closed single solenoid without vacuum release valve (*1)
<b>SVV20 H 10 S-B V-</b>	High vacuum normally closed single solenoid with vacuum release valve (*2)
<b>SVV20 H 10 D- A-</b>	High vacuum normally open single solenoid without vacuum release valve (*1)
<b>SVV20 H 10 D-A V-</b>	High vacuum normally open single solenoid with vacuum release valve (*2)
<b>SVV20 L 10 S- B-</b>	Large flow normally closed single solenoid without vacuum release valve (*1)
<b>SVV20 L 10 S-B V-</b>	Large flow normally closed single solenoid with vacuum release valve (*2)
<b>SVV20 L 10 D- A-</b>	Large flow normally open single solenoid without vacuum release valve (*1)
<b>SVV20 L 10 D-A V-</b>	Large flow normally open single solenoid with vacuum release valve (*2)

\*1. These vacuum Generators come with vacuum filter: "SVV20 F-" as standard.

\*2. These vacuum Generators come with vacuum filter with vacuum release flow adjusting needle unit: "SVV20 N F-".

"SVV20 D S-": Vacuum switch with digital display (display in kPa) is also available.

Please enter ✓ mark at vacuum switch on the order form on page 28.

# Solenoid Valve SVA Series

## Model Designation (Example)

### SVA 20 Mounting Valve

**SVA 20** **D** - **D24** **D** - **B** - **MC** → (5) Common  
**MC**: Negative common  
**No code**: Positive common

(4) Body color

Code	Body color
<b>B</b>	Black
<b>W</b>	Ivory

(3) Wiring type

Code	Wiring type
<b>S</b>	Individual plug-in connector
<b>D</b>	Sub-D connector
<b>F</b>	Flat cable (ribbon-cable) connector

(2) Solenoid valve current

Code	
<b>D24</b>	24VDC
<b>100</b>	100VAC

(1) Solenoid valve

Code	Specification
<b>S</b>	SVA10S-: 2-position, 5-ports single solenoid valve
<b>D</b>	SVA10D-: 2-position, 5-ports double solenoid valve
<b>E</b>	SVA10E-: 2-position, Twin 3-ports valve; A: B: normally closed
<b>F</b>	SVA10F-: 2-position, Twin 3-ports valve; A: B: normally open
<b>G</b>	SVA10G-: 2-position, Twin 3-ports valve; A: normally closed, B: normally open
<b>H</b>	SVA10H-: 2-position, Twin 3-ports valve; A: normally open, B: normally closed
<b>A</b>	SVA10A-: 3-position, 5-ports double solenoid valve, all port block
<b>R</b>	SVA10A-: 3-position, 5-ports double solenoid valve, ABR connection
<b>P</b>	SVA10A-: 3-position, 5-ports double solenoid valve, PAB connection
<b>T</b>	SVA10T-: 2-position, 2-ports single solenoid valve, vacuum operatable
<b>U</b>	SVA10U-: 2-position, 2-ports double solenoid valve, vacuum operatable
<b>V</b>	SVA10V-: 2-position, 3-ports single solenoid valve, vacuum operatable
<b>W</b>	SVA10W-: 2-position, 3-ports double solenoid valve, vacuum operatable

### SVA 20 Blank Plate

**SVA 20 B - B** (1)

(1) Body color

Code	Body color
<b>B</b>	Black
<b>W</b>	Ivory

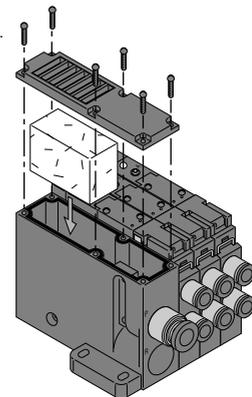
### SVA 20 DIN-rail Bracket

**DRF35S**

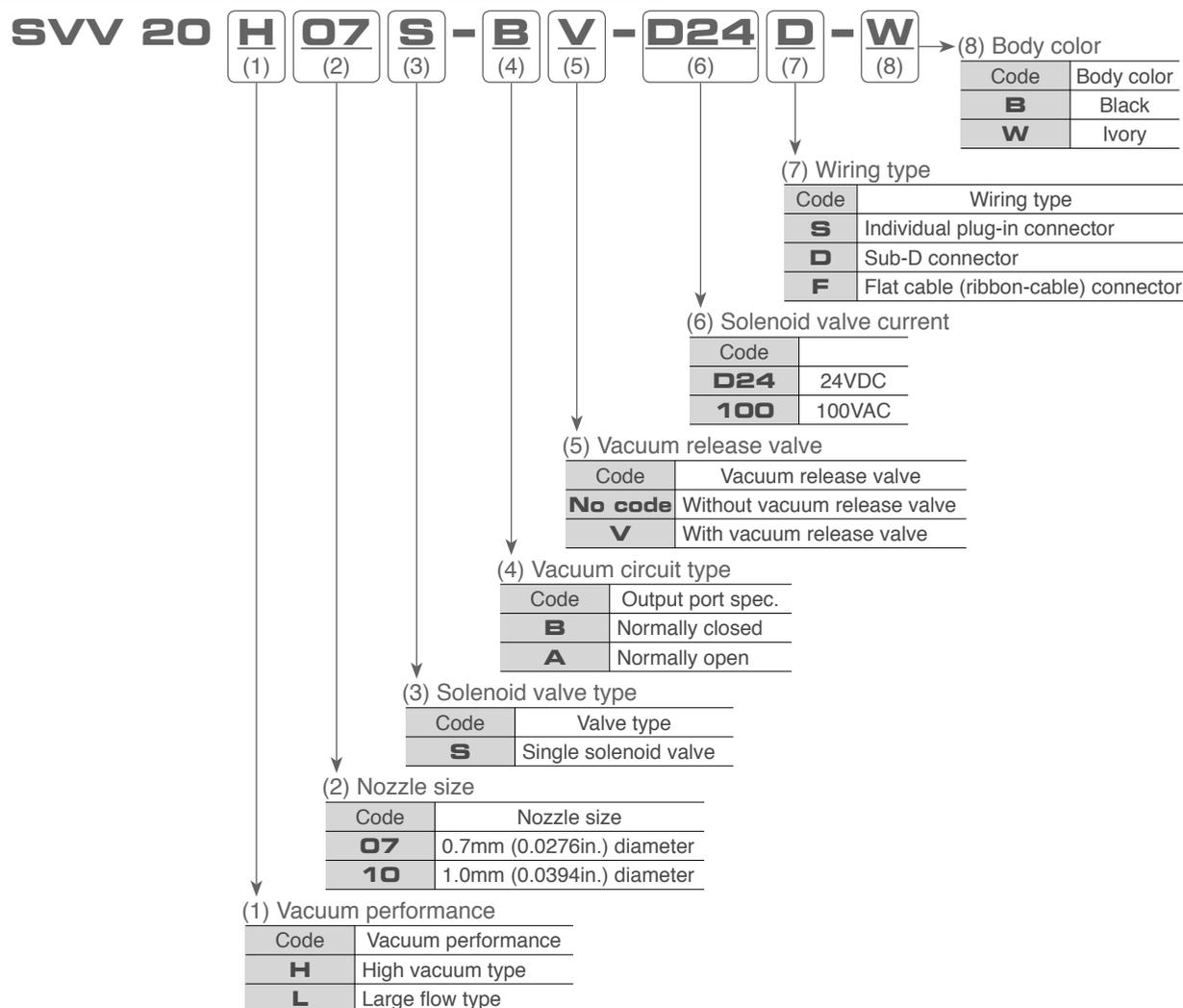
### SVA 20 Silencer Element

**SVA 20 EX - E**

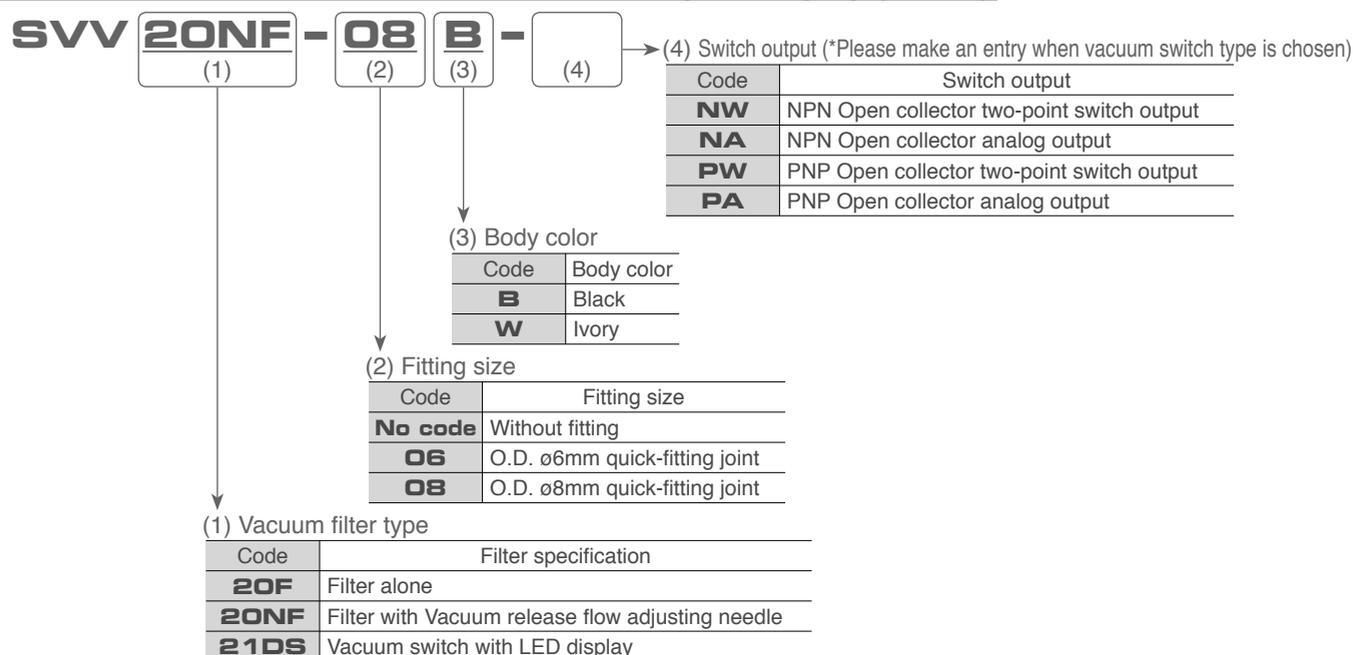
(2 pcs./set)  
 \* You need 2 sets for both side of intake & exhaust block.



### SVA 20 Mounting Vacuum Generator (SVV 20)



### SVA 20 Vacuum Filter/Vacuum Switch with Digital Display (in kPa)

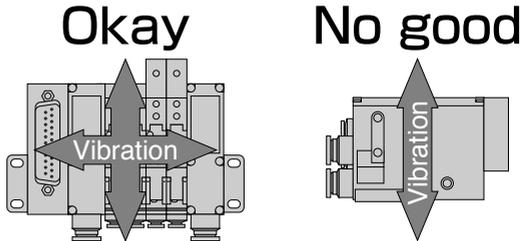


## ⚠ Detailed Safety Instructions

Before using the PISCO device, be sure to read the "Safety Instructions", "Common Safety Instructions for Products Listed in This Manual" on page 114 to 116 and "Common Safety Instructions for Solenoid Valves" on page 117.

### Warning

- Where the Solenoid Valve is used with vibration of 5G or below, install it in such a way that the direction of vibration is perpendicular to the spool valve.  
\* See the following illustration



### Caution

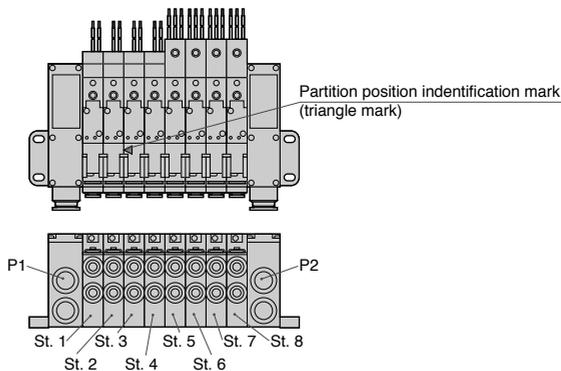
- When the valves are used as Valve Manifold, back pressure can cause malfunction of the actuator (single acting cylinder, etc.) In such a case, provide a check valve to the exhaust port.
- Do not use a 3-position valve for center position stop of the cylinder that requires accuracy. Compressiveness of air may not allow accuracy in stop position. Also, the valve permits leakage, so that the stop position may not remain constant for a long time.
- Do not give excessive tension or bending to the individual plug-in connector (cable). Disconnection or damage to the connector may result.
- The cartridge joint can be disconnected by removing the lock pin. During use, however, make certain that the lock pin is properly in place.
- Read the manual carefully for proper connection and disconnection of valves. Also, keep the manual at hand.
- In case of wiring Sub-D connector, Individual plug-in connector and Flat-cable, please refer to P.16 for Electric Circuit.

## ⚠ Caution of Optional Type

### ■ Dual-pressure-used Type

(Single manifold controls two different level pressure)

- Partition position confirmation is made by checking the position of the triangle on the side of the unit (see Fig. 1). The right side, including the triangle-marked manifold block, is for P2 supply pressure. The left side is for P1 supply pressure. (In the case of Fig. 1. St. 1 to St. 2 is for P1 and St. 3 to St. 8 is for P2)
- Please note that alteration of the partition position cannot be accepted after the product ships.
- Available intake and exhaust block configuration is A type (on both sides) only.



### ■ 2-and 3-ports Valve (Vacuum-operable)

- Connect the air supply source with the B port, and the actuator with the A port. Connecting any other way may result in malfunctions.
- Be sure to provide an air filter not admit dust or any other foreign substance into the valve.

### ■ DIN-rail bracket

- Be sure to clamp the screw with specified torque.
- Do not place any item whose weight exceeds the max. movable load.
- Avoid fitting where vibrations are extremely strong.

### ■ Vacuum Generator

#### Warning

- For the operation of the valve, make certain that the leakage current is less than 1mA. Leakage current large than that may cause malfunction.
- The Vacuum Generator with hold function or check valve function permits some vacuum leakage, so provide an appropriate safety means where vacuum must be held for a long time.
- Long continuous power supply to the valve may raise the temperature of the coil. Heat may cause burns or affect the surrounding equipment adversely. Consult PISCO about applications.

#### Caution

- Do not give excessive tension or bending to the valve leads. Disconnection or damage to the connector may result.
- Be sure to provide an air filter on V port (B port). Absorption of foreign substance may cause trouble.

### ■ Pressure Sensor with Digital Display

#### Caution

- This product is not of the drip-proof type. (Avoid using it where it is exposed to splashing water drops.)
- Do not use it with an ambience or gas containing a corrosive substance.
- Keep the fluid used as possible.
- For power source, use DC which is stable.
- Be sure to shut off the power before wiring.
- Incorporate a surge absorber circuit in relays, solenoid valves, relay, etc. which are to be connected with output and source terminals. Avoid any use which involves over 80mA in current.
- Ground the FG terminal when using a unit power source such as switching current.
- Take care not to short-circuit the output terminal (black) with any other terminal.
- Do not apply a forcible impact or excessive force from outside to the sensor body.
- Malfunctions may result if the wiring is designed or used in a way to allow noise to be applied.

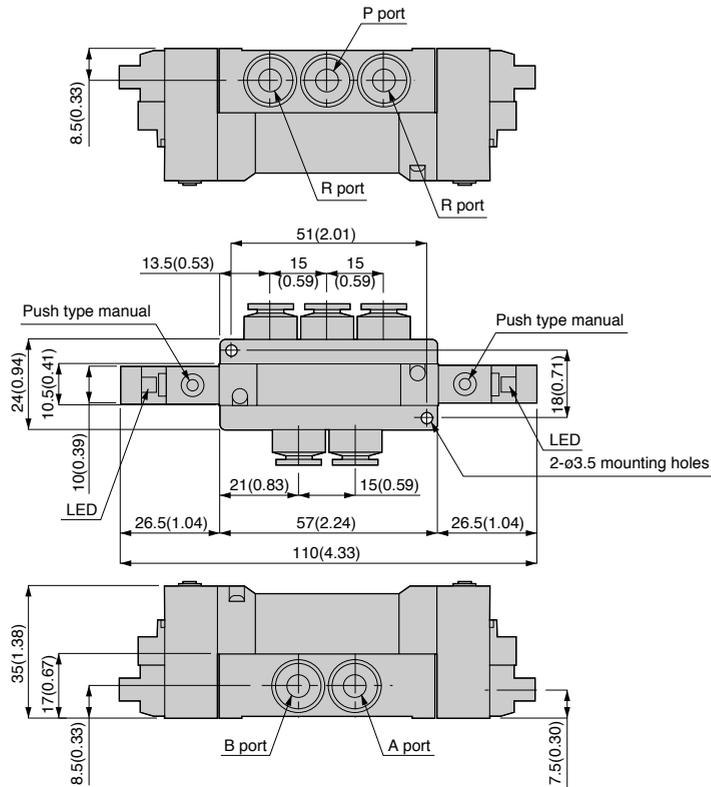
# Solenoid Valve SVA Series

## SVA 11 Series

### Double solenoid valve Concentrated exhaust port

Model: SVA 11-□□□-D□-□□  
 SVA 11-□□□-E□-□□  
 SVA 11-□□□-F□-□□  
 SVA 11-□□□-G□-□□  
 SVA 11-□□□-H□-□□  
 SVA 11-□□□-A□-□□  
 SVA 11-□□□-R□-□□  
 SVA 11-□□□-P□-□□  
 SVA 11-□□□-U□-□□  
 SVA 11-□□□-W□-□□

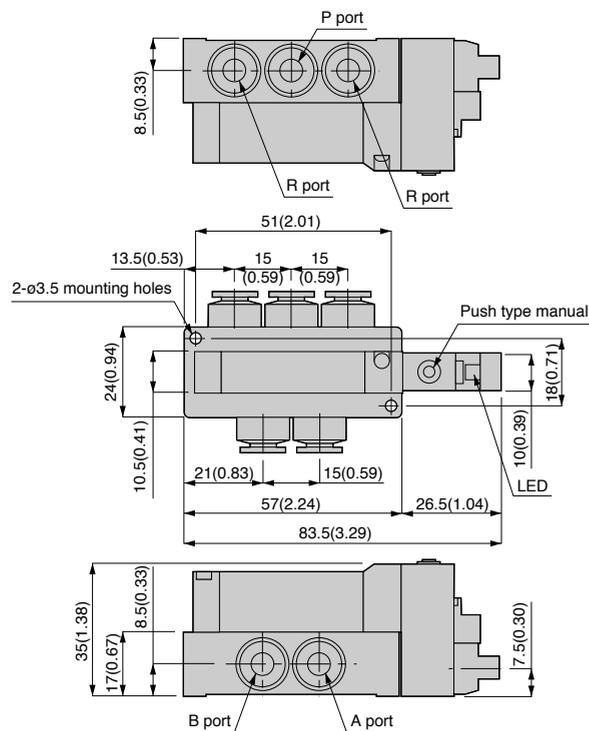
Unit: mm(inch)



### Single solenoid valve Concentrated exhaust port

Model: SVA 11-□□□-S□-□□  
 SVA 11-□□□-T□-□□  
 SVA 11-□□□-V□-□□

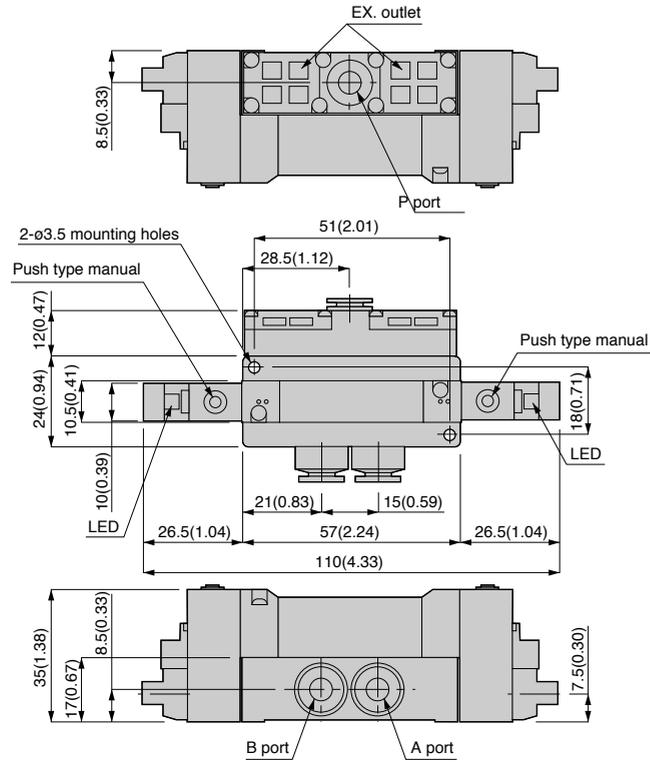
Unit: mm(inch)



### Double solenoid valve Silencer type exhaust open to atmosphere

- Model: SVA 11-□□S-D□-□□  
 SVA 11-□□S-E□-□□  
 SVA 11-□□S-F□-□□  
 SVA 11-□□S-G□-□□  
 SVA 11-□□S-H□-□□  
 SVA 11-□□S-A□-□□  
 SVA 11-□□S-R□-□□  
 SVA 11-□□S-P□-□□  
 SVA 11-□□S-U□-□□  
 SVA 11-□□S-W□-□□

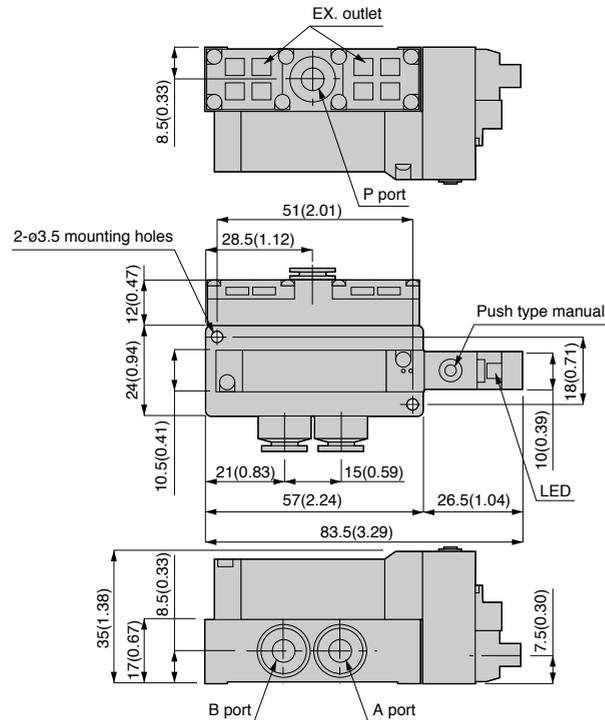
Unit: mm(inch)



### Single solenoid valve Silencer type exhaust open to atmosphere

- Model: SVA 11-□□S-S□-□□  
 SVA 11-□□S-T□-□□  
 SVA 11-□□S-V□-□□

Unit: mm(inch)



# Solenoid Valve SVA Series

## SVA 11 Series

### Tube dia. and L dimension

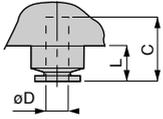
Lateral lead-out

A·B port, P·R port (concentrated ex.)

Up side lead-out

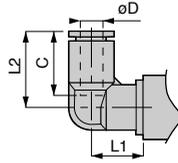
A·B port, P·R port (concentrated ex.)

P port, Silencer (open to atmosphere)



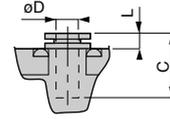
Unit: mm / inch

Tube dia. øD	L	C
ø4mm	9.5mm	15mm
ø6mm	12mm	17mm
ø8mm	13.5mm	18.5mm
5/32" OD	0.37"	0.59"
1/4" OD	0.47"	0.67"
5/16" OD	0.53"	0.73"



Unit: mm / inch

Tube dia. øD	L1	L2	C
ø4mm	13.5mm	13.5mm	18.5mm
ø6mm	17mm	14mm	20mm
ø8mm	18.5mm	17mm	23mm
5/32" OD	0.59"	0.53"	0.73"
1/4" OD	0.67"	0.55"	0.79"
5/16" OD	0.73"	0.67"	0.91"



Unit: mm / inch

Tube dia. øD	L	C
ø4mm	6.5mm	15mm
ø6mm	5mm	17mm
ø8mm	5mm	18.5mm
5/32" OD	0.26"	0.59"
1/4" OD	0.30"	0.67"
5/16" OD	0.20"	0.73"



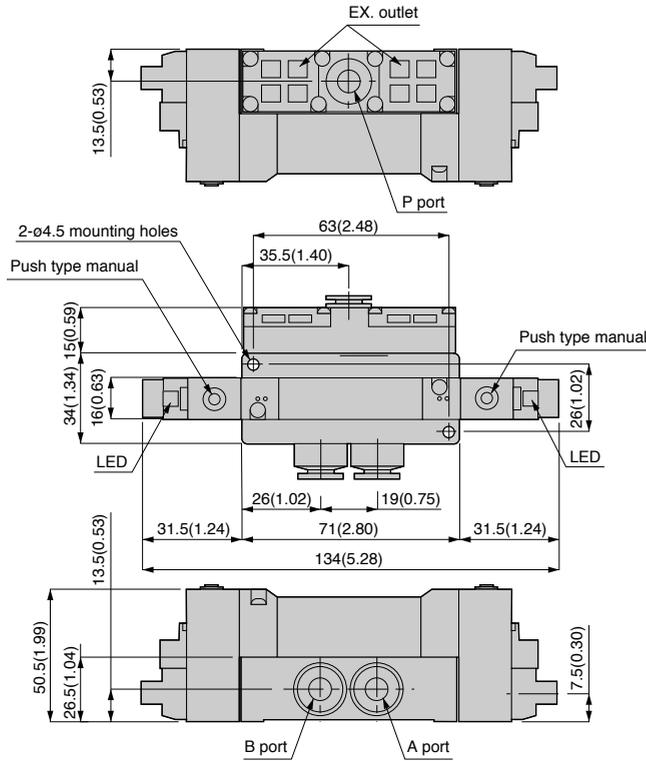
# Solenoid Valve SVA Series

## SVA 21 Series

Double solenoid valve Silencer type exhaust open to atmosphere

- Model: SVA 21-□□S-D□-□□  
 SVA 21-□□S-E□-□□  
 SVA 21-□□S-F□-□□  
 SVA 21-□□S-G□-□□  
 SVA 21-□□S-H□-□□  
 SVA 21-□□S-A□-□□  
 SVA 21-□□S-R□-□□  
 SVA 21-□□S-P□-□□  
 SVA 21-□□S-U□-□□  
 SVA 21-□□S-W□-□□

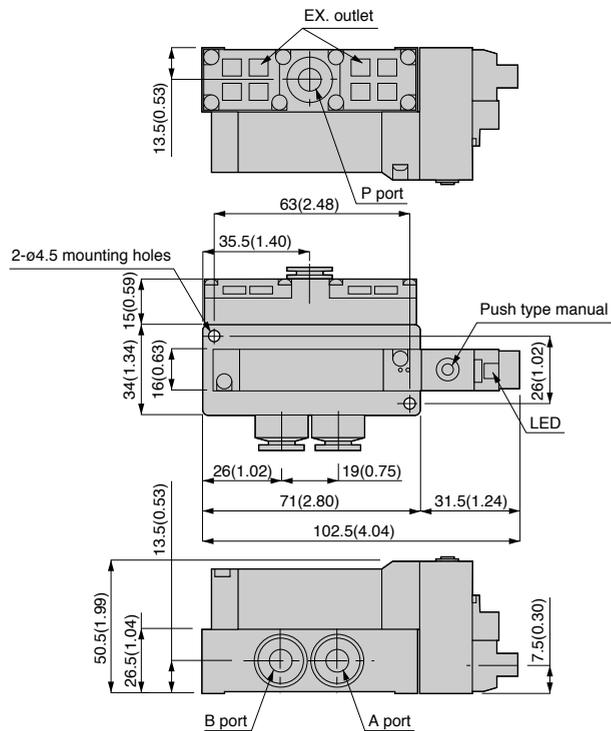
Unit: mm(inch)



Single solenoid valve Silencer type exhaust open to atmosphere

- Model: SVA 21-□□S-S□-□□  
 SVA 21-□□S-T□-□□  
 SVA 21-□□S-V□-□□

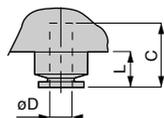
Unit: mm(inch)



Tube dia. and L dimension

Lateral lead-out

A·B port, P·R port (concentrated ex.)

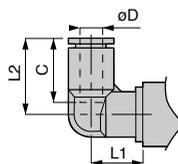


Unit: mm / inch

Tube dia. $\phi D$	L	C
$\phi 6\text{mm}$	11mm	17mm
$\phi 8\text{mm}$	12.5mm	18.5mm
$\phi 10\text{mm}$	15mm	21mm
1/4" OD	0.43"	0.67"
5/16" OD	0.49"	0.73"
3/8" OD	0.59"	0.83"

Up side lead-out

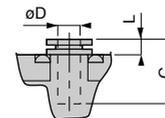
A·B port, P·R port (concentrated ex.)



Unit: mm / inch

Tube dia. $\phi D$	L1	L2	C
$\phi 6\text{mm}$	17mm	14mm	20mm
$\phi 8\text{mm}$	18.5mm	17mm	23mm
$\phi 10\text{mm}$	20.5mm	21mm	26.5mm
1/4" OD	0.67"	0.55"	0.79"
5/16" OD	0.73"	0.67"	0.91"
3/8" OD	0.81"	0.83"	1.04"

P port, Silencer (open to atmosphere)



Unit: mm / inch

Tube dia. $\phi D$	L	C
$\phi 6\text{mm}$	7mm	17mm
$\phi 8\text{mm}$	5mm	18.5mm
$\phi 10\text{mm}$	5.5mm	20.5mm
1/4" OD	0.28"	0.67"
5/16" OD	0.20"	0.73"
3/8" OD	0.22"	0.81"