



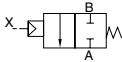
Air operated 2 port valve
(cylinder valve)

SAB*S Series

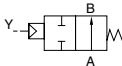
- NC (normally closed) type, NO (normally open) type, double acting type
- Port size: Rc1/4 to Rc2, 32 to 50 flange
- Working fluid: steam, water, air

JIS symbol

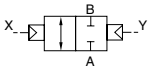
- NC (normally closed) type



- NO (normally open) type



- Double acting type



Common specifications

Item	SAB1S	SAB2S	SAB3S
Actuation	NC (normally closed) type	NO (normally open) type	Double acting type
Working fluid	Steam, water, air, non-corrosive fluids (*1)		
Liquid viscosity mm ² /s	500 or less		
Working pressure range MPa	0 to 1		
Withstanding pressure (water) MPa	2.0		
Pilot air pressure MPa	0.35 to 0.7	Refer to page 442.	
Fluid temperature °C	-10 to 184 (no freezing)		
Ambient temperature °C	-10 to 90		
Valve seat leakage cm ³ /min.	300 or less (at pneumatic pressure 0.02 to 1 MPa)		
Mounting attitude	Free		

*1: Refer to the working fluid check list in page 36 of the Introduction.

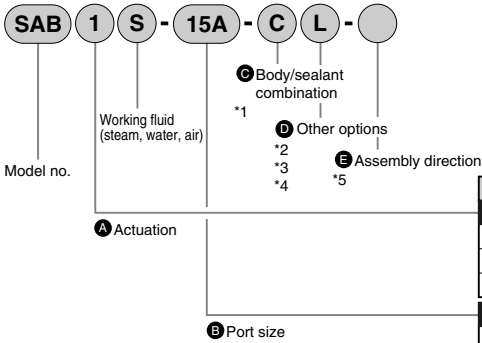
Individual specifications

Item	Port size	Orifice (mm)	C [dm ³ /(s·bar)]	b	S (mm ²)	Cv flow factor	Pilot port size	Weight (kg)
NC type: normally closed								
SAB1S-8A	Rc1/4	10	8.3	0.4	-	2.1	Rc1/8	0.3
SAB1S-10A	Rc3/8	10	11	0.4	-	2.5		0.3
SAB1S-15A	Rc1/2	15	-	-	120	5.5		0.6
SAB1S-20A	Rc3/4	16	-	-	150	7		0.8
SAB1S-25A	Rc1	20	-	-	240	11		1.1
SAB1S-32A	Rc1 1/4	26	-	-	390	18.5		2.2
SAB1S-32F	32 flange	26	-	-	390	18.5		5.2
SAB1S-40A	Rc1 1/2	32	-	-	610	29		3.2
SAB1S-40F	40 flange	32	-	-	610	29		6.3
SAB1S-50A	Rc2	42	-	-	920	43		5.2
SAB1S-50F	50 flange	42	-	-	920	43		9.1
NO type: normally open								
SAB2S-8A	Rc1/4	10	8.9	0.4	-	2.3	Rc1/8	0.3
SAB2S-10A	Rc3/8	10	12	0.3	-	2.6		0.3
SAB2S-15A	Rc1/2	15	-	-	140	5.6		0.6
SAB2S-20A	Rc3/4	16	-	-	180	8		0.8
SAB2S-25A	Rc1	20	-	-	280	12		1.1
SAB2S-32A	Rc1 1/4	26	-	-	450	20		2.2
SAB2S-32F	32 flange	26	-	-	450	20		5.2
SAB2S-40A	Rc1 1/2	32	-	-	680	32		3.2
SAB2S-40F	40 flange	32	-	-	680	32		6.3
SAB2S-50A	Rc2	42	-	-	1020	50		5.2
SAB2S-50F	50 flange	42	-	-	1020	50		9.1
Double acting type (*1)								
SAB3S-8A	Rc1/4	10	8.3 (8.9)	0.4	-	2.1 (2.3)	Rc1/8	0.3
SAB3S-10A	Rc3/8	10	11 (12)	0.4 (0.3)	-	2.5 (2.6)		0.3
SAB3S-15A	Rc1/2	15	-	-	120 (140)	5.5 (5.6)		0.6
SAB3S-20A	Rc3/4	16	-	-	150 (180)	7 (8)		0.8
SAB3S-25A	Rc1	20	-	-	240 (280)	11 (12)		1.1
SAB3S-32A	Rc1 1/4	26	-	-	390 (450)	18.5 (20)		2.2
SAB3S-32F	32 flange	26	-	-	390 (450)	18.5 (20)		5.2
SAB3S-40A	Rc1 1/2	32	-	-	610 (680)	29 (32)		3.2
SAB3S-40F	40 flange	32	-	-	610 (680)	29 (32)		6.3
SAB3S-50A	Rc2	42	-	-	920 (1020)	43 (50)		5.2
SAB3S-50F	50 flange	42	-	-	920 (1020)	43 (50)		9.1

*1: Values shown in () for the C, b and S values of the double acting type are the flow rate when port A is pressurized.

*2: Effective sectional area S and sonic conductance C are converted as $S = 5.0 \times C$.

How to order



Note on model no. selection

- *1: Select C or E for steam.
- *2: The mounting plate (D B) is available for port size 8A to 32A.
- *3: The indicator (D L) is available only for Actuation 1: NC type.
- *4: Indicate BL in (D) to select both mounting plate and indicator.
- *5: Mounting plate assembly position reverse rotation (D B-R) is for port size 15A to 32A.
- *6: Clockwise viewed from above with port A facing right.

<Example of model number>

SAB1S-15A-CL

Model no.: SAB

- A** Actuation: NC (normally closed) type
- B** Port size: Rc1/2
- C** Body/sealant combination
: Body - bronze, sealant - tetrafluoroethylene resin
- D** Other options: Indicator
- E** Assembly direction: No options

Symbol	Descriptions			
A Actuation				
1	NC (normally closed) type			
2	NO (normally open) type			
3	Double acting type			
B Port size				
8A	Rc1/4			
10A	Rc3/8			
15A	Rc1/2			
20A	Rc3/4			
25A	Rc1			
32A	Rc1 1/4			
32F	32 flange			
40A	Rc1 1/2			
40F	40 flange			
50A	Rc2			
50F	50 flange			
C Body/sealant combination				
	Body	Sealant	O ring	Remarks
C	Bronze	Tetrafluoroethylene resin	Fluoro rubber	Steam, air,
E	Stainless steel	Tetrafluoroethylene resin	Fluoro rubber	water
F	Stainless steel	Tetrafluoroethylene resin	Tetrafluoroethylene resin	Solvents
D Other options				
Blank	No options			
B	Mounting plate			
L	Indicator			
E Assembly direction				
Blank	No options			
R	Mounting plate assembly position reverse rotation			

Refer to the following diagram for the layout drawing.

E Assembly direction

SAB (air operated type) *2/6		
Symbol	B (mounting plate)	B-R *5
Direction	Without rotation	Mounting plate reverse rotation
Arrangement		

← indicates pilot port IN.

HNB/G

USB/G

FAB/G

FGB/G

FVB

FWB/G

FHB

FLB

AB

AG

AP/AD

APK/ADK

For dry air

Explosion proof

HVB/HVL

SAB/SVB

NP/NAP/NVP

CHB/G

MXB/G

Other G.P. systems

PD/FAD/PJ

CV/E/ CVSE

CPE/ CPD

Medical analysis

Custom order

Cylinder valve
Air operated 2 port valve