

Series AC

Pressure Switch: (S)

A compact integrated pressure switch can be easily installed and facilitates the pressure detection of the line.

IS1000M - **30** - **□**

① ②

	Symbol	Description			①					
		Lead wire length	Set pressure range	Pressure display	Body size					
					20	30	40	50	60	
② Option	Nil	0.5 m	0.1 to 0.4 MPa	MPa	●	●	●	●	●	
	P (Note)	0.5 m	0.1 to 0.4 MPa	MPa/psi dual scale	●	●	●	●	●	
	X202	0.5 m	0.1 to 0.6 MPa	MPa	●	●	●	●	●	
	X202-P (Note)	0.5 m	0.1 to 0.6 MPa	MPa/psi dual scale	●	●	●	●	●	
	X201	3 m	0.1 to 0.4 MPa	MPa	●	●	●	●	●	
	X201-P (Note)	3 m	0.1 to 0.4 MPa	MPa/psi dual scale	●	●	●	●	●	
	X215	3 m	0.1 to 0.6 MPa	MPa	●	●	●	●	●	
X215-P (Note)	3 m	0.1 to 0.6 MPa	MPa/psi dual scale	●	●	●	●	●		

Note) This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

Specifications

Fluid	Air
Ambient and fluid temperature	-5 to 60°C (with no freezing)
Proof pressure	1.0 MPa
Maximum operating pressure	0.7 MPa
Set pressure range (when OFF)	0.1 to 0.4 MPa
Hysteresis	0.08 MPa or less

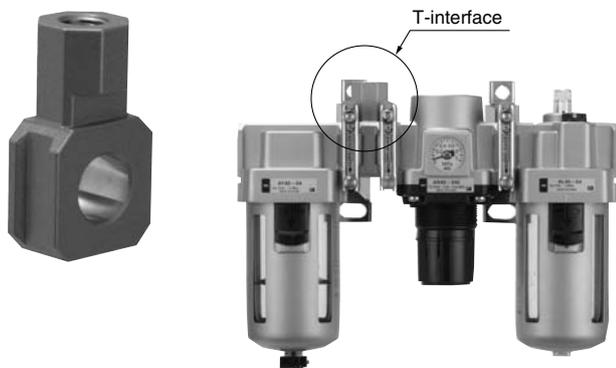
Switch Characteristics

Contact point configuration	1a
Maximum contact point capacity	2 VA (AC), 2 W (DC)
Operating voltage: AC, DC	100 V or less
Maximum operating current	12 V to 24 VAC, DC: 50 mA
	48 VAC, DC: 40 mA 100 VAC, DC: 20 mA

Note) For detailed specifications on the IS1000 series, please refer to series IS1000 in Best Pneumatics No.6.

T-interface: (T) M5 x 0.8, 1/8, 1/4, 3/8, 1/2

Using a T-interface facilitates the redirection of air flow.



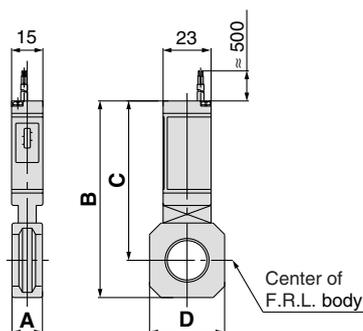
Caution on Mounting

If a T-interface is used on the IN side of the lubricator, lubricant may be mixed. Use the AKM series check valve to avoid such possibility.

JIS Symbol

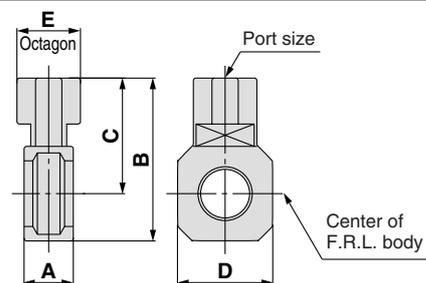


Pressure switch



Model	A	B	C	D	Applicable model
IS1000M-20	11	76	66	28	AC20□
IS1000M-30	13	86	72	30	AC25□, AC30□
IS1000M-40	15	95	77	36	AC40□
IS1000M-50	17	99	79	44	AC40□-06
IS1000M-60	22	92.5	68.5	53	AC50□, AC55□, AC60□

Note) Separate spacers are required for modular unit.



Model	Port size	A	B	C	D	E	Applicable model
Y110-M5	M5 x 0.8	11	19	12	14	8	AC10, AC10B
Y210-□01	1/8	15	42	32	28	19	AC20, AC20B, AC20C
Y210-□02	1/4		53	39	30	19	
Y310-□01	1/8	19	62	44	36	24	AC40, AC40B, AC40C
Y310-□02	1/4		66	46	44	24	
Y410-□02	1/4	22	81	57	53	30	AC40-06, AC40B-06, AC40C-06
Y410-□03	3/8		81	57	53	30	
Y510-□02	1/4	22	81	57	53	30	AC50, AC55, AC60, AC50B, AC55B, AC60B
Y510-□03	3/8		81	57	53	30	
Y610-□03	3/8	22	81	57	53	30	AC50, AC55, AC60, AC50B, AC55B, AC60B
Y610-□04	1/2		81	57	53	30	

Note 1) □ in model numbers indicates a thread type. No indication is necessary for Rc; however, indicate N for NPT, and F for G.

Note 2) Separate interfaces are required for modular unit.

* Refer to the attachment table on page 321 for standard port sizes when using with the AC.

Pressure Relief 3 Port Valve: (V)

With the use of a 3-port valve for residual pressure release, pressure left in the line can be easily exhausted.

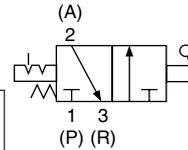
VHS 30 - 03 -

1
 2
 3
 4

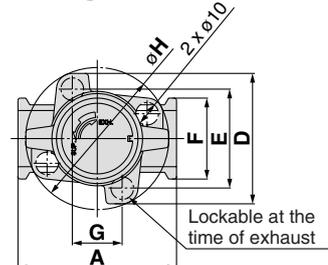
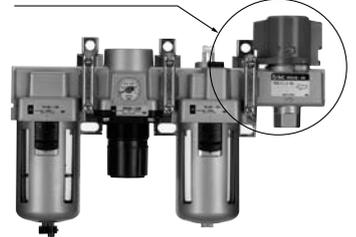
- Semi-standard: Select one each for **a** to **b**.
- Semi-standard symbol: When more than one specification is required, indicate in alphabetic order.
Example) VHS30-03-RZ

		Symbol	Description	① Body size				
				20	30	40	50	
②	Thread type	Nil	Rc	●	●	●	●	
		N (Note)	NPT	●	●	●	●	
		F (Note)	G	●	●	●	●	
+								
③	Port size	01	1/8	●	—	—	—	
		02	1/4	●	●	—	—	
		03	3/8	—	●	●	—	
		04	1/2	—	—	●	—	
		06	3/4	—	—	●	●	
		10	1	—	—	—	●	
+								
④	a	Flow direction	Nil	Flow direction: Left to right	●	●	●	●
		R	Flow direction: Right to left	●	●	●	●	
	+							
	b	Pressure unit	Nil	Name plate in imperial units: MPa	●	●	●	●
Z (Note)		Name plate in imperial units: psi	●	●	●	●		

JIS Symbol



3-port valve for residual pressure release



Note) For thread type: NPT only. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

Specifications

Model	Port size		Effective area (mm ²) () : Cv factor	
	IN, OUT	EXH	IN→OUT	OUT→EXH
VHS20	1/8	1/8	10 (0.54)	11 (0.60)
	1/4		14 (0.76)	16 (0.87)
VHS30	1/4	1/4	16 (0.87)	14 (0.76)
	3/8		31 (1.68)	29 (1.57)
VHS40	1/4	3/8	27 (1.46)	36 (1.95)
	3/8		38 (2.06)	40 (2.17)
	1/2		55 (2.98)	42 (2.28)
VHS40-06	3/4	1/2	77 (1.73)	49 (2.66)
VHS50	3/4	1/2	82 (4.44)	50 (2.71)
	1		125 (6.78)	53 (2.87)

Note) Use an air filter on the IN side for operating protection.

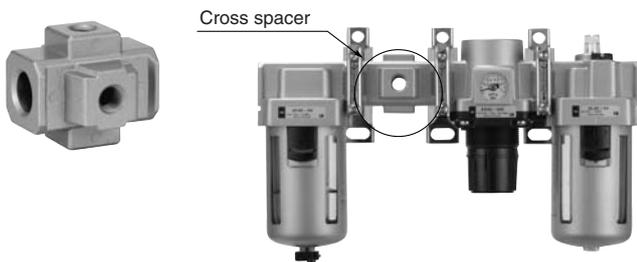
Caution on Mounting

1. If a tube, stop valve or silencer is connected to the exhaust port of the VHS20/30, the effective sectional area should be larger than the figure indicated in the following table, to prevent malfunction caused by back pressure. (This is not applicable to the VHS40/50.)

Model	Effective area (mm ²)
VHS20	5
VHS30	5

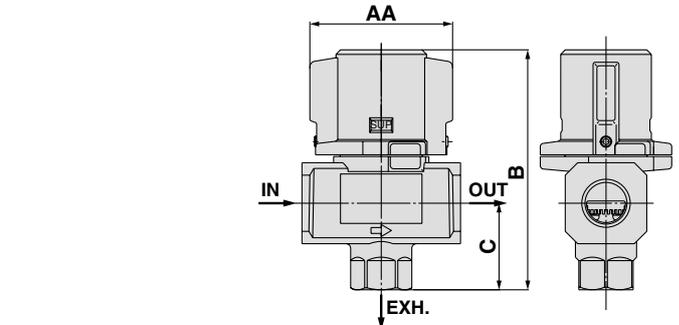
Cross Spacer: M5 x 0.8, 1/8, 1/4, 3/8, 1/2

Pipings are possible in all 4 directions.
IN/OUT ports are not machined for threads.
Please contact SMC if threaded (machined) ports are required.

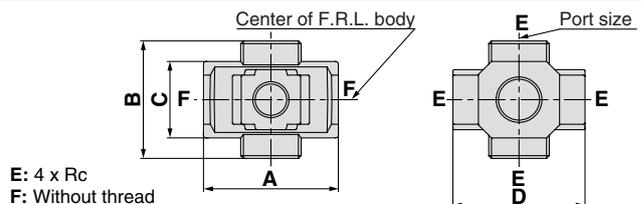


Caution on Mounting

1. When mounting a cross interface directly on the IN side of the lubricator, be sure to use the AKM series check valve between the lubricator and cross interface.
2. Factory mounting of a cross interface on the AC model is available as a special order.



Model	A	AA	B	C	D	E	F	G	H
VHS20	40	34	59	20	45	33	28	—	45
VHS30	53	46	78	29	55	42	30	—	55
VHS40	70	63	107	39	58	44	36	22	63
VHS40-06	75	67	110	42	65	50	44	21	69
VHS50	90	78	134	53	76	61	54	26	81



E: 4 x Rc
F: Without thread

Model	Port size	A	B	C	D	Applicable model
Y14-M5	M5	23	16	14	25	AC10□
Y24-□01	1/8	40	40	22	40	AC20□
Y24-□02	1/4					
Y34-□01	1/8	49	43	28	48	AC25□, AC30□
Y34-□02	1/4					
Y44-□02	1/4	60	48	36	54	AC40□
Y44-□03	3/8					
Y54-□03	3/8	72	62	40	62	AC40□-06
Y54-□04	1/2					

Note 1) □ in model numbers indicates a thread type. No indication is necessary for Rc; however, indicate N for NPT, and F for G.

Note 2) If threaded IN/OUT ports are required, they are available as a special order. Please contact SMC.