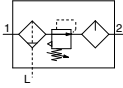


AC10-A to AC40-A

Symbol



How to Order

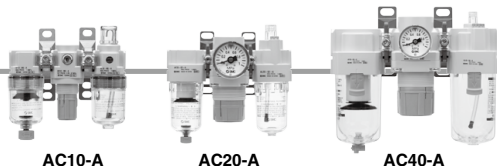
AC **30** - **03** **DG** - - **A**

①
②
③
④
⑤
⑥

- Option/Semi-standard: Select one each for **a** to **m**.
- Option/Attachment/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) AC30-F03DM-KSTV-13NR-A

	Symbol	Description	①						
			Body size						
			10	20	25	30	40		
②	Pipe thread type	Nil	Metric thread (M5)						
		N ^{Note 1)}	Rc						
		F ^{Note 2)}	NPT						
			G						
+									
③	Port size	M5	M5						
		01	1/8						
		02	1/4						
		03	3/8						
		04	1/2						
		06	3/4						
+									
④	Option ^{Note 3)}	a	Float type auto drain	Nil	Without auto drain				
			C ^{Note 4)}	N.C. (Normally closed) Drain port is closed when pressure is not applied.					
			D ^{Note 5)}	N.O. (Normally open) Drain port is open when pressure is not applied.					
+									
b	Pressure gauge ^{Note 6)}	Nil	Without pressure gauge						
		G	Round type pressure gauge (without limit indicator)						
		M	Round type pressure gauge (with limit indicator)						
+									
⑤	Attachment	c	Check valve	Nil	Without attachment				
			K	Mounting position: AF+AR+K+AL					
		+							
		d	Pressure switch	Nil	Without attachment				
				S ^{Note 8)}	Mounting position: AF+AR+S+AL				
		+							
e	T-spacer	Nil	Without attachment						
		T ^{Note 8)}	Mounting position: AF+T+AR+AL						
+									
f	Pressure relief 3 port valve	Nil	Without attachment						
		V	Mounting position: AF+AR+AL+V						
+									
⑥	Semi-standard	g	Set pressure ^{Note 9)}	Nil	0.05 to 0.7 MPa setting				
			1	0.02 to 0.2 MPa setting					
+									
h	Bowl ^{Note 10)}	Nil	Polycarbonate bowl						
		2	Metal bowl						
		6	Nylon bowl						
		8	Metal bowl with level gauge						
		C	With bowl guard						
		6C	With bowl guard (Nylon bowl)						

Air Combination **AC10-A to AC40-A Series**



		Symbol	Description	①					
				Body size					
				10	20	25	30	40	
6	i	Air filter drain port <small>Note 13)</small>	Nil	With drain cock	●	●	●	●	●
			J <small>Note 14)</small>	Drain guide 1/8	—	●	—	—	—
				Drain guide 1/4	—	—	●	●	●
			W <small>Note 15)</small>	Drain cock with barb fitting (for ø6 x ø4 nylon tube)	—	—	●	●	●
	+								
	j	Lubricator lubricant exhaust port	Nil	Without drain cock	●	●	●	●	●
			3 <small>Note 16)</small>	Lubricator with drain cock	●	●	●	●	●
	+								
	k	Exhaust mechanism	Nil	Relieving type	●	●	●	●	●
			N	Non-relieving type	●	●	●	●	●
+									
l	Flow direction	Nil	Flow direction: Left to right	●	●	●	●	●	
		R	Flow direction: Right to left	●	●	●	●	●	
+									
m	Pressure unit	Nil	Name plate and pressure gauge in imperial units: MPa	●	●	●	●	●	
		Z <small>Note 17)</small>	Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, 'F	○ <small>Note 18)</small>	○ <small>Note 18)</small>	○ <small>Note 18)</small>	○ <small>Note 18)</small>	○ <small>Note 18)</small>	

Note 1) Drain guide is NPT1/8 (applicable to the AC20-A) and NPT1/4 (applicable to the AC25-A to AC40-A). The auto drain port comes with ø3/8" One-touch fitting (applicable to the AC25-A to AC40-A).

Note 2) Drain guide is G1/8 (applicable to the AC20-A) and G1/4 (applicable to the AC25-A to AC40-A).

Note 3) Option G, M, are not assembled and supplied loose at the time of shipment.

Note 4) When pressure is not applied, condensate which does not start the auto drain mechanism will be left in the bowl. Releasing the residual condensate before ending operations for the day is recommended.

Note 5) If the compressor is small (0.75 kW, discharge flow is less than 100 L/min(ANR)), air leakage from the drain cock may occur during start

of operations. N.C. type is recommended.

Note 6) When the pressure gauge is attached, a 1.0 MPa pressure gauge will be fitted for standard (0.7 MPa) type. 0.4 MPa pressure gauge for 0.2 MPa type (1.0 MPa pressure gauge only for the AC10-A).

Note 7) Not available with piping port size: 06

Note 8) The bracket position varies depending on the T-spacer or pressure switch mounting.

Note 9) Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

Note 10) Refer to Chemical data on page 689 for chemical resistance of the bowl.

Note 11) A bowl guard is provided as standard equipment (polycarbonate).

Note 12) A bowl guard is provided as standard equipment (nylon).

Note 13) Float type auto drain: The combination of C and D is not possible.

Note 14) Without a valve function

Note 15) The combination of metal bowl: 2 and 8 is not available.

Note 16) When choosing with W: Filter drain port, the drain cock of a lubricator will be with barb fittings.

Note 17) For pipe thread type: M5, NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.) MPa and psi are shown together on the pressure unit. Cannot be used with M: Round pressure gauge (with color zone). Available by request for special.

Note 18) ○: For pipe thread type: M5, NPT only

Standard Specifications

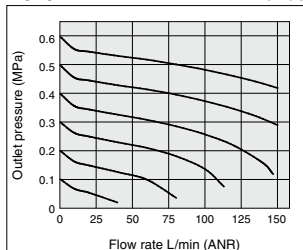
Model	AC10-A	AC20-A	AC25-A	AC30-A	AC40-A	AC40-06-A	
Component	Air Filter [AF]	AF10-A	AF20-A	AF30-A	AF30-A	AF40-A	AF40-06-A
	Regulator [AR]	AR10-A	AR20-A	AR25-A	AR30-A	AR40-A	AR40-06-A
	Lubricator [AL]	AL10-A	AL20-A	AL30-A	AL30-A	AL40-A	AL40-06-A
Port size	M5 x 0.8	1/8, 1/4	1/4, 3/8	1/4, 3/8	1/4, 3/8, 1/2	3/4	
Pressure gauge port size [AR]	1/16			1/8			
Fluid	Air						
Ambient and fluid temperature	-5 to 60 °C (with no freezing)						
Proof pressure	1.5 MPa						
Max. operating pressure	1.0 MPa						
Set pressure range [AR]	0.05 to 0.7 MPa						
Nominal filtration rating [AF]	5 µm						
Recommended lubricant [AL]	Class 1 turbine oil (ISO VG32)						
Bowl material [AF/AL]	Polycarbonate						
Bowl guard [AF/AL]	—	Semi-standard (Steel)		Standard (Polycarbonate)			
Construction [AR]	Relieving type						
Weight (kg)	0.27	0.40	0.68	0.83	1.53	1.66	

AC10-A to AC40-A Series

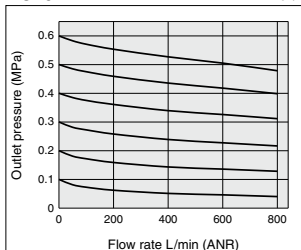
Flow Rate Characteristics (Representative values)

Condition: Inlet pressure 0.7 MPa

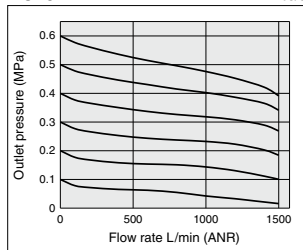
AC10-A M5 x 0.8



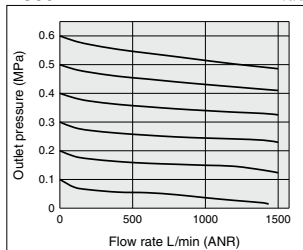
AC20-A Rc1/4



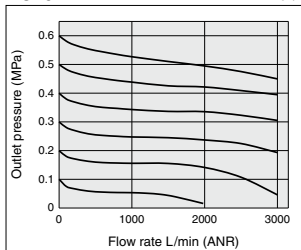
AC25-A Rc3/8



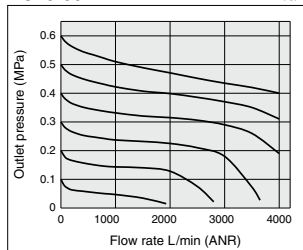
AC30-A Rc3/8



AC40-A Rc1/2



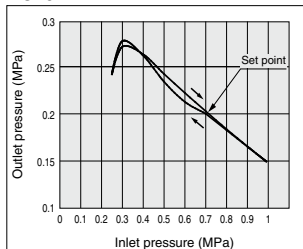
AC40-06-A Rc3/4



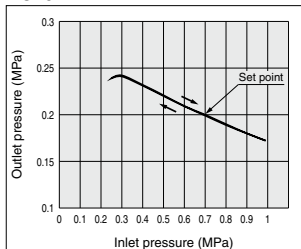
Pressure Characteristics (Representative values)

Conditions: Inlet pressure 0.7 MPa, Outlet pressure 0.2 MPa, Flow rate 20 L/min (ANR)

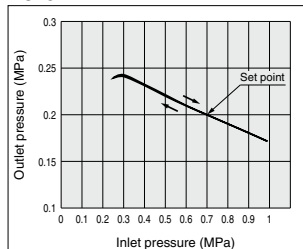
AC10-A



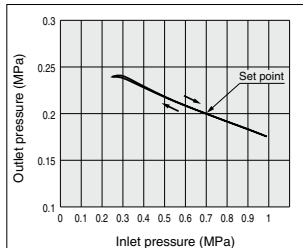
AC20-A



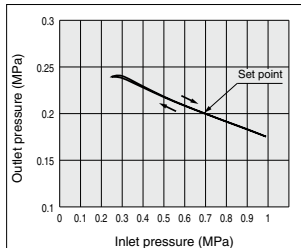
AC25-A



AC30-A



AC40-A/AC40-06-A



⚠ Specific Product Precautions

Be sure to read this before handling the products. Refer to page 9 for safety instructions and pages 13 to 17 for F.R.L. precautions.

Piping

⚠ Warning

- When mounting a check valve, make sure the arrow (IN side) points in the correct direction of air flow.

Air Supply

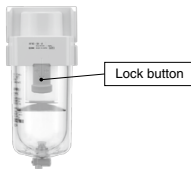
⚠ Caution

- Use an air filter with 5 μm or less filtration rating on the inlet side of the valve to avoid any damage to the seat caused by dust when mounting a pressure relief 3 port valve on the inlet side.

Mounting/Adjustment

⚠ Caution

- When the bowl is installed on the air filter, filter regulator, lubricator, mist separator, or micro mist separator (AC25-A to AC40-A), install them so that the lock button lines up to the groove of the front (or the back) of the body to avoid drop or damage of the bowl.



Selection

⚠ Warning

- Float type auto drain
 - Operate under the following conditions to avoid malfunction.
 - <N.O. type>
 - Operating compressor: 0.75 kW (100 L/min (ANR)) or more.
 - When using 2 or more auto drains, multiply the value above by the number of auto drains to find the capacity of the compressors you will need.
 - For example, when using 2 auto drains, 1.5 kW (200 L/min (ANR)) of the compressor capacity is required.
 - Operating pressure: 0.1 MPa or more
- <N.C. type>
 - Operating pressure for AD27-A: 0.1 MPa or more
 - Operating pressure for AD37-A/AD47-A: 0.15 MPa or more

Selection

⚠ Warning

- When a pressure release 3 port valve is mounted on the inlet side of the regulator or filter regulator, the residual pressure can be released to the inlet side. However, if the set pressure is 0.15 MPa or less, the residual pressure may not be released.
 - When using the pressure release 3 port valve at a set pressure level of 0.15 MPa or less, it is recommended to use a regulator with backflow function.

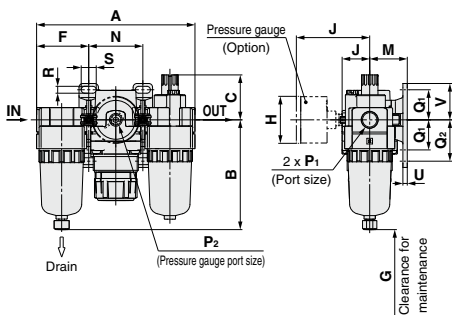
⚠ Caution

- When releasing air at the intermediate position using a T-spacer on the inlet side of the lubricator, lubricant may back flow. Therefore, releasing air that does not contain traces of lubricant is not possible.
 - To release air that does not contain traces of lubricant, use a check valve (AKM series) on the inlet side of the lubricator to prevent a backflow of the lubricant.
- If a pressure relief 3 port valve is mounted on the inlet side of the lubricator, causing a backflow of air, it can result in a backflow of oil or damage to internal parts. Do not use it in this fashion.
- An F.R.L. unit shipped from the plant has its model number labeled. However, components that are combined together during the distribution process do not have a label on them.
- For AC10 series products with a pressure gauge, when connected to the modular unit, there will be interference preventing the use of tools; therefore, the pressure gauge cannot be mounted or removed in such a state.
 - Mount or remove the pressure gauge from the AR/AW10-A single unit product before connecting it to the modular unit.
 - To screw in the pressure gauge, make sure to insert a wrench into the wrench flats before turning the gauge.
 - If the pressure gauge is screwed in by holding some other part of it, air leakage or damage may result.
 - It is possible to have the product shipped with the pressure gauge already mounted. Please contact your local sales representative for more details.
- When operating at an inlet pressure lower than the inlet pressure used in the flow rate characteristics graph, the pressure drop on the outlet side may be greater. Therefore, be sure to conduct testing using the actual equipment.
 - For air combination selection, refer to the "Product Selection Guide."

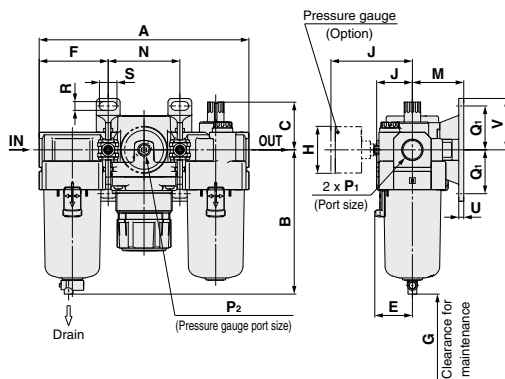
AC10-A to AC40-A Series

Dimensions

AC10-A/AC20-A



AC25-A to AC40-06-A



Applicable model	AC10-A/AC20-A		AC20-A		AC25-A to AC40-06-A
Optional/Semi-standard specifications	With auto drain (N.C.)	Metal bowl	With drain guide	Metal bowl with drain guide	With auto drain (N.O./N.C.)
Dimensions					
					Thread type/Rc, G: ø10 One-touch fitting Thread type/NPT: ø3/8" One-touch fitting

Applicable model	AC25-A to AC40-06-A					
Optional/Semi-standard specifications	Metal bowl	Metal bowl with drain guide	Metal bowl with level gauge	Metal bowl with level gauge, with drain guide	With drain guide	Drain cock with barb fitting
Dimensions						

Model	Standard specifications																
	P ₁	P ₂	A	B	C	E	F	G	J	Bracket mount							
	M5 x 0.8	1/16	87	59.9	25.5	—	28	35	12.5	M	N	Q ₁	Q ₂	R	S	U	V
AC10-A	M5 x 0.8	1/16	87	59.9	25.5	—	28	35	12.5	25	31	20	27	4.5	6.8	3	24.5
AC20-A	1/8, 1/4	1/8	126.4	87.6	35.9	—	41.6	60	23.4	30	43.2	24	33	5.5	12	3.5	29
AC25-A	1/4, 3/8	1/8	167.4	115.1	38.1	30	55.1	80	30.5	41	57.2	35	—	7	14	4	41
AC30-A	1/4, 3/8	1/8	167.4	115.1	38.1	30	55.1	80	30.5	41	57.2	35	—	7	14	4	41
AC40-A	1/4, 3/8, 1/2	1/8	220.4	147.1	39.8	38.4	72.6	110	36.1	50	75.2	40	—	9	18	5	48
AC40-06-A	3/4	1/8	235.4	149.1	37.8	38.4	77.6	110	39.6	50	80.2	40	—	9	18	5	48

Model	Optional specifications						Semi-standard specifications					
	Round type pressure gauge		Round type pressure gauge (with color zone)		With auto drain	With barb fitting	With drain guide	Metal bowl	Metal bowl with drain guide	Metal bowl with level gauge	Metal bowl with level gauge, with drain guide	
	H	J	H	J	B	B	B	B	B	B	B	
AC10-A	ø26	26	—	—	77.9	—	—	59.3	—	—	—	
AC20-A	ø37.5	58.5	ø37.5	59.5	104.9	—	91.4	87.4	93.9	—	—	
AC25-A	ø37.5	58.5	ø37.5	59.5	156.8	123.6	121.9	117.6	122.1	137.6	142.1	
AC30-A	ø37.5	65	ø37.5	66	156.8	123.6	121.9	117.6	122.1	137.6	142.1	
AC40-A	ø42.5	72	ø42.5	72	186.9	155.6	153.9	149.6	154.1	169.6	174.1	
AC40-06-A	ø42.5	72	ø42.5	72	188.9	157.6	155.9	151.6	156.1	171.6	176.1	

Air Combination AC Series Options/Attachments

Options/Attachments/Part No.

Section	Model		Part no.					
			For AC10-A For AC10A-A For AC10B-A	For AC20-A For AC20A-A For AC20C-A For AC20D-A	For AC25-A — For AC25B-A For AC25C-A	For AC30-A For AC30A-A For AC30B-A For AC30C-A For AC30D-A	For AC40-A For AC40A-A For AC40B-A For AC40C-A For AC40D-A	For AC40-06-A For AC40A-06-A For AC40B-06-A For AC40C-06-A For AC40D-06-A
Option <small>(pressure gauge is included)</small>	Round type	Standard	G27-10-R1	—	G36-10-□01	—	G46-10-□01	—
	Round type with color (zone)	0.02 to 0.2 MPa setting	G27-10-R1 Note 2)	—	G36-4-□01	—	G46-4-□01	—
Attachment	Spacer	Standard	—	Y100-A	Y200-A	Y300-A	Y400-A	Y500-A
	Spacer with bracket	—	—	Y100T-A	Y200T-A	Y300T-A	Y400T-A	Y500T-A
	Check valve	Note 3) Note 4)	—	—	AKM2000-□01-A (□02)-A	AKM3000-□01-A (□02)-A	AKM4000-□02-A (□03)-A	—
	Pressure switch	Note 4)	—	—	IS10M-20-A	IS10M-30-A	IS10M-40-A	IS10M-50-A
	T-spacer	Note 3) Note 4)	Y110-M5-A	Y210-□01-A (□02)-A	Y310-□01-A (□02)-A	Y410-□02-A (□03)-A	Y510-□02-A (□03)-A	—
	Pressure relief 3 port valve	Note 4)	—	—	VHS20-□01A (□02A)	VHS30-□02A (□03A)	VHS40-□03A (□04A)	VHS40-□06A
	Piping adapter	Note 4)	E100-M5-A	—	□01-A E200-□02-A (□03-A)	□02-A E300-□03-A (□04-A)	E400-□03-A (□04-A) (□06-A)	E500-□06-A
	Pressure switch with piping adapter	Note 4)	—	—	□01-A IS10E-20□02-A (□03-A)	□02-A IS10E-30□03-A (□04-A)	□02-A IS10E-40□03-A (□04-A) (□06-A)	—
	Cross spacer	Note 4)	Y14-M5-A	Y24-□01-A (□02-A)	—	Y34-□01-A (□02-A)	Y44-□02-A (□03-A)	Y54-□03-A (□04-A)

Note 1) □ in round pressure gauge part numbers indicates a pipe thread type. No indication is necessary for R; however, indicate N for NPT.
Please contact SMC regarding the pipe thread type NPT and the supply of pressure gauge with psi unit display specifications.

Note 2) Standard pressure gauge

Note 3) For F.R.L. units, port sizes without () are standard specifications.

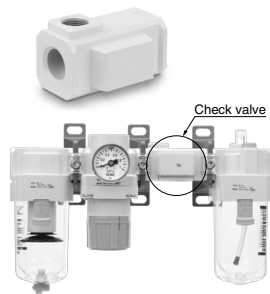
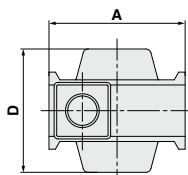
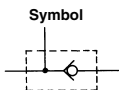
Note 4) Separate interfaces are required for modular unit.

Check Valve: (K) 1/8, 1/4, 3/8

A check valve with intermediate air release port can be easily installed to prevent a backflow of lubricant when redirecting the air flow and releasing the air on the outlet side of the regulator.

AKM 30 00 - □ 01 - A

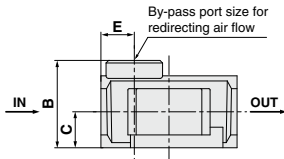
Symbol		Description	Body size		
1	Symbol	Body size	20	30	40
2	Pipe thread type	Nil N F	Rc NPT G	●	●
3	By-pass port size	01 02 03	1/8 1/4 3/8	●	●



Specifications

Model	Effective area (mm ²)
AKM2000-A	28
AKM3000-A	55
AKM4000-A	111

Be sure to use above check valves when redirecting the air flow on the inlet side of the lubricator. Threads for IN and OUT ports are not machined.



Model	By-pass port size	A	B	C	D	E	Applicable model
AKM2000-A	1/8, 1/4	40	28	11	40	11	AC20-A, AC20A-A
AKM3000-A	1/8, 1/4	53	34	14	48	13	AC25-A, AC30-A, AC30A-A
AKM4000-A	1/4, 3/8	70	42	18	54	15	AC40-A, AC40A-A ^(Note)

Note) Cannot be mounted on the AC40□06-A.
* Refer to the attachment table above for standard by-pass port sizes applicable to the AC.

AC Series

Pressure Switch: (S)

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

IS10M-30- -A



- Semi-standard: Select one each for a to c.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) IS10M-30-6LP

	Symbol	Description	①				
			Body size				
			20	30	40	50	
② Semi-standard	a	Set pressure range	Nil	●	●	●	●
			6 ^{Note 1)}	●	●	●	●
	b	Lead wire length	+	●	●	●	●
			Nil	●	●	●	●
L			●	●	●	●	
	Z	●	●	●	●		
c	Pressure unit of the scale plate	+	●	●	●	●	
		Nil	●	●	●	●	
	P ^{Note 2)}	MPa/psi dual scale	●	●	●	●	

Note 1) Set pressure range of 6P (L, Z) is 0.2 to 0.6 MPa (30 to 90 psi).
Note 2) 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

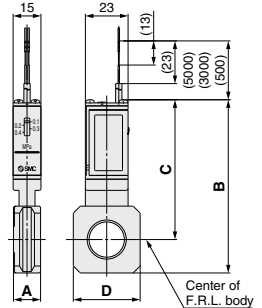
Contact point configuration	1a
Maximum contact point capacity	2 VA (AC), 2 W (DC)
Operating voltage: AC, DC	100 V or less
Maximum operating current	12 V to 24 VAC, DC: 50 mA
	48 VAC, DC: 40 mA 100 VAC, DC: 20 mA

Note) For detailed specifications on the IS10 series, refer to the IS10 series section of the SMC website: <https://www.smcworld.com>

Symbol



Pressure switch

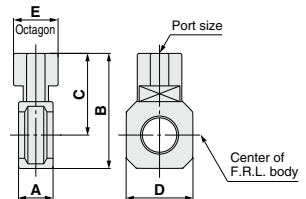
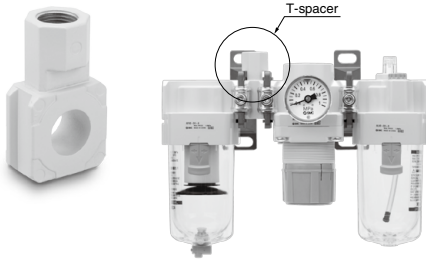


Model	A	B	C	D	Applicable model
IS10M-20-A	10.6	74.2	64.4	28	AC20□-A
IS10M-30-A	12.6	84.5	70.5	30	AC25□-A, AC30□-A
IS10M-40-A	14.6	93.3	75.3	36	AC40□-A
IS10M-50-A	16.6	97.3	77.3	44	AC40□-06-A

* Separate spacers are required for modular unit.

T-Spacer: (T) 1/8, 1/4, 3/8

Using a T-spacer facilitates the branching of air flow.



Model ^{Note)}	Port size	A	B	C	D	E	Applicable model
Y110-M5-A	M5 x 0.8	11.2	19	12	14	8	AC10-A, AC10B-A
Y210-□01-A	1/8	14.6	41.8	32	28	19	AC20-A, AC20B-A
Y210-□02-A	1/4						AC20C-A
Y310-□01-A	1/8	14.6	52.7	38.7	30	19	AC25-A, AC25B-A
Y310-□02-A	1/4						AC25C-A, AC30-A
Y410-□02-A	1/4						AC30B-A, AC30C-A
Y410-□03-A	3/8	18.6	62	44	36	24	AC40-A, AC40B-A
Y510-□02-A	1/4						AC40C-A
Y510-□03-A	3/8	18.6	66	46	44	24	AC40-06-A, AC40B-06-A
							AC40C-06-A

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

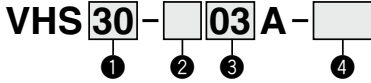
- * Separate interfaces are required for modular unit.
- * Refer to the attachment table on page 679 for standard port sizes when using with the AC.

Caution on Mounting

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

Pressure Relief 3 Port Valve: (V) Refer to the [Web Catalog](#) for details on pressure relief 3 port valve

With the use of a pressure relief 3 port valve, pressure left in the line can be easily exhausted.

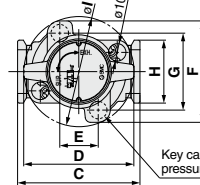
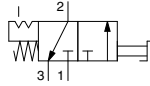


- Semi-standard: Select one each for a to b.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) VHS30-03A-PZ

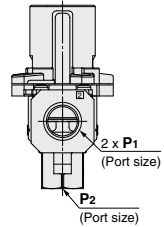
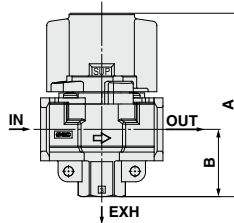
		Symbol	Description	① Body size			
					20	30	40
②	Pipe thread type	Nil	Rc	●	●	●	●
		N (Note)	NPT	●	●	●	●
		F (Note)	G	●	●	●	●
+							
③	Port size	01	1/8	●	—	—	—
		02	1/4	—	●	●	●
		03	3/8	—	—	●	●
		04	1/2	—	—	—	●
		06	3/4	—	—	—	—
+							
④	Semi-standard	a	Flow direction	Nil	Flow direction: Left to right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

Note) For pipe 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.)

Symbol



Key can be mounted when residual pressure is released.



2 x P1 (Port size)

P2 (Port size)

Specifications

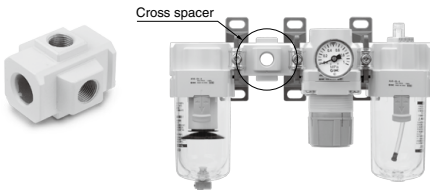
Model	Port size			Specifications					
	IN, OUT	EXH		IN → OUT			OUT → EXH		
				C (dm ³ /s·bar)	b	Cv	C (dm ³ /s·bar)	b	Cv
VHS20	1/8	1/8		2.4	0.43	0.65	2.5	0.39	0.69
	1/4	1/4		3.3	0.40	0.88	3.1	0.51	0.84
VHS30	1/4	1/4		6.4	0.45	1.7	6.2	0.38	1.7
	3/8	3/8		8.3	0.41	2.3	7.0	0.41	1.9
VHS40	1/4	1/4		7.3	0.49	2.0	8.5	0.35	2.3
	3/8	3/8		10.9	0.45	3.0	11.6	0.40	3.1
	1/2	1/2		14.2	0.39	3.8	13.3	0.43	3.6
VHS40-06	3/4	1/2		18.3	0.31	5.0	17.7	0.37	4.8

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

Model	Standard specifications										
	P1	P2	A	B	C	D	E	F	G	H	I
VHS20	1/8, 1/4	1/8	66.4	22.3	40	37.5	14	46.6	33.6	28	43
VHS30	1/4, 3/8	1/4	80.3	29.4	53	49	19	52	38	30	49
VHS40	1/4, 3/8, 1/2	3/8	104.9	38.5	70	63	22	58	44	36	63
VHS40-06	3/4	1/2	110.4	42	75	63	22	58	44	44	63

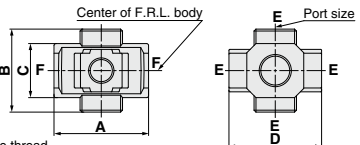
Cross Spacer: 1/8, 1/4, 3/8, 1/2

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



F: Without pipe thread

Model (Note)	E (Port size)	A	B	C	D	Applicable model
Y14-M5-A	M5 x 0.8	23	16	14	25	AC10□-A
Y24-□01-A	1/8	40	40	22	40	AC20□-A
Y24-□02-A	1/4	49	43	28	48	AC25□-A, AC30□-A
Y34-□01-A	1/8	60	48	36	54	AC40□-A
Y34-□02-A	1/4	72	62	40	62	AC40□-06-A
Y44-□02-A	1/4	60	48	36	54	AC40□-A
Y44-□03-A	3/8	60	48	36	54	AC40□-A
Y54-□03-A	3/8	72	62	40	62	AC40□-06-A
Y54-□04-A	1/2	72	62	40	62	AC40□-06-A

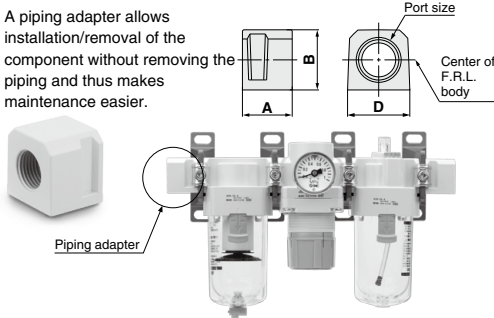
Note) □ in model numbers indicates a pipe thread type. No indication is necessary for Rc; however, indicate N for NPT, and F for G.

- * If threaded IN/OUT ports are required, they are available as a special order. Please contact SMC.
- * Two hexagon socket head plugs are included in the package.

AC Series

Piping Adapter: 1/8, 1/4, 3/8, 1/2, 3/4

A piping adapter allows installation/removal of the component without removing the piping and thus makes maintenance easier.



Model (Note)	Port size	A	B	D	Applicable model
E100-M5-A	M5 x 0.8	10	14	14	AC10□-A
E200-□01-A	1/8	29.8	23.5	28	AC20□-A
E200-□02-A	1/4				
E200-□03-A	3/8	31.8	30	30	AC25□-A, AC30□-A
E300-□02-A	1/4				
E300-□03-A	3/8				
E300-□04-A	1/2	31.8	36	36	AC40□-A
E400-□02-A	1/4				
E400-□03-A	3/8	31.8	36	36	AC40□-A
E400-□04-A	1/2				
E400-□06-A	3/4	31.8	40	44	AC40□-06-A
E500-□06-A	3/4				

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

* Separate interfaces are required for modular unit.

* Factory mounting of a piping adapter on the AC models is available as a special order.

Pressure Switch with Piping Adapter

IS10E-□30□□03-□-A

① ② ③ ④

- Semi-standard: Select one each for a to d.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) IS10E-30N03-6PRZ

	Symbol	Description	①				
			Body size				
			20	30	40		
②	Pipe 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	—	—	●			
④	a	Set pressure range	Nil	0.1 to 0.4 MPa	●	●	●
			6 (Note 1)	0.1 to 0.6 MPa	●	●	●
	b	Lead wire length	+				
			Nil	0.5 m	●	●	●
			L	3 m	●	●	●
	Z	5 m	●	●	●		
	c	Pressure unit of the scale plate	Nil	MPa	●	●	●
			p (Note 2)	MPa/psi dual scale	●	●	●
d	Mounting position	+					
		Nil	Right	●	●	●	
R	Left	●	●	●			

Note 1) Set pressure range of 6P (L, R, Z) is 0.2 to 0.6 MPa (30 to 90 psi).

Note 2) For pipe 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.)

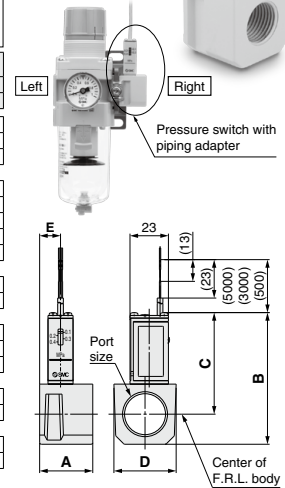
Specifications

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 V AC, DC: 50 mA
	48 V AC, DC: 40 mA
	100 V AC, DC: 20 mA

Symbol



Model (Note 1)	Port size	A	B	C	D	E	Applicable model
IS10E-20□01-A	1/8	29.8	66.3	55.3	28	16	AC20□-A
IS10E-20□02-A	1/4						
IS10E-20□03-A	3/8						
IS10E-30□02-A	1/4	31.8	72.8	58.8	30	13	AC25□-A, AC30□-A
IS10E-30□03-A	3/8						
IS10E-30□04-A	1/2	31.8	78.8	60.8	37	12.5	Note 2) AC40□-A
IS10E-40□02-A	1/4						
IS10E-40□03-A	3/8						
IS10E-40□04-A	1/2	31.8	78.8	60.8	37	12.5	Note 2) AC40□-A
IS10E-40□06-A	3/4						

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

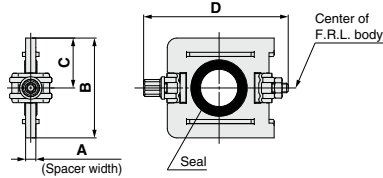
Note 2) Cannot be mounted on the AC40□-06-A.

* Separate interfaces are required for modular unit.

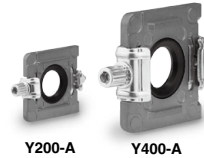
* The pressure switch on the AC40□-06-A can be mounted by screwing IS10-01S into the piping adapter E500-□06-A-X501 (with top-face thread Rc1/8). Products with a pre-mounted switch are available as a special order. Please contact SMC regarding their availability.

AC Series Accessories (Spacers/Brackets)

Spacer



Model	A	B	C	D	Applicable model
Y100-A	6	17.9	9	35.4	AC10□-A
Y200-A	3.2	31.2	15.6	44.9	AC20□-A
Y300-A	4.2	43.4	21.7	57.9	AC25□-A, AC30□-A
Y400-A	5.2	53	26.5	68.5	AC40□-A
Y500-A	5.2	57	28.5	75.6	AC40□-06-A



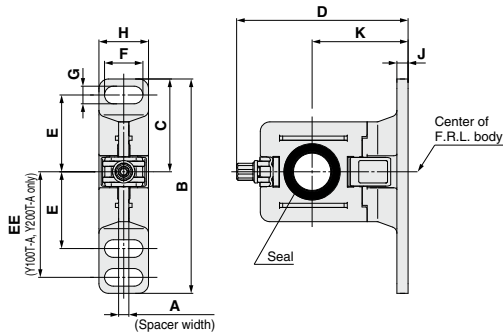
Replacement Parts

Description	Material	Part no.				
		Y100-A	Y200-A	Y300-A	Y400-A	Y500-A
Seal	HNBR (NBR) ^{Note 1)}	Y120P-050AS ^{Note 2)}	Y220P-050S	Y320P-050S	Y420P-050S	Y520P-050S

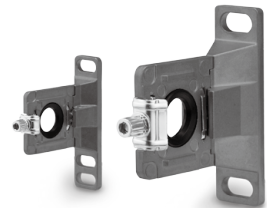
Note 1) (): Size 10

Note 2) Assembly of 2 O-rings

Spacer with Bracket



Model	A	B	C	D	E	EE	F	G	H	J	K	Applicable model
Y100T-A	6	56	24.5	43.6	20	27	6.8	4.5	13	3	25	AC10□-A
Y200T-A	3.2	67	29	53.4	24	33	12	5.5	15.5	3.5	30	AC20□-A
Y300T-A	4.2	82	41	71.5	35	—	14	7	19	4	41	AC25□-A, AC30□-A
Y400T-A	5.2	96	48	86.1	40	—	18	9	26	5	50	AC40□-A
Y500T-A	5.2	96	48	89.6	40	—	18	9	26	5	50	AC40□-06-A



Replacement Parts

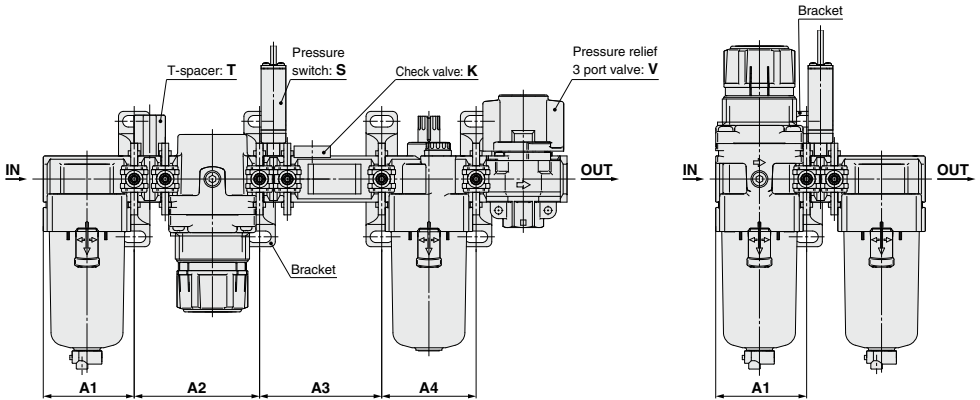
Description	Material	Part no.				
		Y100T-A	Y200T-A	Y300T-A	Y400T-A	Y500T-A
Seal	HNBR (NBR) ^{Note 1)}	Y120P-050AS ^{Note 2)}	Y220P-050S	Y320P-050S	Y420P-050S	Y520P-050S

Note 1) (): Size 10

Note 2) Assembly of 2 O-rings

AC Series

Mounting Position for Spacer with Bracket



Attachment	K			S			T			V			KS			KT			KV				KST					
	A1	A2	A3	A1	A2	A1	A2	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3	A4	A1	A2	A3		
Model																												
AC10-A	—			—			28 48.2			—			—			—			—			—				—		
AC20-A	41.6	43.2	43.2	41.6	43.2	41.6	61	41.6	43.2	43.2	41.6	43.2	43.2	41.6	43.2	57	41.6	61	43.2	41.6	43.2	43.2	43.2	41.6	61	57		
AC25-A	55.1	57.2	57.2	55.1	57.2	55.1	76	55.1	57.2	57.2	55.1	57.2	57.2	55.1	57.2	74	55.1	76	57.2	55.1	57.2	55.1	57.2	57.2	57.2	55.1	76	74
AC30-A	55.1	57.2	57.2	55.1	57.2	55.1	76	55.1	57.2	57.2	55.1	57.2	57.2	55.1	57.2	74	55.1	76	57.2	55.1	57.2	55.1	57.2	57.2	57.2	55.1	76	74
AC40-A	72.6	75.2	75.2	72.6	75.2	72.6	99	72.6	75.2	75.2	72.6	75.2	75.2	72.6	75.2	95	72.6	99	75.2	72.6	75.2	72.6	75.2	75.2	75.2	72.6	99	95
AC40-06-A	—			77.6			104			77.6			80.2			—			—			—				—		

Attachment	KSV				KTV				KSTV				ST		SV			STV			TV											
	A1	A2	A3	A4	A1	A2	A3	A4	A1	A2	A3	A4	A1	A2	A1	A2	A3	A1	A2	A3	A1	A2	A3									
Model																																
AC10-A	—				—				—				—		—			—			—											
AC20-A	41.6	43.2	57	43.2	41.6	61	43.2	43.2	41.6	61	57	43.2	41.6	61	41.6	43.2	57	41.6	61	57	41.6	61	57	41.6	61	43.2						
AC25-A	55.1	57.2	74	57.2	55.1	76	57.2	57.2	55.1	76	74	57.2	55.1	76	55.1	57.2	74	55.1	76	74	55.1	76	74	55.1	76	57.2						
AC30-A	55.1	57.2	74	57.2	55.1	76	57.2	57.2	55.1	76	74	57.2	55.1	76	55.1	57.2	74	55.1	76	74	55.1	76	74	55.1	76	57.2						
AC40-A	72.6	75.2	95	75.2	72.6	99	75.2	75.2	72.6	99	95	75.2	72.6	99	72.6	99	72.6	75.2	95	72.6	75.2	95	95	72.6	99	75.2						
AC40-06-A	—				—				—				77.6		104			80.2			102			77.6			104			80.2		

Attachment	K		S		V		KS		KV			KSV			SV	
	A1	A2	A1	A2	A1	A2	A1	A2	A1	A2	A3	A1	A2	A3	A1	A2
Model																
AC10A-A	—		—		—		—		—			—			—	
AC20A-A	41.6	43.2	41.6	41.6	43.2	41.6	57	41.6	43.2	43.2	41.6	57	43.2	41.6	57	
AC30A-A	55.1	57.2	55.1	55.1	57.2	55.1	74	55.1	57.2	57.2	55.1	74	57.2	55.1	74	
AC40A-A	72.6	75.2	72.6	72.6	75.2	72.6	95	72.6	75.2	75.2	72.6	95	75.2	72.6	95	
AC40A-06-A	—		77.6		80.2		—		—			77.6			102	

Attachment	S		T		V		V1		SV		SV1		TV		TV1	
	A1	A1	A1	A2	A1	A2	A1	A2	A1	A2	A1	A2	A1	A2	A1	A2
Model																
AC10B-A	—		—		—		—		—		—		—		—	
AC20B-A	41.6	41.6	41.6	43.2	41.6	43.2	41.6	57	41.6	43.2	41.6	61	41.6	43.2	41.6	43.2
AC25B-A	55.1	55.1	55.1	57.2	55.1	57.2	55.1	74	55.1	57.2	55.1	76	55.1	57.2	55.1	57.2
AC30B-A	55.1	55.1	55.1	57.2	55.1	57.2	55.1	74	55.1	57.2	55.1	76	55.1	57.2	55.1	57.2
AC40B-A	72.6	72.6	72.6	75.2	72.6	75.2	72.6	95	72.6	75.2	72.6	99	72.6	75.2	72.6	75.2
AC40B-06-A	77.6	77.6	77.6	80.2	77.6	80.2	77.6	102	77.6	80.2	77.6	104	77.6	80.2	77.6	80.2

Attachment	S		T		V			V1			SV			SV1			TV			TV1					
	A1	A2	A1	A2	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3			
Model																									
AC20C-A	41.6	43.2	41.6	43.2	41.6	43.2	41.6	43.2	41.6	43.2	41.6	43.2	57	41.6	43.2	43.2	41.6	43.2	41.6	43.2	61	41.6	43.2	43.2	
AC25C-A	55.1	57.2	55.1	57.2	55.1	57.2	55.1	57.2	55.1	57.2	55.1	57.2	74	55.1	57.2	74	55.1	57.2	55.1	57.2	76	55.1	57.2	57.2	
AC30C-A	55.1	57.2	55.1	57.2	55.1	57.2	55.1	57.2	55.1	57.2	55.1	57.2	74	55.1	57.2	74	55.1	57.2	55.1	57.2	76	55.1	57.2	57.2	
AC40C-A	72.6	75.2	72.6	75.2	72.6	75.2	72.6	75.2	72.6	75.2	72.6	75.2	95	72.6	75.2	95	72.6	75.2	72.6	75.2	99	72.6	75.2	75.2	
AC40C-06-A	77.6	80.2	77.6	80.2	77.6	80.2	77.6	80.2	77.6	80.2	77.6	80.2	102	77.6	80.2	102	77.6	80.2	80.2	77.6	80.2	104	77.6	80.2	80.2

Attachment	S		V		V1		SV		SV1	
	A1	A1	A1	A2	A1	A2	A1	A2	A1	A2
Model										
AC20D-A	41.6	41.6	43.2	41.6	43.2	41.6	57	41.6	43.2	43.2
AC25D-A	55.1	55.1	57.2	55.1	57.2	55.1	74	55.1	57.2	57.2
AC30D-A	55.1	55.1	57.2	55.1	57.2	55.1	74	55.1	57.2	57.2
AC40D-A	72.6	72.6	75.2	72.6	75.2	72.6	95	72.6	75.2	75.2
AC40D-06-A	77.6	77.6	80.2	77.6	80.2	77.6	102	77.6	80.2	80.2

- A1: Dimension from the end of the IN side to the center of the mounting hole for the first bracket.
- A2: Mounting hole pitch between the first and the second brackets.
- A3: Mounting hole pitch between the second and the third brackets.
- A4: Mounting hole pitch between the third and the fourth brackets.