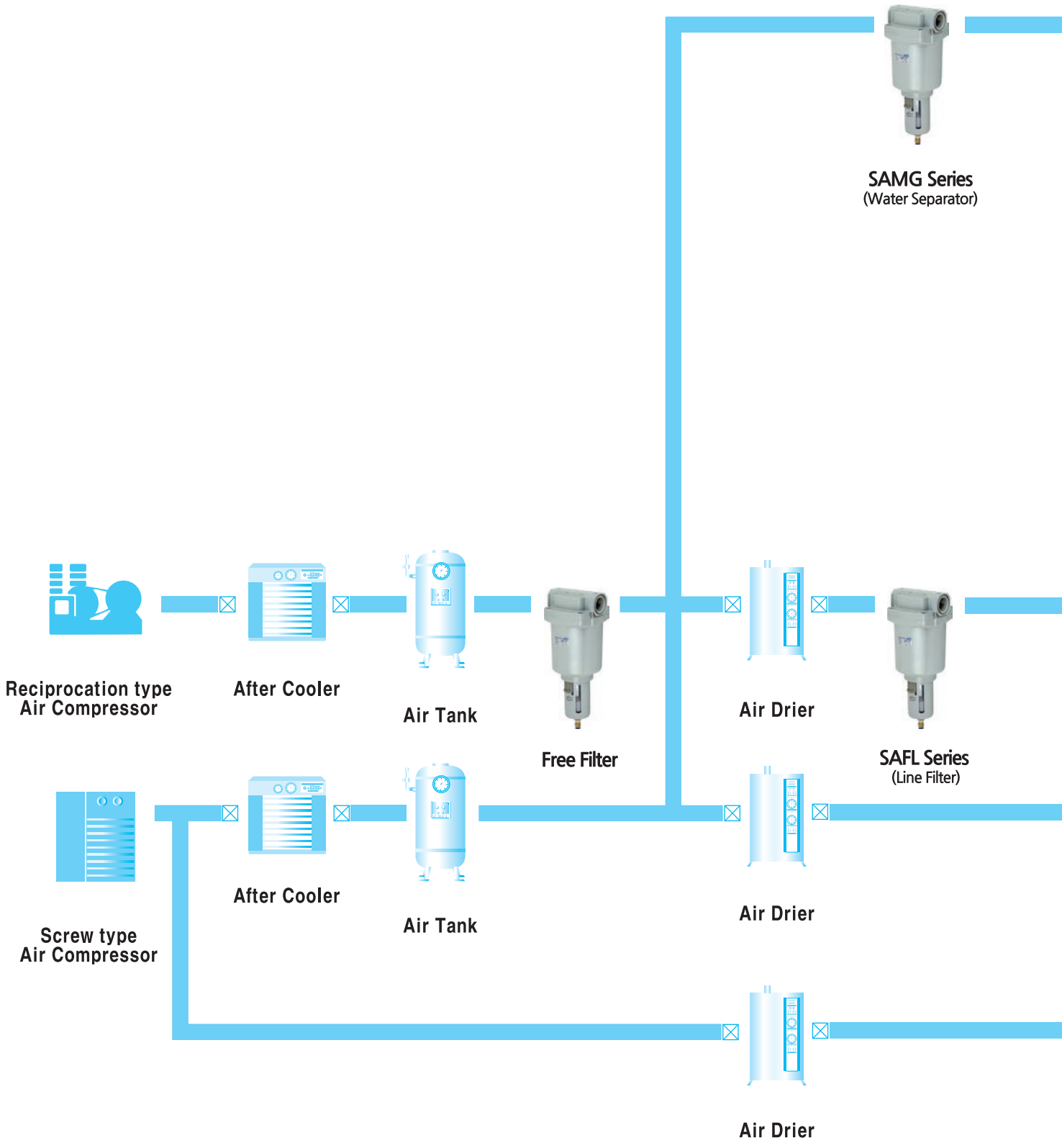
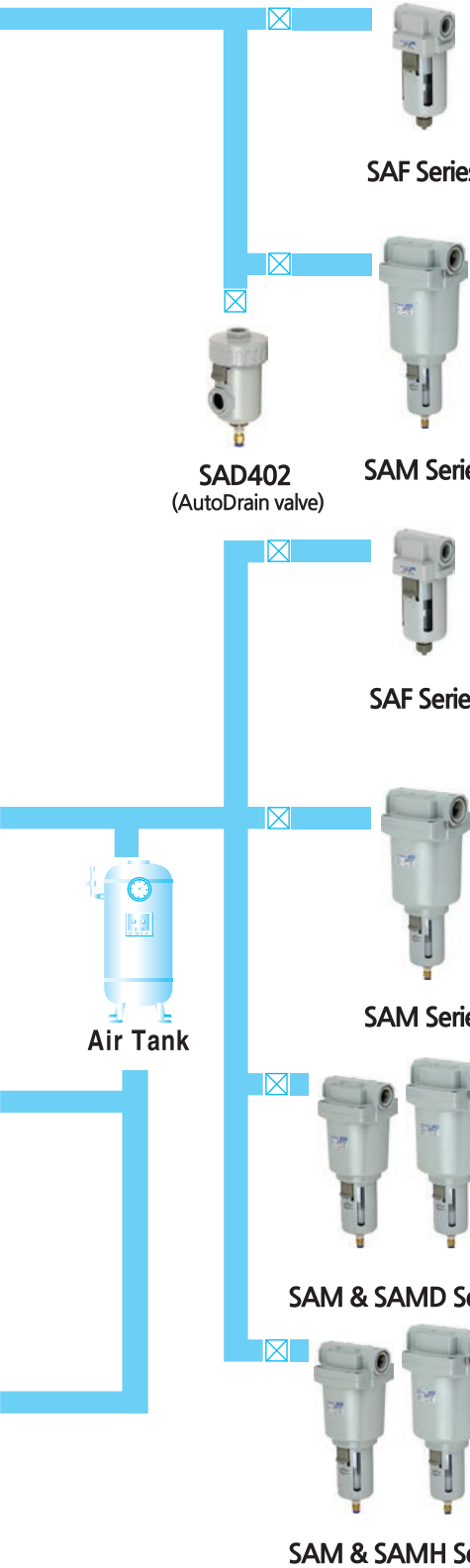
Air Cleaning Equipment

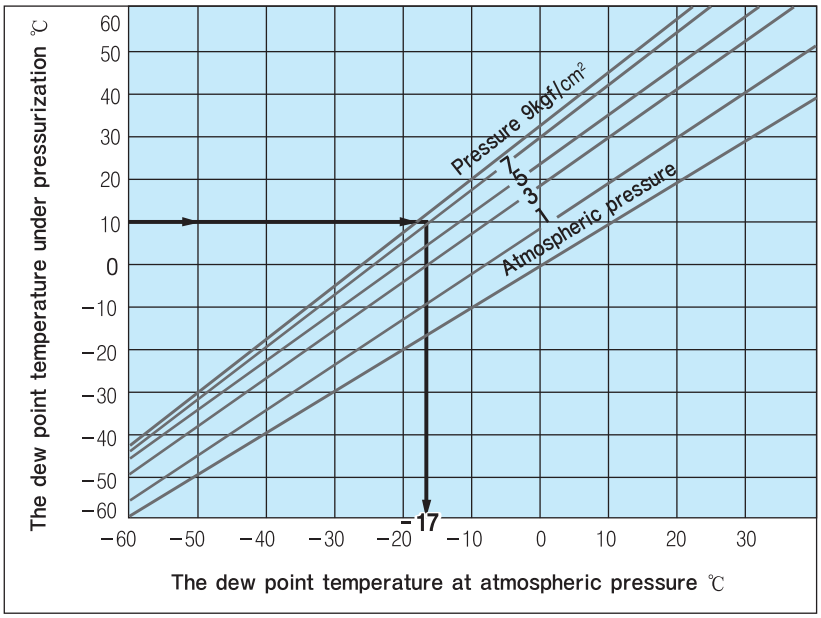
Selection Guide for Cleaning System



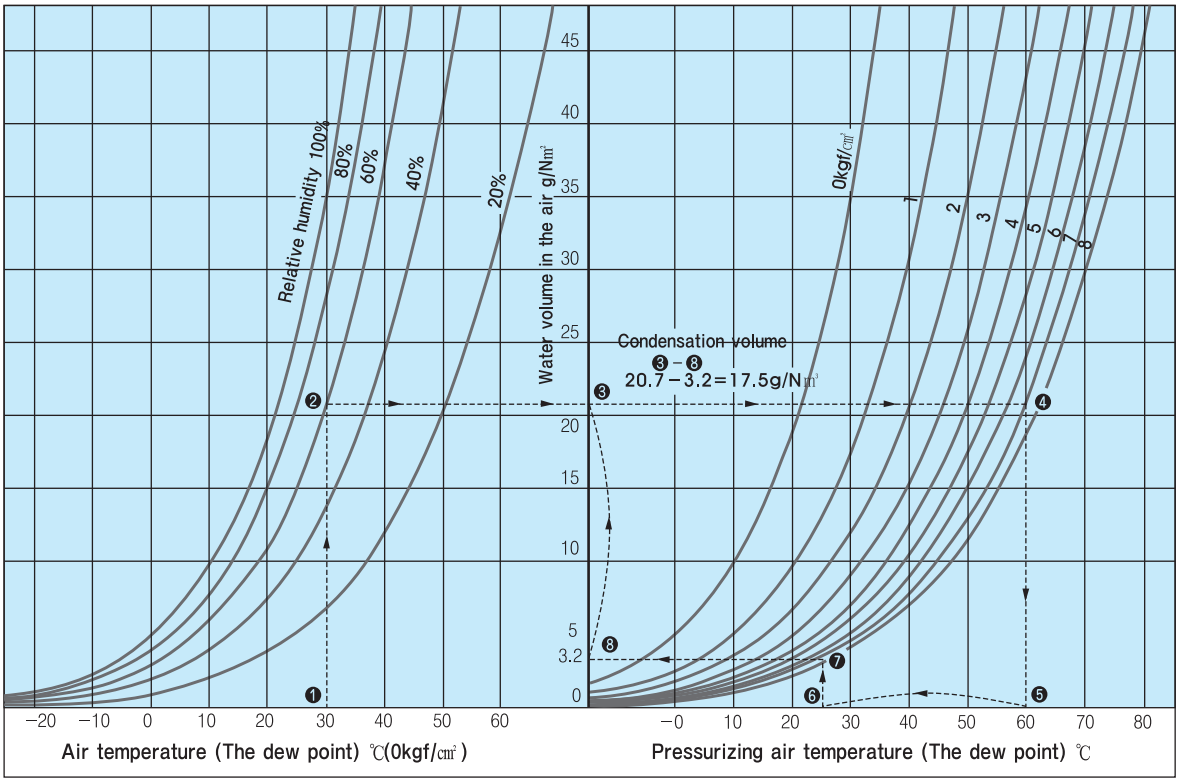


System	Quality of compressed air	Impurities in compressed air				Application
		Moisture	Solid	Oil	Smell	
Air filter	Including some moisture, oil and dust	Humidity 100%	5㎛ etc. 2, 10, 20, 40, 70, 100	5 mgf/N㎥	Oily	• General industrial automatic equipments • Air vise, Chuck • Usual cleaning system (Air gun etc.)
Mist separator	Including some moisture generated by temperature drop. Excluding dust and oil	Humidity 100%	0.1㎛	1 mgf/N㎥	Oily	• General industrial machinery (Metal seal of operating parts) • Industrial robots.
Air filter	Including some dust and oil. Excluding moisture.	Less than -17℃ of the dew point at the atmospheric pressure	5㎛ etc. 2, 10, 20, 40, 70, 100	5 mgf/N㎥ (ANR)	Oily	• General industrial automatic equipments • Air vise, Chuck • Usual cleaning system (Air gun etc.)
Mist separator	Excluding moisture, oil and dust	Less than -17℃ of the dew point at the atmospheric pressure	0.1㎛	1 mgf/N㎥ (ANR)	Oily	• System process • Usual painting • Usual freezing and drying equipments
Mist separator **Micro mist separator**	Complete excluding moisture, oil and dust	Less than -17℃ of the dew point at the atmospheric pressure	0.01㎛	0.01 mgf/N㎥ (ANR)	Oily	• Air type instruments • Precision parts of drying and cleaning equipments
Mist separator **Free filter micro mist separator**	Sufficient excluding moisture, oil and dust	Less than -17℃ of the dew point at the atmospheric pressure	0.01㎛	0.01 mgf/N㎥ (ANR)	Oily	• Electrostatic painting • High qualified painting • Air bearing

A conversion table of The dew point temperature



The dew point under pressurization - Calculation of condensation volume



- The damp air of 30℃ under atmospheric pressure and 60% of relative humidity has about 20.7g/Nm^{2}of the moisture volume.(③)
- The dew point of air will be 60℃ after condensation damp air up to 7kgf/cm^2(①→②→③→④→⑤)
- The moisture volume will be 17.5g/Nm^{2}after cooling the damp air up to 25℃.(⑥→⑦→⑧→③)
- Therefore in case of 3Nm^2/min of air flow(a air compressor equivalent to 22kw), condensation volume per hour will be 17.5x3x60 =3.15gf/h.

Air Cleaning Equipment

SAMG / SAFL / SAM / SAMD / SAMH

> 150~850 Series
> Water separation · Solid/Oil Separation

NEW VERSION

Possible to make a modular connection with SAU series.

- Space-saving design, Labor-saving in piping!
- Modular connection with SAF, SAW, SAR, SALseries.
- Filter Body size : 150, 250, 350, 550

Port size(When connection with SAU series)

Symbol	Size	Body size			
		150	250	350	550
02	1/4	●			
03	3/8		●		
04	1/2			●	
06	3/4				●
10	1				●

Water Separation

SAMG (Water Separator)

Solid/Oil Separation

SAFL (Main Line Filter)
SAM (Mist Separator)
SAMD (Micro Mist Separator)
SAMH (Micro Mist Separator with Pre-filter)

Micro Separator Unit (SAMU)

SAMU150~550 Series

SAMU150

SAMU250

- SAMU Series, The SAMU unique design combines the SAMG (Water Separator), SAMH (0.01 Micron Coalescing) and SAR (Air Regulator). The SAMU is a point-of-use drying filtration system which delivers high quality dry air, and a high performance regulator which reduces primary pressure to a desired pressure setting.
- The SAMU series are modular type for easy installation and use in confined spaces.

How to order

SAMU 350 M - ○ 04 DG - MeP - S

① Micro Separator Unit

② **Body Size**
150 - 1/4
250 - 3/8
350 - 1/2
450 - 3/4
550 - 3/4, 1

③ **Attachment Method**
M - Bracket with Modular Spacer
B - Modular Spacer

④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port Size**

Symbol	Size	Body size				
		150	250	350	450	550
02	1/4	●				
03	3/8		●			
04	1/2			●		
06	3/4				●	●
10	1					●

⑥ **Accessory(Optional)**
Nil - Manual Drain / None gauge
D - Auto drain

Symbol	Drain connector	Material
D	One-touch fitting(Φ6mm)	Acetal
Dn	Nipple(PT 1/8)	Brass

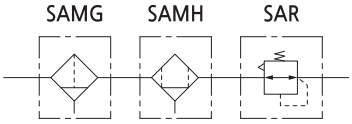
G - Gauge

G	Round type gauge
Gs	Square embedded type

⑦ **Case**
Nil - Metal bowl with flat type sight glass(MeF)
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass
Note) 150 and 250 are the integral cover and bowl(MeF type)

⑧ **Option**
Nil - None
S - Differential Pressure Indicator

Symbol



Specification

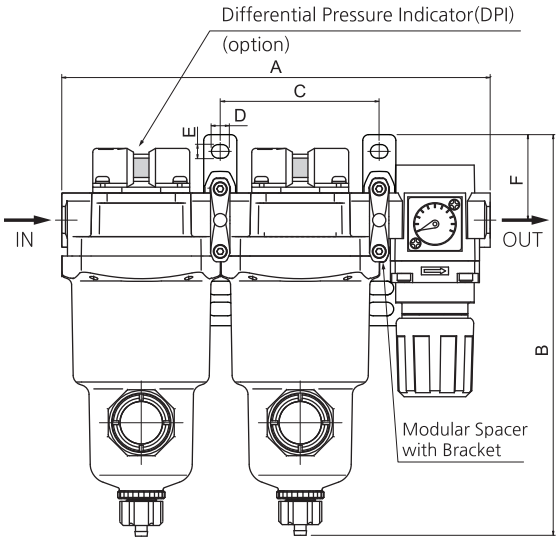
Composition	Water Separator + Micro Mist Separator with Prefilter + Regulator
Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAR)	0.5~8.5bar (0.05~0.85MPa)
Filtration	SAMG(99% Removal rate of water) + SAMH(0.1+0.01μm)
Life of element	When pressure drop reached at 1bar
Construction(SAR)	Relief type

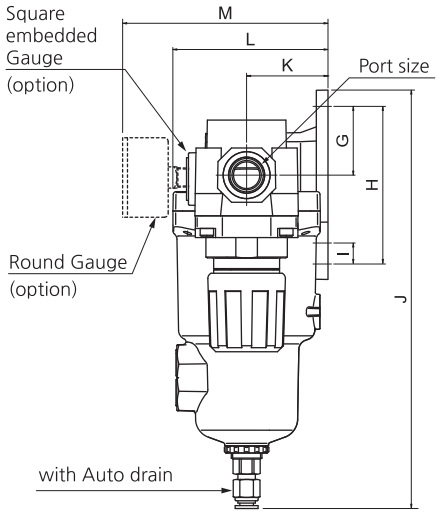
Precautions

① Please consult with SKP when using the product in applications other than compressed air.
② Filter element should be changed after 2years of using or when pressure drop reached at 1bar(0.1MPa).
③ Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.
④ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.
⑤ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.
⑥ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Also should avoid setting drain piping upwards.
⑦ When auto drain is used it is recommended to use at least 1.5bar pressure.
⑧ When auto drain is out of order, it is possible to drain manually by operating one-touch fitting vertically upwards.

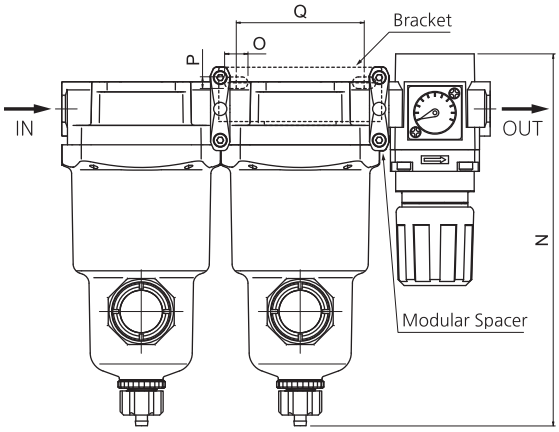
DIMENSIONS (mm)

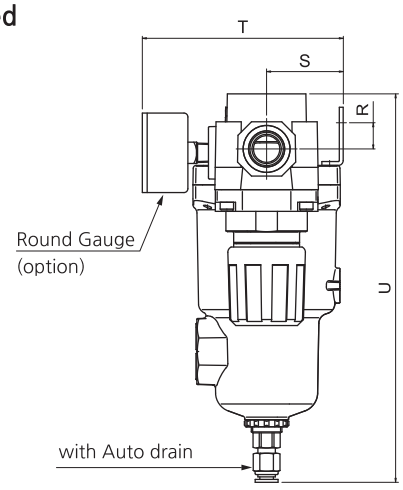
SAMU 150~250

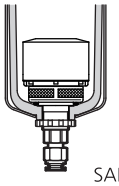
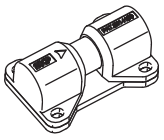




■ Dimensions of each model with an option attached



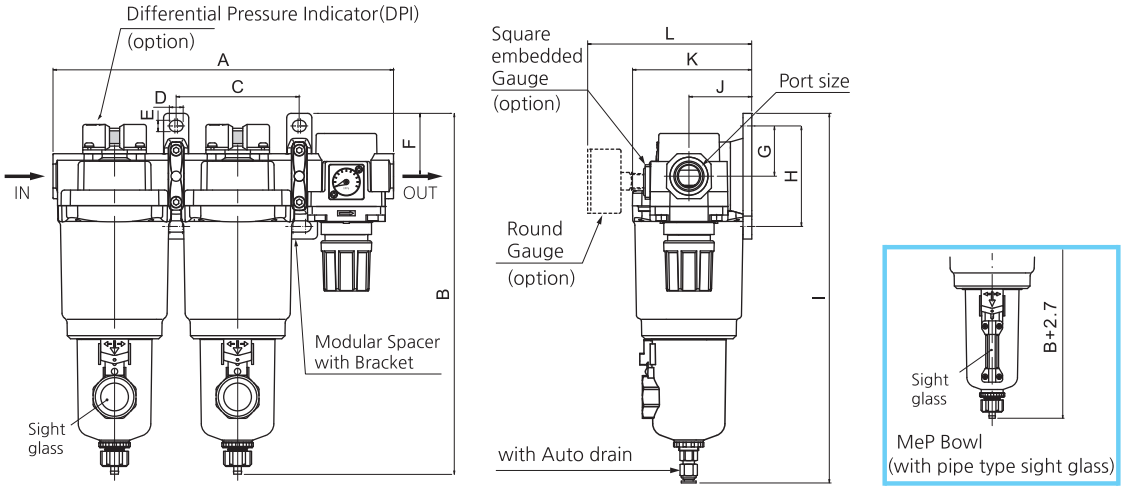


Option	D : Auto Drain	Gauge		S : Differential Pressure Indicator
		G : Round type	Gs : Square embedded type	
품명	 SAD400	 G40, R1/8	 Gs28	

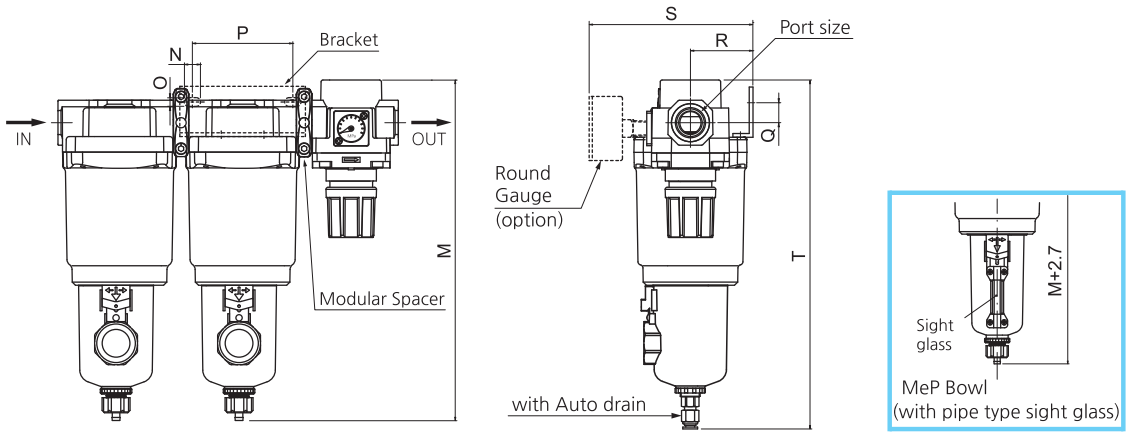
Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
SAMU150	1/4	177	178	67	6.5	5.5	30	24	57	9	185	35	66.5	90	176	9.5	6	56	19.7	33.6	88.6	183
SAMU250	3/8	221	207	82	9	7	43.3	35	70	–	214	41	79	99	192	12	6	66	13.5	39.5	97.5	199

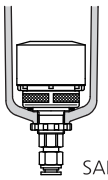
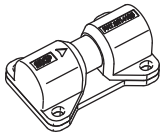
DIMENSIONS (mm)

SAMU 350~550



■ Dimensions of each model with an option attached



Option	D : Auto Drain	Gauge		S : Differential Pressure Indicator
		G : Round type	Gs : Square embedded type	
Model	 SAD400	 G50, R1/4	 Gs28	

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
SAMU350	1/2	271	285.1	98	11	9	50	40	80	292.1	50	95	122	269	13	7	80	15.9	49.8	121.8	276
SAMU450	3/4	302.7	301.5	114	11	9	50	40	80	308.5	55	108	127	286	14	9	90	13.5	56.2	128.2	393
SAMU550	3/4, 1	355	350.2	130	13	11	62.7	50	100	357.2	70	131	148.5	330.4	17.6	8.8	100	21	64.5	143	337.4

Water Separator (SAMG)

SAMG150~850 Series

SAMG550 SAMG450 SAMG350 SAMG250 SAMG150

150-550 series can be combined with other modular equipment.

- SAMG series filter aims at eliminating waterdrops.
- SAMG series eliminate waterdrops up to 99% at the area of inlet of pneumatic machinery equipment and at the last stage of using air in the workroom.
- SAMG series are effective to the place such as
  1. which does not have to be dry as much as air drier.
  2. which is not able to install air drier for its restriction.

How to order

SAMG 350 - ( ) 03 BD - MeP - S

① Water Separator

② **Body Size**
150 - 1/8
250 - 1/4
350 - 1/2
450 - 3/4
550 - 1
650 - 1 1/2
850 - 2

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

④ **Port Size**

Symbol	Size	Body size						
		150	250	350	450	550	650	850
01	1/8	●						
02	1/4	●	●					
03	3/8		●	●				
04	1/2			●				
06	3/4				●	●		
10	1					●		
12	11/4						●	
14	11/2						●	●
20	2							●

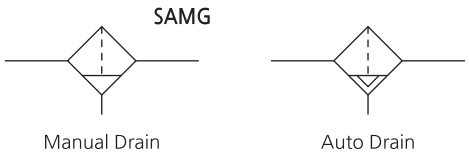
⑤ **Accessory(Optional)**
Nil - None Bracket / Manual Drain
B - Bracket
D - Auto Drain

Symbol	Drain connector	Material
D	One-touch fitting(Φ6mm)	Acetal
Dn	Nipple(PT 1/8)	Brass

⑥ **Bowl**
Nil - Metal bowl with flat type sight glass(MeF)
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass
Note) 150 and 250 are the integral cover and bowl(MeF type).

⑦ **Option**
Nil - None
S - Differential Pressure Indicator

Symbol



Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Min. operating pressure	1.5bar (0.15MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	5~60℃
Removal rate of water	99%
Life of element	When pressure drop reached at 1bar

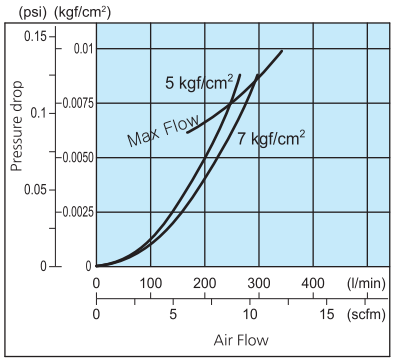
Precautions

① Water separator can remove water droplets, but it cannot remove moisture.
② Filter element should be changed after 2years of use or when pressure drop reached at 1bar(0.1MPa).
③ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.
④ When auto drain is used it is recommended to use at least 1.5bar pressure.
⑤ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.
⑥ Before disassembling the equipment on the compressed air side to inspect the auto drain or to replace the filter element, confirm that the pressure is set to zero.

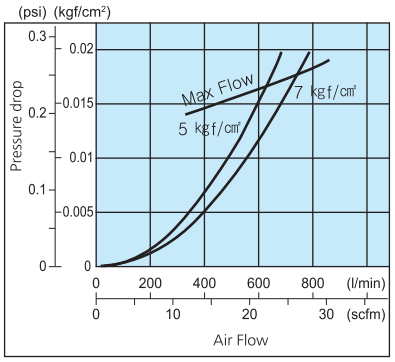
FLOW CHARACTERISTICS

Note : If compressed air is above max. flow, water separator cannot operate well.

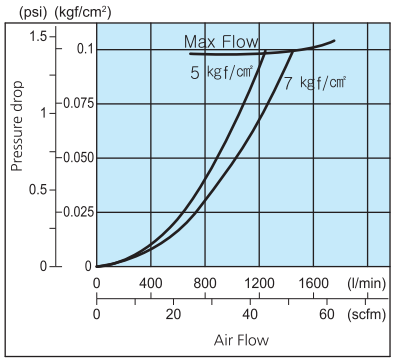
SAMG 150



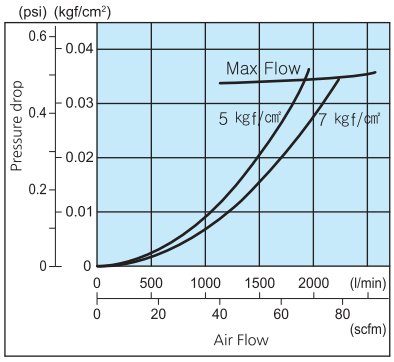
SAMG 250



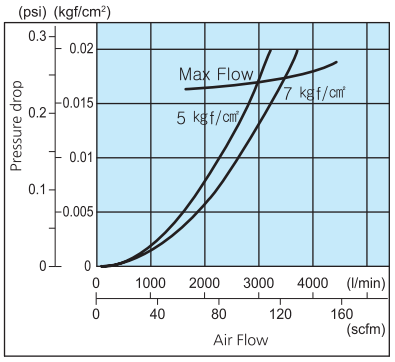
SAMG 350



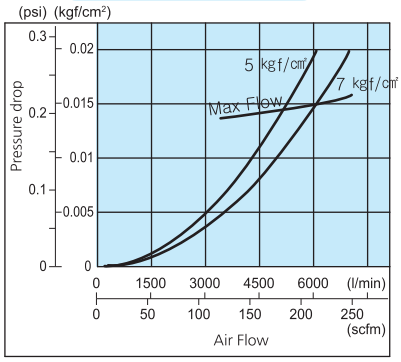
SAMG 450



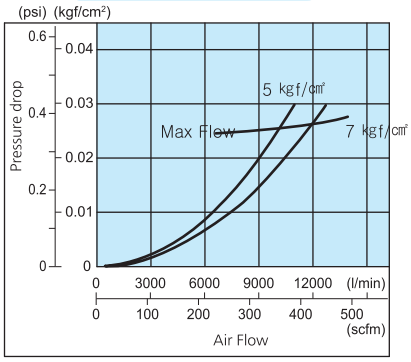
SAMG 550



SAMG 650

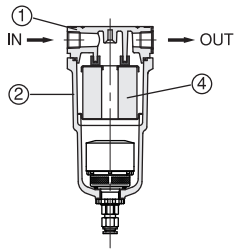


SAMG 850

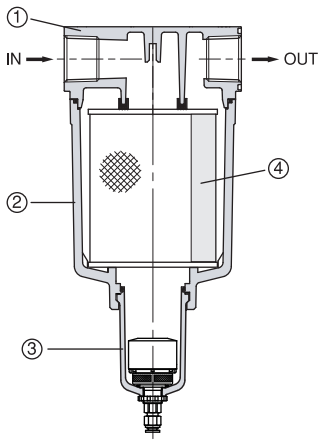


STRUCTURE / PARTS

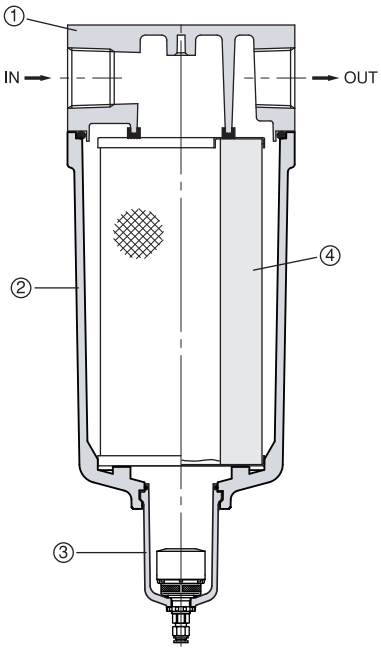
SAMG 150~250



SAMG 350~550



SAMG 650~850



▪ Component Parts

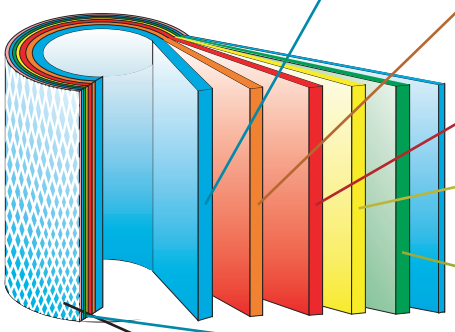
No.	PARTS	MATERIAL
①	Body	ALDC
②	Housing	ALDC
③	Bowl Ass'y	ALDC(MeP type)
		ALDC(MeF type)

▪ Replacement Parts

(mm)

No.	PARTS	Part No. & Size(Φ x Height)						
		AMG-EL150	AMG-EL250	AMG-EL350	AMG-EL450	AMG-EL550	AMG-EL650	AMG-EL850
④	Filter	45 x 42	58 x 52.5	70 x 77	82 x 87	95 x 117	122 x 144	130 x 260

▪ Sectional drawing (SAMG Filter)



1) Porous Plastic Coalescing Stage
- Oleophilic Porous Plastic core.
- In addition to removing particulates down to 40㎛.

2) Water Catch Mesh Media
- Water aerosol catch coat mesh.

3) Water Catch Fiber
- Water aerosol catch Fiber.

4) HydroPhilic Laminated Glass Stage
- Water or Oil catch Fiber (13㎛).
- Remove oil and water aerosol from process air or gas.

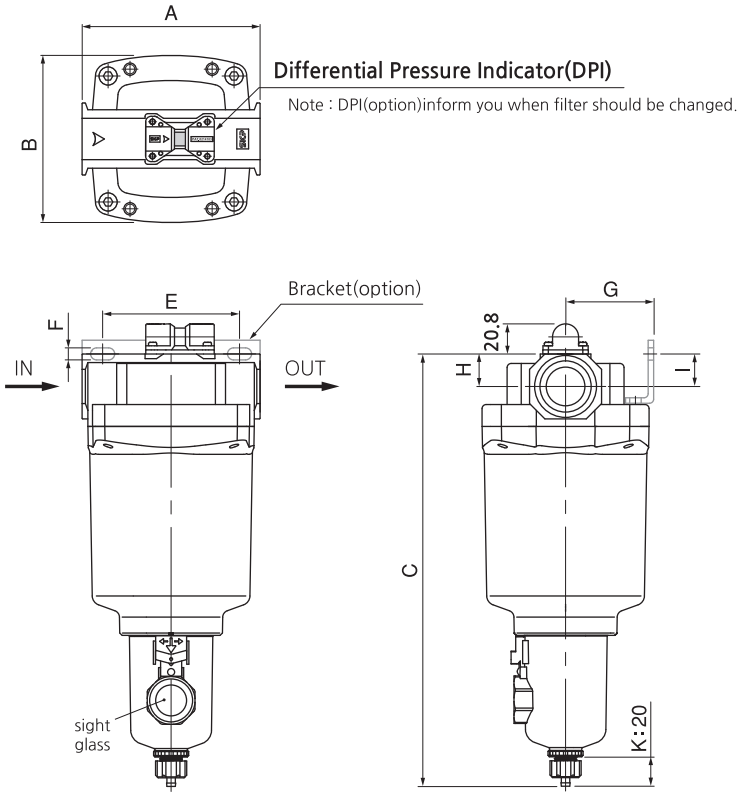
5) Drain Layer
- Non-wetting fiber drain layer.

6) Porous Plastic Coalescing Stage
- In addition to removing particulates down to 40㎛.

7) Coated Mesh

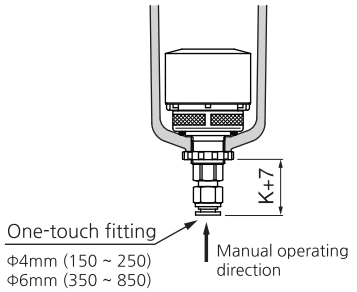
DIMENSIONS (mm)

SAMG 150~550

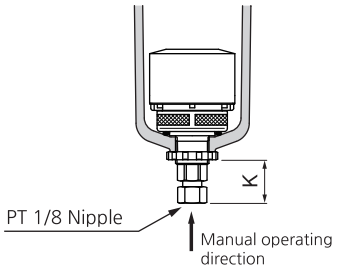


Auto Drain (option)

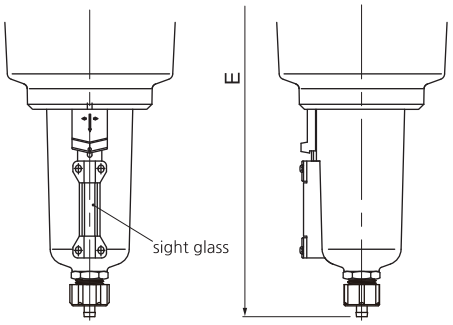
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



• **MeP** - Metal Bowl with pipe type sight glass

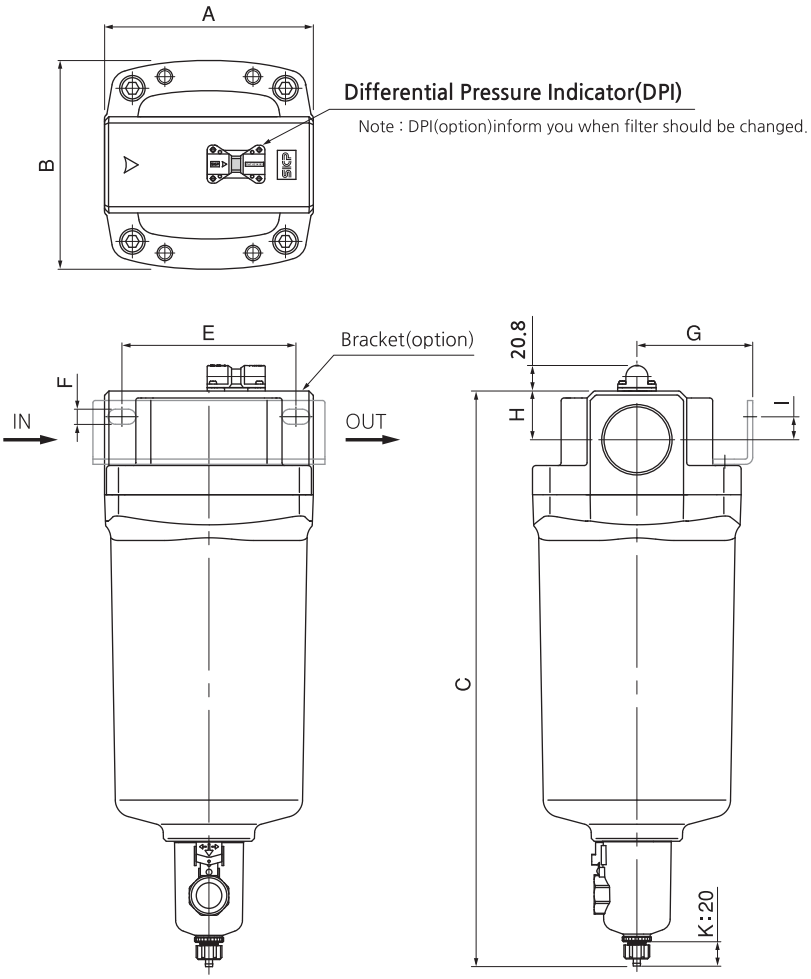


Note : 150 and 250 are the integral cover and bowl(MeF type)

Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAMG 150	1/8, 1/4	67	66	158.5	-	56	6	33.6	10.5	19.7
SAMG 250	1/4, 3/8	82	76	177.7	-	66	6	39.5	14	13.5
SAMG 350	3/8, 1/2	98	90	253	273	80	7	49.8	17.9	15.9
SAMG 450	3/4	114	106	271.3	291.3	90	9	56.2	19.8	15.3
SAMG 550	3/4, 1	130	122	311.2	331.2	100	8.8	64.5	23.7	21

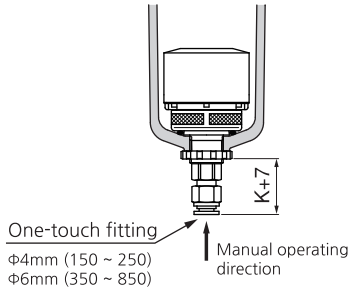
DIMENSIONS (mm)

SAMG 650~850

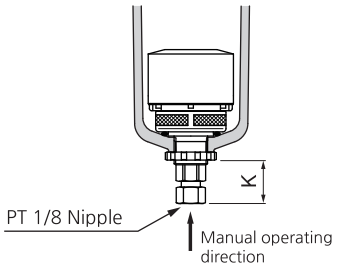


Auto Drain (option)

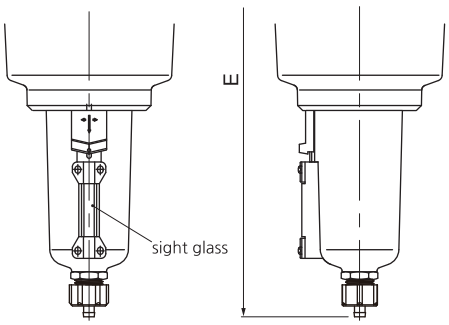
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



- **MeP** - Metal Bowl with pipe type sight glass



Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAMG 650	1 1/4, 1 1/2	160	160	361.2	381.2	150	13	93	32	27
SAMG 850	1 1/2, 2	180	180	490.7	510.7	150	13	100	42	20

Main Line Filter (SAFL)

SAFL150~850 Series

SAFL850

SAFL650

150-550 series can be combined with other modular equipment.

- SAFL series installed in the main line improve the function of later drier, prolong the expected life span of precision filter and prevent the troubles of machinery by eliminating the impurities such as moisture, oil, other foreign substances from the compressed air.

How to order

SAFL 350 - ○ 03 BD - MeP - S

① Main Line Filter

② **Body Size**
150 - 1/8
250 - 1/4
350 - 1/2
450 - 3/4
550 - 1
650 - 1 1/2
850 - 2

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

④ **Port Size**

Symbol	Size	Body size						
		150	250	350	450	550	650	850
01	1/8	●						
02	1/4	●	●					
03	3/8		●	●				
04	1/2			●				
06	3/4				●	●		
10	1					●		
12	11/4						●	
14	11/2						●	●
20	2							●

⑤ **Accessory(Optional)**
Nil - None Bracket / Manual Drain
B - Bracket
D - Auto Drain

Symbol	Drain connector	Material
D	One-touch fitting(Φ6mm)	Acetal
Dn	Nipple(PT 1/8)	Brass

⑥ **Bowl**
Nil - Metal bowl with flat type sight glass(MeF)
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass
Note) 150 and 250 are the integral cover and bowl(MeF type).

⑦ **Option**
Nil - None
S - Differential Pressure Indicator

Symbol

Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Min. operating pressure	1.5bar (0.15MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	5~60℃
Filteration	1μm (Filtration efficiency: 99%)
Life of element	When pressure drop reached at 1bar

Precautions

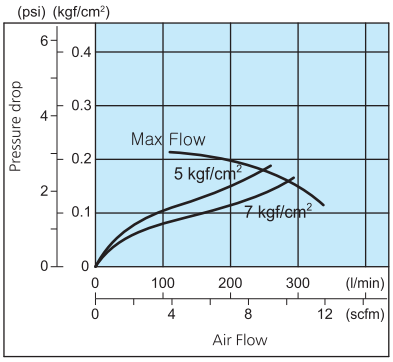
① Filter element should be changed after 2years of use or when pressure drop reached at 1bar(0.1MPa).
② When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.
③ When auto drain is used it is recommended to use at least 1.5bar pressure.
④ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.
⑤ Before disassembling the equipment on the compressed air side to inspect the auto drain or to replace the filter element, confirm that the pressure is set to zero.
⑥ Please consult with SKP when using the product in applications other than compressed air.

FLOW CHARACTERISTICS

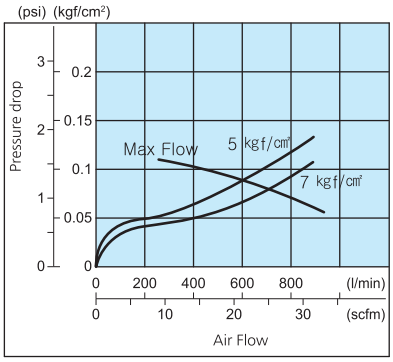
Oil saturated state of element

Note : If compressed air is above max. flow, main line filter cannot be operated well or element may be damaged.

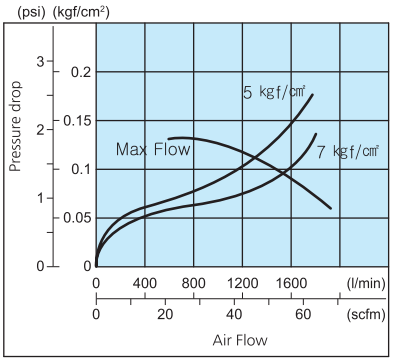
SAFL 150



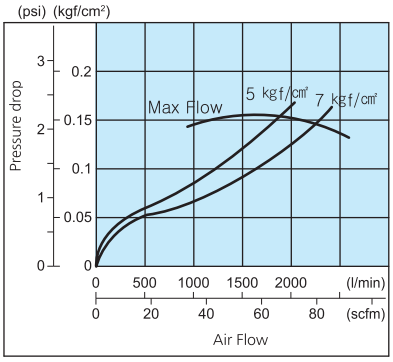
SAFL 250



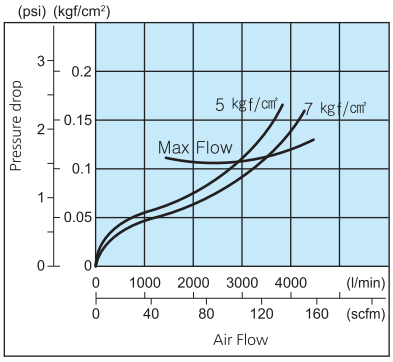
SAFL 350



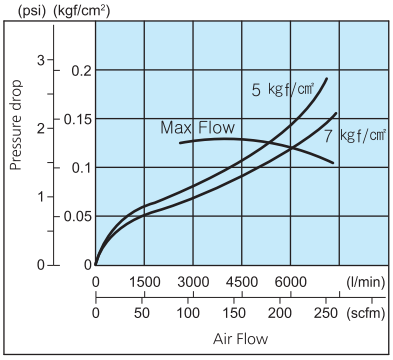
SAFL 450



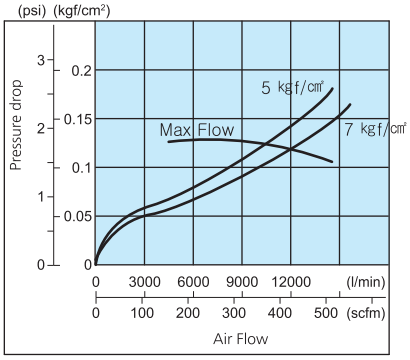
SAFL 550



SAFL 650

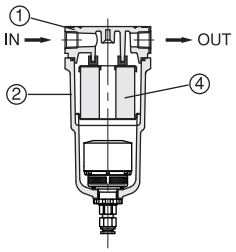


SAFL 850

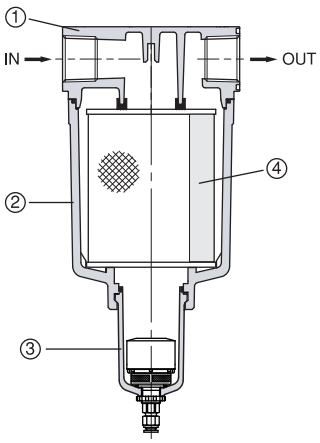


STRUCTURE / PARTS

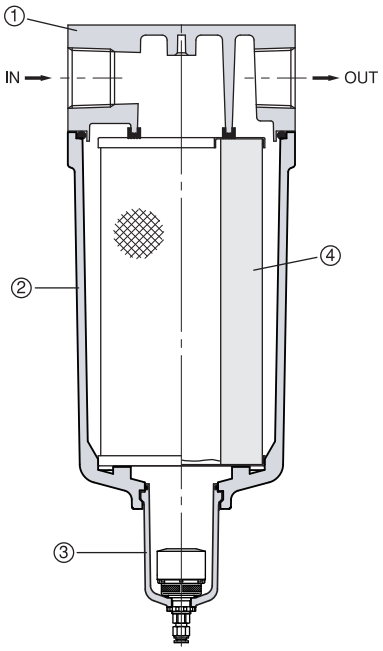
SAFL 150~250



SAFL 350~550



SAFL 650~850



▪ Component Parts

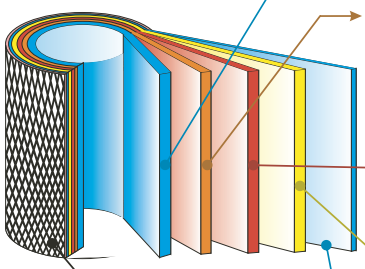
No.	PARTS	MATERIAL
①	Body	ALDC
②	Housing	ALDC
③	Bowl Ass'y	ALDC(MeP type)
		ALDC(MeF type)

▪ Replacement Parts

(mm)

No.	PARTS	Part No. & Size(Φ x Height)						
		AFL-EL150	AFL-EL250	AFL-EL350	AFL-EL450	AFL-EL550	AFL-EL650	AFL-EL850
④	Filter	45 x 42	58 x 52.5	70 x 77	82 x 87	95 x 117	122 x 144	130 x 260

▪ Sectional drawing (SAFL Filter)



1) Porous Plastic Coalescing Stage

- Oleophilic Porous Plastic core.
- In addition to removing particulates down to 40㎛.

2) Remove Oil Media

- 0.3㎛ remove oil micro fiber media.
- Coalescing element designed to remove oil and water aerosol from process air or gas.

3) Main Media

- Three element choices(0.01㎛(AMD), 0.1㎛(AM), 1㎛(AFL)).
- Pure borosilicate glass micro fiber.

4) Drain Layer

- Non-wetting fiber drain layer.

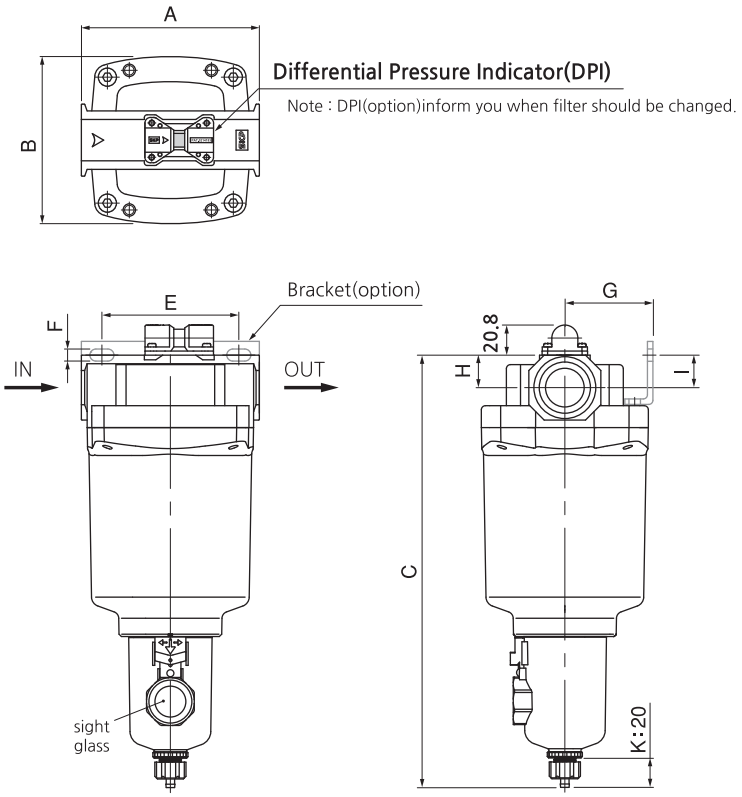
5) Porous Plastic Coalescing Stage

- In addition to removing particulates down to 40㎛.

6) Coated Mesh

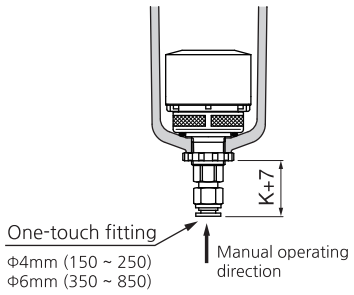
DIMENSIONS (mm)

SAFL 150~550

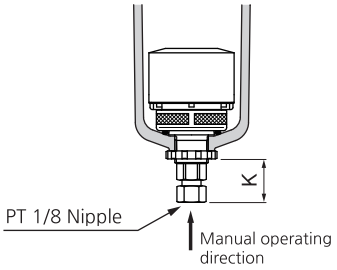


Auto Drain (option)

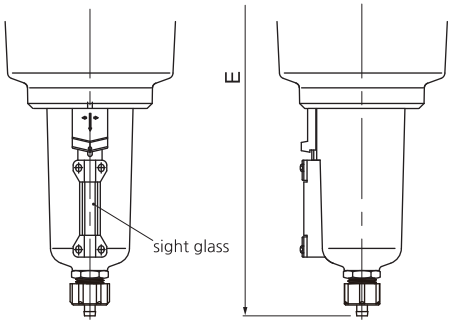
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



• **MeP** - Metal Bowl with pipe type sight glass

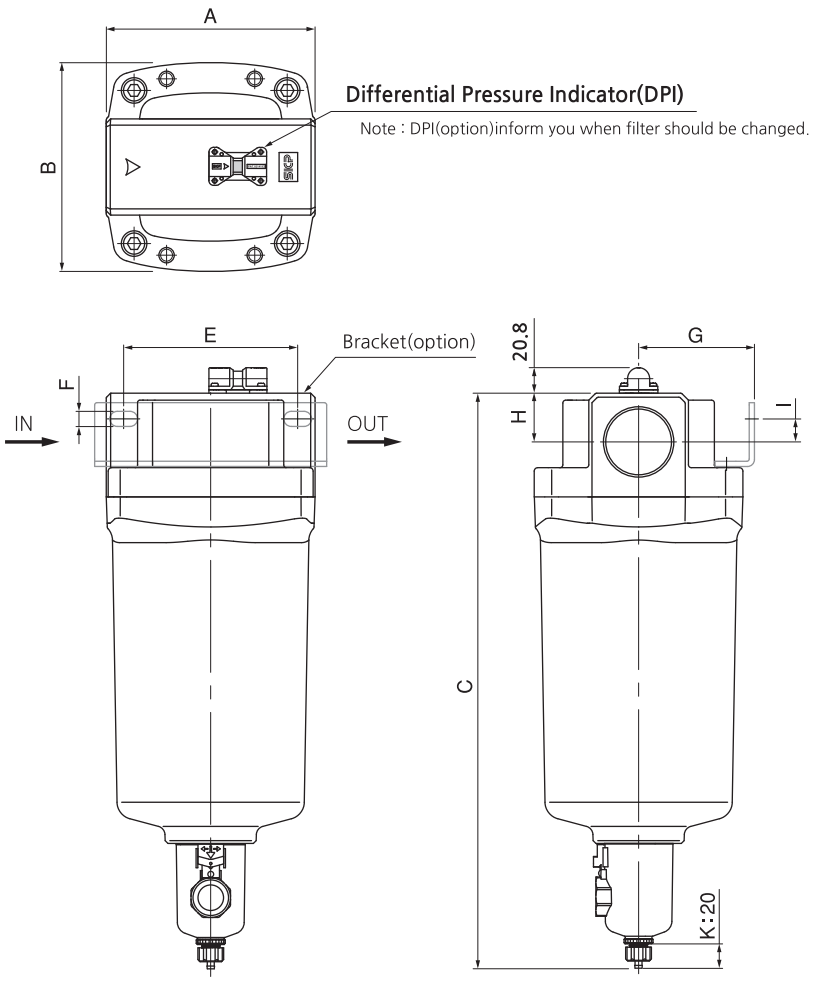


Note : 150 and 250 are the integral cover and bowl(MeF type)

Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAFL 150	1/8, 1/4	67	66	158.5	-	56	6	33.6	10.5	19.7
SAFL 250	1/4, 3/8	82	76	177.7	-	66	6	39.5	14	13.5
SAFL 350	3/8, 1/2	98	90	253	273	80	7	49.8	17.9	15.9
SAFL 450	3/4	114	106	271.3	291.3	90	9	56.2	19.8	15.3
SAFL 550	3/4, 1	130	122	311.2	331.2	100	8.8	64.5	23.7	21

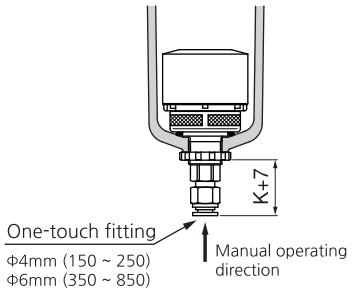
DIMENSIONS (mm)

SAFL 650~850

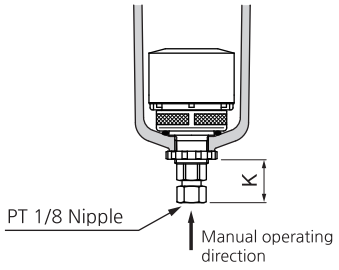


Auto Drain (option)

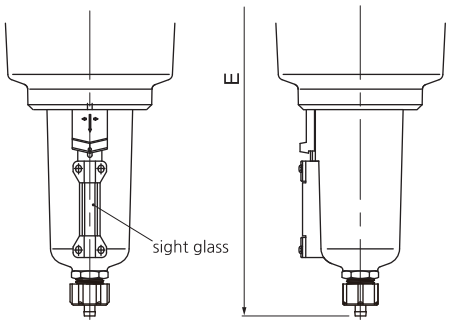
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



• **MeP** - Metal Bowl with pipe type sight glass



Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAFL 650	1 1/4, 1 1/2	160	160	361.2	381.2	150	13	93	32	27
SAFL 850	1 1/2, 2	180	180	490.7	510.7	150	13	100	42	20

Mist Separator (SAM)

SAM150~850 Series


SAM850


SAM350


SAM250

150-550 series can be combined with other modular equipment.

- SAM series eliminates micro-particles such as rust, carbon of 0.1 micron or greater, etc. by separating oil mist that normal air filters may have difficulty removing.
- SAM series is the optimal filter for use with any air source that drives solenoid valves of pilot type, and metal seal type.

How to order

SAM 350 - ( ) 03 BD - MeP - S

① Mist Separator

② **Body Size**
150 - 1/8
250 - 1/4
350 - 1/2
450 - 3/4
550 - 1
650 - 1 1/2
850 - 2

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

④ **Port Size**

Symbol	Size	Body size						
		150	250	350	450	550	650	850
01	1/8	●						
02	1/4	●	●					
03	3/8		●	●				
04	1/2			●				
06	3/4				●	●		
10	1					●		
12	11/4						●	
14	11/2						●	●
20	2							●

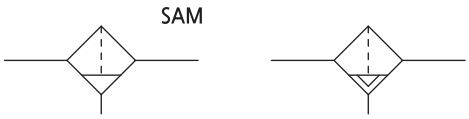
⑤ **Accessory(Optional)**
Nil - None Bracket / Manual Drain
B - Bracket
D - Auto Drain

Symbol	Drain connector	Material
D	One-touch fitting(Φ6mm)	Acetal
Dn	Nipple(PT 1/8)	Brass

⑥ **Bowl**
Nil - Metal bowl with flat type sight glass(MeF)
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass
Note) 150 and 250 are the integral cover and bowl(MeF type).

⑦ **Option**
Nil - None
S - Differential Pressure Indicator

Symbol



Manual Drain Auto Drain

Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Min. operating pressure	1.5bar (0.15MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	5~60℃
Filteration	0.1μm (Filtration efficiency: 99%)
Life of element	When pressure drop reached at 1bar

Precautions

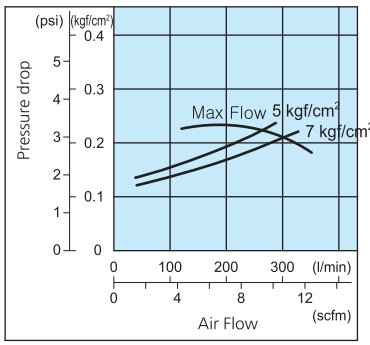
① Filter element should be changed after 2years of use or when pressure drop reached at 1bar(0.1MPa).
② When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length. Avoid installing drain piping upwards.
③ When auto drain is used it is recommended to use at least 1.5bar pressure.
④ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.
⑤ Before disassembling the equipment on the compressed air side to inspect the auto drain or to replace the filter element, confirm that the pressure is set to zero.
⑥ Please consult with SKP when using the product in applications other than compressed air.

FLOW CHARACTERISTICS

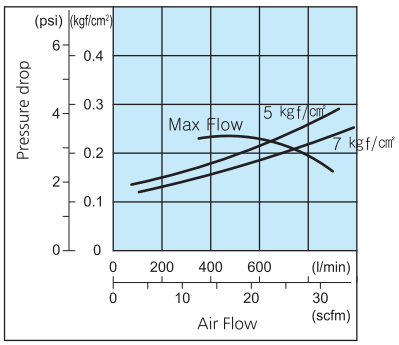
Oil saturated state of element

Note : If compressed air is above max. flow, mist separator cannot be operated well or element may be damaged.

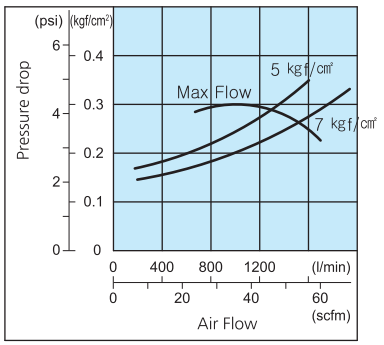
SAM 150



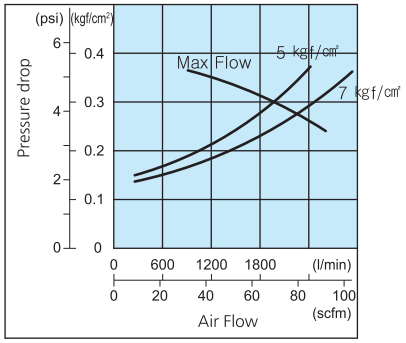
SAM 250



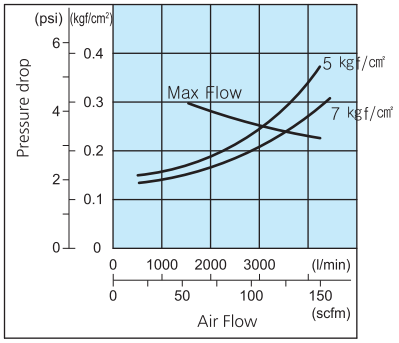
SAM 350



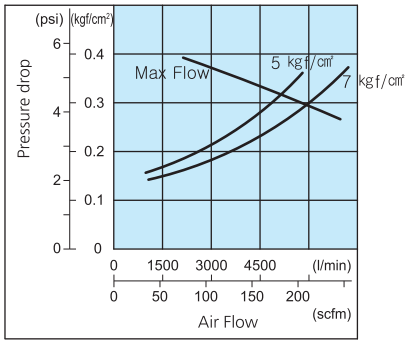
SAM 450



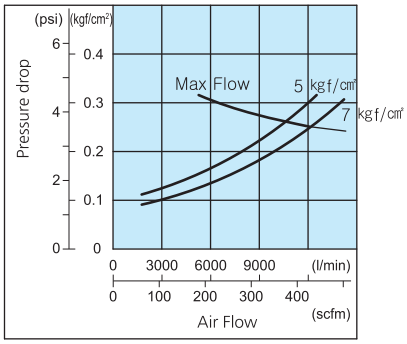
SAM 550



SAM 650

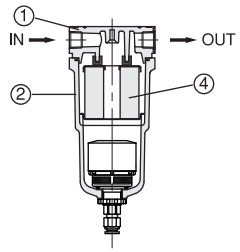


SAM 850

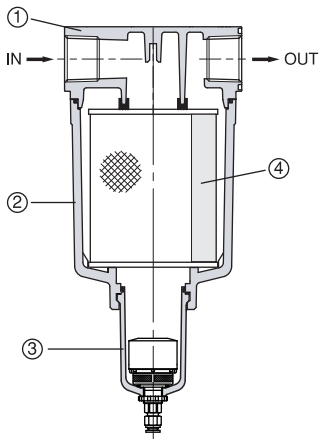


STRUCTURE / PARTS

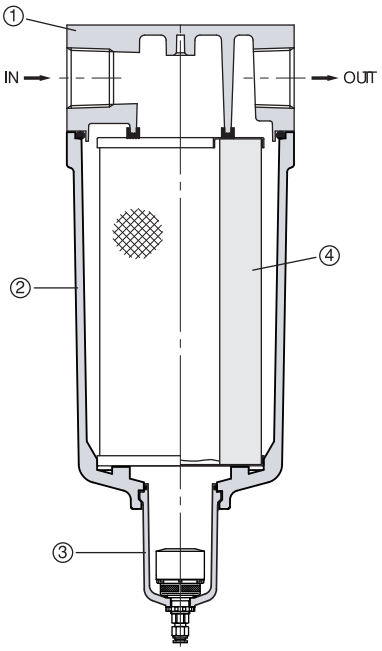
SAM 150~250



SAM 350~550



SAM 650~850



▪ Component Parts

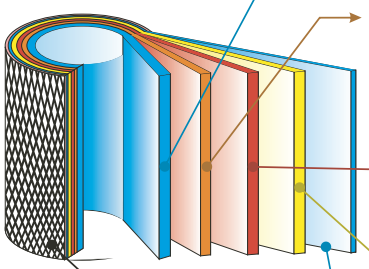
No.	PARTS	MATERIAL
①	Body	ALDC
②	Housing	ALDC
③	Bowl Ass'y	ALDC(MeP type)
		ALDC(MeF type)

▪ Replacement Parts

(mm)

No.	PARTS	Part No. & Size(Φ x Height)						
		AM-EL150	AM-EL250	AM-EL350	AM-EL450	AM-EL550	AM-EL650	AM-EL850
④	Filter	45 x 42	58 x 52.5	70 x 77	82 x 87	95 x 117	122 x 144	130 x 260

▪ Sectional drawing (SAM Filter)



1) Porous Plastic Coalescing Stage

- Oleophilic Porous Plastic core.
- In addition to removing particulates down to 40㎛.

2) Remove Oil Media

- 0.3㎛ remove oil micro fiber media.
- Coalescing element designed to remove oil and water aerosol from process air or gas.

3) Main Media

- Three element choices(0.01㎛(AMD), 0.1㎛(AM), 1㎛(AFL)).
- Pure borosilicate glass micro fiber.

4) Drain Layer

- Non-wetting fiber drain layer.

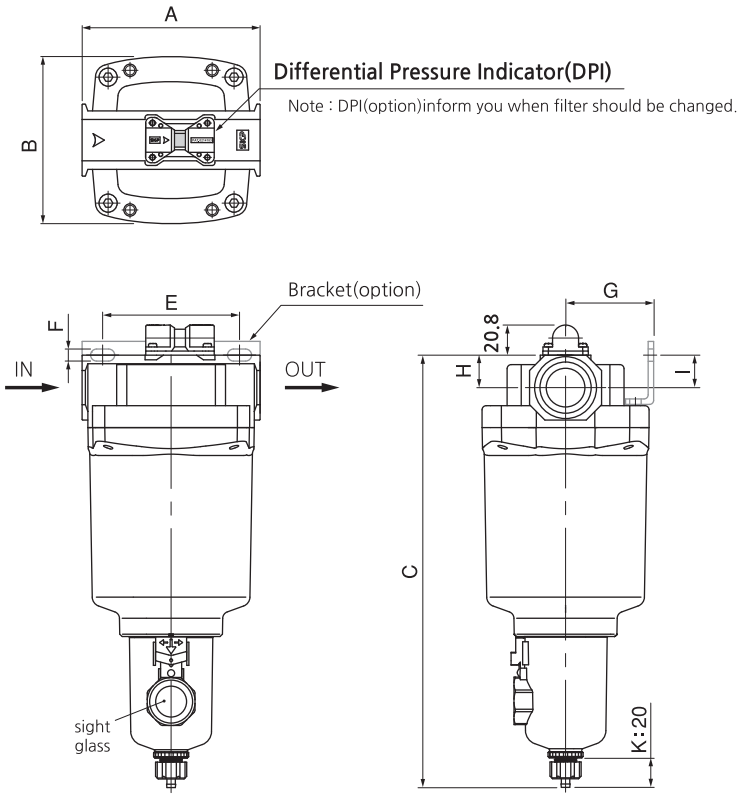
5) Porous Plastic Coalescing Stage

- In addition to removing particulates down to 40㎛.

6) Coated Mesh

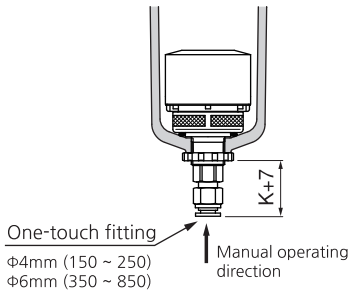
DIMENSIONS (mm)

SAM 150~550

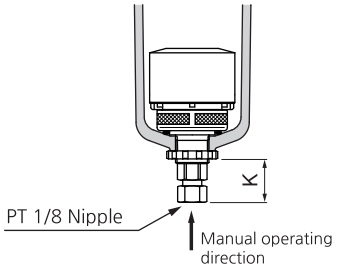


Auto Drain (option)

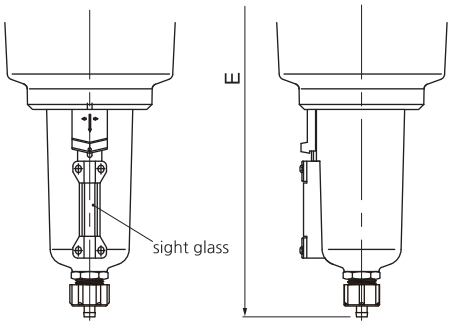
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



• **MeP** - Metal Bowl with pipe type sight glass

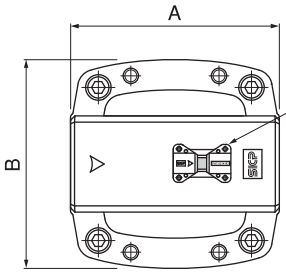


Note : 150 and 250 are the integral cover and bowl(MeF type)

Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAM 150	1/8, 1/4	67	66	158.5	-	56	6	33.6	10.5	19.7
SAM 250	1/4, 3/8	82	76	177.7	-	66	6	39.5	14	13.5
SAM 350	3/8, 1/2	98	90	253	273	80	7	49.8	17.9	15.9
SAM 450	3/4	114	106	271.3	291.3	90	9	56.2	19.8	15.3
SAM 550	3/4, 1	130	122	311.2	331.2	100	8.8	64.5	23.7	21

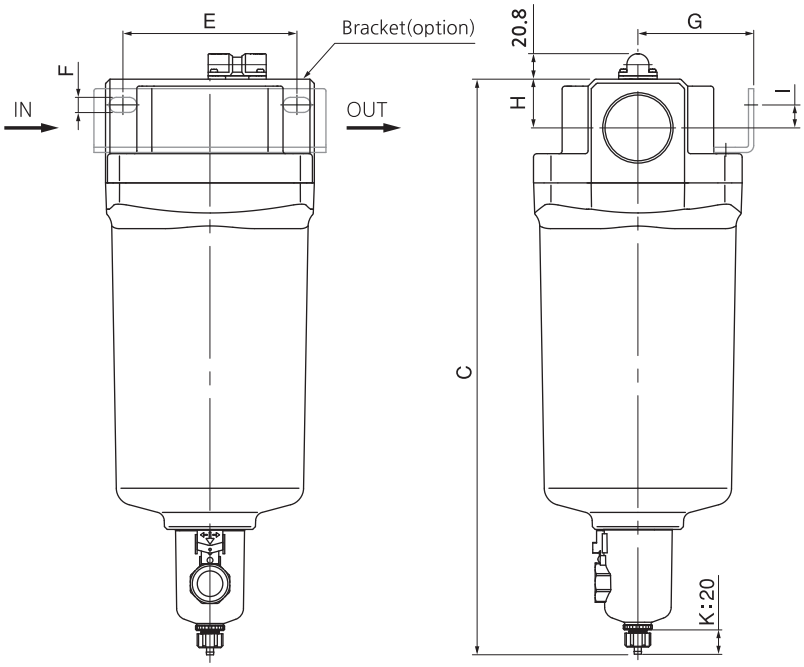
DIMENSIONS (mm)

SAM 650~850



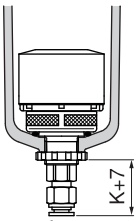
Differential Pressure Indicator(DPI)

Note : DPI(option)inform you when filter should be changed.



Auto Drain (option)

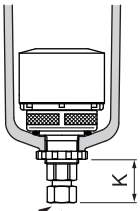
D : Auto Drain with one-touch fitting



One-touch fitting
Φ4mm (150 ~ 250)
Φ6mm (350 ~ 850)

Manual operating direction

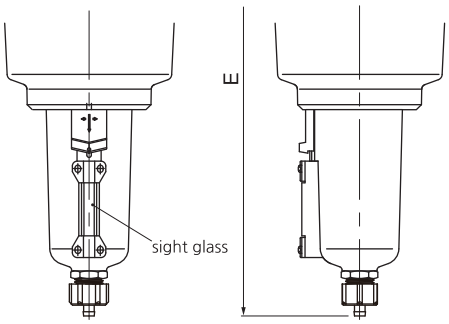
Dn : Auto Drain with Nipple



PT 1/8 Nipple

Manual operating direction

- **MeP** - Metal Bowl with pipe type sight glass



Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAM 650	1 1/4, 1 1/2	160	160	361.2	381.2	150	13	93	32	27
SAM 850	1 1/2, 2	180	180	490.7	510.7	150	13	100	42	20

Micro Mist Separator (SAMD)

SAMD150~850 Series

SAMD650

SAMD450

SAMD150

150-550 series can be combined with other modular equipment.

- SAMD series separate and remove the oil particles or carbon and dust particles of size 0.01μm or greater in the air sol state. Accordingly SAMD series are ideal for filtering the compressed air necessary for precision measuring instruments and clean room.

How to order

SAMD 350 - [ ] 03 BD - MeP - S

① Micro Mist Separator

② **Body Size**
- 150 - 1/8
- 250 - 1/4
- 350 - 1/2
- 450 - 3/4
- 550 - 1
- 650 - 1 1/2
- 850 - 2

③ **Thread type**
- Nil - Rc(PT)
- N - NPT
- G - G(PF)

④ **Port Size**

Symbol	Size	Body size						
		150	250	350	450	550	650	850
01	1/8	●						
02	1/4	●	●					
03	3/8		●	●				
04	1/2			●				
06	3/4				●	●		
10	1					●		
12	11/4						●	
14	11/2						●	●
20	2							●

⑤ **Accessory(Optional)**
- Nil - None Bracket / Manual Drain
- B - Bracket
- D - Auto Drain

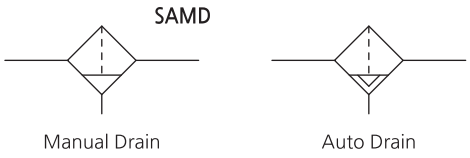
Symbol	Drain connector	Material
D	One-touch fitting(Φ6mm)	Acetal
Dn	Nipple(PT 1/8)	Brass

⑥ **Bowl**
- Nil - Metal bowl with flat type sight glass(MeF)
- PcS - Polycarbonate bowl with Steel guard
- MeP - Metal bowl with pipe type sight glass

Note) 150 and 250 are the integral cover and bowl(MeF type).

⑦ **Option**
- Nil - None
- S - Differential Pressure Indicator

Symbol



Manual Drain

Auto Drain

Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Min. operating pressure	1.5bar (0.15MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	5~60℃
Filteration	0.01μm (Filtration efficiency: 99%)
Life of element	When pressure drop reached at 1bar

Precautions

① Filter element should be changed after 2years of use or when pressure drop reached at 1bar(0.1MPa).

② When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length. Avoid installing drain piping upwards.

③ When auto drain is used it is recommended to use at least 1.5bar pressure.

④ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

⑤ Before disassembling the equipment on the compressed air side to inspect the auto drain or to replace the filter element, confirm that the pressure is set to zero.

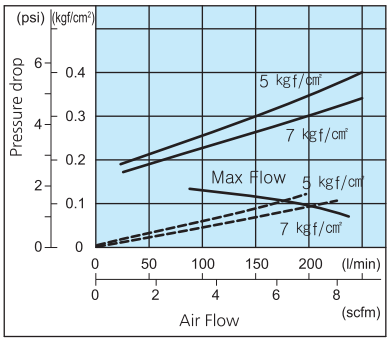
⑥ Please consult with SKP when using the product in applications other than compressed air.

FLOW CHARACTERISTICS

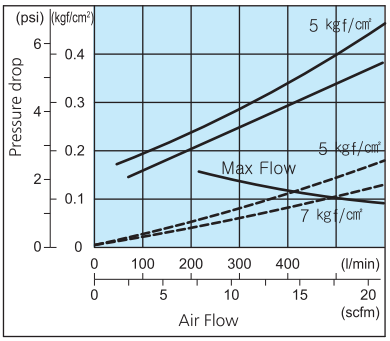
(——Element oil saturation -----Initial condition)

Note : Compressed air over max. flow line in the table below may not meet the specifications of the product.
It may cause damage to the element.

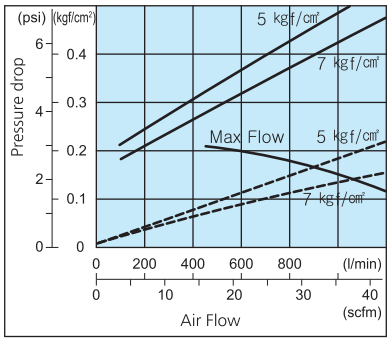
SAMD 150



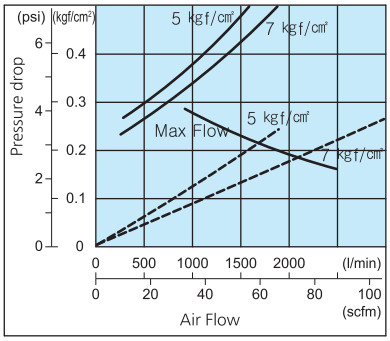
SAMD 250



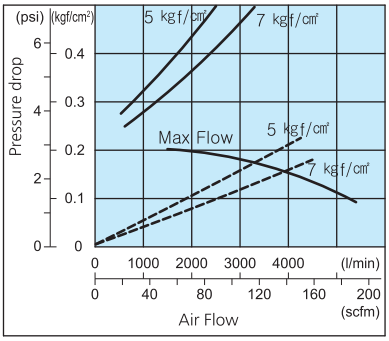
SAMD 350



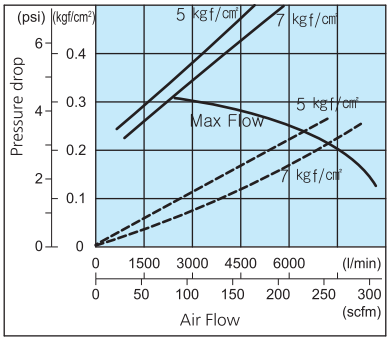
SAMD 450



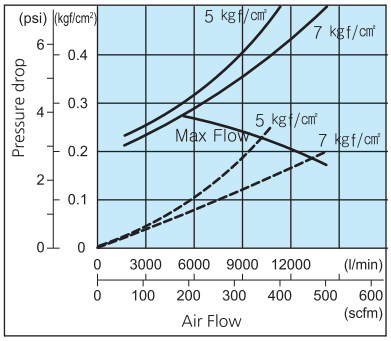
SAMD 550



SAMD 650



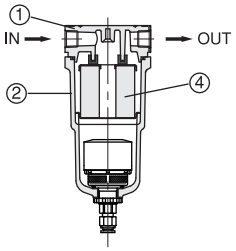
SAMD 850



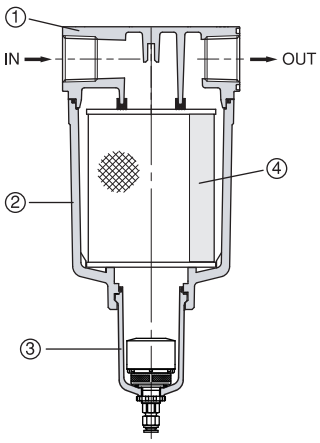
Series SAMD

STRUCTURE / PARTS

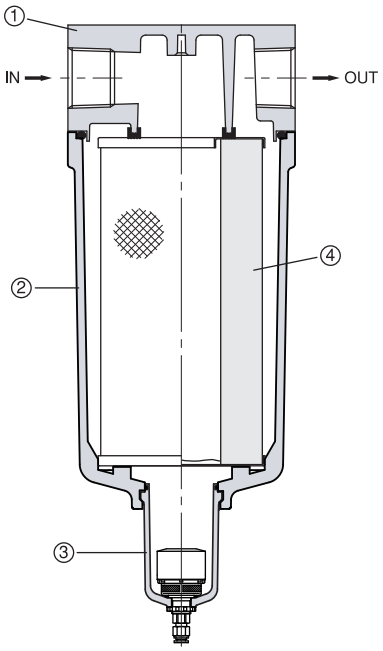
SAMD 150~250



SAMD 350~550



SAMD 650~850



▪ Component Parts

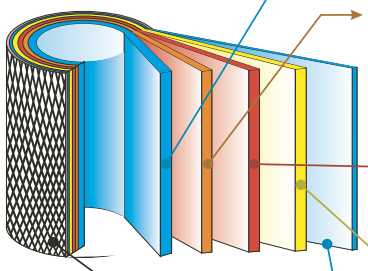
No.	PARTS	MATERIAL
①	Body	ALDC
②	Housing	ALDC
③	Bowl Ass'y	ALDC(MeP type)
		ALDC(MeF type)

▪ Replacement Parts

(mm)

No.	PARTS	Part No. & Size(Φ x Height)						
		AMD-EL150	AMD-EL250	AMD-EL350	AMD-EL450	AMD-EL550	AMD-EL650	AMD-EL850
④	Filter	45 x 42	58 x 52.5	70 x 77	82 x 87	95 x 117	122 x 144	130 x 260

▪ Sectional drawing (SAMD Filter)



1) Porous Plastic Coalescing Stage

- Oleophilic Porous Plastic core.
- In addition to removing particulates down to 40㎛.

2) Remove Oil Media

- 0.3㎛ remove oil micro fiber media.
- Coalescing element designed to remove oil and water aerosol from process air or gas.

3) Main Media

- Three element choices(0.01㎛(AMD), 0.1㎛(AM), 1㎛(AFL)).
- Pure borosilicate glass micro fiber.

4) Drain Layer

- Non-wetting fiber drain layer.

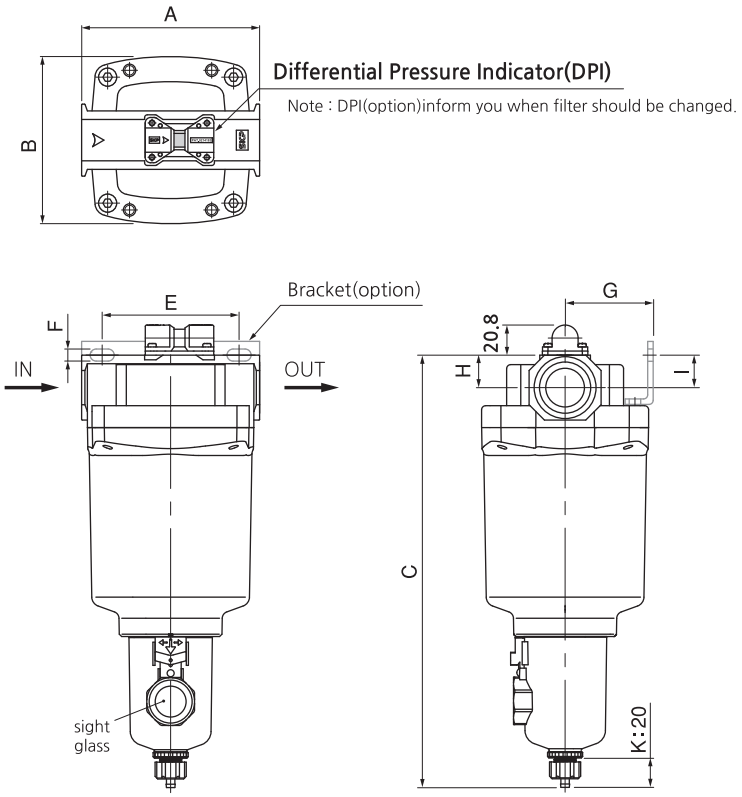
5) Porous Plastic Coalescing Stage

- In addition to removing particulates down to 40㎛.

6) Coated Mesh

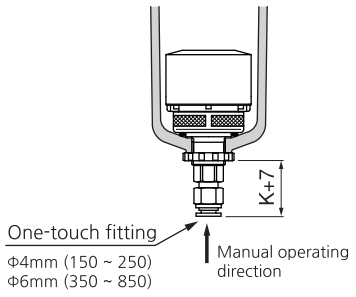
DIMENSIONS (mm)

SAMD 150~550

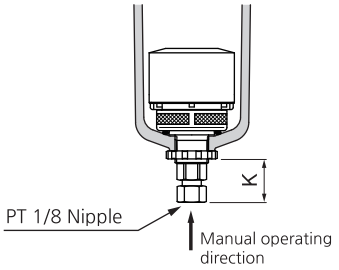


Auto Drain (option)

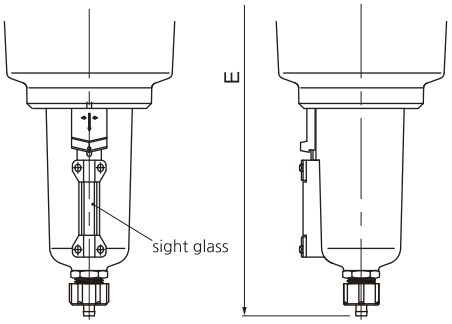
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



• **MeP** - Metal Bowl with pipe type sight glass

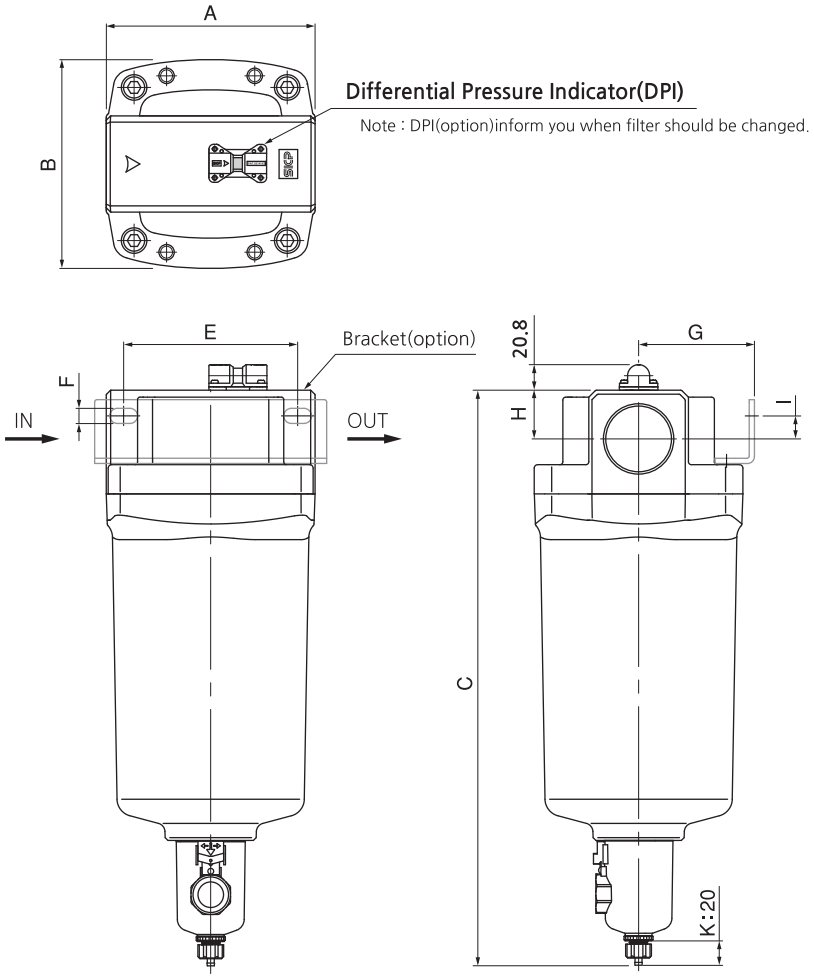


Note : 150 and 250 are the integral cover and bowl(MeF type)

Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAMD 150	1/8, 1/4	67	66	158.5	-	56	6	33.6	10.5	19.7
SAMD 250	1/4, 3/8	82	76	177.7	-	66	6	39.5	14	13.5
SAMD 350	3/8, 1/2	98	90	253	273	80	7	49.8	17.9	15.9
SAMD 450	3/4	114	106	271.3	291.3	90	9	56.2	19.8	15.3
SAMD 550	3/4, 1	130	122	311.2	331.2	100	8.8	64.5	23.7	21

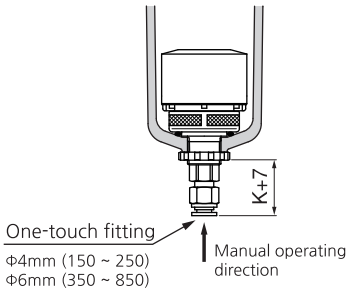
DIMENSIONS (mm)

SAMD 650~850

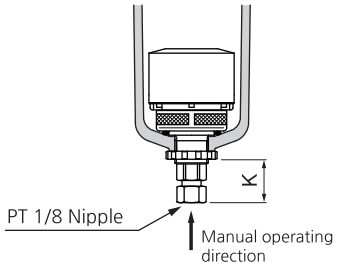


Auto Drain (option)

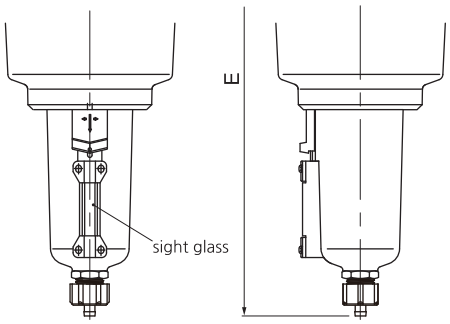
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



• **MeP** - Metal Bowl with pipe type sight glass



Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAMD 650	1 1/4, 1 1/2	160	160	361.2	381.2	150	13	93	32	27
SAMD 850	1 1/2, 2	180	180	490.7	510.7	150	13	100	42	20

Micro Mist Separator with Prefilter (SAMH)

SAMH150~850 Series

SAMH450

SAMH350

150-550 series can be combined with other modular equipment.

- SAMH series is designed to separate and remove aerosol state oil mist in compressed air and remove carbon or dust of more than 0.01 micron. It should be used as a prefilter for precision instruments utilizing compressed air, or in clean room environments requiring higher clean air quality.
- The conventional pneumatic pressure line SAM Series + SAMD Series have been integrated to reduce installation space, piping labor, and costs.

How to order

SAMH 350 - ( ) 03 BD - MeP - S

① Micro Mist Separator with Prefilter

② **Body Size**
- 150 - 1/8
- 250 - 1/4
- 350 - 1/2
- 450 - 3/4
- 550 - 1
- 650 - 1 1/2
- 850 - 2

③ **Thread type**
- Nil - Rc(PT)
- N - NPT
- G - G(PF)

④ **Port Size**

Symbol	Size	Body size						
		150	250	350	450	550	650	850
01	1/8	●						
02	1/4	●	●					
03	3/8		●	●				
04	1/2			●				
06	3/4				●	●		
10	1					●		
12	11/4						●	
14	11/2						●	●
20	2							●

⑤ **Accessory(Optional)**
- Nil - None Bracket / Manual Drain
- B - Bracket
- D - Auto Drain

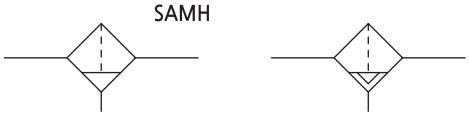
Symbol	Drain connector	Material
D	One-touch fitting(Φ6mm)	Acetal
Dn	Nipple(PT 1/8)	Brass

⑥ **Bowl**
- Nil - Metal bowl with flat type sight glass(MeF)
- PcS - Polycarbonate bowl with Steel guard
- MeP - Metal bowl with pipe type sight glass

Note) 150 and 250 are the integral cover and bowl(MeF type).

⑦ **Option**
- Nil - None
- S - Differential Pressure Indicator

Symbol



Manual Drain　　Auto Drain

Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Min. operating pressure	1.5bar (0.15MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	5~60℃
Filteration	0.1μm + 0.01μm
Life of element	When pressure drop reached at 1bar

Precautions

① Filter element should be changed after 2years of use or when pressure drop reached at 1bar(0.1MPa).

② When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length. Avoid installing drain piping upwards.

③ When auto drain is used it is recommended to use at least 1.5bar pressure.

④ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

⑤ Before disassembling the equipment on the compressed air side to inspect the auto drain or to replace the filter element, confirm that the pressure is set to zero.

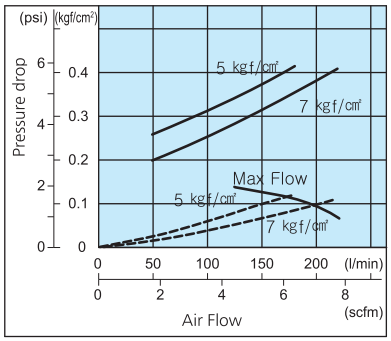
⑥ Please consult with SKP when using the product in applications other than compressed air.

FLOW CHARACTERISTICS

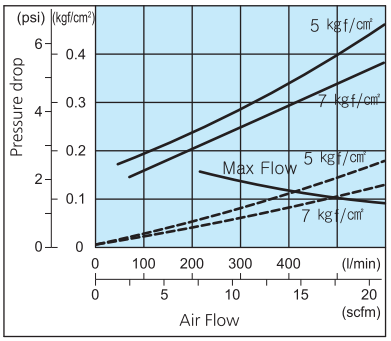
(—— Element oil saturation ----- Initial condition)

Note : Compressed air over max. flow line in the table below may not meet the specifications of the product.
It may cause damage to the element.

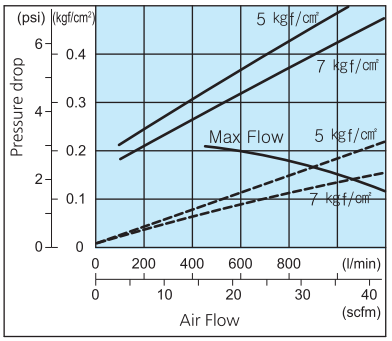
SAMH 150



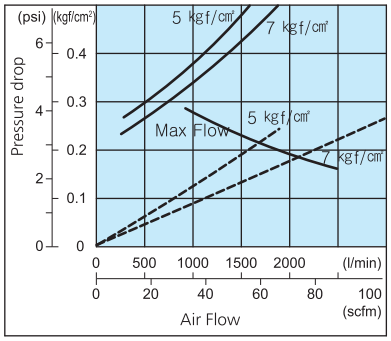
SAMH 250



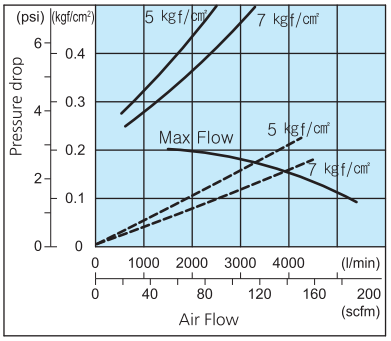
SAMH 350



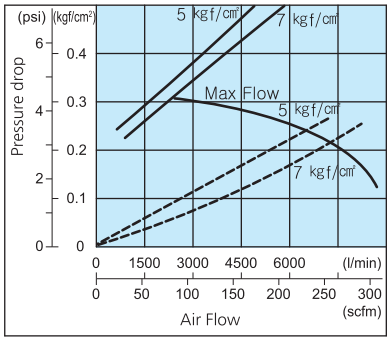
SAMH 450



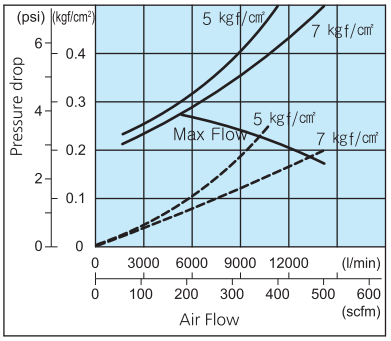
SAMH 550



SAMH 650

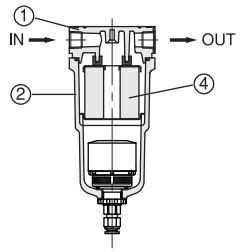


SAMH 850

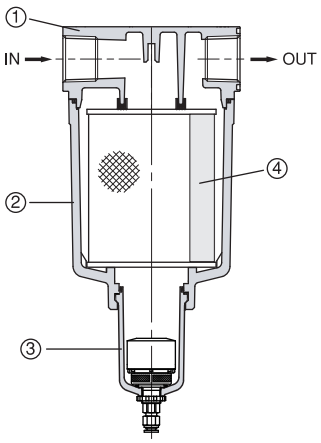


STRUCTURE / PARTS

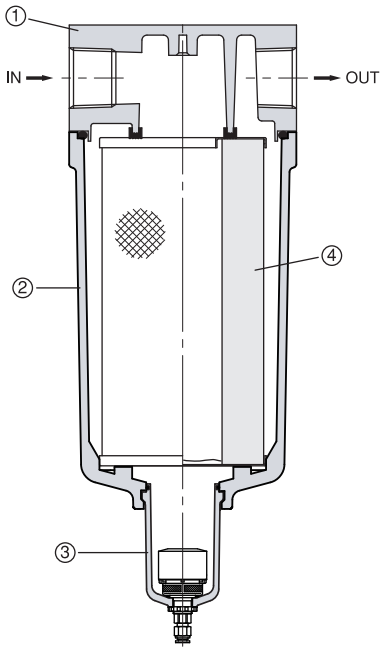
SAMH 150~250



SAMH 350~550



SAMH 650~850



▪ Component Parts

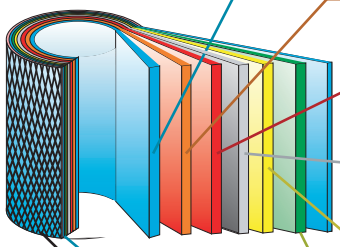
No.	PARTS	MATERIAL
①	Body	ALDC
②	Housing	ALDC
③	Bowl Ass'y	ALDC(MeP type)
		ALDC(MeF type)

▪ Replacement Parts

(mm)

No.	PARTS	Part No. & Size(Φ x Height)						
		AMH-EL150	AMH-EL250	AMH-EL350	AMH-EL450	AMH-EL550	AMH-EL650	AMH-EL850
④	Filter	45 x 42	58 x 52.5	70 x 77	82 x 87	95 x 117	122 x 144	130 x 260

▪ Sectional drawing (SAMH Filter)



1) Porous Plastic Coalescing Stage
- Oleophilic Porous Plastic core.
- In addition to removing particulates down to 40㎛.

2) 0.1㎛ Main Media
- 0.1㎛ pure borosilicate glass micor fiber.

3) Remove Oil Media
- 0.3㎛ remove oil micro fiber media.
- Coalescing element designed to remove oil and water aerosol from process air or gas.

4) Drain Layer
- Non-wetting fiber drain layer.

5) 0.01㎛ Main Media
- 0.01㎛ pure borosilicate glass micor fiber.

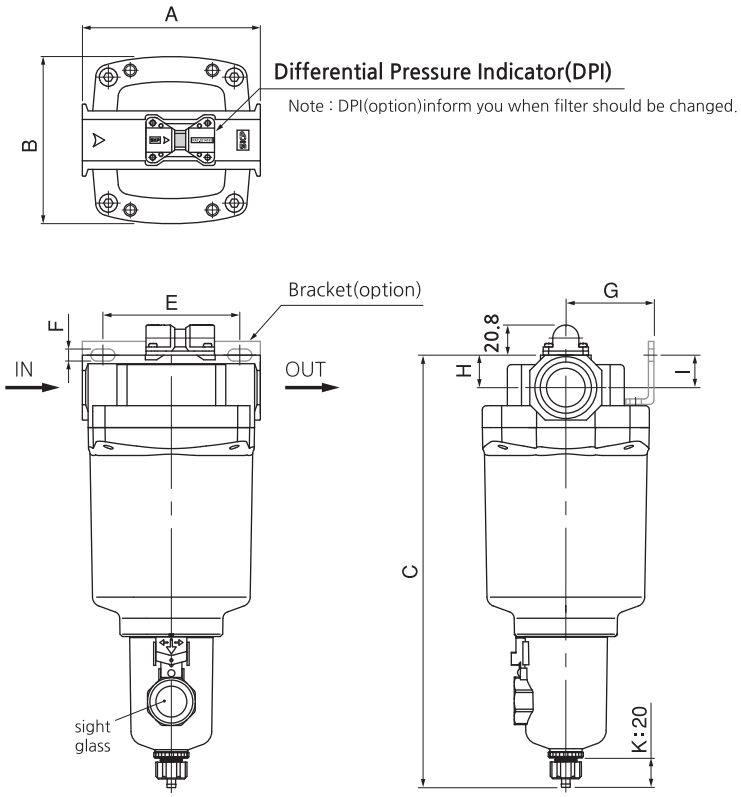
6) Drain Layer
- Non-wetting fiber drain layer.

7) Porous Plastic Coalescing Stage
- In addition to removing particulates down to 40㎛.

8) Coated Mesh

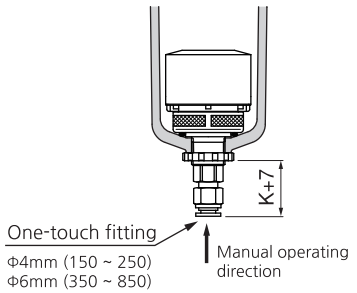
DIMENSIONS (mm)

SAMH 150~550

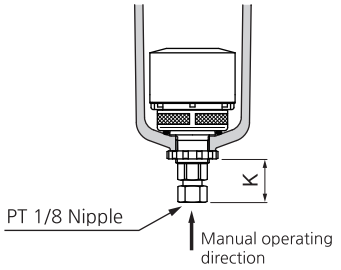


Auto Drain (option)

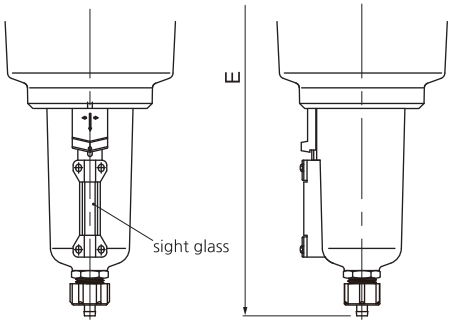
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



• **MeP** - Metal Bowl with pipe type sight glass

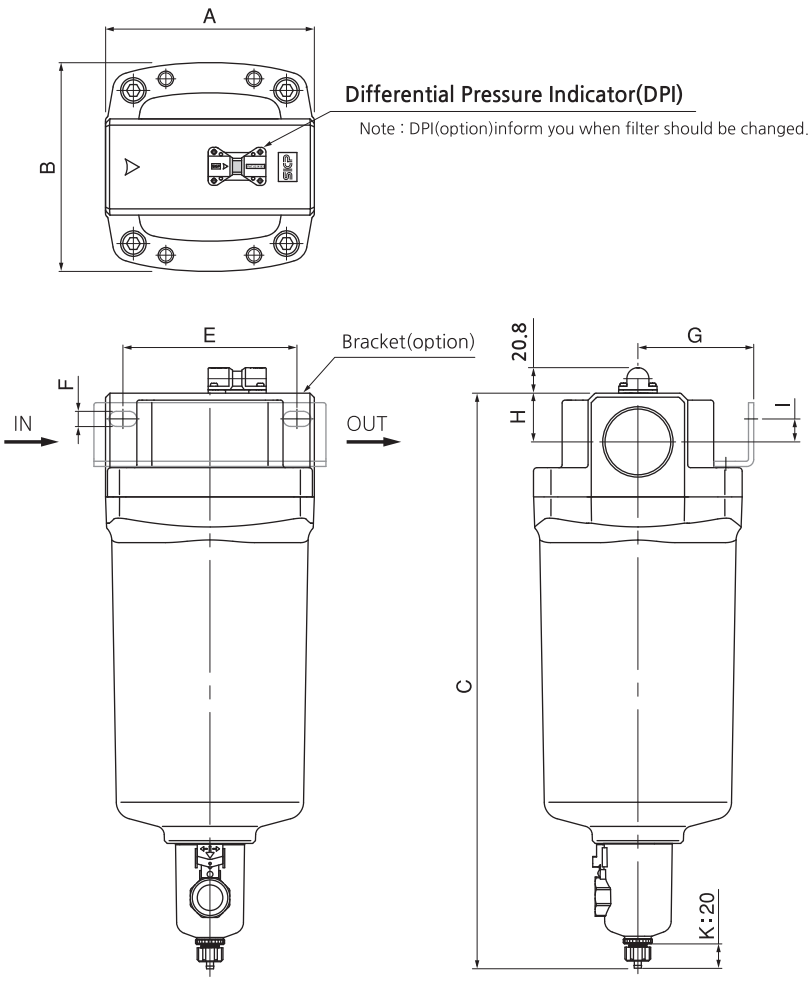


Note : 150 and 250 are the integral cover and bowl(MeF type)

Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAMH 150	1/8, 1/4	67	66	158.5	-	56	6	33.6	10.5	19.7
SAMH 250	1/4, 3/8	82	76	177.7	-	66	6	39.5	14	13.5
SAMH 350	3/8, 1/2	98	90	253	273	80	7	49.8	17.9	15.9
SAMH 450	3/4	114	106	271.3	291.3	90	9	56.2	19.8	15.3
SAMH 550	3/4, 1	130	122	311.2	331.2	100	8.8	64.5	23.7	21

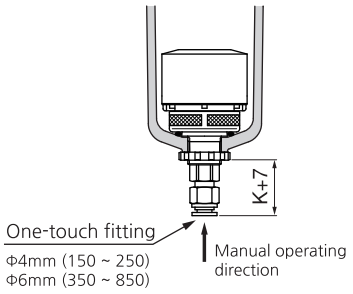
DIMENSIONS (mm)

SAMH 650~850

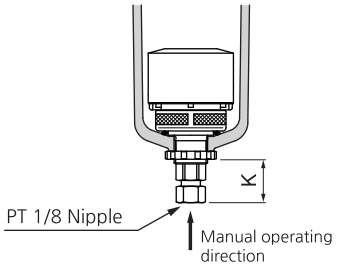


Auto Drain (option)

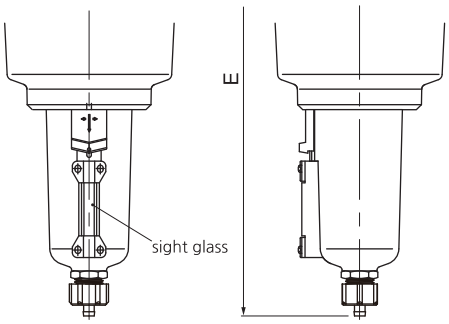
D : Auto Drain with one-touch fitting



Dn : Auto Drain with Nipple



- **MeP** - Metal Bowl with pipe type sight glass



Model	Port size	A	B	Height(manual drain)		E	F	G	H	I
				C(MeF)	D(MeP)					
SAMH 650	1 1/4, 1 1/2	160	160	361.2	381.2	150	13	93	32	27
SAMH 850	1 1/2, 2	180	180	490.7	510.7	150	13	100	42	20

Auto Drain Valve (SAD402)

SAD402 Series

- SAD402 series enable the condensed water in the compressed air line to be drained automatically.
- SAD402 series can also be operated manually.

Feale thread
Rc(PT)1/4, 3/8, 1/2

Male thread
R(PT)1/2

Male thread
M30

PC bowl
with Nylon guard

MeP type bowl

MeF type bowl

How to order

SAD 402 - ○ 04 D - MeP

① Auto drain Valve

② **Female thread type**
- Nil - Rc(PT)
- N - NPT
- G - G(PF)

③ **Thread type**
- 02 - 1/4
- 03 - 3/8
- 04 - 1/2
- R04 - 1/2 male thread
- M30 - M30 male thread

④ **Drain connector**
- D - One-touch fitting(Φ6mm)
- Dn - Nipple(PT 1/8)

⑤ **Bowl**
- Nil - Polycarbonate bowl with Nylon guard
- PcS - Polycarbonate bowl with Steel guard
- MeP - Metal bowl with pipe type sight glass
- MeF - Metal bowl with flat type sight glass

Symbol

Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Min. operating pressure	1.5bar (0.15MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Bowl Material	Polycarbonate
Bowl Guard Material	Nylon
Port size	1/4, 3/8, 1/2, R1/2, M30

Precautions

① Drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

② The drainage hose installed should be straight.

③ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

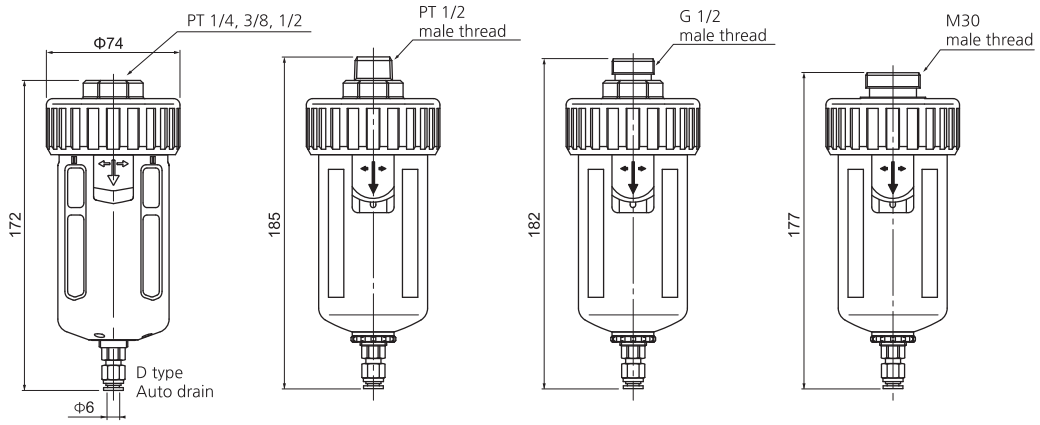
④ When auto drain is used it is recommended to use at least 1.5bar pressure.

⑤ Please consult with SKP when using the product in applications other than compressed air.

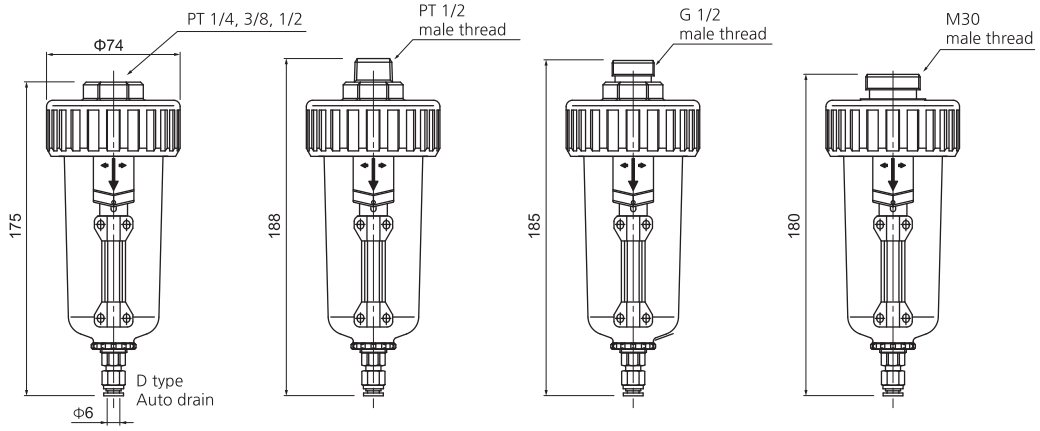
DIMENSIONS (mm)

Note : Dn-type is shorter than 4mm D-type.

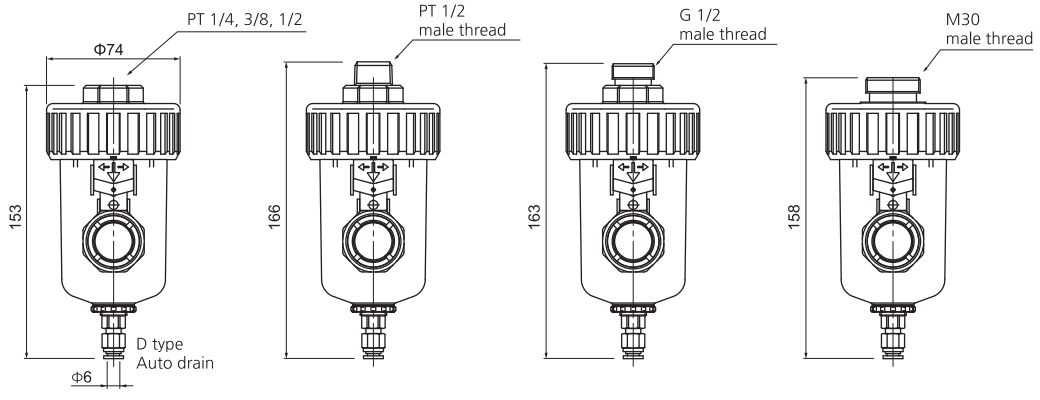
■ PC Bowl with a bowl guard



■ Metal Bowl with pipe type sight glass(MeP)

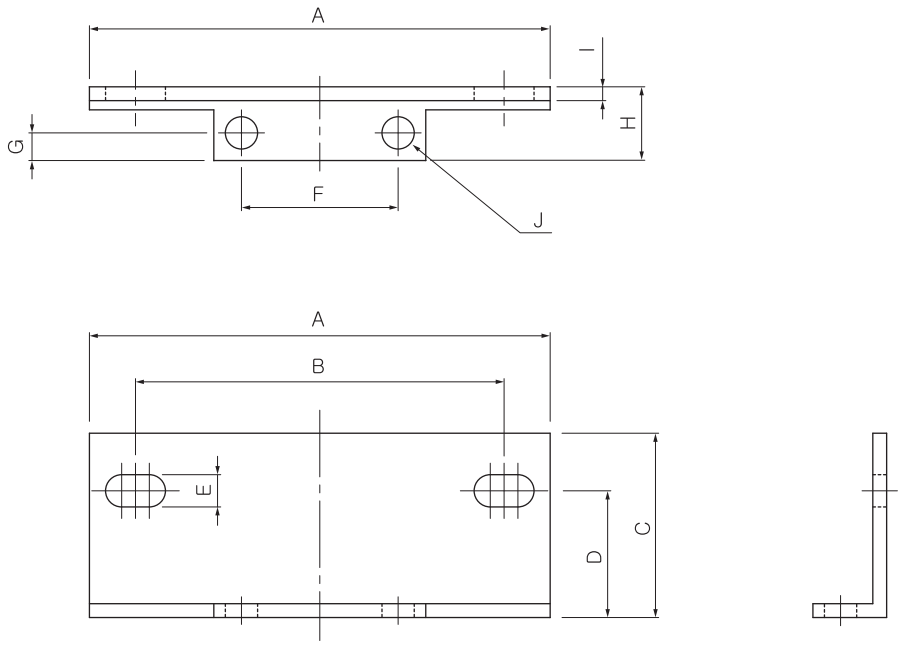


■ Metal Bowl with flat type sight glass(MeF)



Bracket for Micro Filter

B150~B850 Series



Model	A	B	C	D	E	F	G	H	I	J	Applicable Model
B150	70	56	24	19	5.5	26	5.3	11.9	1.6	ϕ3.8	150 Series (SAFL, SAM, SAMD, SAMH, SAMG)
B250	84	66	30	22	6	28	4	11	2	ϕ6	250 Series (SAFL, SAM, SAMD, SAMH, SAMG)
B350	100	80	35.5	23	7	34	6	16	3	ϕ7	350 Series (SAFL, SAM, SAMD, SAMH, SAMG)
B450	110	90	38.2	28.2	9	50	6	18.2	3.2	ϕ9	450 Series (SAFL, SAM, SAMD, SAMH, SAMG)
B550	130	100	44	34	9	60	7	20.5	4	ϕ9	550 Series (SAFL, SAM, SAMD, SAMH, SAMG)
B650	200	150	60	46	13	76	10	34	6	ϕ13	650 Series (SAFL, SAM, SAMD, SAMH, SAMG)
B850	200	150	60	46	13	76	10	34	6	ϕ13	850 Series (SAFL, SAM, SAMD, SAMH, SAMG)

Air Cleaning Equipment Precautions

⚠ Safety Instructions

Be sure to read before handling.

These safety instructions are intended to prevent hazardous situations and/or equipment damage.
These instructions indicate the level of potential hazard with the labels of "Caution," "Warning" or "Danger."
They are all important notes for safety and must be followed in addition to International Standards (ISO)[1], KS[2]
and other safety regulations.

⚠CAUTION	indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
⚠WARNING	indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
⚠DANGER	indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

1) ISO 4414 : Pneumatic fluid power -- General rules relating to systems.
2) KS B 6376 : 공기압 시스템 통칙

Design / Selection

⚠WARNING

- Pneumatic system design and device specifications selection should be done by the person with professional knowledge.
- Products represented in this catalog are designed only for use in compressed air systems.
  Please contact SKP when using a fluid other than compressed air
- Do not operate at pressures or temperatures, etc., beyond the range of specifications, as this can cause damage or malfunction. (Refer to the specifications.)
  We do not guarantee against any damage if the product is used outside of the specification range.

⚠CAUTION

- Provide a design that prevents back pressure and back flow.
  The generation of back pressure and back flow could lead to equipment damage.

Air Supply

⚠WARNING

- Please consult with SKP when using the product in applications other than compressed air.

⚠CAUTION

- Do not use compressed air that contains chemicals, organic solvents, salt, or corrosive gases as it can cause damage or malfunction.

Mounting

⚠WARNING

- When installing the products, allow access for maintenance.
- Tighten threads with the proper tightening torque.
  Insufficient tightening torque may cause loosening or defective sealing.
  Over-tightening torque may damage the thread etc.

⚠CAUTION

- Verify the IN and OUT sides.
  When connecting the piping, avoid interchanging the IN and the OUT sides.
- Wrapping of pipe tape
  When screwing piping or fittings into ports, ensure that chips from the pipe threads or sealing material do not enter the piping. Also, if pipe tape is used, leave 1.5 to 2 thread ridges exposed at the end of the threads.

Operating Environment

⚠WARNING

- Do not operate under the conditions listed below due to a risk of malfunction.
  1) In locations having corrosive gases, organic solvents, and chemical solutions, or in locations in which these elements are likely to adhere to the equipment.
  2) In locations that are exposed to direct sunlight.
  3) In locations that have a heat source and poor ventilation.
  4) In locations that are exposed to shocks and vibrations.
  5) In locations with high humidity or a large amounts of dust.
- Adhere to the specified fluid temperature and ambient temperature ranges.
  Using the equipment outside of its specification range could cause it to be damaged, malfunction, or operate improperly.

Maintenance

⚠WARNING

- If handled improperly, compressed air can be dangerous.
  Assembly, handling, repair and element replacement of pneumatic systems should be performed by a knowledgeable and experienced person.
- Do not remove components until safety is confirmed.
  1) Inspection and maintenance of machine and equipment should only be performed after the confirmation of safe locked-out control positions.
  2) Make sure the safety procedure is carried out before disassembly the pneumatic devices. Cut off the supply pressure of the equipment and release the residual compressed air in the system.
  3) When restart the system, be aware workpeace flown out cause injury.

⚠CAUTION

- Set the pressure of the compressed air to zero before an inspection.
  Before disassembling the equipment on the compressed air side for inspecting the auto drain or for replacing the filter element, confirm that the pressure is set to zero.
- Discharge the drainage on a regular basis.
  If drain remains accumulated in the equipment or in the piping, it could cause the equipment to operate improperly, or the drain could splash to the outlet side, leading to unforeseen accidents.
  Therefore, check the drainage volume and the operation of the auto drain on a daily basis.

Air Line Equipment

Air Unit (SAU)

Air Filter + Air Regulator + Air Lubricator

SAU100 SAU200 SAU300 SAU400 SAU600

How to order

SAU 4 00 - 04 DG - MeP

① Air Unit

② **Body Size**
- 1 - 1/8
- 2 - 1/4
- 3 - 3/8
- 4 - 1/2
- 6 - 1

③ **Composition**
- 00 - Filter(SAF)
- Regulator(SAR)
- Lubricator(SAL)

④ **Thread type**
- Nil - Rc(PT)
- N - NPT
- G - G(PF)

⑤ **Port Size**

Symbol	Size	Body size				
		1	2	3	4	6
M5	M5	●				
01	1/8		●			
02	1/4		●	●		
03	3/8			●		
04	1/2				●	
06	3/4				●	●
10	1					●

⑥ **Accessory(Optional)**
- Nil - None gauge / Manual Drain
- D - Auto Drain

Symbol	Description	Body				
		1	2	3	4	6
D	One-touch fitting type	●	●	●	●	●
Dn	Nipple type	-	-	●	●	●
Df	SAF200 Float type	-	●	-	-	-

주) 1. SAF100 and SAF200 are differential pressure type.
2. SAF300~600 are float type.

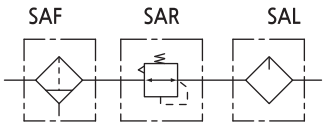
- G - Gauge

G	Round type gauge
Gs	Square embedded type

주) SAU100 is available only round type gauge.

⑦ **Bowl**
- Nil - Polycarbonate bowl with Nylon guard
- PcS - Polycarbonate bowl with Steel guard
- MeP - Metal bowl with pipe type sight glass

Symbol



Specification

Composition	Filter + Regulator + Lubricator
Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAR)	0.5~8.5bar (0.05~0.85MPa)
Filtration(SAF)	10μm (option: 2, 5, 20, 40)
Recommended oil(SAL)	Turbin oil (ISO VG32)
Bowl material(SAF, SAL)	Poly-carbonate (option: ALDC)
Bowl Guard Material	Nylon
Construction(SAR)	Relief type

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

④ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

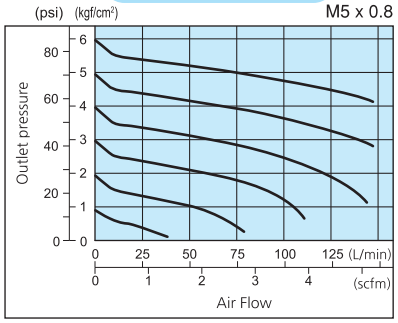
⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

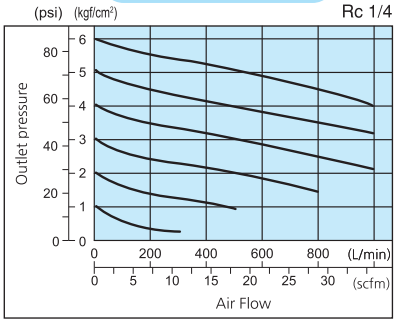
FLOW CHARACTERISTICS

Inlet pressure 7kg/cm²

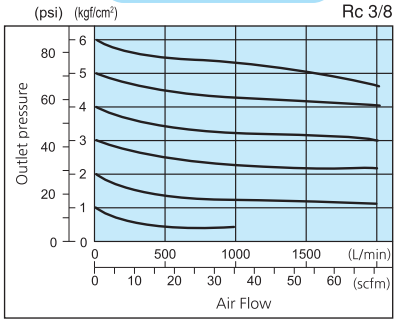
SAU 100



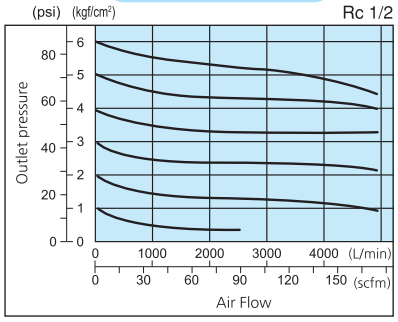
SAU 200



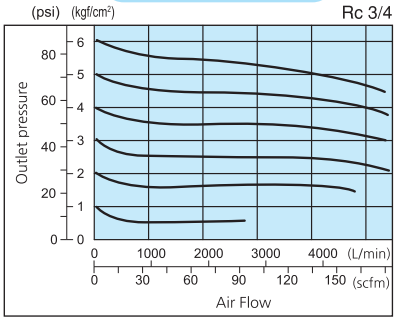
SAU 300



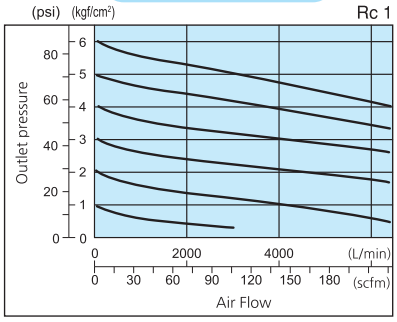
SAU 400-04



SAU 400-06



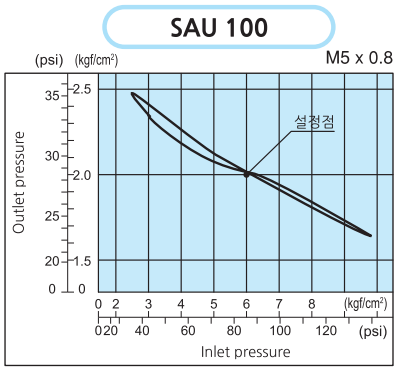
SAU 600



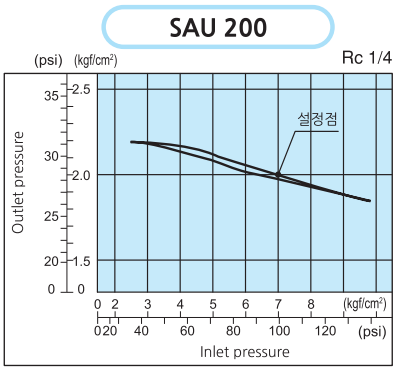
PRESSURE CHARACTERISTICS

Inlet pressure 7kg/cm², Outlet pressure 2kg/cm², Flow 20L/min(ANR)

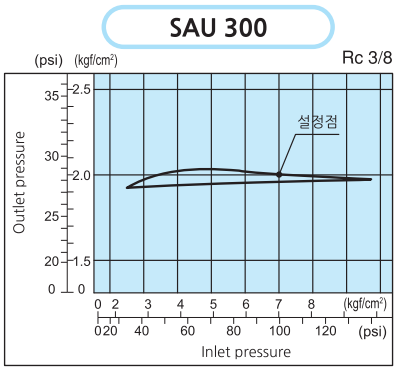
SAU 100



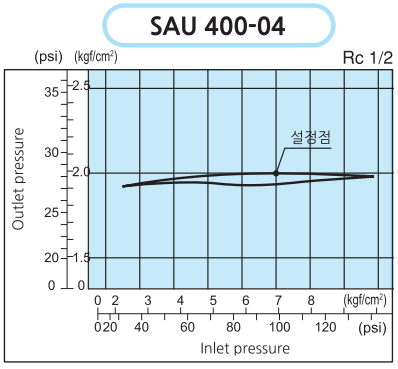
SAU 200



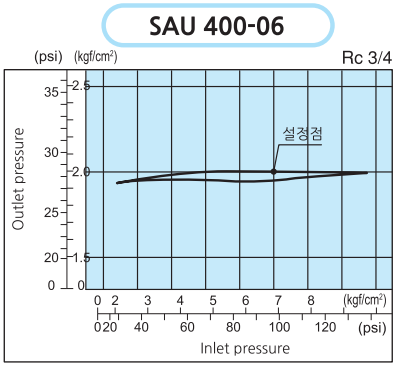
SAU 300



SAU 400-04



SAU 400-06



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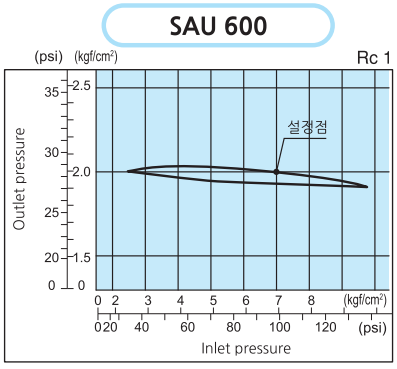
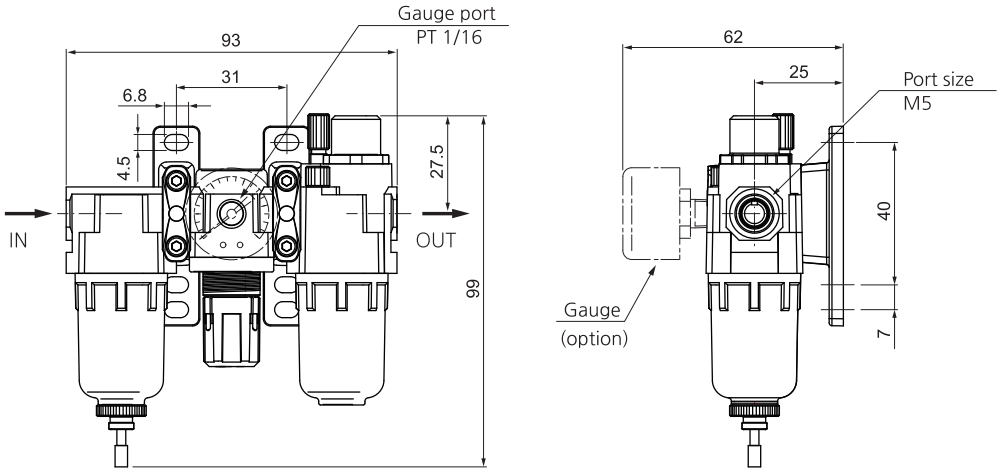


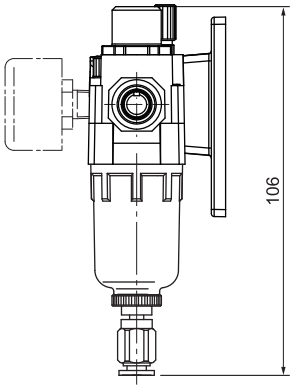
DIMENSIONS (mm)

SAU 100

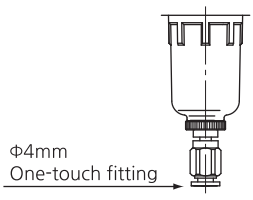
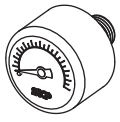
■ SAU100-□□□



■ Dimensions of each model with an option attached



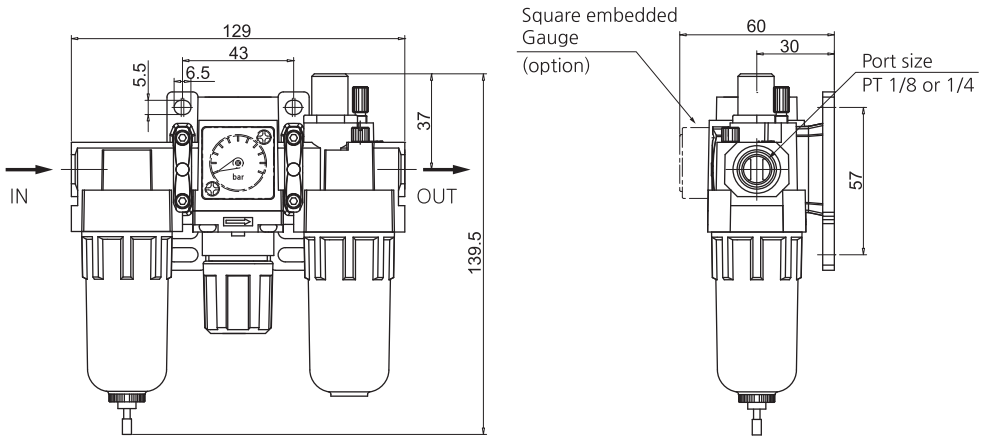
with Auto Drain
(Differential pressure type)

Option	D : Auto Drain (Differential pressure type)	G : Gauge
Model	 Φ4mm One-touch fitting	 G25, R1/16

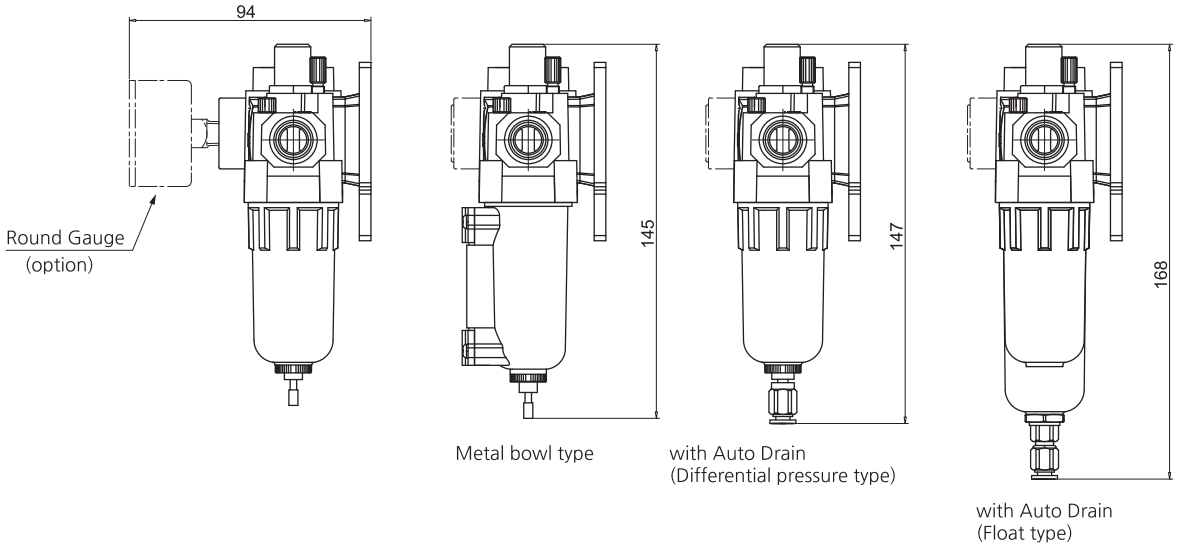
DIMENSIONS (mm)

SAU 200

■ SAU200-□02□□-□



■ Dimensions of each model with an option attached

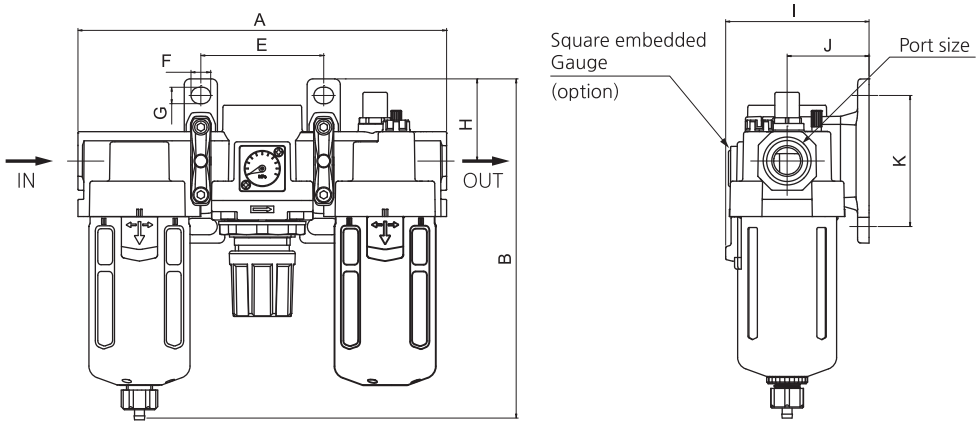


Option	Auto Drain		Gauge	
	D : Differential pressure type	Df : Float type	G : Round type	Gs : Square embedded type
Model		SAD200	G40, R1/8	Gs28

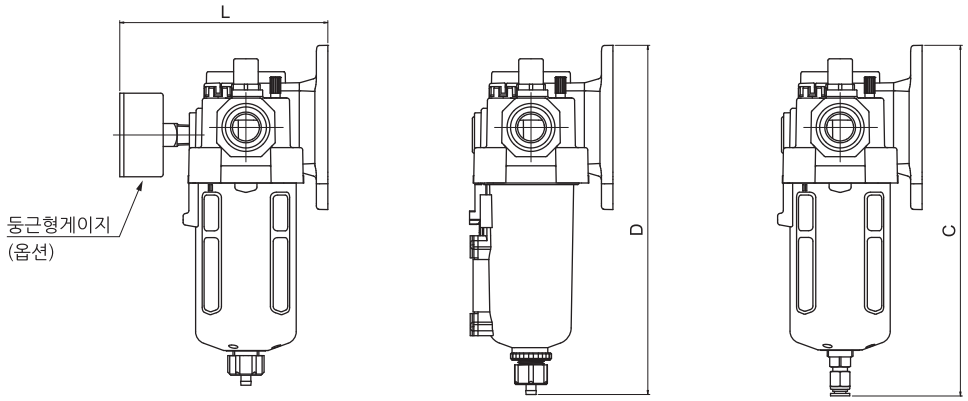
DIMENSIONS (mm)

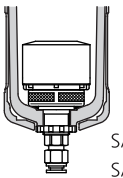
SAU 300~400

■ SAU300-□03□□-□
SAU400-□04(06)□□-□



■ Dimensions of each model with an option attached



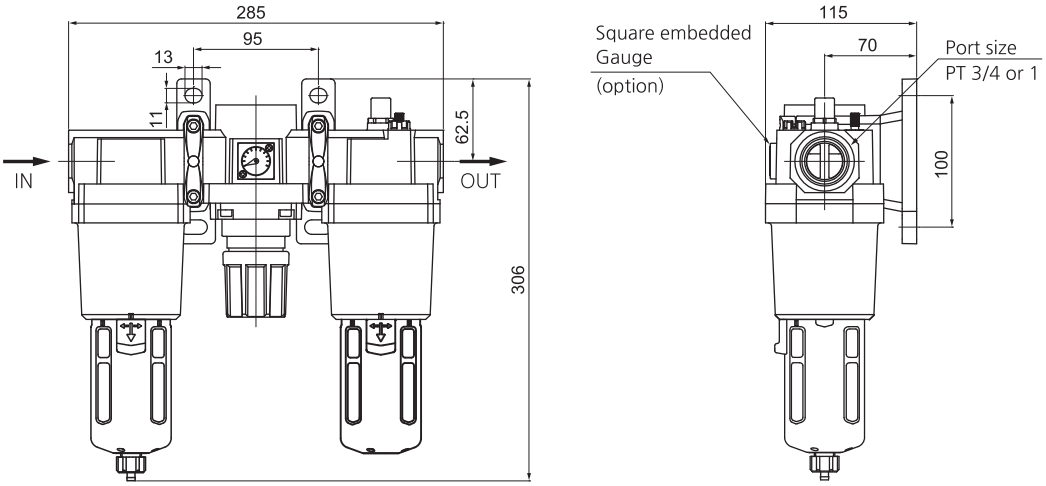
Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAU300 : SAD300 SAU400 : SAD400	 SAU300 : G40, R1/8 SAU400 : G50, R1/4	 Gs28

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L
SAU300-03	3/8	171	173	179	190	57	9	7	43	71.5	41	70	107
SAU400-04	1/2	225	208	215	213	75	11	9	50	87.5	50	80	127
SAU400-06	3/4	225	212	219	217	75	11	9	50	87.5	50	80	127

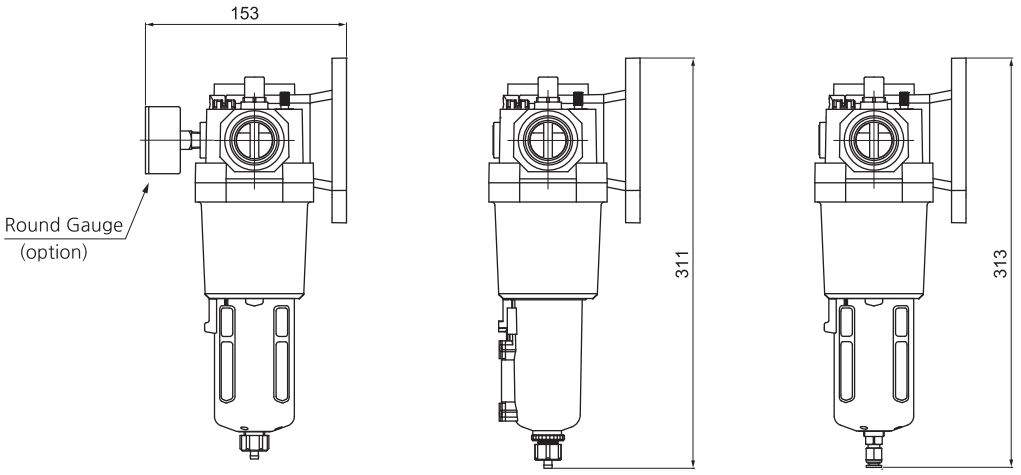
DIMENSIONS (mm)

SAU 600

■ SAU600-□06(10)□□-□

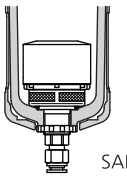


■ Dimensions of each model with an option attached



Metal bowl type

with Auto drain

Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD400	 G50, R1/4	 Gs28

Air Unit (SAU110~610 Series)

Filter Regulator + Lubricator

SAU 110

SAU 210

SAU 310

How to order

SAU 6 10 - 10 DG - MeP

① Air Unit

② **Body Size**
- 1 - 1/8
- 2 - 1/4
- 3 - 3/8
- 4 - 1/2
- 6 - 1

③ **Composition**
- 10 — Filter Regulator(SAW)
- Lubricator(SAL)

④ **Thread type**
- Nil - Rc(PT)
- N - NPT
- G - G(PF)

⑤ **Port Size**

Symbol	Size	Body size				
		1	2	3	4	6
M5	M5	●				
01	1/8		●			
02	1/4		●	●		
03	3/8			●		
04	1/2				●	
06	3/4				●	●
10	1					●

⑥ **Accessory(Optional)**
- Nil - None gauge / Manual Drain
- D - Auto Drain

Symbol	Description	Body				
		1	2	3	4	6
D	One-touch fitting type	●	●	●	●	●
Dn	Nipple type	-	-	●	●	●
Df	SAW200 Float type	-	●	-	-	-

Note) 1. SAW100 and SAW200 are differential pressure type.
2. SAW300~600 are float type.

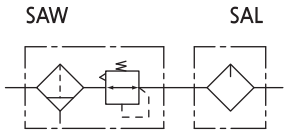
- G - Gauge

G	Round type gauge
Gs	Square embedded type

Note) SAU110 is available only round type gauge.

⑦ **Bowl**
- Nil - Polycarbonate bowl with Nylon guard
- PcS - Polycarbonate bowl with Steel guard
- MeP - Metal bowl with pipe type sight glass

Symbol



Specification

Composition	Filter Regulator + Lubricator
Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAR)	0.5~8.5bar (0.05~0.85MPa)
Filtration(SAF)	10μm (option: 2, 5, 20, 40)
Recommended oil(SAL)	Turbin oil (ISO VG32)
Bowl material(SAF, SAL)	Poly-carbonate (option: ALDC)
Bowl Guard Material	Nylon
Construction(SAR)	Relief type

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

④ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

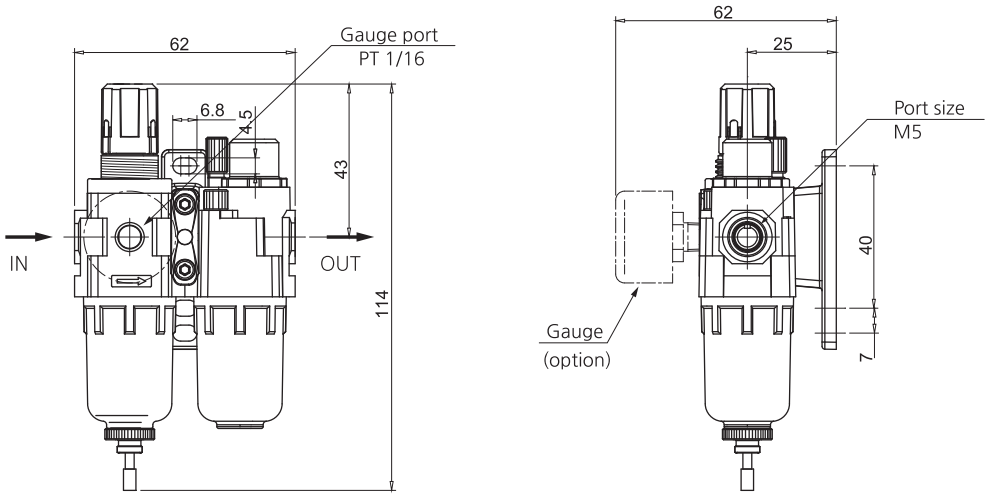
⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

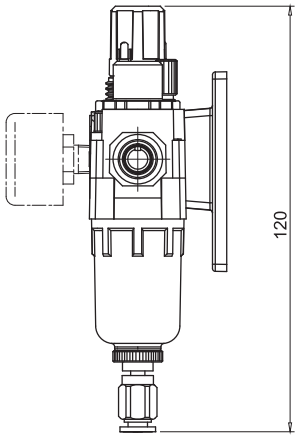
DIMENSIONS (mm)

SAU 110

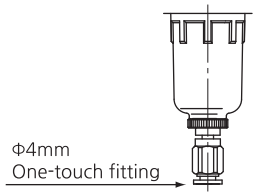
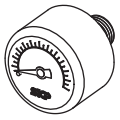
■ SAU110-□□□



■ Dimensions of each model with an option attached



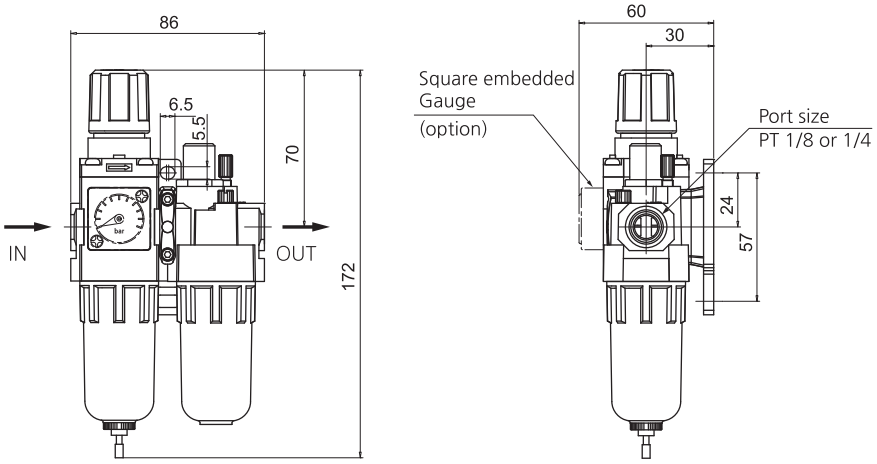
with Auto Drain
(Differential pressure type)

Option	D : Auto Drain (Differential pressure type)	G : Gauge
Model	 Φ4mm One-touch fitting	 G25, R1/16

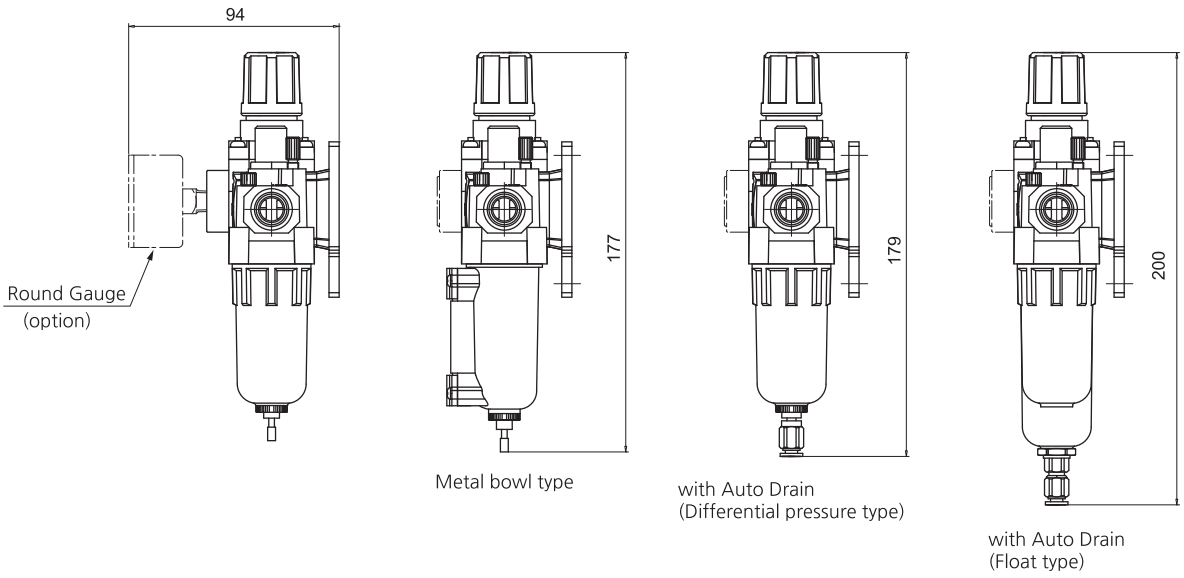
DIMENSIONS (mm)

SAU 210

■ SAU210-□02□□-□



■ Dimensions of each model with an option attached

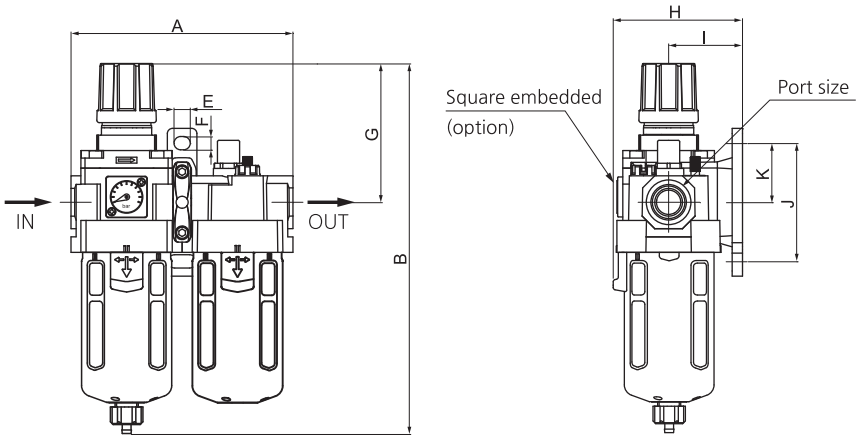


Option	Auto Drain		Gauge	
	D : Differential pressure type	**Df** : Float type	**G** : Round type	**Gs** : Square embedded type
Model		SAD200	G40, R1/8	Gs28

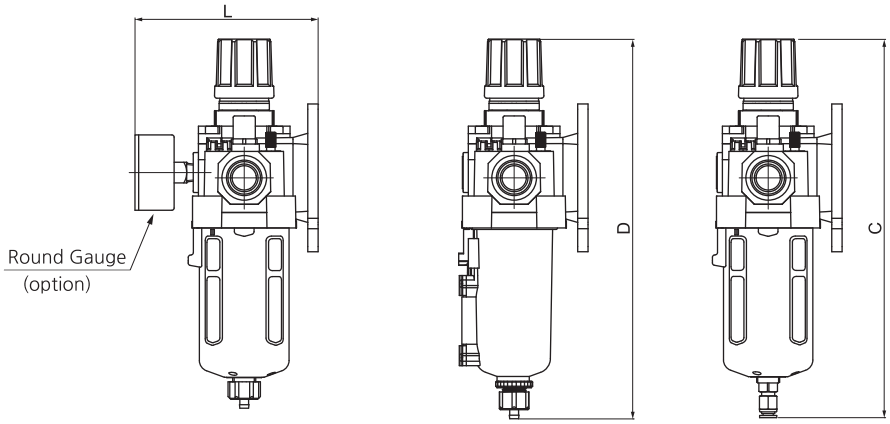
DIMENSIONS (mm)

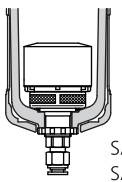
SAU 310~410

■ SAU310-□03□□-□
SAU410-□04□□-□



■ Dimensions of each model with an option attached



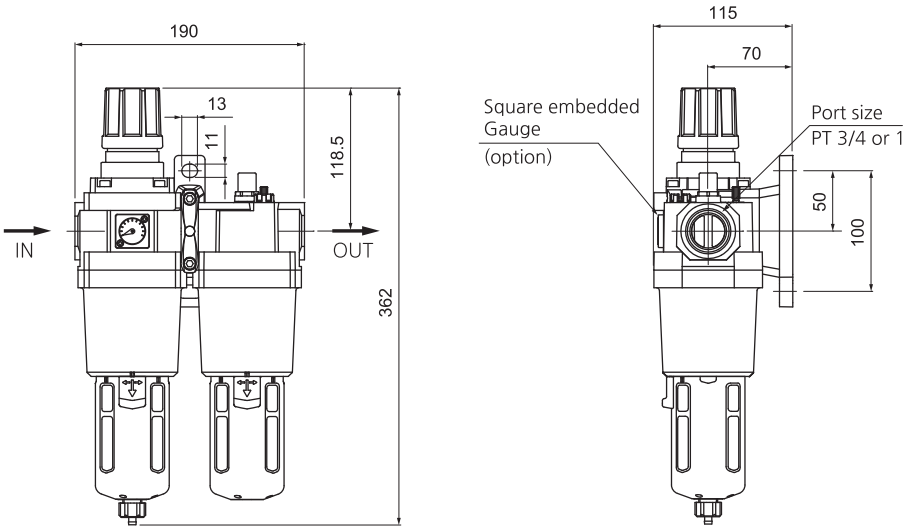
Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAU300 : SAD300 SAU400 : SAD400	 SAU310 : G40, R1/8 SAU410 : G50, R1/4	 Gs28

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L
SAU310-03	1/4, 3/8	114	220	226	228	9	7	89	71.5	41	70	35	107
SAU410-04	1/2	150	251	258	256	11	9	94	87.5	50	80	40	127

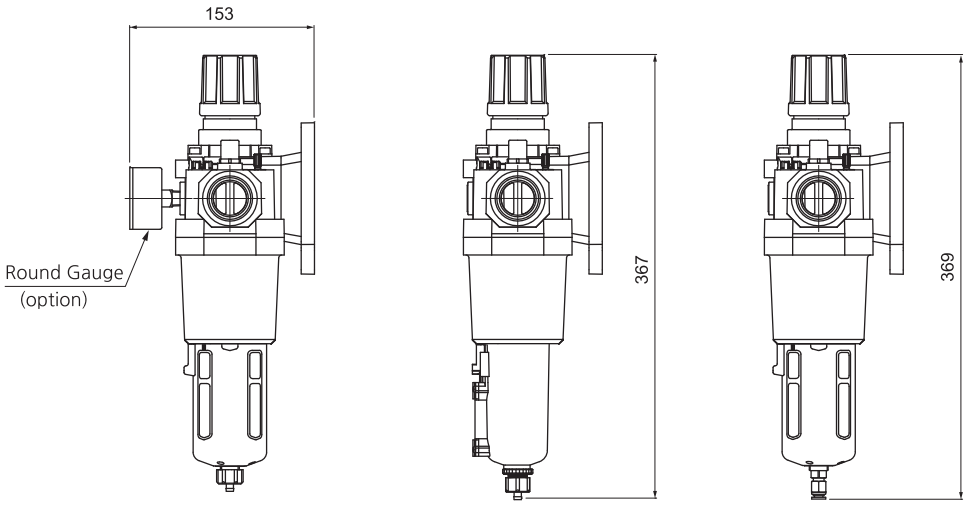
DIMENSIONS (mm)

SAU 610

■ SAU610-□06(10)□□-□

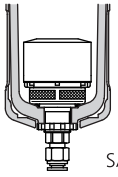


■ Dimensions of each model with an option attached



Metal bowl type

with Auto drain

Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD400	 G50, R1/4	 Gs28

Air Unit (SAU120~620 Series)

Air Filter + Air Regulator

SAU 120 SAU 220 SAU 420

How to order

SAU 3 20 - ○ 03 DG - MeP

① Air Unit

② **Body Size**
1 - 1/8
2 - 1/4
3 - 3/8
4 - 1/2
6 - 1

③ **Composition**
20 ┬ Filter(SAF)
└ Regulator(SAR)

④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port Size**

Symbol	Size	Body size				
		1	2	3	4	6
M5	M5	●				
01	1/8		●			
02	1/4		●	●		
03	3/8			●		
04	1/2				●	
06	3/4				●	●
10	1					●

⑥ **Accessory(Optional)**
Nil - None gauge / Manual Drain
D - Auto Drain

Symbol	Description	Body				
		1	2	3	4	6
D	One-touch fitting type	●	●	●	●	●
Dn	Nipple type	-	-	●	●	●
Df	SAF200 Float type	-	●	-	-	-

주) 1. SAF100 and SAF200 are differential pressure type.
2. SAF300~600 are float type.

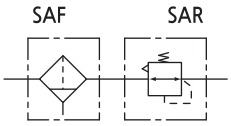
G - Gauge

G	Round type gauge
Gs	Square embedded type

주) SAU110 is available only round type gauge.

⑦ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol



Specification

Composition	Filter + Regulator
Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAR)	0.5~8.5bar (0.05~0.85MPa)
Filtration(SAF)	10μm (option: 2, 5, 20, 40)
Bowl material(SAF)	Poly-carbonate (option: ALDC)
Bowl Guard Material	Nylon
Construction(SAR)	Relief type

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

④ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

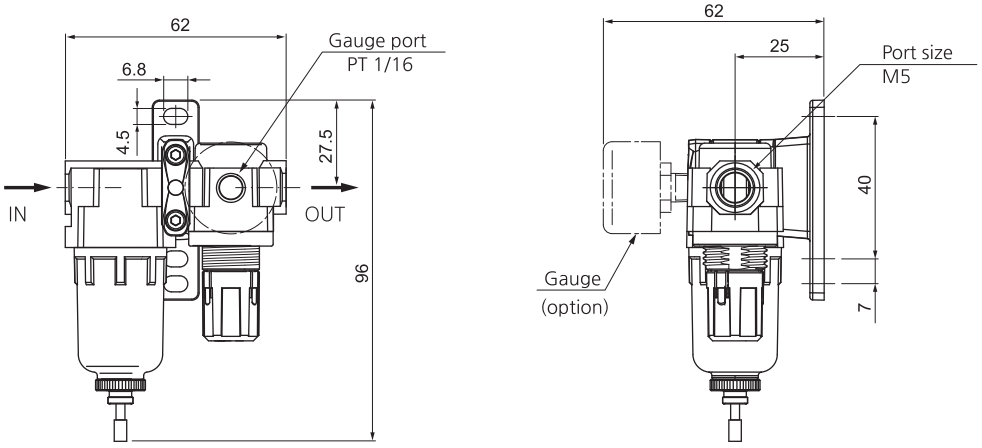
⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

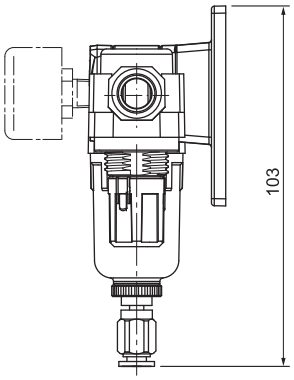
DIMENSIONS (mm)

SAU 120

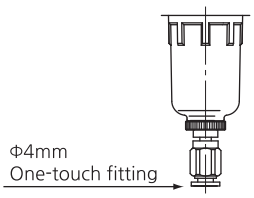
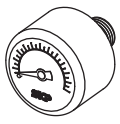
■ SAU120-□□□



■ Dimensions of each model with an option attached



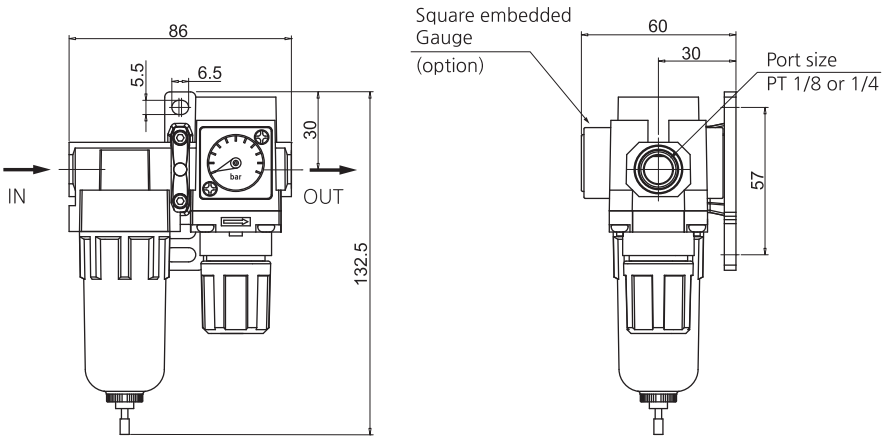
with Auto Drain
(Differential pressure type)

Option	D : Auto Drain (Differential pressure type)	G : Gauge
Model	 Φ4mm One-touch fitting	 G25, R1/16

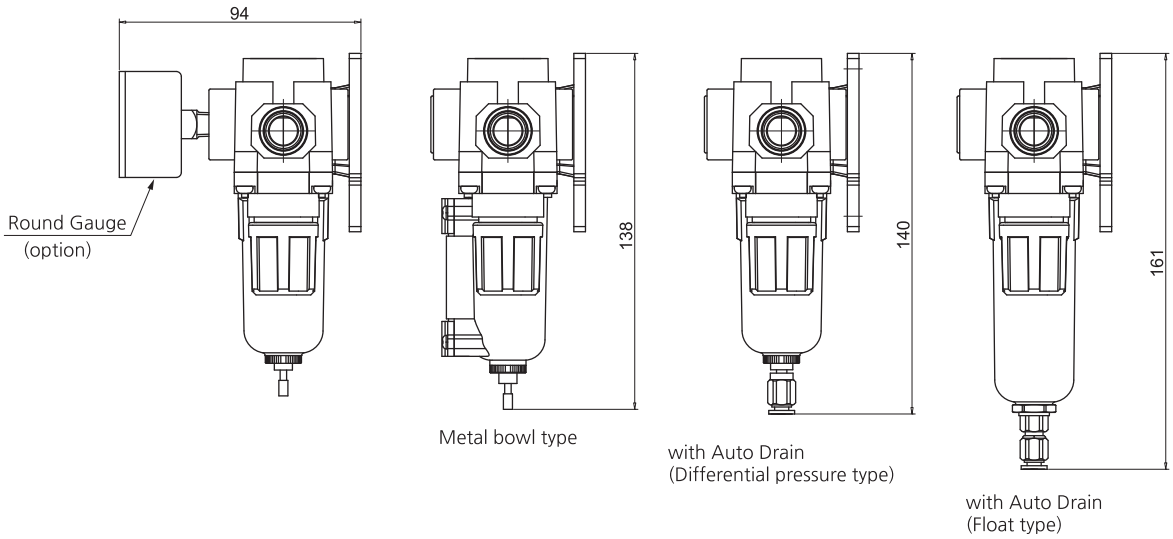
DIMENSIONS (mm)

SAU 220

■ SAU220-□02□□-□



■ Dimensions of each model with an option attached

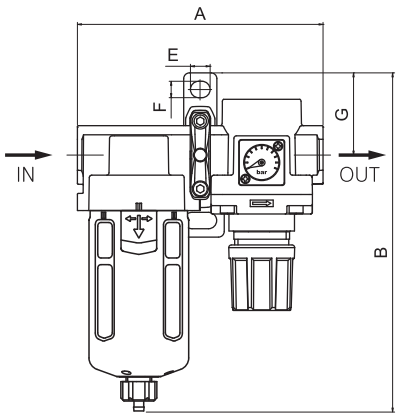


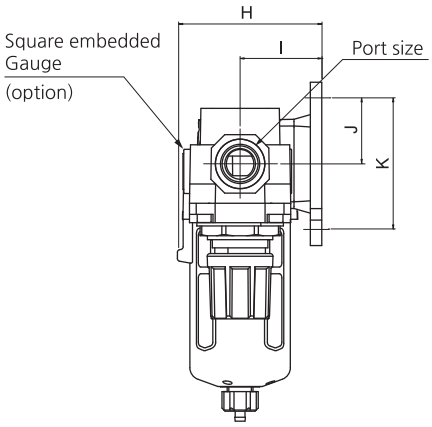
Option	Auto Drain		Gauge	
	D : Differential pressure type	Df : Float type	G : Round type	Gs : Square embedded type
Model		SAD200	G40, R1/8	Gs28

DIMENSIONS (mm)

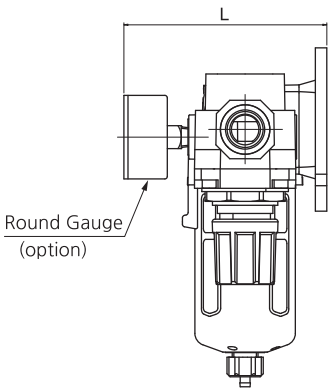
SAU 320~420

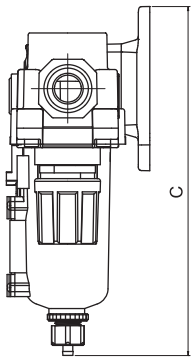
■ SAU320-□03□□-□
SAU420-□04(06)□□-□



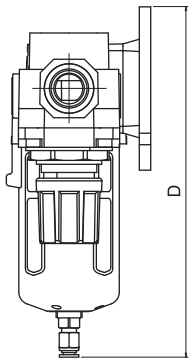


■ Dimensions of each model with an option attached

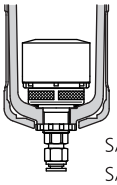




with Auto drain



Metal bowl type

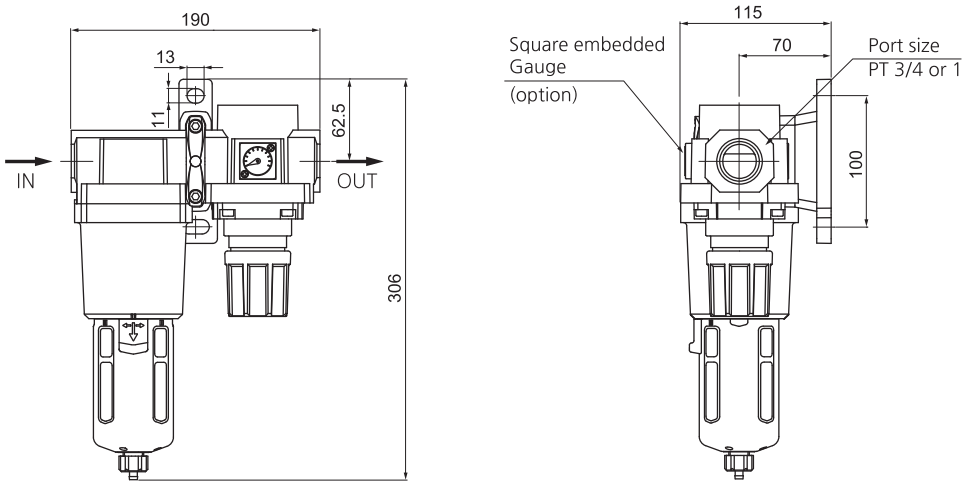
Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAU300 : SAD300 SAU400 : SAD400	 SAU320 : G40, R1/8 SAU420 : G50, R1/4	 Gs28

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L
SAU320-03	1/4, 3/8	114	174	191	180	9	7	43.5	71.5	41	70	35	107
SAU420-04	1/2	150	207	212	214	11	9	50	87.5	50	80	40	127
SAU420-06	3/4	150	211	216	218	11	9	50	87.5	50	80	40	127

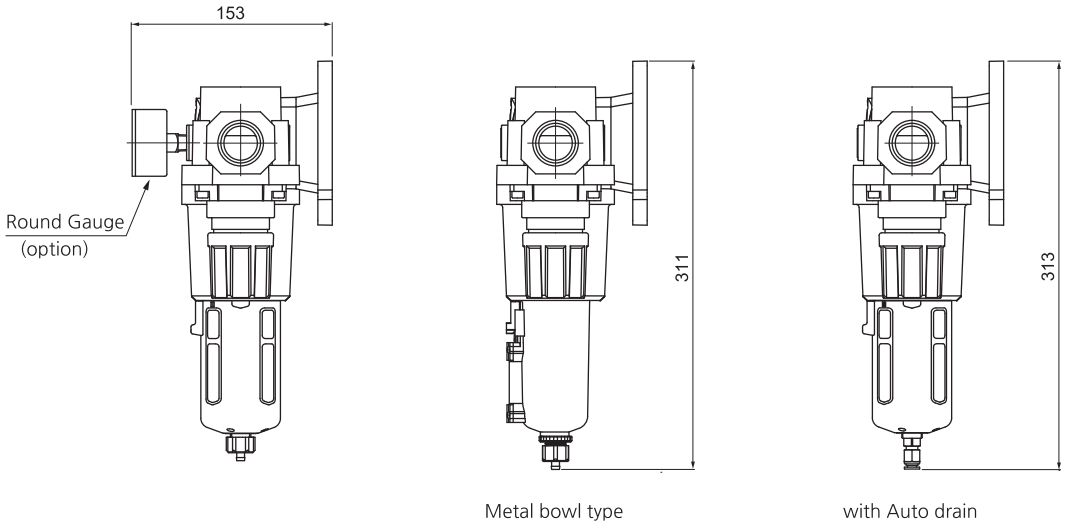
DIMENSIONS (mm)

SAU 620

■ SAU620-□06(10)□□-□

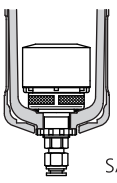


■ Dimensions of each model with an option attached



Metal bowl type

with Auto drain

Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD400	 G50, R1/4	 Gs28

Air Unit (SAU230~430 Series)

Air Filter + Mist Separator + Air Regulator

SAU 230

SAU 330

How to order

SAU 4 30 - ○ 04 DG - MeP

① Air Unit

② **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2

③ **Composition**
30 — Filter(SAF)
Mist Separator(SAFM)
Regulator(SAR)

④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port size**

기호	사이즈	몸체 사이즈		
		2	3	4
01	1/8	●		
02	1/4	●	●	
03	3/8		●	
04	1/2			●
06	3/4			●

⑥ **Accessory(Optional)**
Nil - None gauge / Manual Drain
D - Auto Drain

Symbol	Description	Body		
		2	3	4
D	One-touch fitting type	●	●	●
Dn	Nipple(PT1/8) type	-	●	●
Df	SAF(M)200 Float type	●	-	-

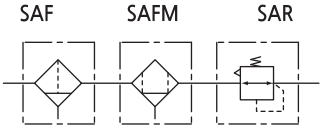
주) 1. SAF(M)200 are differential pressure type.
2. SAF(M)300~400 are float type.

G - Gauge

G	Round type gauge
Gs	Square embedded type

⑦ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol



Specification

Composition	Filter + Mist Separator + Regulator
Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAR)	0.5~8.5bar (0.05~0.85MPa)
Filtration	SAF:10μm + SAFM:0.1μm
Bowl material(SAF, SAFM)	Poly-carbonate (option: ALDC)
Bowl Guard Material	Nylon
Construction(SAR)	Relief type

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

④ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

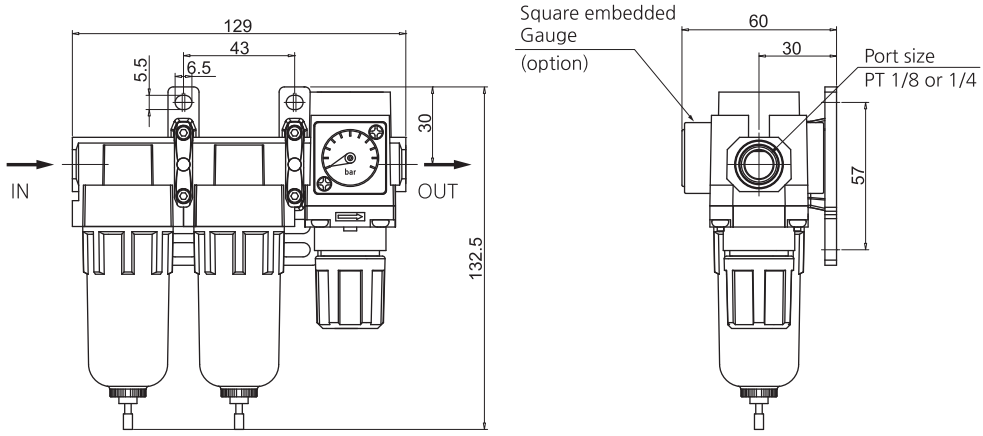
⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

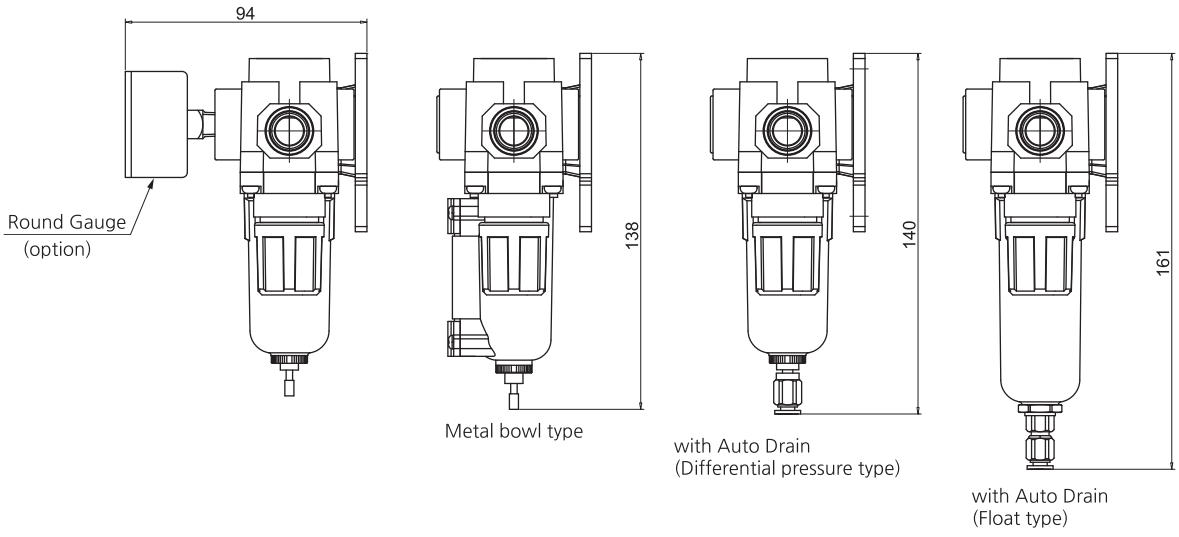
DIMENSIONS (mm)

SAU 230

■ SAU230-□02□□-□



■ Dimensions of each model with an option attached

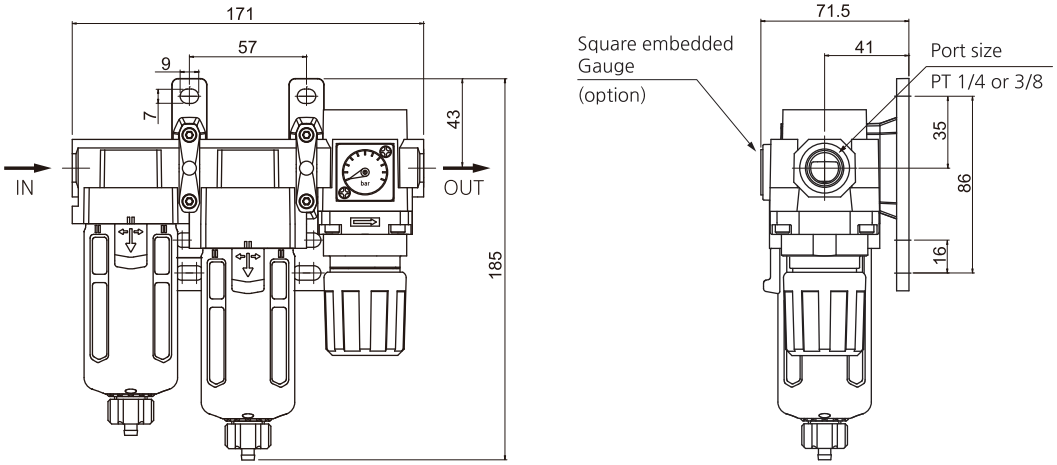


Option	Auto Drain		Gauge	
	D : Differential pressure type	Df : Float type	G : Round type	Gs : Square embedded type
Model		SAD200	G40, R1/8	Gs28

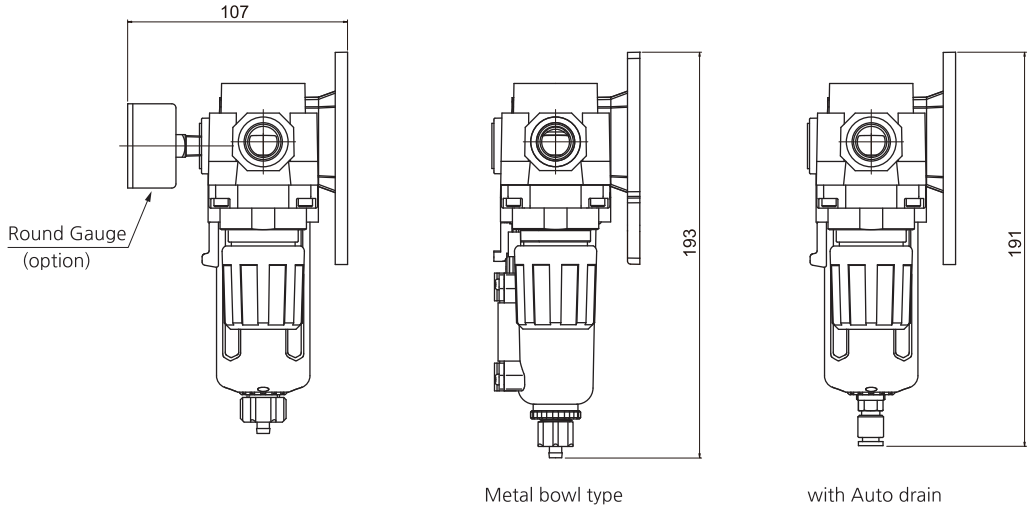
DIMENSIONS (mm)

SAU 330

■ SAU330-□03□□-□

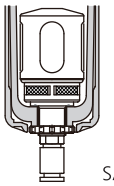


■ Dimensions of each model with an option attached



Metal bowl type

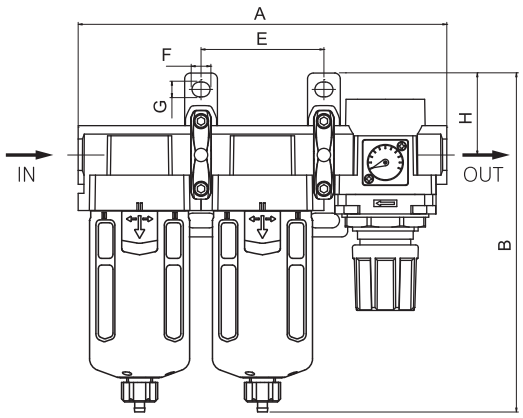
with Auto drain

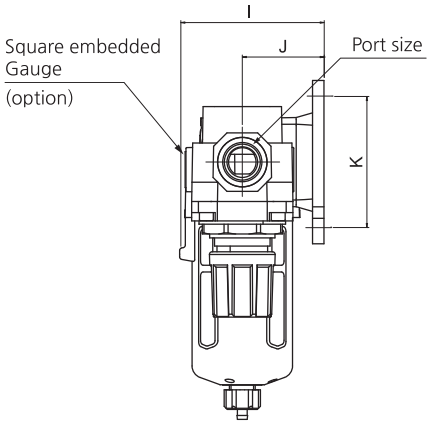
Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD300	 G40, R1/8	 Gs28

DIMENSIONS (mm)

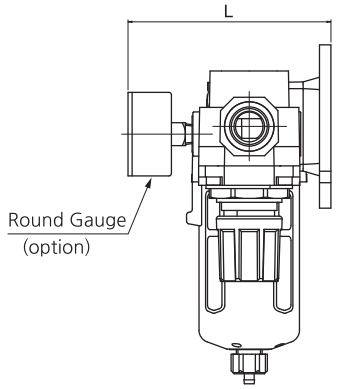
SAU 430

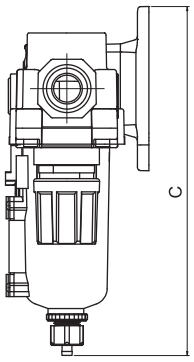
■ SAU430-□04□□-□
SAU430-□06□□-□



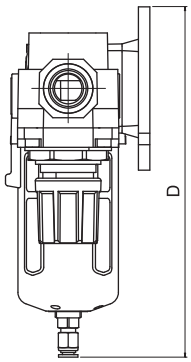


■ Dimensions of each model with an option attached

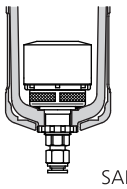




Metal bowl type



with Auto drain

Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD400	 G50, R1/4	 Gs28

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L
SAU430-04	1/2	150	207	212	214	75	11	9	50	87.5	50	80	127
SAU430-06	3/4	150	211	216	218	75	11	9	50	87.5	50	80	127

Air Unit (SAU240~440 Series)

Filter Regulator + Mist Separator

SAU 240

SAU 340

SAU 440

How to order

SAU 4 40 - ○ 04 DG - MeP

① Air Unit

② **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2

③ **Composition**
40 — Filter Regulator(SAW)
Mist Separator(SAFM)

④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port size**

기호	사이즈	몸체 사이즈		
		2	3	4
01	1/8	●		
02	1/4	●	●	
03	3/8		●	
04	1/2			●
06	3/4			●

⑥ **Accessory(Optional)**
Nil - None gauge / Manual Drain
D - Auto Drain

Symbol	Description	Body		
		2	3	4
D	One-touch fitting type	●	●	●
Dn	Nipple(PT1/8) type	-	●	●
Df	SAW,SAFM200 Float type	●	-	-

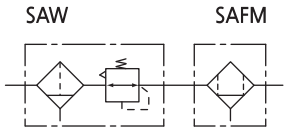
주) 1. SAW, SAFM200 are differential pressure type.
2. SAW, SAFM300~400 are float type.

G - Gauge

G	Round type gauge
Gs	Square embedded type

⑦ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol



Specification

Composition	Filter Regulator + Mist Separator
Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAW)	0.5~8.5bar (0.05~0.85MPa)
Filtration	SAW:10μm + SAFM:0.1μm
Bowl material(SAW, SAFM)	Poly-carbonate (option: ALDC)
Construction(SAW)	Relief type

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

④ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

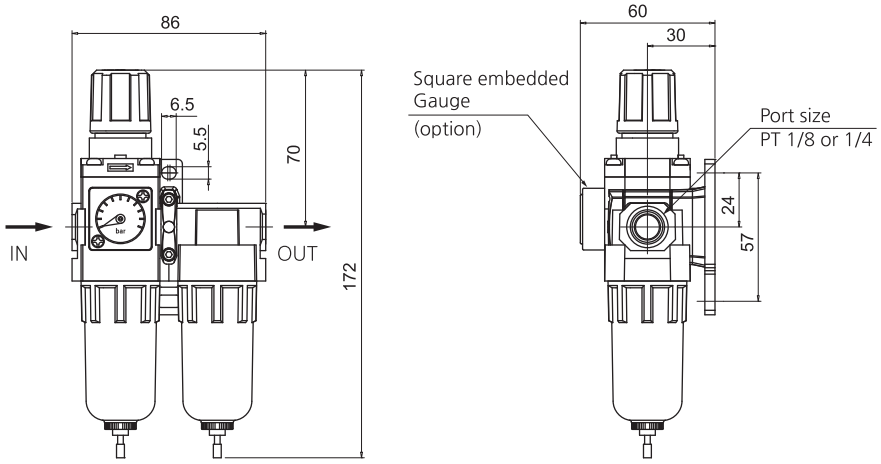
⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

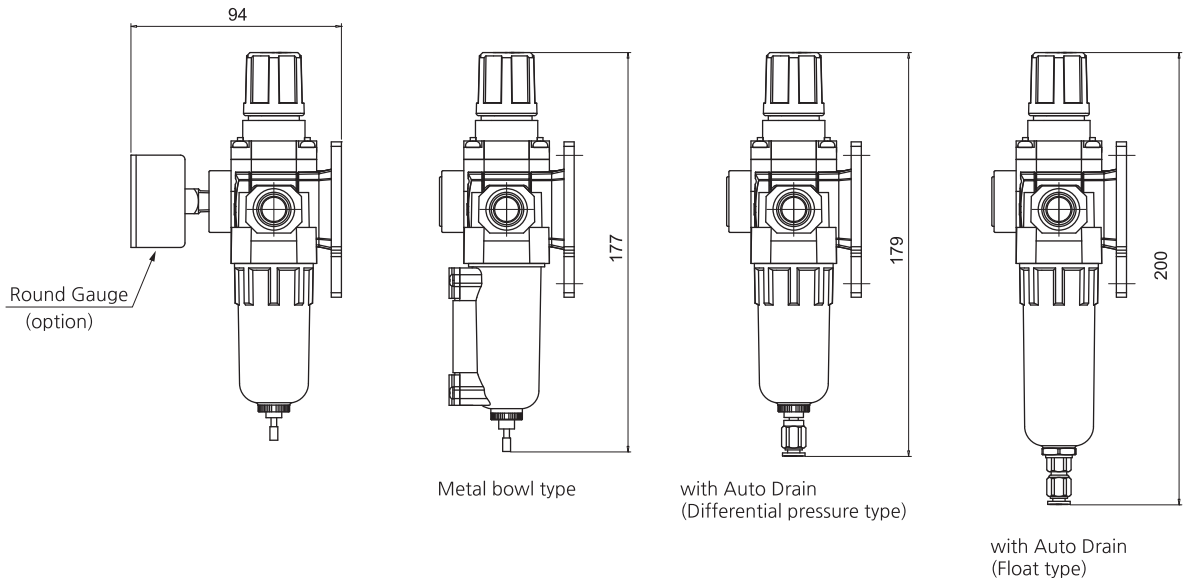
DIMENSIONS (mm)

SAU 240

■ SAU240-□02□□-□



■ Dimensions of each model with an option attached



Metal bowl type

with Auto Drain
(Differential pressure type)

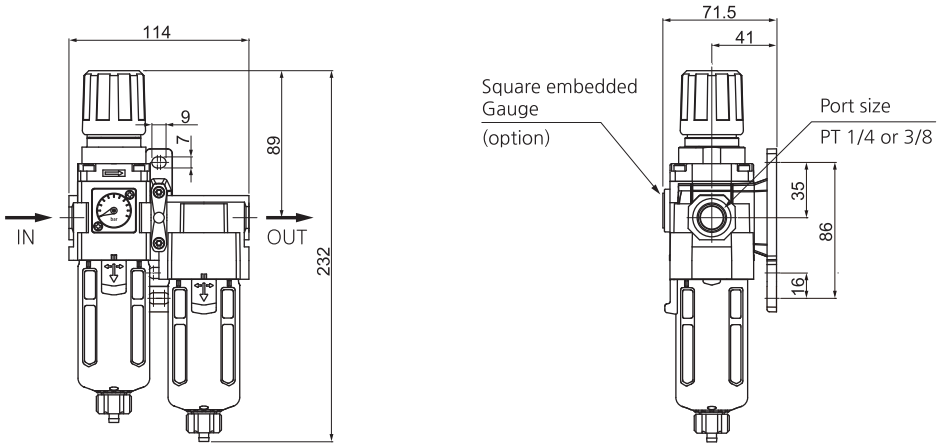
with Auto Drain
(Float type)

Option	Auto Drain		Gauge	
	D : Differential pressure type	Df : Float type	G : Round type	Gs : Square embedded type
Model		SAD200	G40, R1/8	Gs28

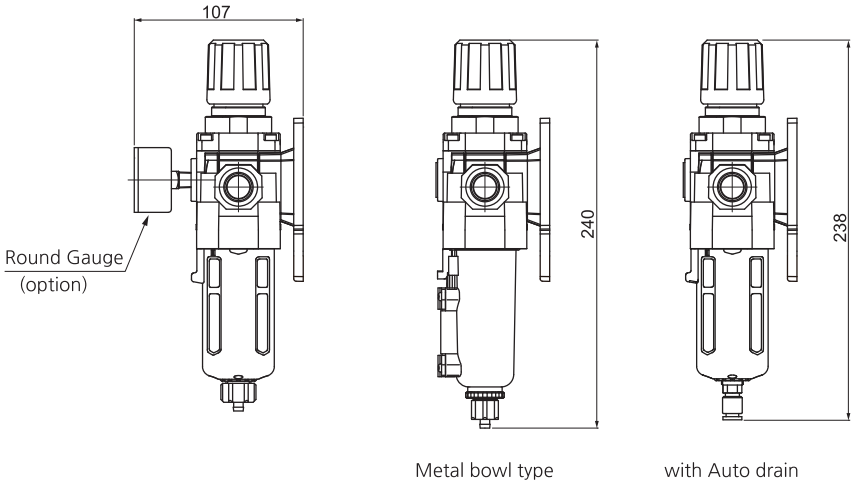
DIMENSIONS (mm)

SAU 340

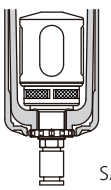
■ SAU340-□03□□-□



■ Dimensions of each model with an option attached



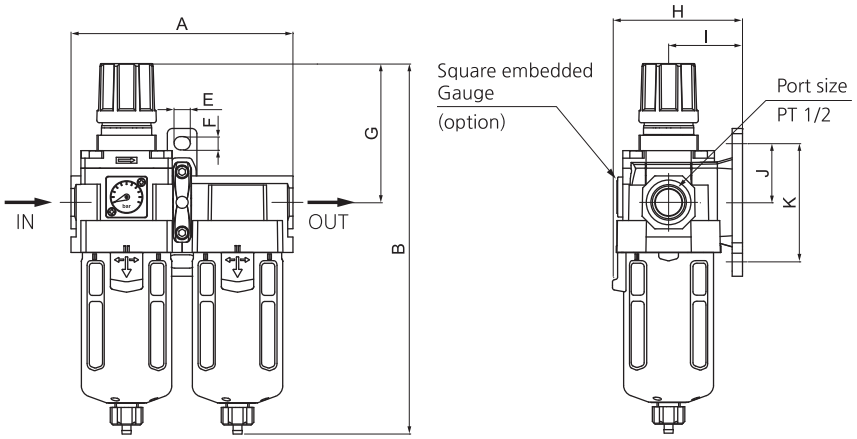
Metal bowl type with Auto drain

Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD300	 G40, R1/8	 Gs28

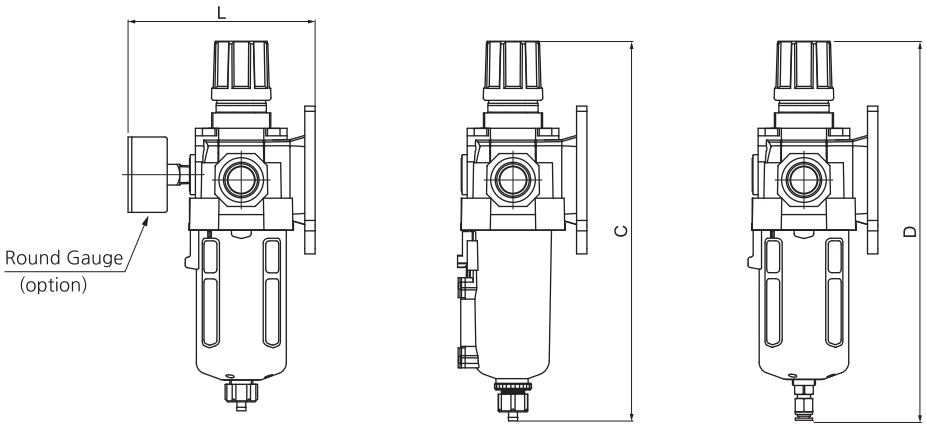
DIMENSIONS (mm)

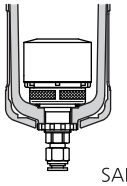
SAU 440

■ SAU440-□04(06)□□-□



■ Dimensions of each model with an option attached



Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD400	 G50, R1/4	 Gs28

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L
SAU420-04	1/2	150	251	254	258	11	9	94	87.5	50	40	80	127
SAU420-06	3/4	150	256	259	263	11	9	94	87.5	50	80	40	127

Air Unit (SAU250~450 Series)

Mist Separator + Micro Mist Separator + Air Regulator

SAU 350

SAU 450

How to order

SAU 4 50 - 04 DG - MeP

① Air Unit

② **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2

③ **Composition**
50 — Mist Separator(SAFM)
Micro Mist Separator(SAFD)
Regulator(SAR)

④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port size**

기호	사이즈	몸체 사이즈		
		2	3	4
01	1/8	●		
02	1/4	●	●	
03	3/8		●	
04	1/2			●
06	3/4			●

⑥ **Accessory(Optional)**
Nil - None gauge / Manual Drain
D - Auto Drain

Symbol	Description	Body		
		2	3	4
D	One-touch fitting type	●	●	●
Dn	Nipple(PT1/8) type	-	●	●
Df	SAFM, SAFD200 Float type	●	-	-

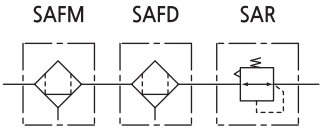
주) 1. SAFM, SAFD200 are differential pressure type.
2. SAFM, SAFD300~400 are float type.

G - Gauge

G	Round type gauge
Gs	Square embedded type

⑦ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
MeP - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol



Specification

Composition	Mist Separator + Micro Mist Separator + Regulator
Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAR)	0.5~8.5bar (0.05~0.85MPa)
Filtration	SAFM:0.1μm + SAFD:0.01μm
Bowl material(SAF, SAFM)	Poly-carbonate (option: ALDC)
Bowl Guard Material	Nylon
Construction(SAR)	Relief type

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

④ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

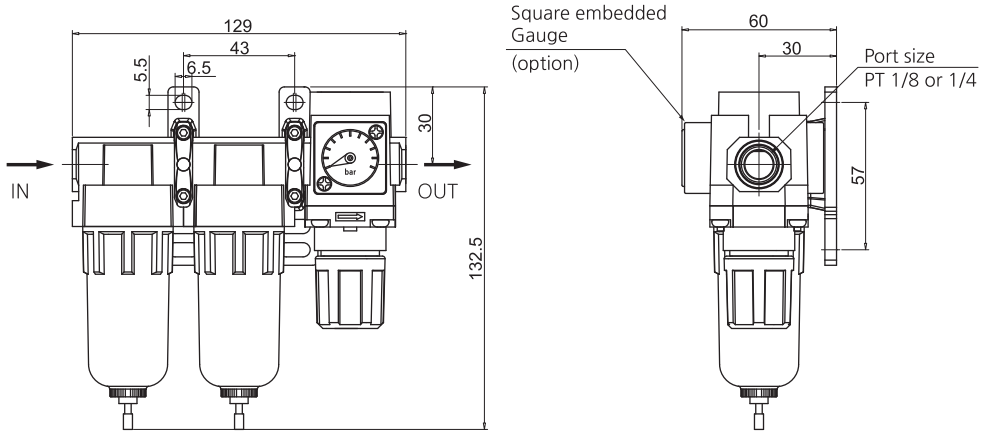
⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

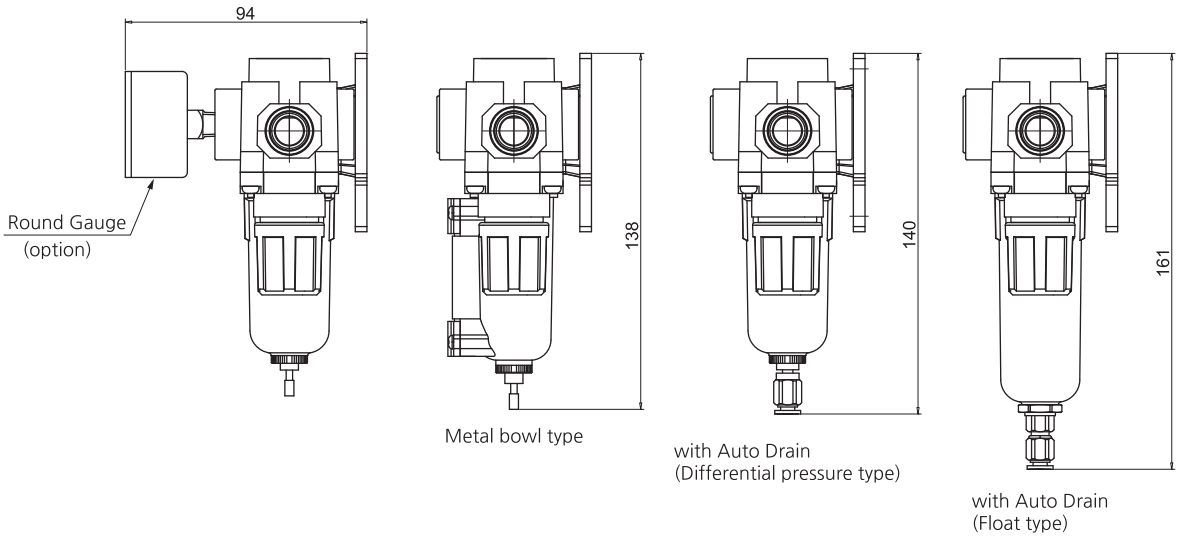
DIMENSIONS (mm)

SAU 250

■ SAU250-□02□□-□



■ Dimensions of each model with an option attached

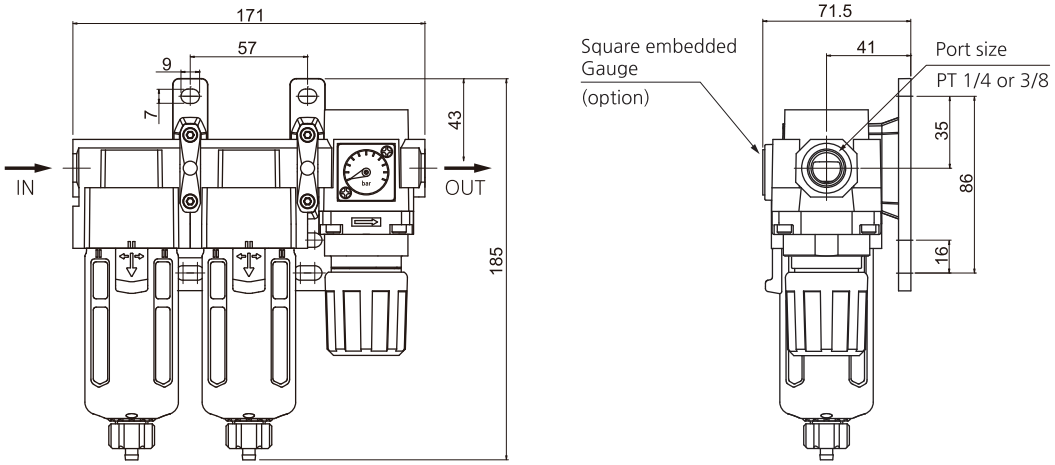


Option	Auto Drain		Gauge	
	D : Differential pressure type	Df : Float type	G : Round type	Gs : Square embedded type
Model		SAD200	G40, R1/8	Gs28

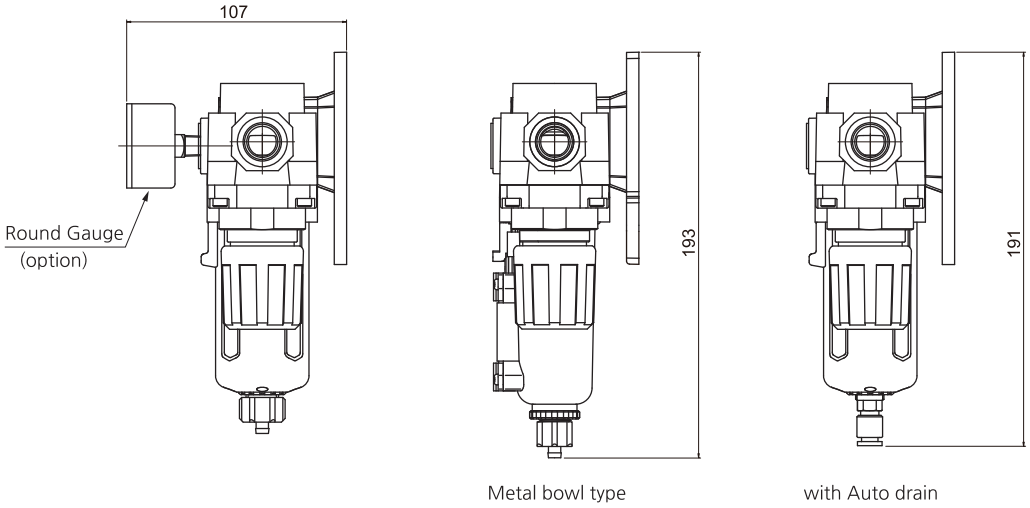
DIMENSIONS (mm)

SAU 350

■ SAU350-□03□□-□



■ Dimensions of each model with an option attached



Metal bowl type

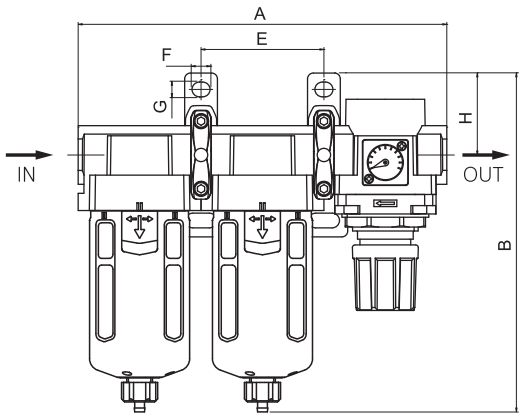
with Auto drain

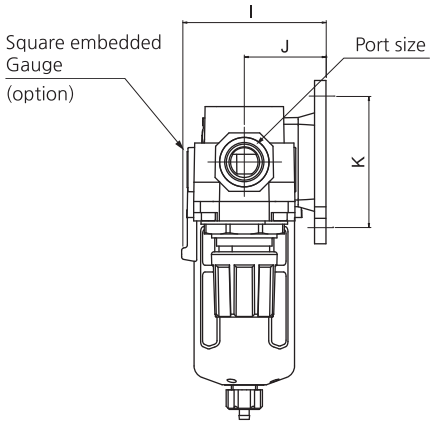
Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	SAD300	G40, R1/8	Gs28

DIMENSIONS (mm)

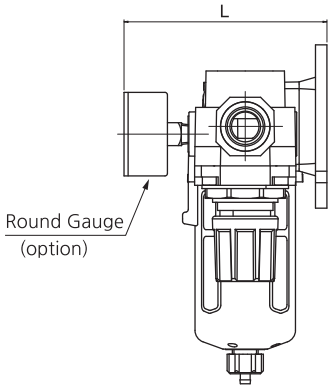
SAU 450

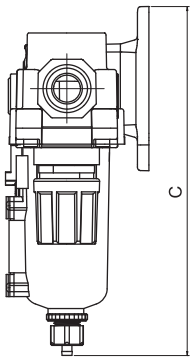
■ SAU450-□04□□-□
SAU450-□06□□-□



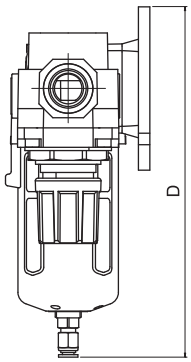


■ Dimensions of each model with an option attached

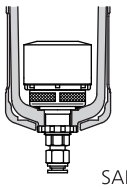




Metal bowl type



with Auto drain

Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD400	 G50, R1/4	 Gs28

품명	관접속구경	A	B	C	D	E	F	G	H	I	J	K	L
SAU450-04	1/2	150	207	212	214	75	11	9	50	87.5	50	80	127
SAU450-06	3/4	150	211	216	218	75	11	9	50	87.5	50	80	127

Air Unit (SAU260~460 Series)

Filter Regulator + Mist Separator + Micro Mist Separator

SAU 260

SAU 360

How to order

SAU 4 60 - ○ 04 DG - MeP

① Air Unit

② **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2

③ **Composition**
60 — Filter Regulator(SAW)
Mist Separator(SAFM)
Micro Mist Separator(SAFD)

④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port size**

기호	사이즈	몸체 사이즈		
		2	3	4
01	1/8	●		
02	1/4	●	●	
03	3/8		●	
04	1/2			●
06	3/4			●

⑥ **Accessory(Optional)**
Nil - None gauge / Manual Drain
D - Auto Drain

Symbol	Description	Body		
		2	3	4
D	One-touch fitting type	●	●	●
Dn	Nipple(PT1/8) type	-	●	●
Df	SAW,SAFM, SAFD200 Float type	●	-	-

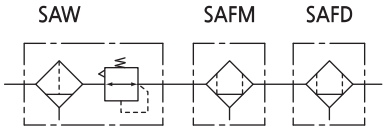
주) 1. SAW, SAFM, SAFD200 are differential pressure type.
2. SAW, SAFM, SAFD300~400 are float type.

G - Gauge

G	Round type gauge
Gs	Square embedded type

⑦ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol



Specification

Composition	Filter Regulator + Mist Separator + Micro Mist Separator
Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAW)	0.5~8.5bar (0.05~0.85MPa)
Filtration	SAW:10μm + SAFM:0.1μm + SAFD:0.01μm
Bowl material(SAW, SAFM,SAFD)	Poly-carbonate (option: ALDC)
Bowl Guard Material	Nylon
Construction(SAW)	Relief type

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

④ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

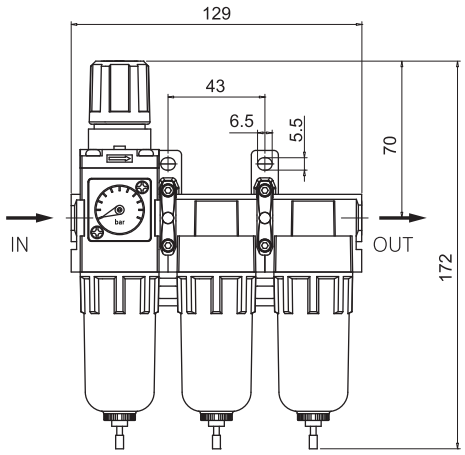
⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

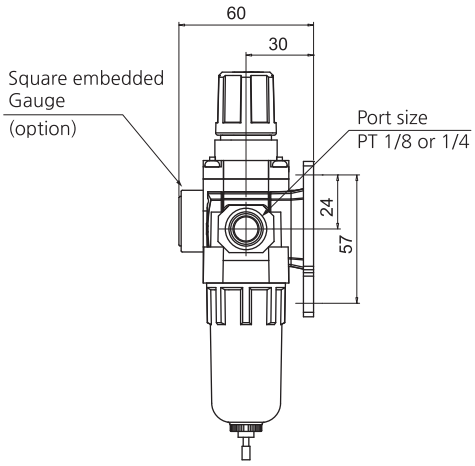
⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

DIMENSIONS (mm)

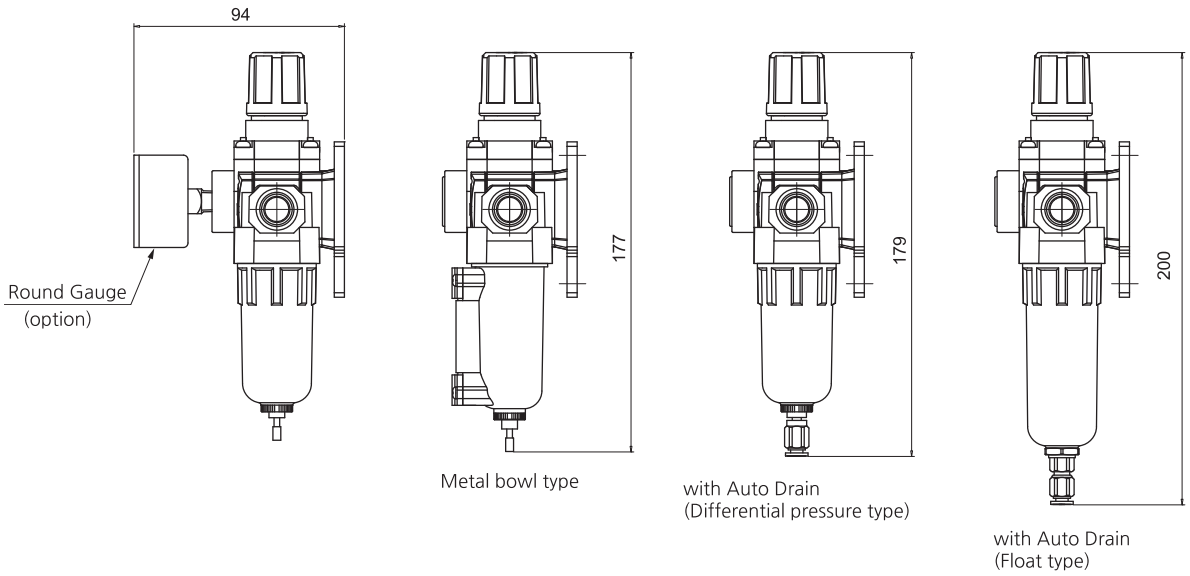
SAU 260

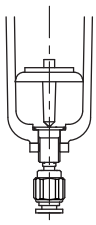
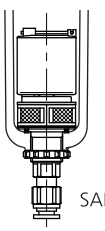
■ SAU260-□02□□-□





■ Dimensions of each model with an option attached

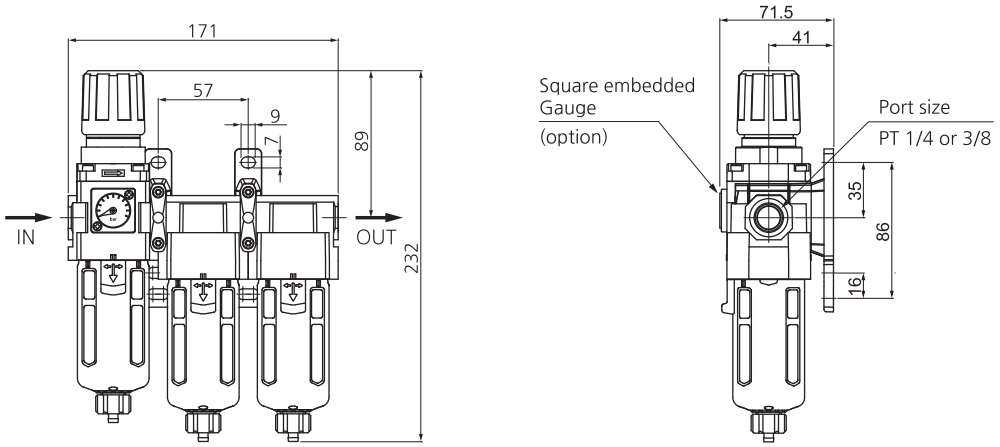


Option	Auto Drain		Gauge	
	D : Differential pressure type	Df : Float type	G : Round type	Gs : Square embedded type
Model		 SAD200	 G40, R1/8	 Gs28

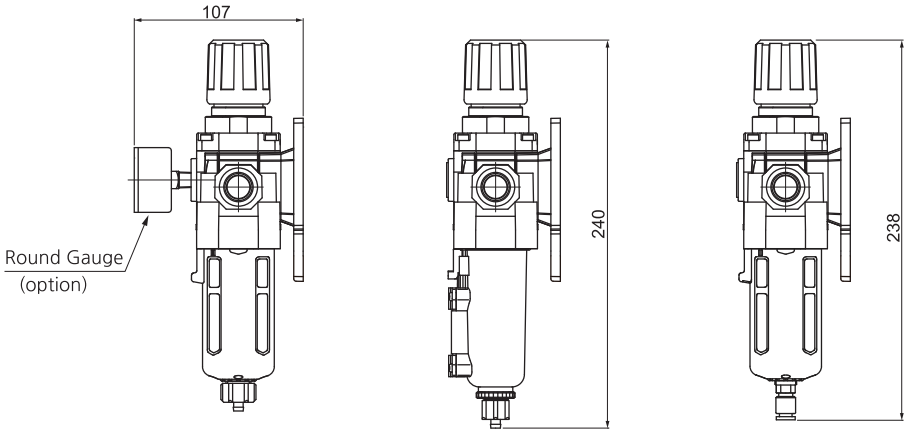
DIMENSIONS (mm)

SAU 360

■ SAU360-□03□□-□

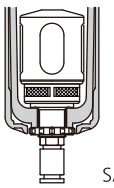


■ Dimensions of each model with an option attached



Metal bowl type

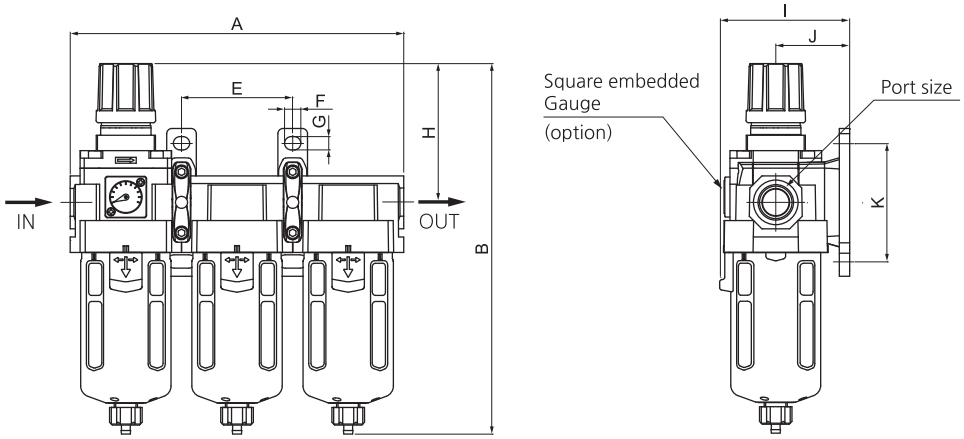
with Auto drain

Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD300	 G40, R1/8	 Gs28

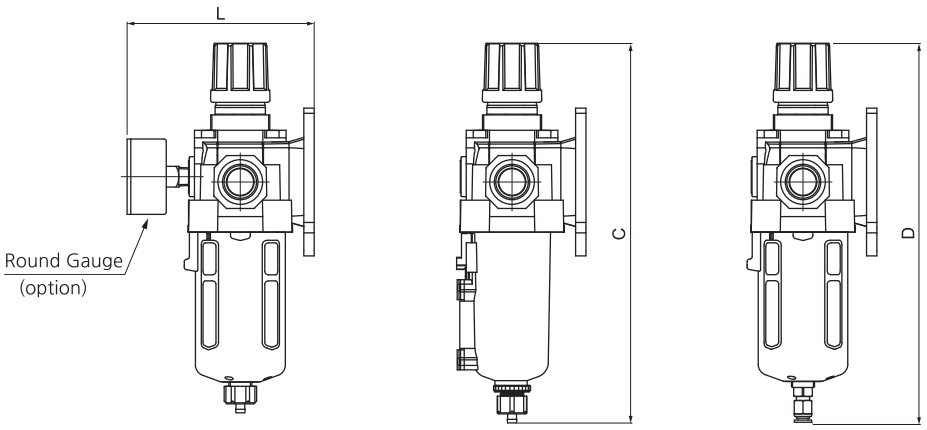
DIMENSIONS (mm)

SAU 460

■ SAU460-□04□□-□
SAU460-□06□□-□

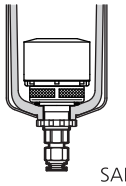


■ 기타 옵션부착시 치수



Metal bowl type

with Auto drain

Option	D : Auto Drain	Gauge	
		G : Round type	Gs : Square embedded type
Model	 SAD400	 G50, R1/4	 Gs28

품명	관접속구경	A	B	C	D	E	F	G	H	I	J	K	L
SAU460-04	1/2	225	251	254	258	75	11	9	94	87.5	50	80	127
SAU460-06	3/4	225	256	259	263	75	11	9	94	87.5	50	80	127

Large Flow Air Unit (SAU)

SAU800~900 / SAU820~920 Series

SAU800

SAU820

How to order

SAU 8 00 - 14 DG - MeP

① Air Unit

② **Body Size**
8 - 1 1/2
9 - 2

③ **Composition**
00 — Filter(SAF), Regulator(SAR), Lubricator(SAL)
20 — Filter(SAF), Regulator(SAR)

④ **Thread type**
무기호 - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port Size**

Symbol	Size	Body size	
		8	9
12	1 1/4	●	
14	1 1/2	●	
20	2		●

⑥ **Accessory(Optional)**
Nil - None Gauge / Manual Drain
D - Auto Drain

Symbol	Drain connector
D	One-touch fitting(Φ6mm)
Dn	Nipple(PT 1/8)

G - Gauge

⑦ **Bowl**
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAR)	0.5~8.5bar (0.05~0.85MPa)
Filtration(SAF)	5μm (option: 40)
Recommended oil(SAL)	Turbin oil (ISO VG32)
Construction(SAR)	Internal pilot relieving style (Pilot air is always bleeding.)
압력계 접속구경(SAR)	1/4

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

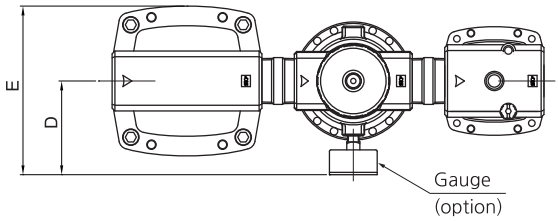
④ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

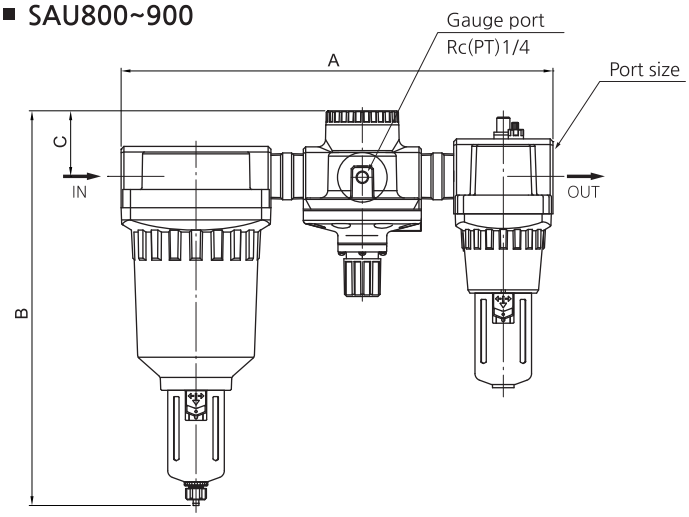
⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

DIMENSIONS (mm)

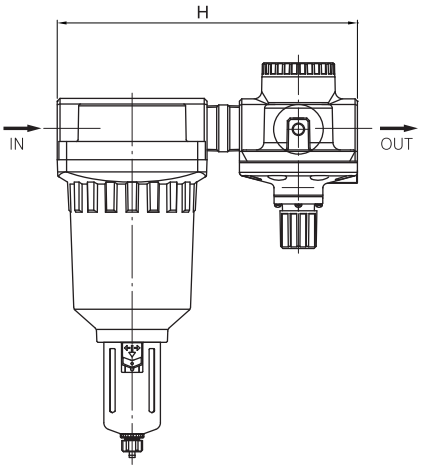
SAU 800~920

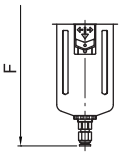


■ SAU800~900

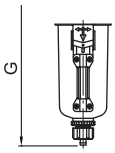


■ SAU820~920

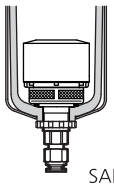




with Auto drain



Metal bolw type

Option	D : Auto Drain	G : Gauge
Model	 SAD400	 G50, R1/4

Model	Port size	A	B	C	D	E	F	G	H
SAU800 / SAU820	1 1/4, 1 1/2	462	415	68.5	103	183	422	417.7	321
SAU900 / SAU920	2	520	493.3	78	119	209	500.3	496	377

Air Unit for High Pressure (SAU)

SAU220H~620H

SAU220H

SAU320H

SAU420H

SAU620H

How to order

SAU 4 20 H - ○ 04 G

① Air Unit

② **Body Size**
- 2 - 1/4
- 3 - 3/8
- 4 - 1/2, 3/4
- 6 - 1

③ **Composition**
- 20 — Filter(SAF)
- 20 — Regulator(SAR)

④ for High pressure

⑤ **Thread type**
- Nil - Rc(PT)
- N - NPT
- G - G(PF)

⑥ **Port Size**

기호	사이즈	몸체 사이즈			
		2	3	4	6
01	1/8	●			
02	1/4	●	●		
03	3/8		●		
04	1/2			●	
06	3/4			●	●
10	1				●

⑦ **Accessory(Optional)**
- Nil - None gauge
- G - Gauge

Specification

Fluid	Compressed Air
Max. operating pressure	20bar (2MPa)
Max. supply pressure	30bar (3MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range(SAR, SAW)	1~17bar (0.1~1.7MPa)
Filtration(SAF, SAW)	5μm (option: 2, 10, 20, 40)
Bowl material(SAF)	ALDC
Construction(SAR)	Relief type

Precautions

① Do not operate at pressures or temperatures, etc., beyond the range of specifications, as this can cause damage or malfunction. (Refer to the specifications.)

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ If condensation in the drain bowl is not emptied on a regular basis, the bowl will overflow and allow the condensation to enter the compressed air lines. It causes malfunction of pneumatic equipment. Remove drainage from air filters regularly.

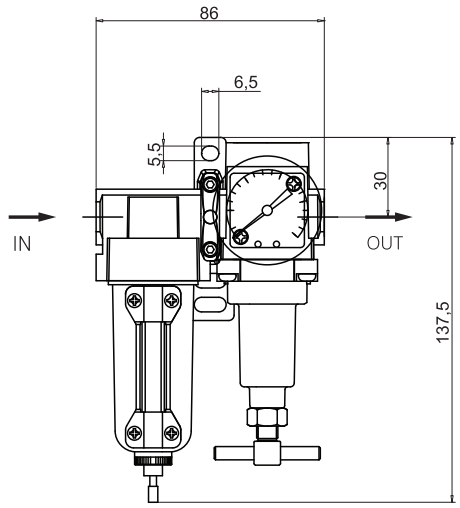
④ Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

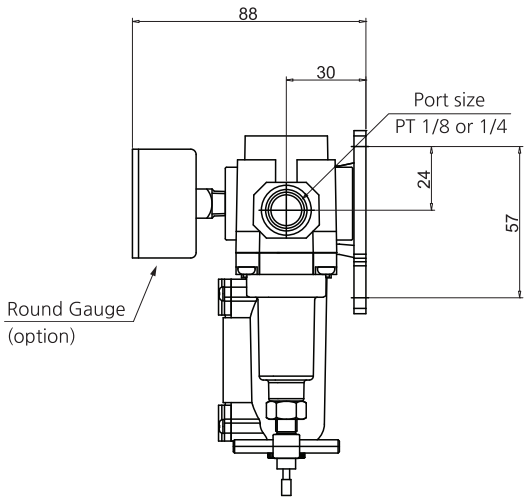
⑤ To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

⑥ Avoid riser piping and branch lines on the outlet side to prevent inferior lubrication.

DIMENSIONS (mm)

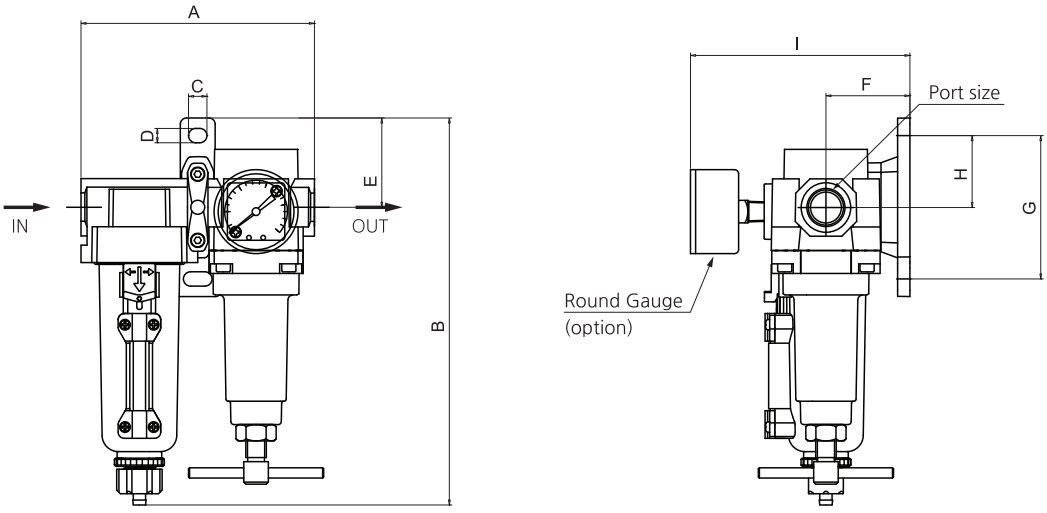
SAU 200H





DIMENSIONS (mm)

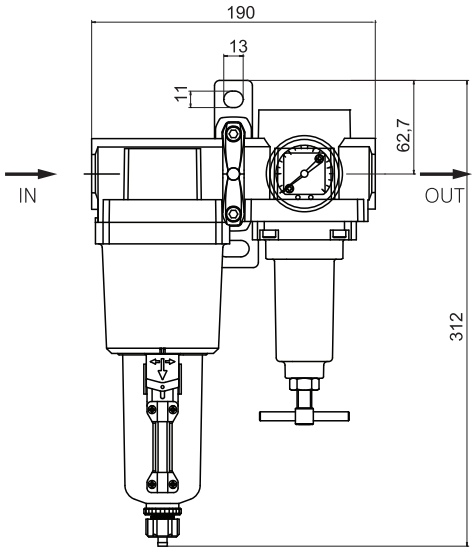
SAU 320H~420H

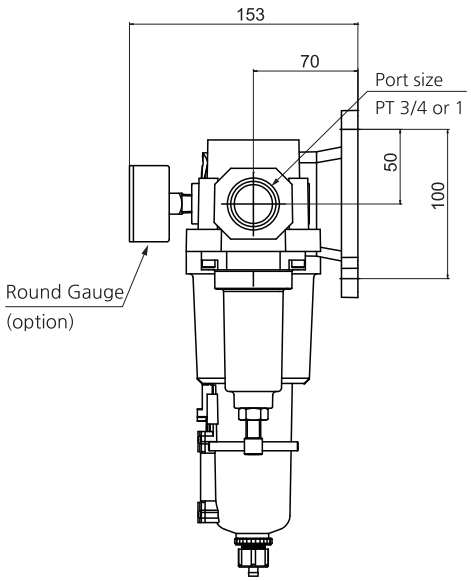


Model	Port size	A	B	C	D	E	F	G	H	I
SAU320H-03	1/4, 3/8	114	178	9	7	43	41	70	35	107
SAU420H-04	1/2	150	210	11	9	50	50	80	40	127
SAU420H-06	3/4	150	212	11	9	50	50	80	40	127

DIMENSIONS (mm)

SAU 620H





Filter Regulator (SAW)

SAW100~600 Series

- SAW series are compact type assemblies of a filter and regulator.

SAW100 SAW200 SAW300 SAW400 SAW600

How to order

SAW 4 00 - ( ) 04 BDG - MeP

① Filter regulator

② **Body Size**
1 - 1/8
2 - 1/4
3 - 3/8
4 - 1/2
6 - 1

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

④ **Port Size**

Symbol	Size	Body size				
		1	2	3	4	6
M5	M5	●				
01	1/8		●			
02	1/4		●	●		
03	3/8			●		
04	1/2				●	
06	3/4				●	●
10	1					●

⑤ **Accessory(Optional)**
Nil - None Bracket / Manual Drain / None Gauge
B - Bracket
D - Auto Drain

Symbol	Description	Body				
		1	2	3	4	6
D	One-touch fitting type	●	●	●	●	●
Dn	Nipple(PT1/8) type	-	-	●	●	●
Df	SAW200 Float type	-	●	-	-	-

Note) 1. SAW100 and SAW200 are differential pressure type.
2. SAW300~600 are float type.

G - Gauge

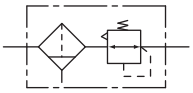
G	Round type gauge
Gs	Square embedded type

Note) SAW100 is available only round type gauge.

⑦ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol

SAW



Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Regulating range	0.5~8.5bar (0.05~0.85MPa)
Filtration	10μm (option: 2, 5, 20, 40)
Bowl material	Poly-carbonate (option: ALDC)
Bowl Guard Material	Nylon
Construction	Relief type

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

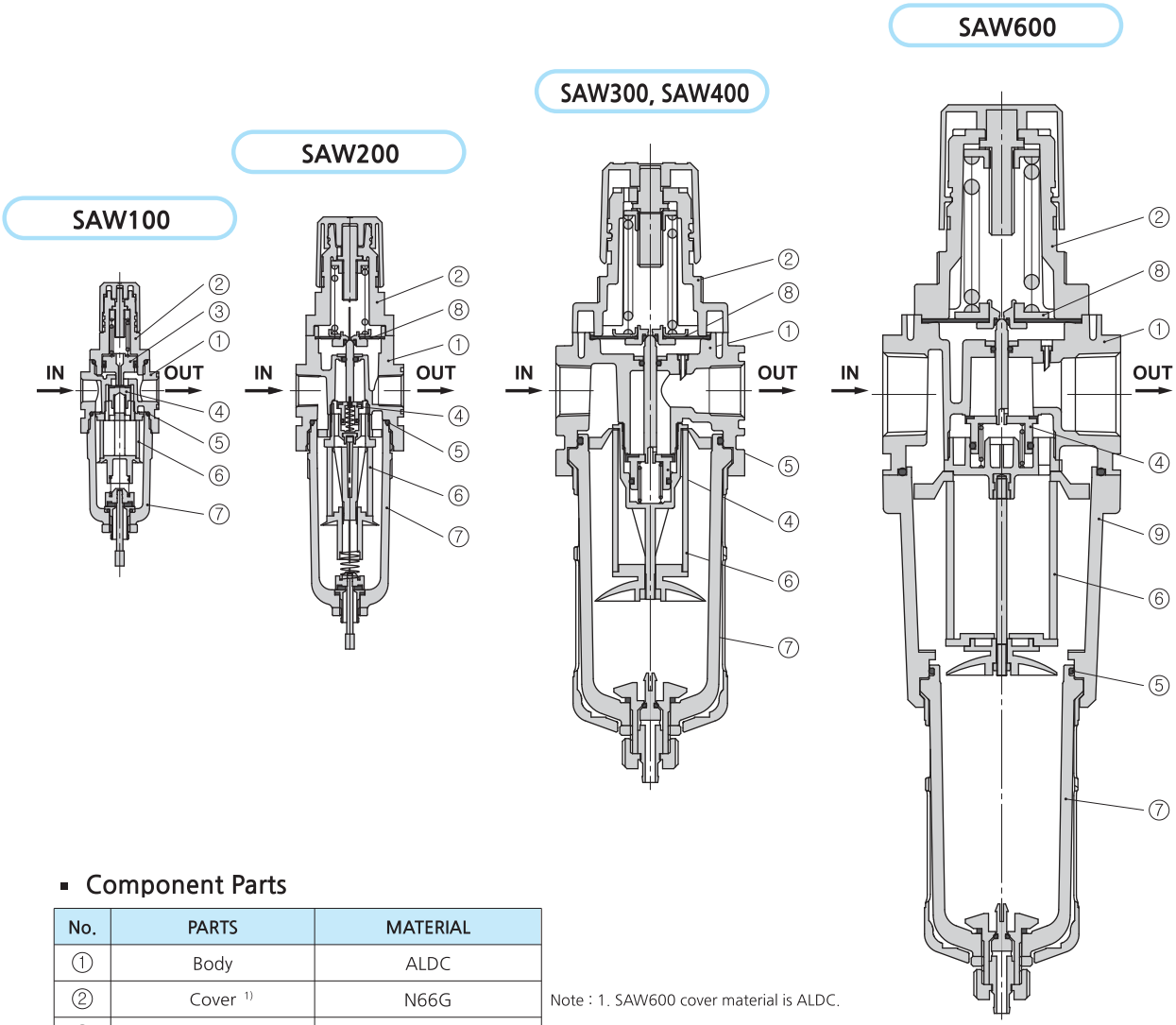
③ Please contact SKP when a circuit requires the use of a regulator having relief sensitivity with high precision and setting accuracy.

④ Residual pressure release (outlet pressure release) is not complete by releasing the inlet pressure. To release residual pressure, select a model with a back flow mechanism.

⑤ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

⑥ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

STRUCTURE / PARTS



▪ Component Parts

No.	PARTS	MATERIAL
①	Body	ALDC
②	Cover [1)]	N66G
③	Piston [2)]	N66G
④	Check valve Ass'y	Brass, NBR
⑦	Bowl Ass'y [3)]	PC & Nylon
⑧	Diaphragm Ass'y	NBR
⑨	Housing	ALDC

Note : 1. SAW600 cover material is ALDC.

Note : 2. The SAW100 and SAW200 are a piston type. Assembly of a piston and a seal.
3. Bowl Ass'y for the SAW300 to SAW600 models comes with a bowl guard (steel band material).

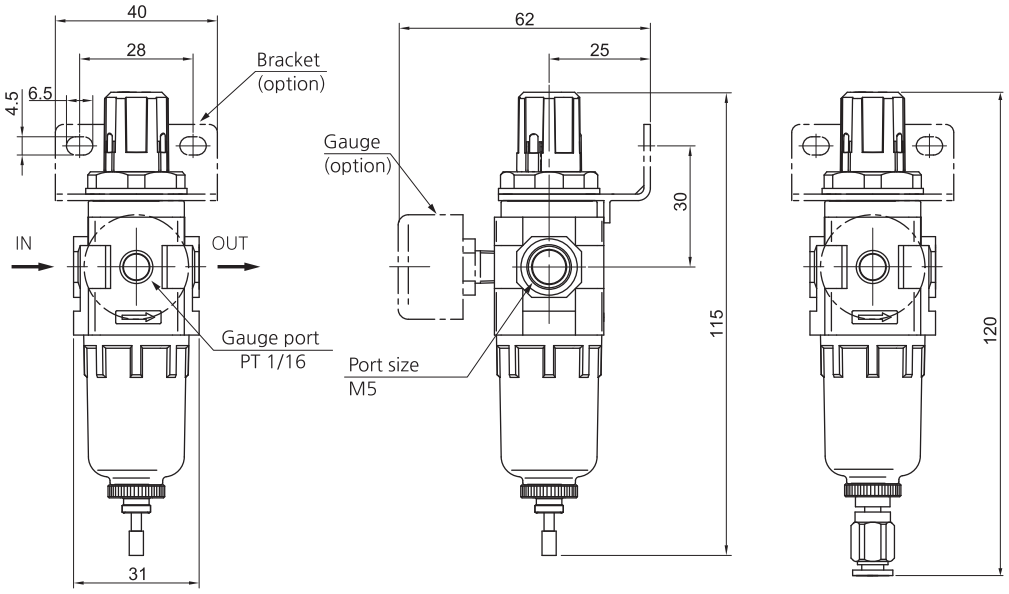
▪ Replacement Parts

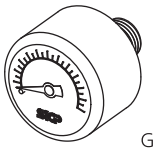
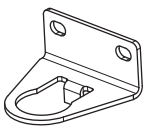
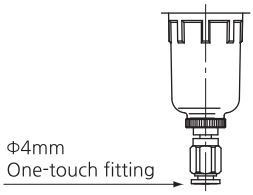
No.	PARTS	MATERIAL	Part no.				
			SAW100	SAW200	SAW300	SAW400	SAW600
⑤	O-ring	NBR	S22	U024	38x2	U137	U137
⑥	Element	-	W100-EL	W200-EL	W300-EL	W400-EL	W600-EL

DIMENSIONS (mm)

SAW 100

■ SAW100-□01(M5)□□

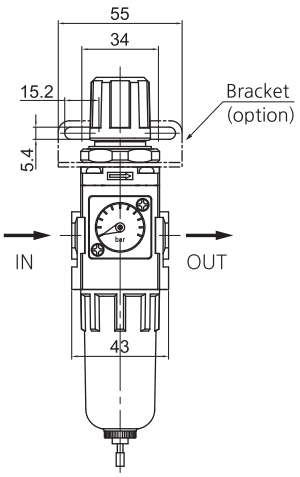


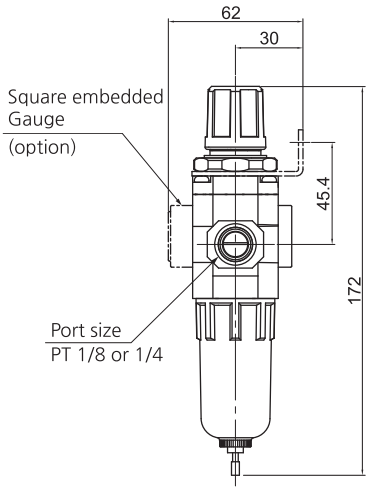
Option	G : Gauge	B : Bracket	D : Auto Drain (Differential pressure type)
Model	 G25, R1/16	 B120	 Φ4mm One-touch fitting

DIMENSIONS (mm)

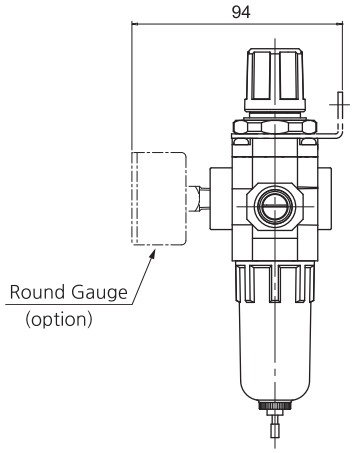
SAW 200

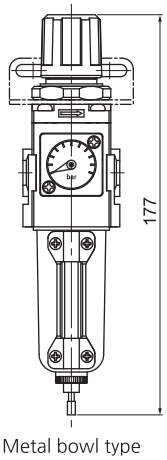
■ SAW200-□02□□□-□



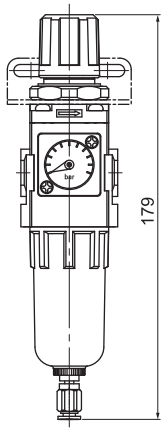


■ Dimensions of each model with an option attached

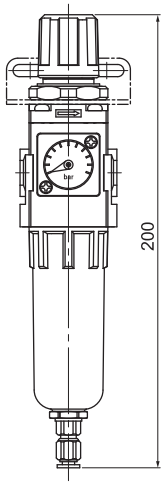




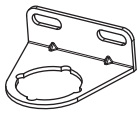
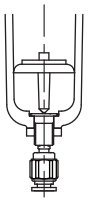
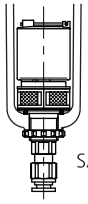
Metal bowl type



with Auto Drain
(Differential pressure type)



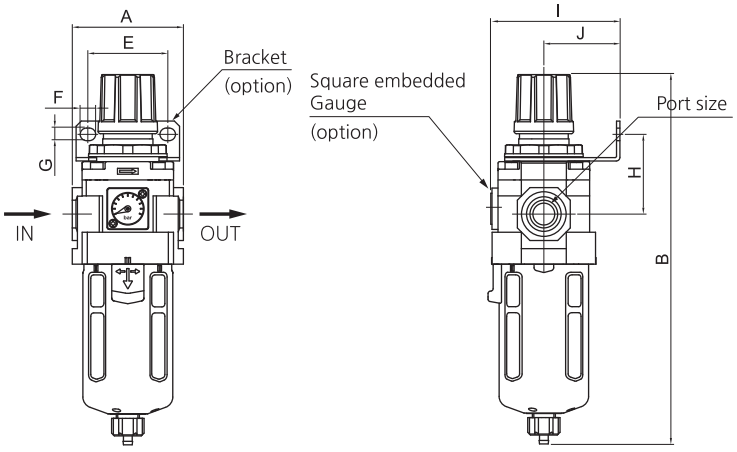
with Auto Drain
(Float type)

Option	B : Bracket	Gauge		Auto Drain	
		Gs : Square embedded	G : Round type	D : Differential pressure	Df : Float type
Model	 B220	 Gs28	 G40, R1/8		 SAD200

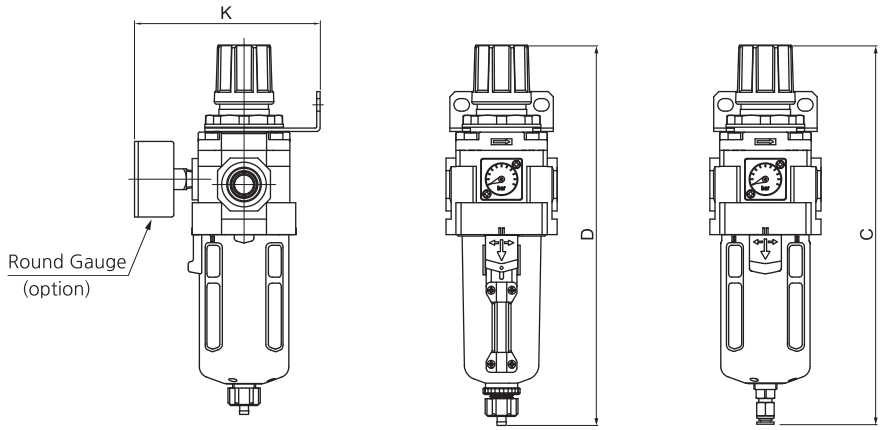
DIMENSIONS (mm)

SAW 300~400

■ SAW300-□03□□□-□
SAW400-□04(06)□□□-□

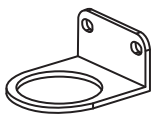
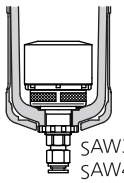


■ Dimensions of each model with an option attached



Metal bowl type

with Auto drain

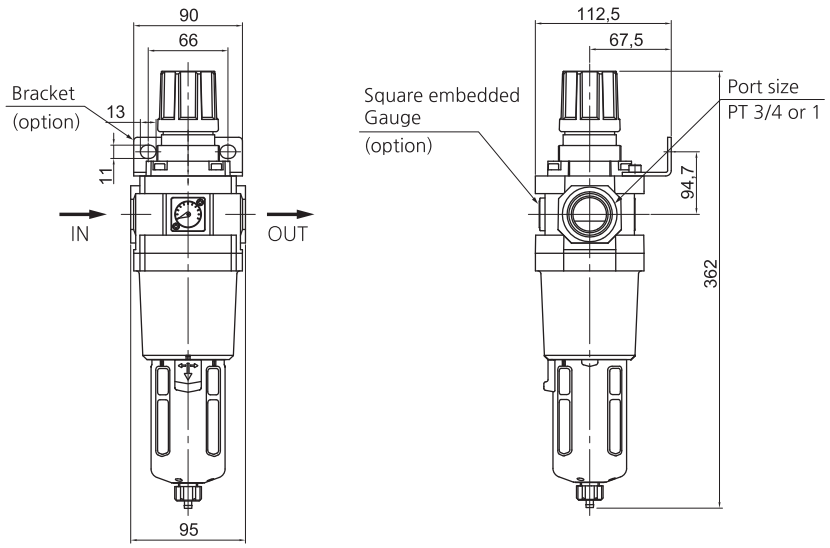
Option	B : Bracket	D : Auto Drain	Gauge	
			G : Round type	Gs : Square embedded type
Model	 SAW300 : B320 SAW400 : B420	 SAW300 : SAD300 SAW400 : SAD400	 SAW300 : G40, R1/8 SAW400 : G50, R1/4	 Gs28

Model	Port size	A	B	C	D	E	F	G	H	I	J	K
SAW300-03	1/4, 3/8	57	220	226	228	40	8	6.5	45.7	72	41	107
SAW400-04	1/2	75	251	258	256	54	10.5	8.5	54	87	50	127
SAW400-06	3/4	75	256.5	262.5	259	54	10.5	8.5	56.5	87	50	127

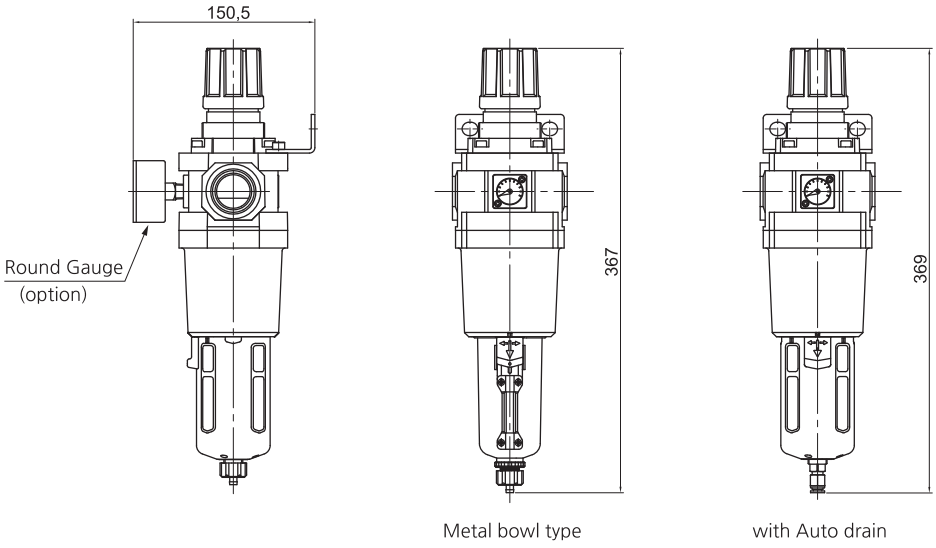
DIMENSIONS (mm)

SAW 600

■ SAW600-□06(10)□□□-□

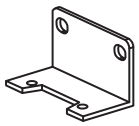
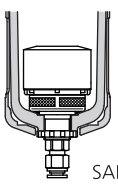


■ 기타 옵션부착시 치수



Metal bowl type

with Auto drain

Option	B : Bracket	D : Auto Drain	Gauge	
			G : Round type	Gs : Square embedded type
Model	 B620	 SAD400	 G50, R1/4	 Gs28

Filter regulator for High Pressure (SAW)

SAW200H~600H Series

SAW200H

SAW300H

SAW400H

SAW600H

How to order

SAW 4 00 H - 04 BG

① **Filter regulator**

② **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2, 3/4
6 - 1

③ **for High pressure**

④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

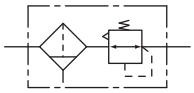
⑤ **Port size**

Symbol	Size	Body size			
		2	3	4	6
01	1/8	●			
02	1/4	●	●		
03	3/8		●		
04	1/2			●	
06	3/4			●	●
10	1				●

⑥ **Accessory(Optional)**
Nil - None Bracket / Manual Drain / None Gauge
B - Bracket
D - Auto Drain

Symbol

SAW



Specification

Fluid	Compressed Air			
Max. operating pressure	30bar (3MPa)			
Max. supply pressure	20bar (2MPa)			
Ambient and Media temp.	-5~60℃ (No freezing)			
Regulating range	1~17bar (0.1~1.7MPa)			
Gauge Port size	SAW200H	SAW300H	SAW400H	SAW600H
	1/8		1/4	
Construction	Relief type			

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

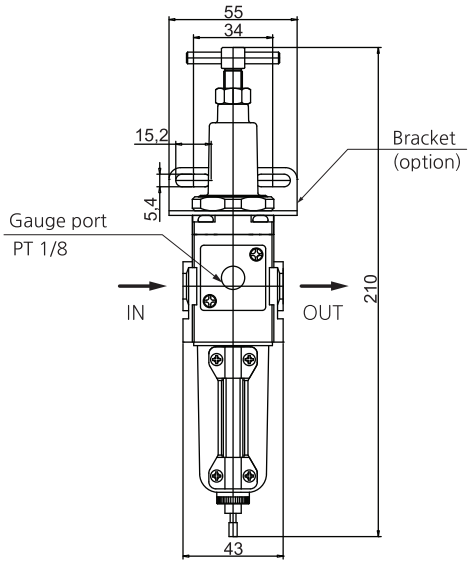
③ Please contact SKP when a circuit requires the use of a regulator having relief sensitivity with high precision and setting accuracy.

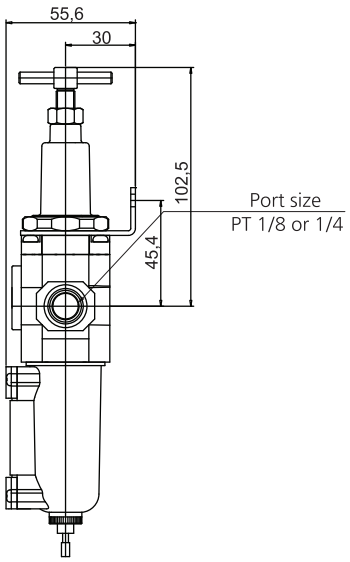
④ Residual pressure release (outlet pressure release) is not complete by releasing the inlet pressure. To release residual pressure, select a model with a back flow mechanism.

DIMENSIONS (mm)

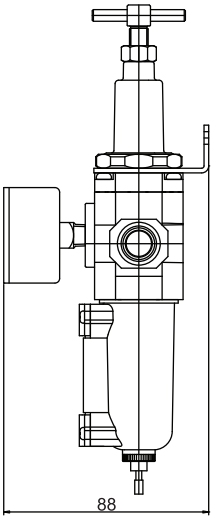
SAW 200H

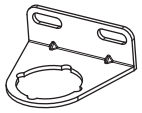
■ SAW200H-□02□□





■ Dimensions of each model with an option attached

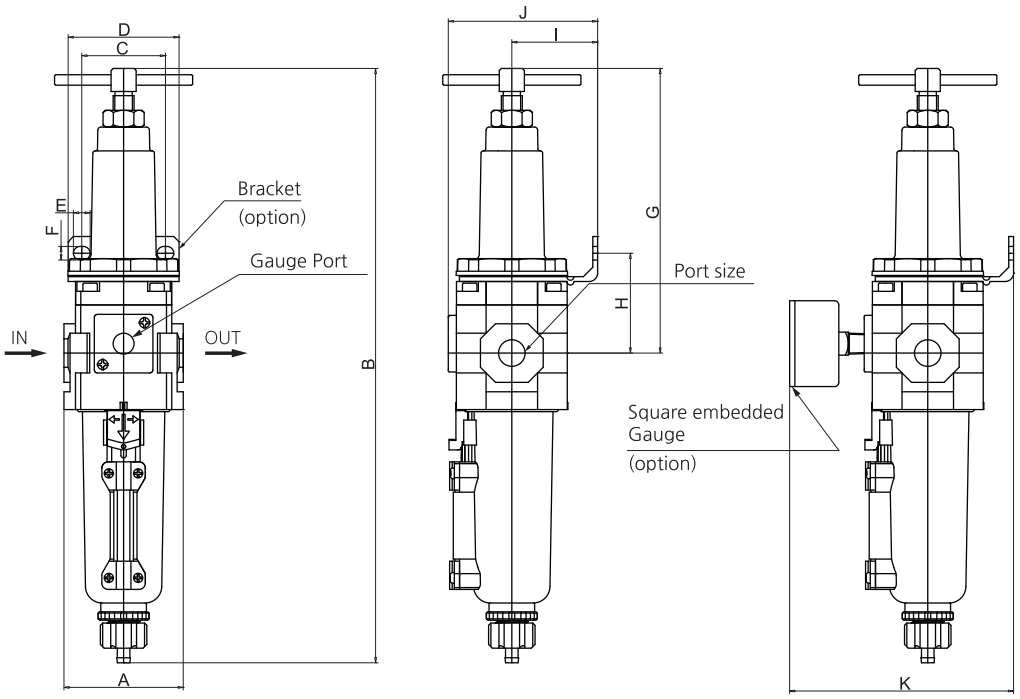


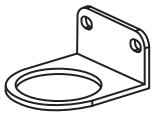
Option	G : Round type	B : Bracket
Model	 Gh40, R1/8	 B220

DIMENSIONS (mm)

SAW 300H~400H

■ SAW300H□-□03□□
SAW400H□-□04(06)□□



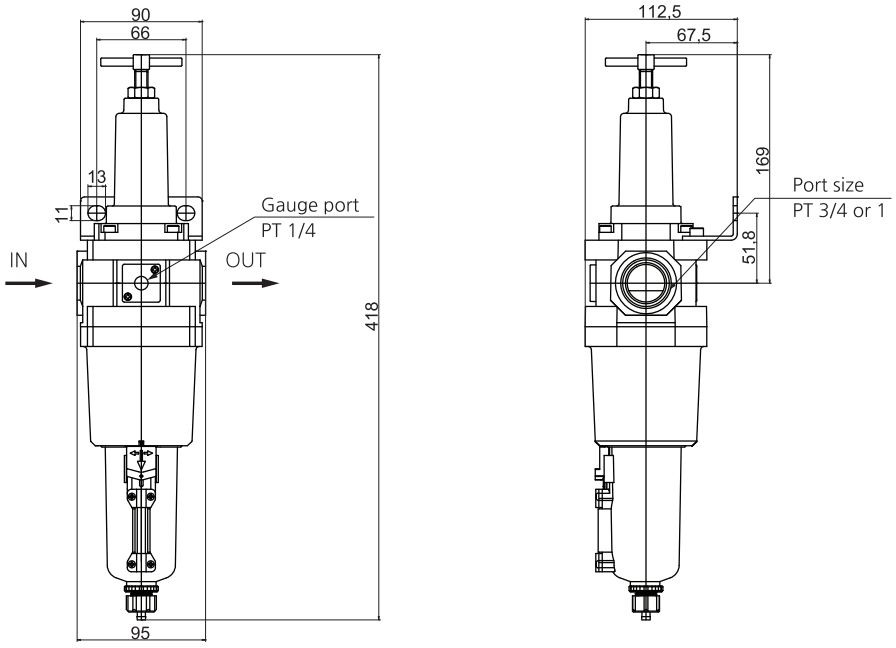
옵션	G : Round type	B : Bracket
품명	 SAW300H : Gh40, R1/8 SAW400-04(06)H : Gh50, R1/4	 SAW300H : B320 SAW400-04(06)H : B420

Model	Port size	A	B	C	D	E	F	G	H	I	J	K
SAW300H-03	1/4, 3/8	57	284	40	53	8	6.5	136	47.7	41	71.4	107
SAW400H-04	1/2	75	314	54	70	10.5	8.5	155	52.9	50	85	122
SAW400H-06	3/4	75	320	54	70	10.5	8.5	157.5	55.4	50	85	122

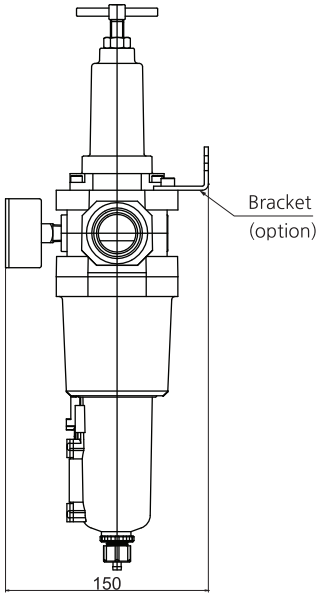
DIMENSIONS (mm)

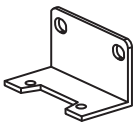
SAW 600H

■ SAW600H□-□06□□
SAW600H□-□10□□



■ Dimensions of each model with an option attached



Option	G : Round type	B : Bracket
Model	 Gh50, R1/4	 B600

Mist Separator Regulator (SAWM)
Micro Mist Separator Regulator (SAWD)

SAWM200~400 Series
SAWD200~400 Series

- SAWM series are compact type assemblies of a mist separator and a regulator.
- SAWD series are compact type assemblies of a micro mist separator and a regulator.

SAWD300

SAWM400

SAWD400

How to order

SAWM **4** **00** – **○** **04** **BDG** – **MeP**
Mist Separator Regulator

SAWD **4** **00** – **○** **04** **BDG** – **MeP**
Micor Mist Separator Regulator

① **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2

② **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

③ **Port Size**

기호	사이즈	몸체 사이즈		
		2	3	4
01	1/8	●		
02	1/4	●	●	
03	3/8		●	
04	1/2			●

④ **Accessory(Optional)**
Nil - None Bracket / Manual Drain / None Gauge
B - Bracket
D - Auto Drain

Symbol	Description	Body		
		2	3	4
D	One-touch fitting type	●	●	●
Dn	Nipple(PT1/8) type	-	●	●
Df	SAWM, SAWD200 Float type	●	-	-

주) 1. SAWM, SAWD200 are differential pressure type.
2. SAWM, SAWD300~400 are float type.

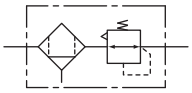
G - Gauge

G	Round type gauge
Gs	Square embedded type

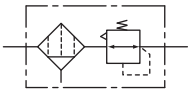
⑤ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol

SAWM



SAWD



Specification

Fluid		Compressed Air
Max. operating pressure		10bar (1.0MPa)
Max. supply pressure		15bar (1.5MPa)
Ambient and Media temp.		-5~60℃ (No freezing)
Regulating range		0.5~8.5bar (0.05~0.85MPa)
Filtration	SAWM	0.1μm
	SAWD	0.01μm
Bowl material		Poly-carbonate (option: ALDC)
Bowl Guard Material		Nylon
Construction		Relief type

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

③ Residual pressure release (outlet pressure release) is not complete by releasing the inlet pressure. To release residual pressure, select a model with a back flow mechanism.

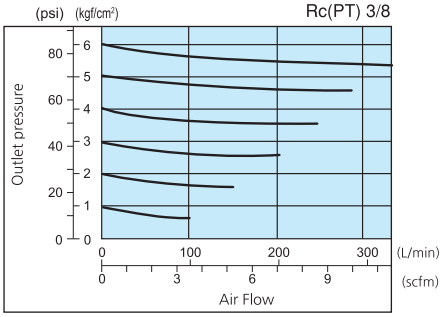
④ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

⑤ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

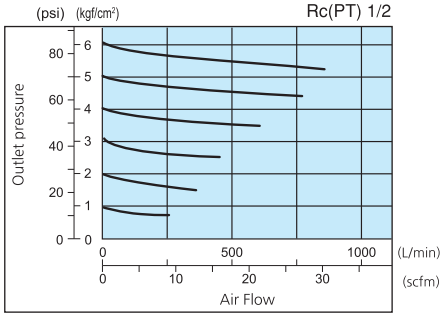
FLOW CHARACTERISTICS

Inlet pressure 7kg/cm²

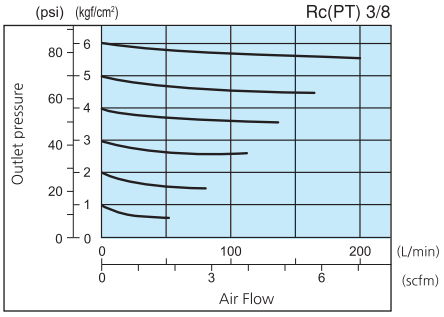
SAWM 300



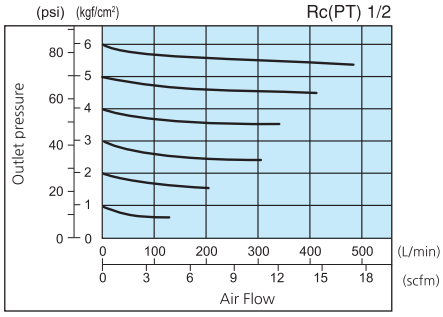
SAWM400



SAWD 300



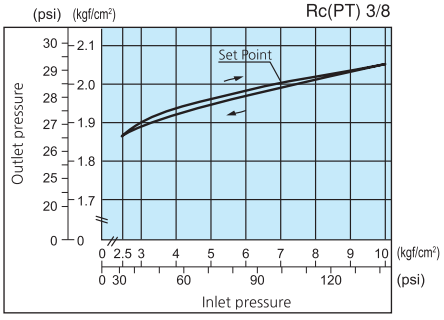
SAWD 400



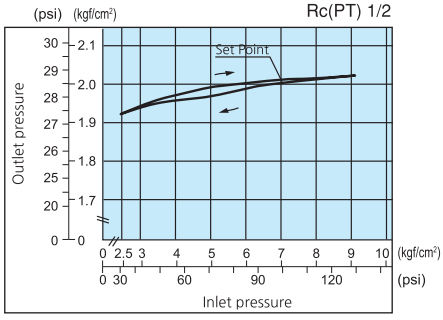
PRESSURE CHARACTERISTICS

Inlet pressure 7kg/cm², Outlet pressure 2kg/cm², Flow 20L/min(ANR)

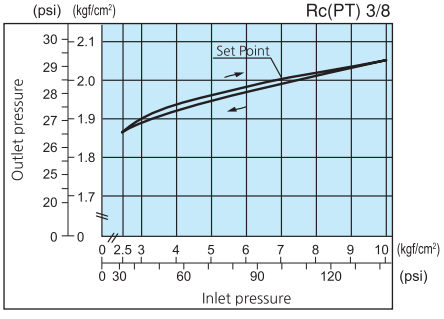
SAWM 300



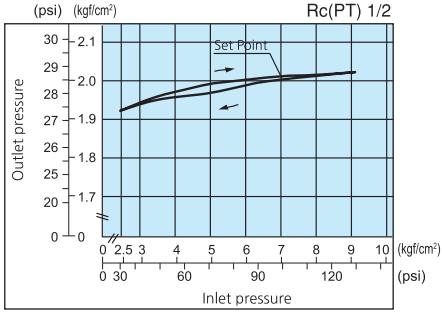
SAWM 400



SAWD 300

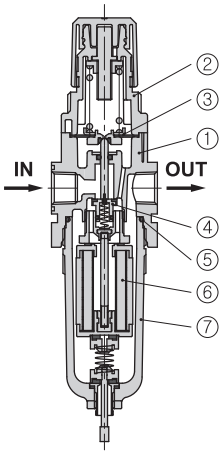


SAWD 400

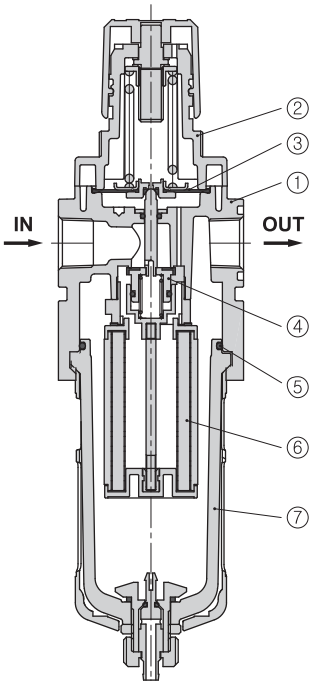


STRUCTURE / PARTS

SAWM 200
SAWD 200



SAWM 300 to 400
SAWD 300 to 400



▪ Component Parts

No.	PARTS	MATERIAL
①	Body	ALDC
②	Cover	N66G
③	Diaphragm Ass'y	NBR
④	Check valve Ass'y	Brass, NBR
⑦	Bowl Ass'y [1)]	PC & Nylon

1) Bowl Ass'y for the SAW300 to SAW600 models comes with a bowl guard (steel band material).

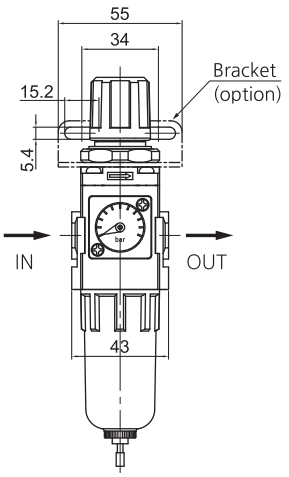
▪ Replacement Parts

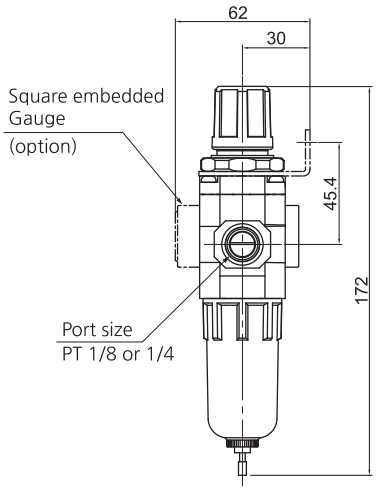
No.	PARTS	MATERIAL	Part no.					
			SAWM200	SAWD200	SAWM300	SAWD300	SAWM400	SAWD400
⑤	O-ring	NBR	U024		38x2		U137	
⑥	Filter	-	WM200-EL	WD200-EL	WM300-EL	WD300-EL	WM400-EL	WD400-EL

DIMENSIONS (mm)

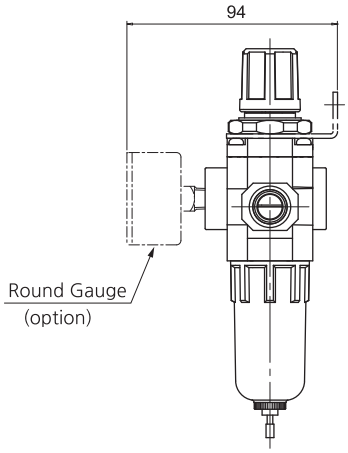
SAWM(SAWD) 200

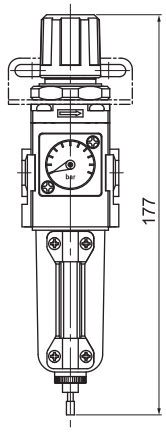
■ SAWM(SAWD)200-□02□□□-□



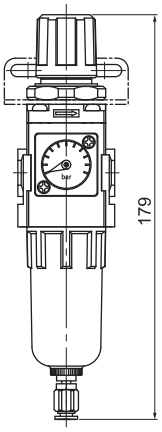


■ Dimensions of each model with an option attached

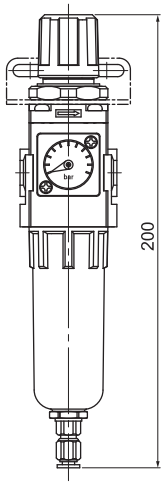




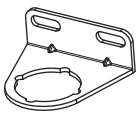
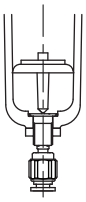
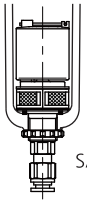
Metal bowl type



with Auto Drain
(Differential pressure type)



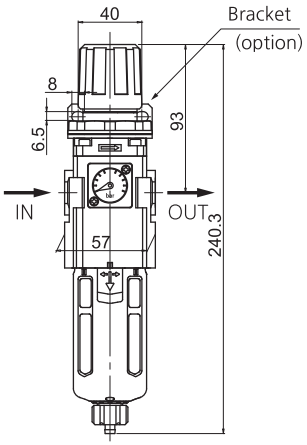
with Auto Drain
(Float type)

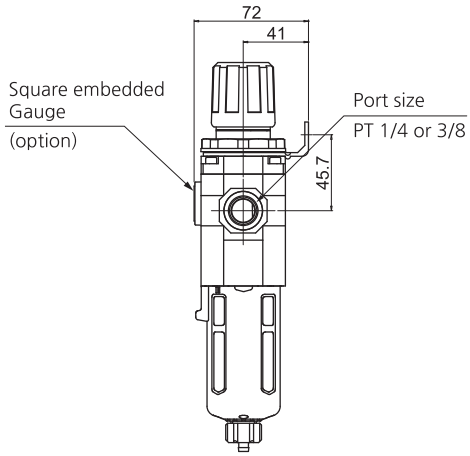
Option	B : Bracket	Gauge		Auto Drain	
		Gs : Square embedded	G : Round type	D : Differential pressure	Df : Float type
Model	 B220	 Gs28	 G40, R1/8		 SAD200

DIMENSIONS (mm)

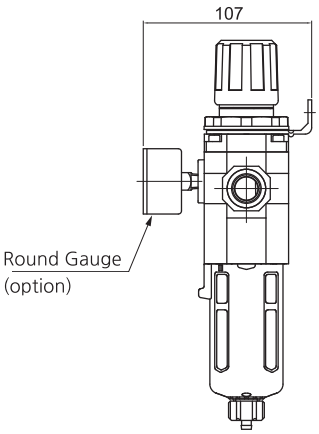
SAWM(SAWD) 300

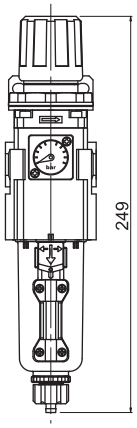
■ SAWM(SAWD)300-□03□□□-□



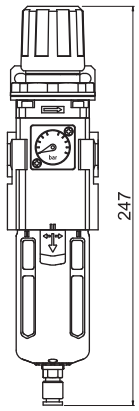


■ Dimensions of each model with an option attached

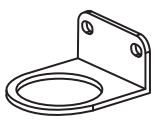
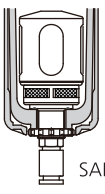




Metal bowl type



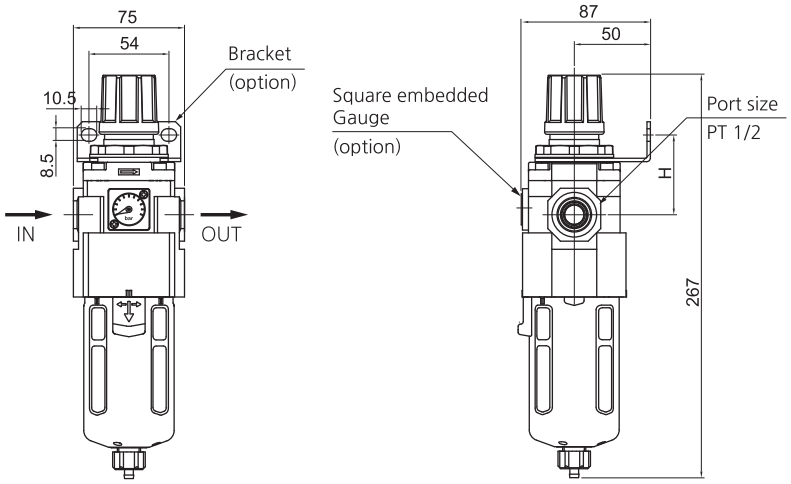
with Auto drain

Option	B : Bracket	D : Auto Drain	Gauge	
			G : Round type	Gs : Square embedded type
Model	 B320	 SAD300	 G40, R1/8	 Gs28

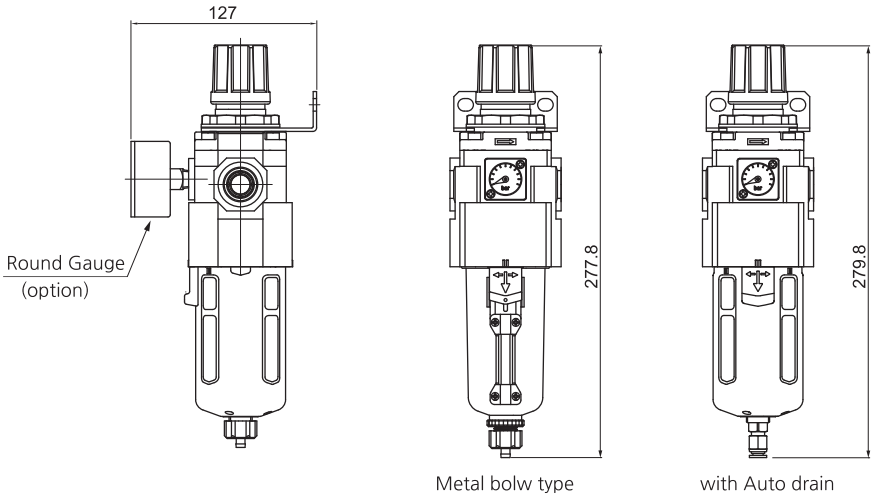
DIMENSIONS (mm)

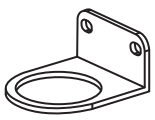
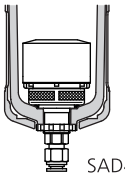
SAWM(SAWD) 400

■ SAWM(SAWD)400-□04□□□-□



■ Dimensions of each model with an option attached



Option	B : Bracket	D : Auto Drain	Gauge	
			G : Round type	Gs :Square embedded type
Model	 B420	 SAD400	 G50, R1/4	 Gs28

Air Filter (SAF)

SAF100~600 Series


SAF100


SAF200


SAF300


SAF400


SAF600

How to order

SAF 4 00 - ( ) 04 BD - MeP

① Air Filter

② **Body Size**
1 - 1/8
2 - 1/4
3 - 3/8
4 - 1/2, 3/4
6 - 1

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

④ **Port Size**

Symbol	Size	Body size				
		1	2	3	4	6
M5	M5	●				
01	1/8		●			
02	1/4		●	●		
03	3/8			●		
04	1/2				●	
06	3/4				●	●
10	1					●

⑤ **Accessory(Optional)**
Nil - None Bracket / Manual Drain
B - Bracket
Note) SAF100 is no bracket options.
D - Auto Drain

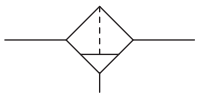
Symbol	Description	Body				
		1	2	3	4	6
D	One-touch fitting type	●	●	●	●	●
Dn	Nipple(PT1/8) type	-	-	●	●	●
Df	SAF200 Float type	-	●	-	-	-

주) 1. SAF100 and SAF200are differential pressure type.
2. SAF300~600 are float type.

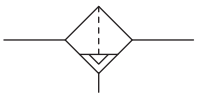
⑥ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol

SAF



SAF with Auto Drain



Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Filtration	10μm (option: 2, 5, 20, 40)
Bowl Guard Material	Poly-carbonate (option: ALDC)
Bowl material	Nylon

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

④ When auto drain is used it is recommended to use at least 1.5bar pressure.

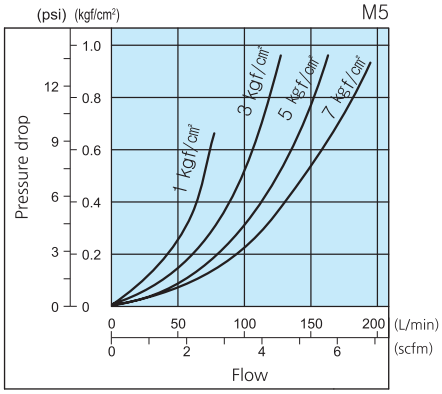
⑤ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

⑥ Before disassembling the equipment on the compressed air side to inspect the auto drain or to replace the filter element, confirm that the pressure is set to zero.

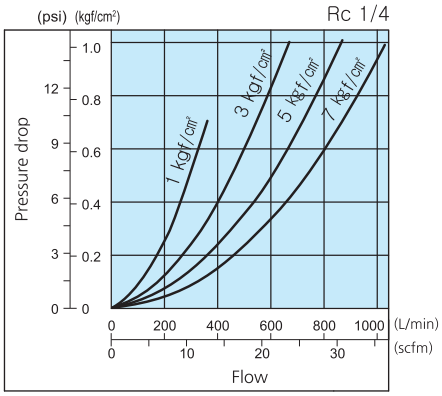
FLOW CHARACTERISTICS

Note : Replace the element every 2 years or when the pressure drop becomes 1bar(0.1Mpa), whichever comes first, to prevent damage to the element.

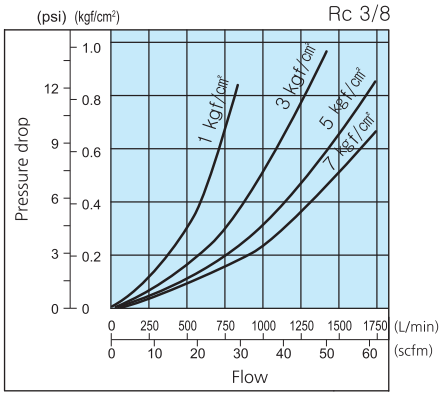
SAF 100



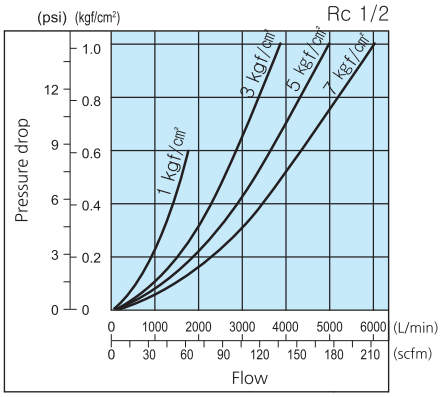
SAF 200



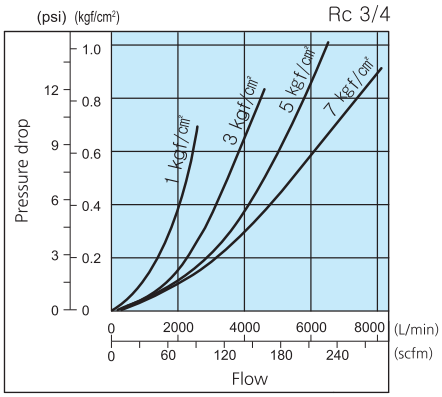
SAF 300



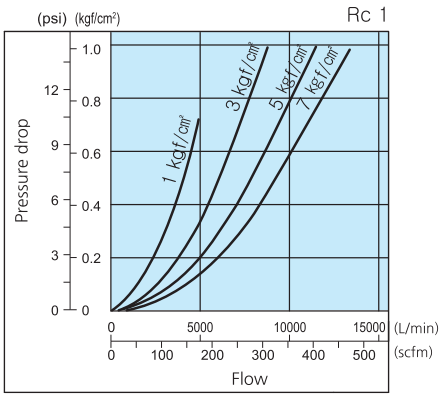
SAF 400-04



SAF 400-06

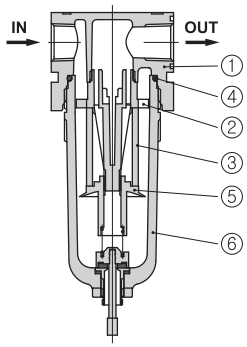


SAF 600

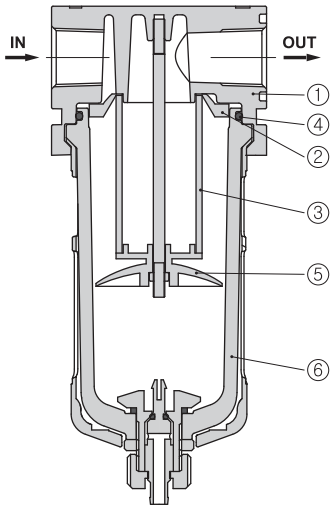


STRUCTURE / PARTS

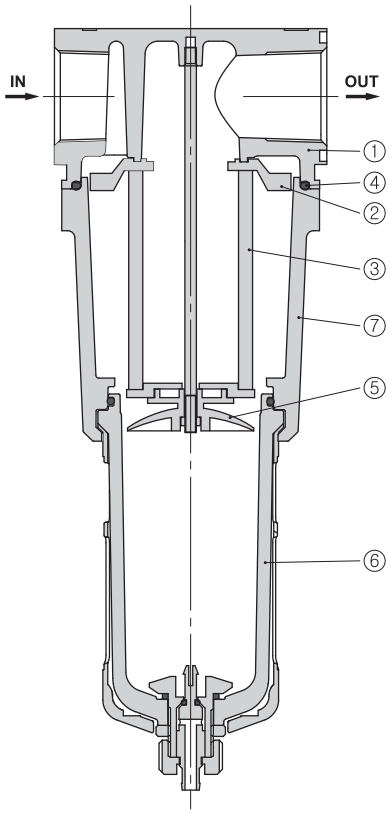
SAF100, SAF200



SAF300, SAF400



SAF600



▪ Component Parts

No.	PARTS	MATERIAL
①	Body	ALDC
②	Impeller	ABS
⑤	Baffle	ABS
⑥	Bowl Ass'y [1)]	PC & Nylon
⑦	Housing	ALDC

1) Bowl Ass'y for the SAF300 to SAF600 models comes with a bowl guard (steel band material).

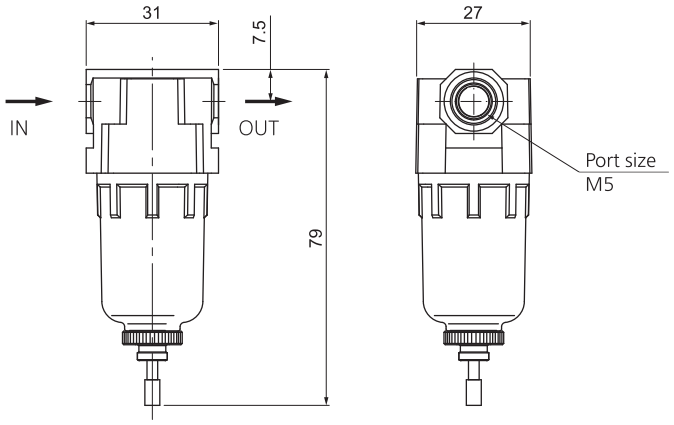
▪ Replacement Parts

No.	PARTS	MATERIAL	Part no.				
			SAF100	SAF200	SAF300	SAF400	SAF600
③	Element	-	F100-EL	F200-EL	F300-EL	F400-EL	F600-EL
④	O-ring	NBR	S22	U024	38x2	U137	U137

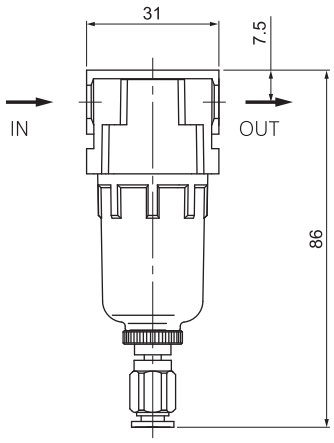
DIMENSIONS (mm)

SAF 100

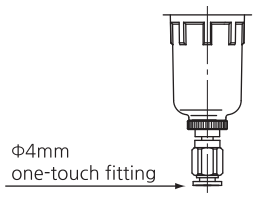
■ SAF100-□01(M5)□



■ Dimensions of each model with an option attached



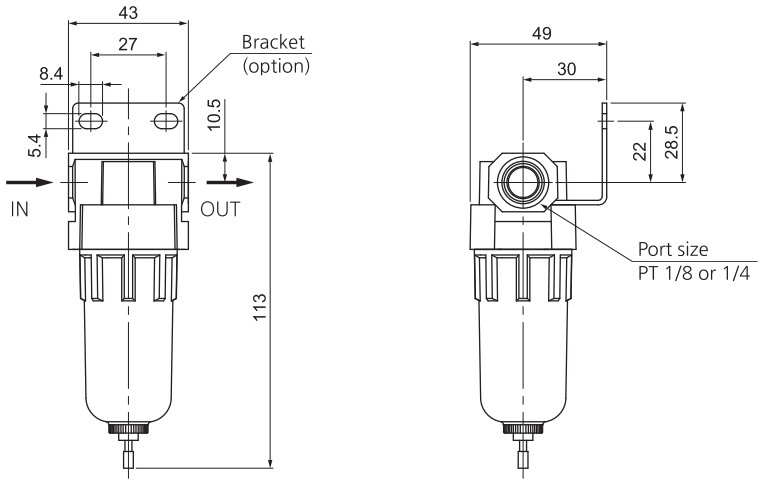
with Auto Drain
(Differential pressure type)

Option	D : Auto Drain (Differential pressure type)
Model	

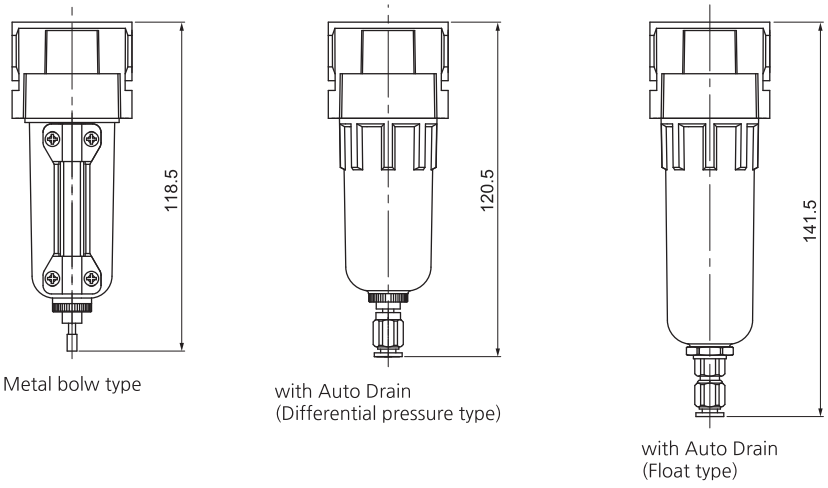
DIMENSIONS (mm)

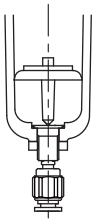
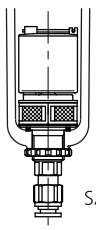
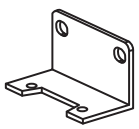
SAF 200

■ SAF200-□02□□



■ Dimensions of each model with an option attached

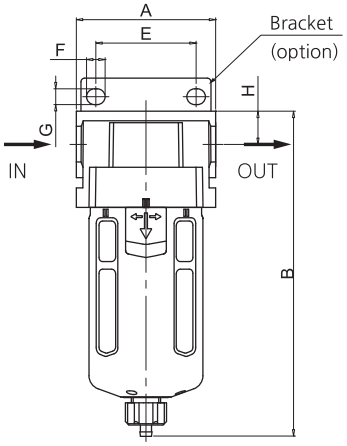


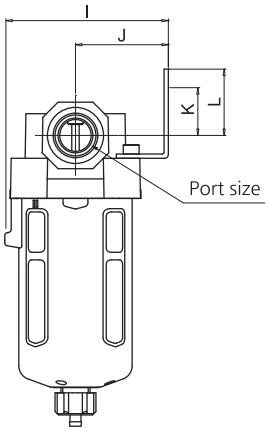
Option	Auto Drain		B : Bracket
	D : Differential pressure type	Df : Float type	
Model		 SAD200	 B200

DIMENSIONS (mm)

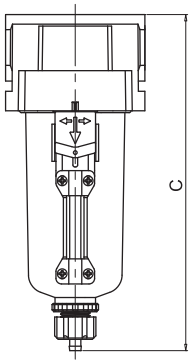
SAF 300~400

■ SAF300-□03□□
SAF400-□04(06)□□

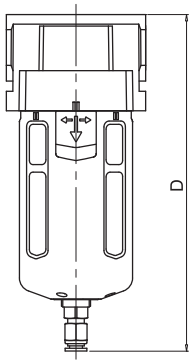




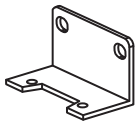
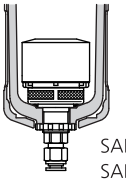
■ Dimensions of each model with an option attached



Metal bowl type



with Auto drain

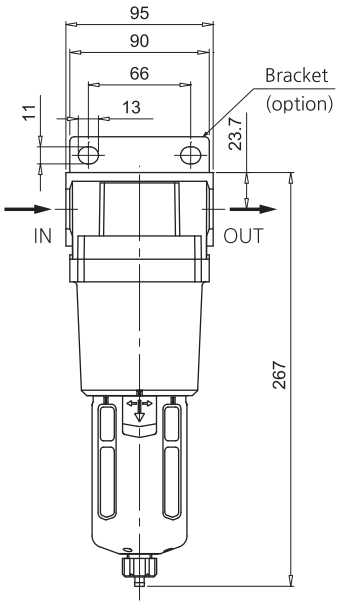
Option	B : Bracket	D : Auto Drain
Model	 SAF300 : B300 SAF400 : B400	 SAF300 : SAD300 SAF400 : SAD400

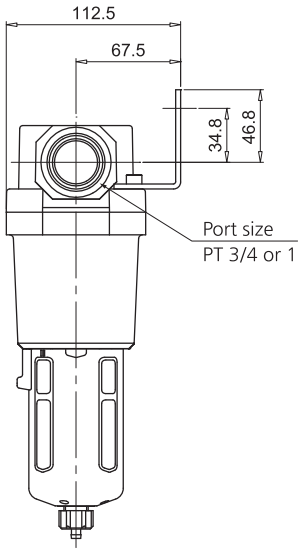
Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L
SAF300-03	1/4, 3/8	57	143	151	149	40	7.9	6.3	14	65	36.5	14	21
SAF400-04	1/2	75	174	179	181	54	10	8.5	17.9	85	50	25.7	35.7
SAF400-06	3/4	75	178	183	185	54	10	8.5	19.8	85	50	25.1	35.1

DIMENSIONS (mm)

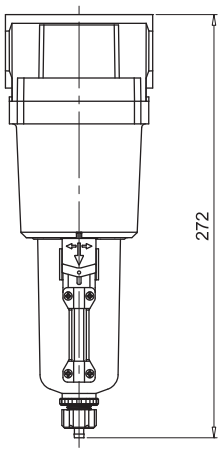
SAF 600

■ SAF600-□06□□
SAF600-□10□□

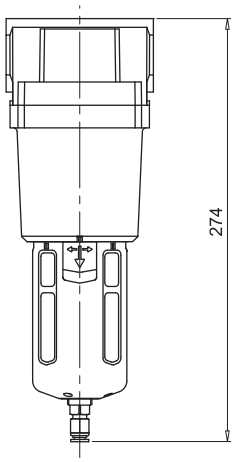




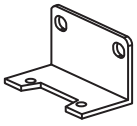
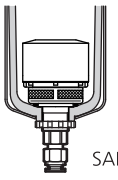
■ Dimensions of each model with an option attached



Metal bolw type



with Auto drain

Option	B : Bracket	D : Auto Drain
Model	 B600	 SAD400

Filter for High Pressure(SAF)

SAF200H~600H Series

SAF200H

SAF300H

SAF400H

SAF600H

How to order

SAF 4 00 H - 04 B

① **Filter**

② **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2
6 - 1

③ **for High pressure**

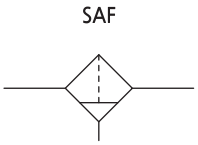
④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port size**

기호	사이즈	몸체 사이즈			
		2	3	4	6
01	1/8	●			
02	1/4	●	●		
03	3/8		●		
04	1/2			●	
06	3/4			●	●
10	1				●

⑥ **Accessory(Optional)**
Nil - None Bracket / Manual Drain / None Gauge
B - Bracket

Symbol



Specification

Fluid	Compressed Air
Max. operating pressure	30bar (3.0MPa)
Max. supply pressure	20bar (2.0MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Filtration	10μm (option: 2, 5, 20, 40)
Bowl material	ALDC

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

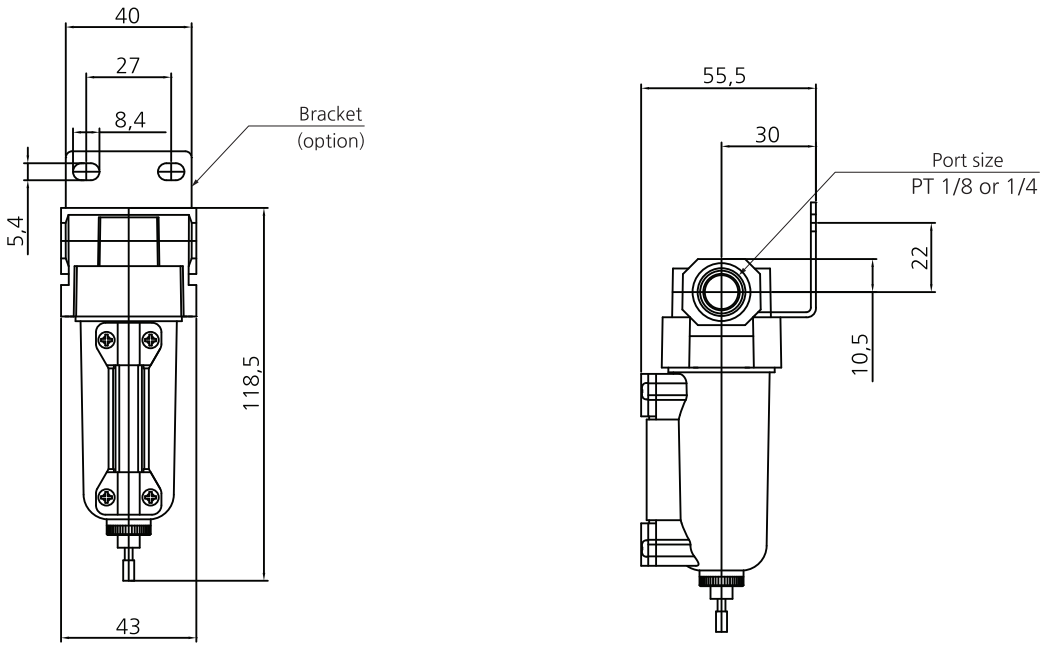
③ Please contact SKP when a circuit requires the use of a regulator having relief sensitivity with high precision and setting accuracy.

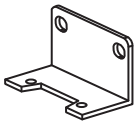
④ Residual pressure release (outlet pressure release) is not complete by releasing the inlet pressure. To release residual pressure, select a model with a back flow mechanism.

DIMENSIONS (mm)

SAF 200H

■ SAF200H-□02□□

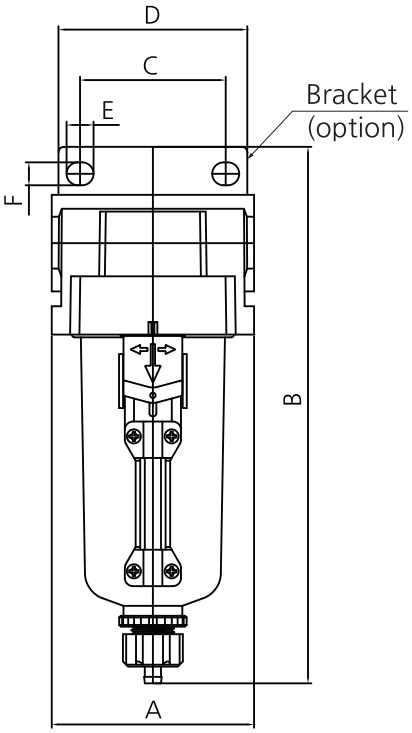


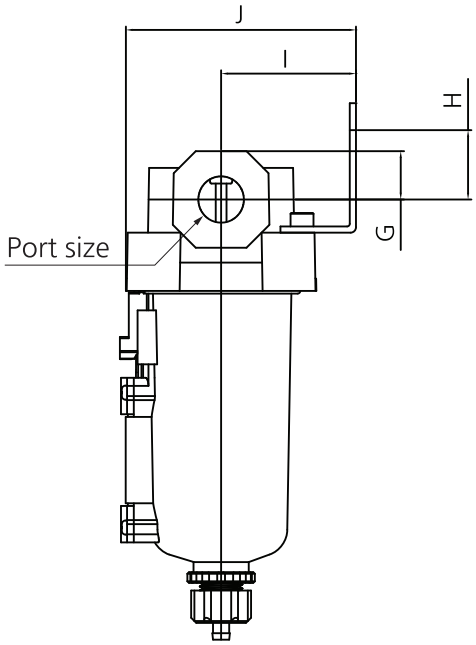
Option	B : Bracket
Model	 B200

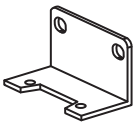
DIMENSIONS (mm)

SAF 300H~400H

■ SAF300H□-□03□□
SAF400H□-□04(06)□□





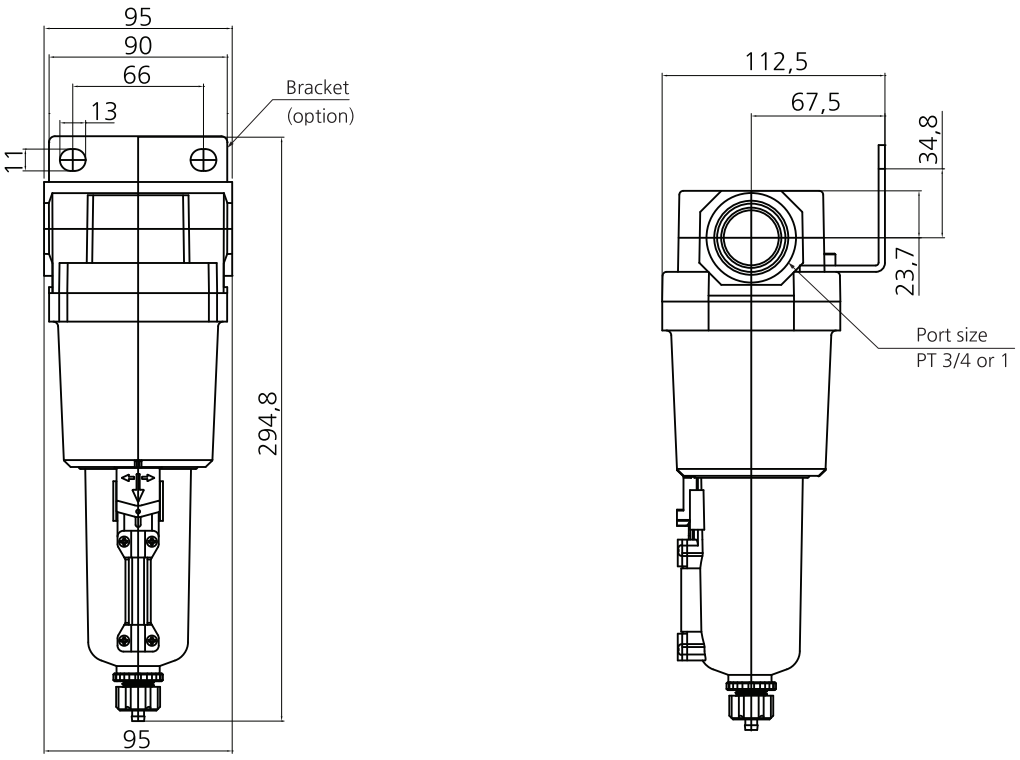
Option	B : Bracket
Model	 SAF300 : B300 SAF400 : B400

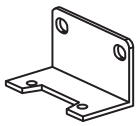
Model	Port size	A	B	C	D	E	F	G	H	I	J
SAF300H-03	1/4, 3/8	57	167.8	40	53	8	6.5	14	21	41	70.7
SAF400H-04	1/2	75	193	54	70	10	8.5	17.9	25.7	50	87.5
SAF400H-06	3/4	75	194.5	54	70	10	8.5	19.8	25	50	87.5

DIMENSIONS (mm)

SAF 600H

■ SAF600H□-□06□□
SAF600H□-□10□□



Option	B : Bracket
Model	 B600

Large Flow Air Filter (SAF)

SAF800~900 Series

SAF800

SAF900

How to order

SAF 8 00 - 14 BD - MeP

① Air Filter

② **Body Size**
8 - 1 1/4, 1 1/2
9 - 2

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

④ **Port Size**

Symbol	Size	Body size	
		8	9
12	1 1/4	●	
14	1 1/2	●	
20	2		●

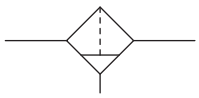
⑤ **Accessory(Optional)**
Nil - None Bracket / Manual Drain
B - Bracket
D - Auto Drain

Symbol	Drain type	Drain connector
D	Float	One-touch fitting(Φ6mm)
Dn	Float	Nipple(PT 1/8)

⑥ **Bowl**
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol

SAF



SAF with Auto Drain

Specification

Port size	SAF800	1 1/4, 1 1/2
	SAF900	2
Fluid		Compressed Air
Max. operating pressure		10bar (1.0MPa)
Max. supply pressure		15bar (1.5MPa)
Ambient and Media temp.		-5~60℃ (No freezing)
Filtration		5μm (option: 40)
Bowl material		Poly-carbonate (option: ALDC)

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

③ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.

④ When auto drain is used it is recommended to use at least 1.5bar pressure.

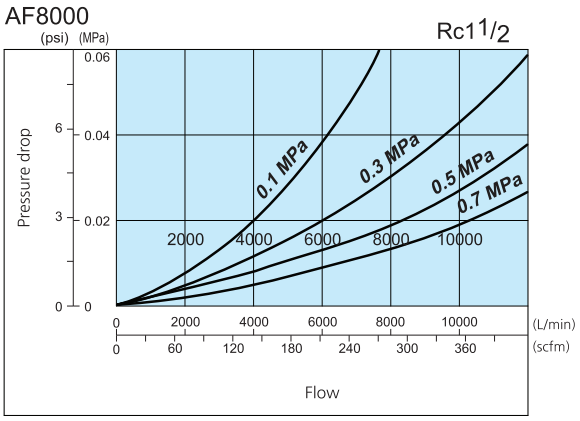
⑤ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.

⑥ Before disassembling the equipment on the compressed air side to inspect the auto drain or to replace the filter element, confirm that the pressure is set to zero.

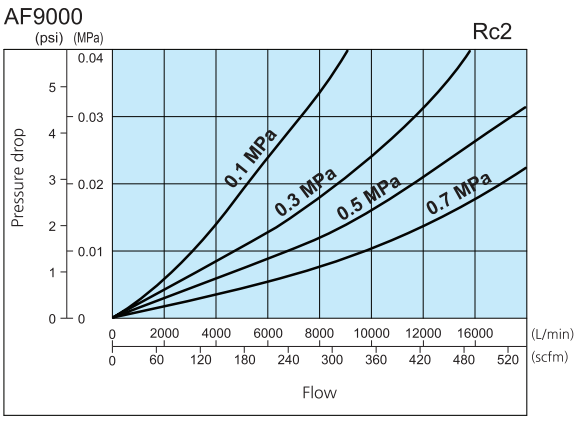
Series SAF800~900

FLOW CHARACTERISTICS

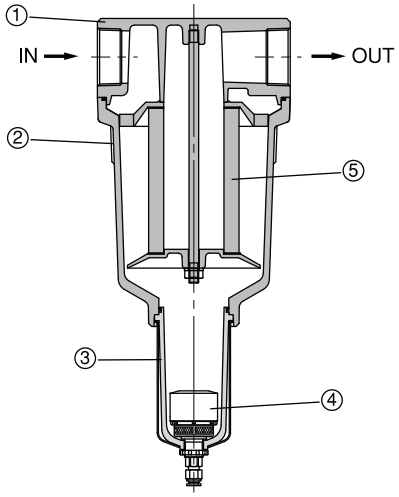
SAF 800



SAF 900



STRUCTURE / PARTS



▪ Component Parts

No.	PARTS	MATERIAL
①	Body	ALDC
②	Housing	ALDC
③	Bowl Ass'y [1]	PC
④	Auto Drain	-

1) Bowl Ass'y comes with a bowl guard (steel band material).

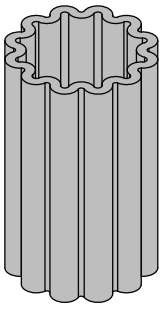
▪ Replacement Parts

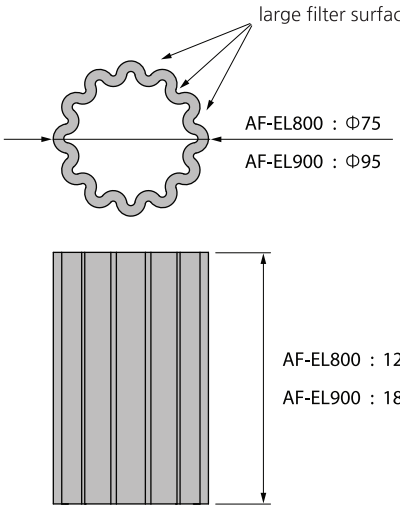
(mm)

No.	PARTS	MATERIAL	Size(Φ x Height)
⑤	Element	AF-EL800	75 x 120
		AF-EL900	95 x 180

▪ SKP Filter for large flow

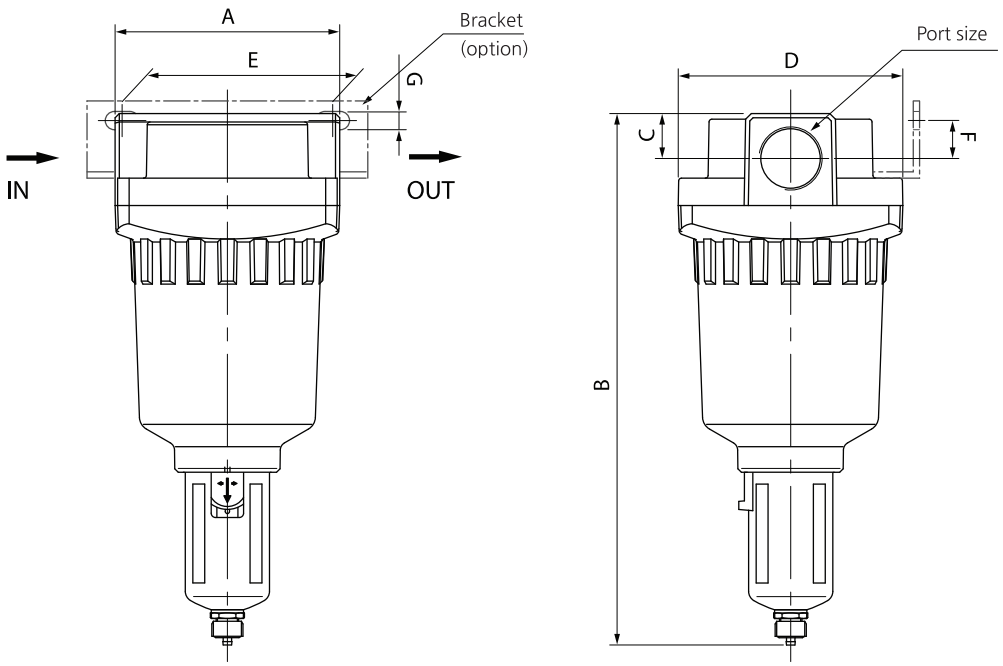
- Material : Porous plastics
- Filtration : 5μm (option : 40μm)
- Large filter surface
- Long life



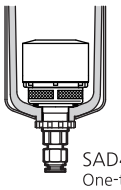
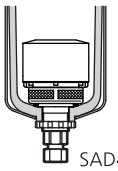
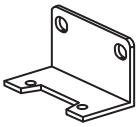


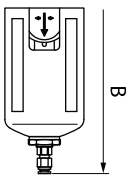
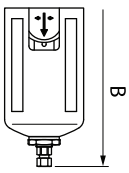
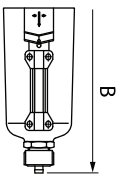
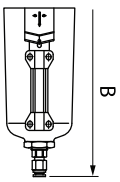
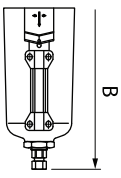
DIMENSIONS (mm)

SAF800~900



Model	Port size	A	B	C	D	E	F	G
SAF800	1 1/4, 1 1/2	160	378.5	32	160	150	27	13
SAF900	2	180	457	42	180	150	20	13

Option	D : Auto Drain	Dn : Auto Drain	B : Bracket
Model	 SAD400 with One-touch fitting	 SAD400 with Nipple(1/8)	 SAF800 : B650 SAF900 : B850

Bowl	PC Bowl		Metal Bowl		
	With D	With Dn	Manual Drain	With D	With Dn
					
SAF800	385.5	378.5	381.2	388.2	381.2
SAF900	464	457	459.7	466.7	459.7

Mist Separator (SAFM)
Micro Mist Separator (SAFD)

SAFM200~400 Series
SAFD200~400 Series

- Series SAFM Nominal filtration rating: 0.1 μm.
- Series SAFD Nominal filtration rating: 0.01 μm.

SAFM200

SAFD200

How to order

SAFM 3 00 – ○ 03 BD – MeP
Mist Separator

SAFD 3 00 – ○ 03 BD – MeP
Micor Mist Separator

① **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2, 3/4

② **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

③ **Port Size**

기호	사이즈	몸체 사이즈		
		2	3	4
01	1/8	●		
02	1/4	●	●	
03	3/8		●	
04	1/2			●
06	3/4			●

④ **Accessory(Optional)**
Nil - None Bracket / Manual Drain
B - Bracket
D - Auto Drain

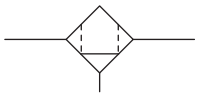
Symbol	Description	Body		
		2	3	4
D	One-touch fitting type	●	●	●
Dn	Nipple(PT1/8) type	-	●	●
Df	SAFM, SAFD200 Float type	●	-	-

주) 1. SAFM, SAFD200 are differential pressure type.
2. SAFM, SAFD300~400 are float type.

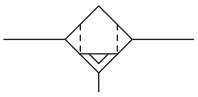
⑤ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol

SAFM
SAFD



with autodrain SAFM
with autodrain SAFD



Specification

Fluid		Compressed Air
Max. operating pressure		10bar (1.0MPa)
Min. operating pressure		0.5bar (0.05MPa)
Max. supply pressure		15bar (1.5MPa)
Ambient and Media temp.		-5~60℃ (No freezing)
Filtration	SAFM	0.1μm
	SAFD	0.01μm
Bowl Material		Poly-carbonate (option: ALDC)
Bowl Guard material		Nylon

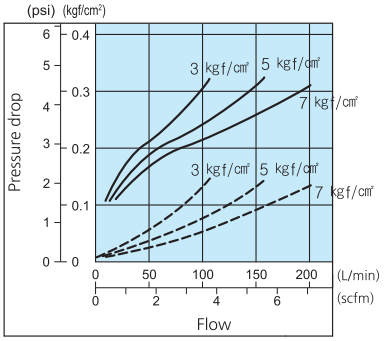
Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.
② Components with a bowl must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.
③ When auto drain is used, drain piping should be both 4mm or greater in diameter and less than 1m in length.
Avoid installing drain piping upwards.
④ When auto drain is used it is recommended to use at least 1.5bar pressure.
⑤ When auto drain is inoperable, drain manually by pushing the one-touch fitting upward.
⑥ Before disassembling the equipment on the compressed air side to inspect the auto drain or to replace the filter element, confirm that the pressure is set to zero.

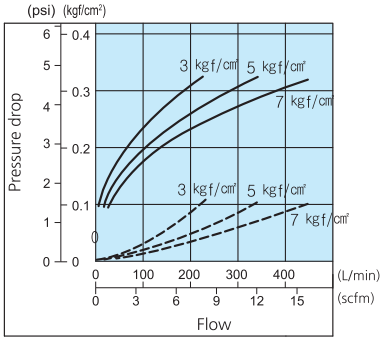
FLOW CHARACTERISTICS

(——Element oil saturation -----Initial condition)

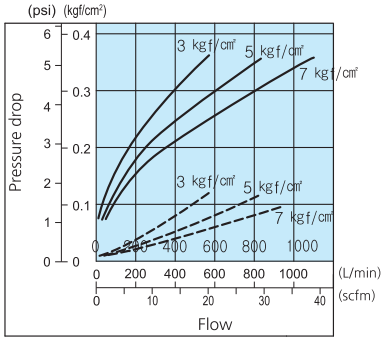
SAFM 200



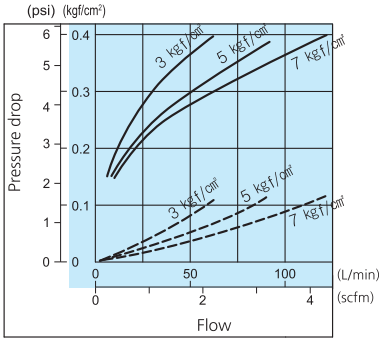
SAFM 300



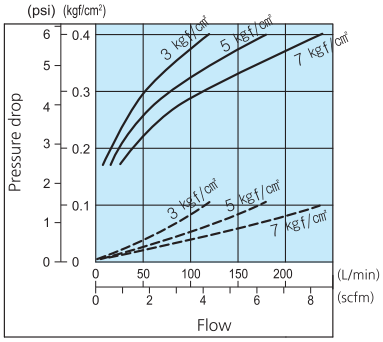
SAFM 400



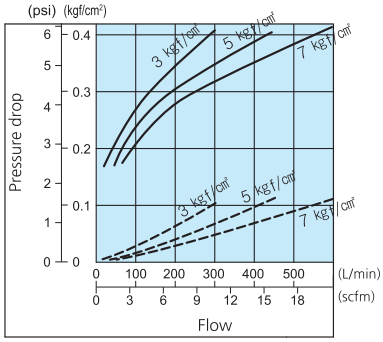
SAFD 200



SAFD 300

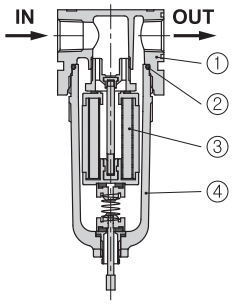


SAFD 400

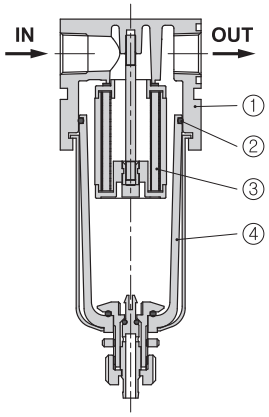


STRUCTURE / PARTS

SAFM 200
SAFD 200



SAFM 300 to 400
SAFD 300 to 400



▪ Component Parts

No.	PARTS	MATERIAL
①	Body	ALDC
④	Bowl Ass'y [1)]	PC & Nylon

Note : 1. Bowl Ass'y comes with a bowl guard (steel band material).

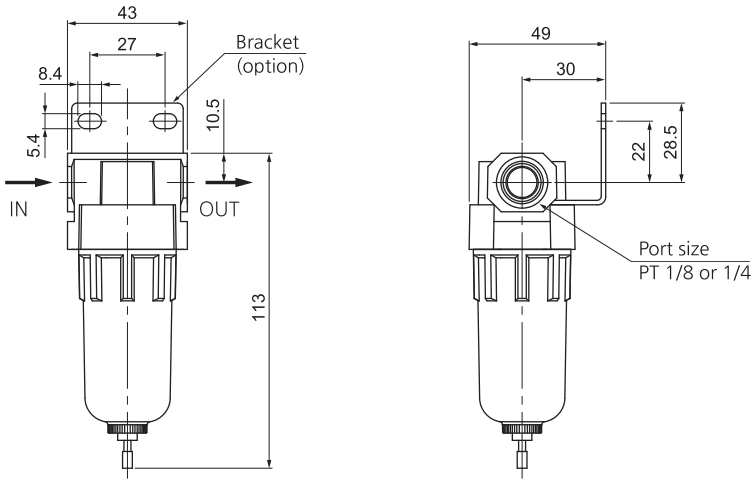
▪ Replacement Parts

No.	PARTS	MATERIAL	Part no.					
			SAFM200	SAFD200	SAFM300	SAFD300	SAFM400	SAFD400
②	O-ring	NBR	U024		38x2		U137	
③	Filter	-	FM200-EL	FD200-EL	FM300-EL	FD300-EL	FM400-EL	FD400-EL

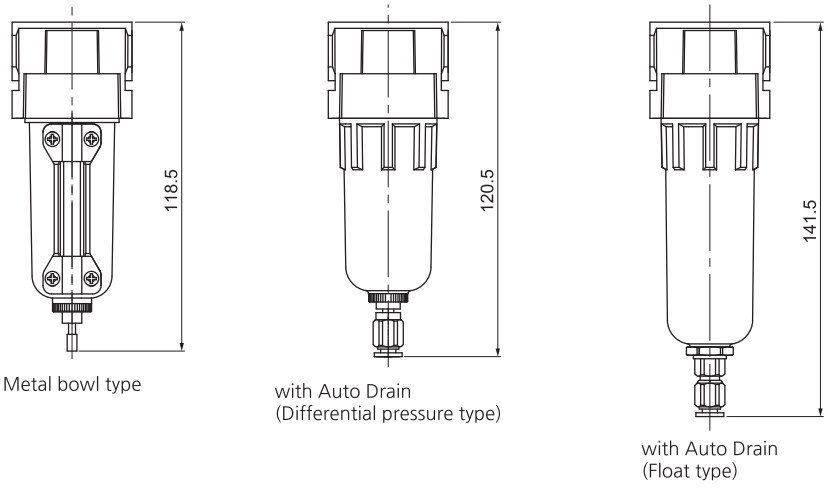
DIMENSIONS (mm)

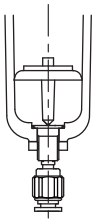
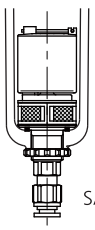
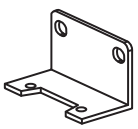
SAFM(SAFD) 200

■ SAFM(SAFD) 200-□02□□



■ Dimensions of each model with an option attached

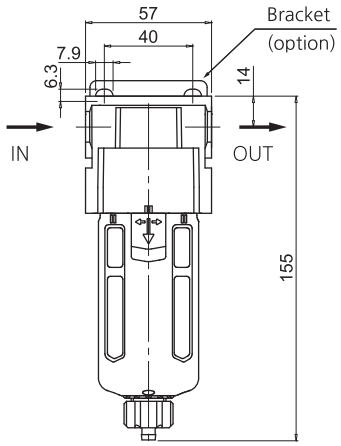


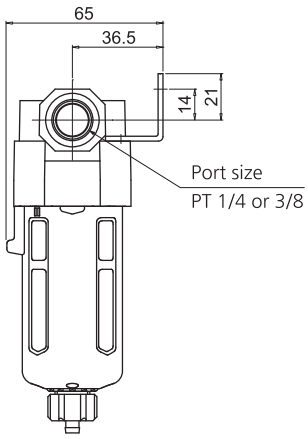
Option	Auto Drain		B : Bracket
	D : Differential pressure type	Df : Float type	
Model		 SAD200	 B200

DIMENSIONS (mm)

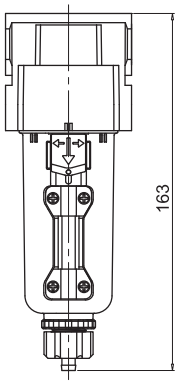
SAFM(SAFD) 300

■ SAFM(SAFD)300-□03□□

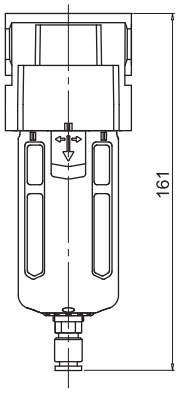




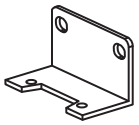
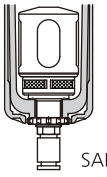
■ Dimensions of each model with an option attached



Metal bowl type



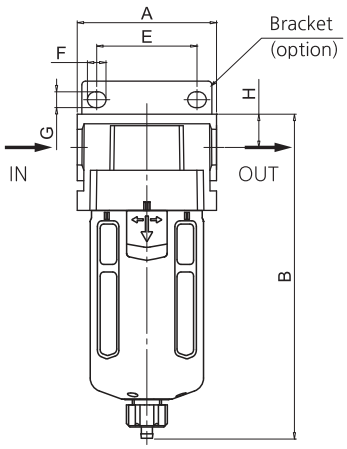
with Auto drain

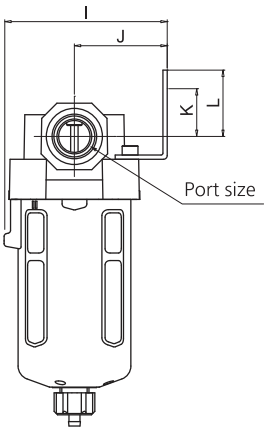
Option	B : Bracket	D : Auto Drain
Model	 B300	 SAD300

DIMENSIONS (mm)

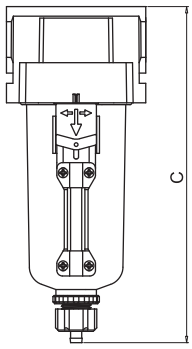
SAFM(SAFD) 400

■ SAFM(SAFD)400-□04□□
SAFM(SAFD)400-□06□□

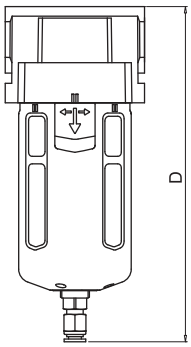




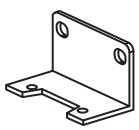
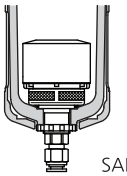
■ Dimensions of each model with an option attached



Metal bowl type



with Auto drain

Option	B : Bracket	D : Auto Drain
Model	 B400	 SAD400

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L
SAFM(SAFD)400-04	1/2	75	174	179	181	54	10	8.5	17.9	85	50	25.7	35.7
SAFM(SAFD)400-06	3/4	75	178	183	185	54	10	8.5	19.8	85	50	25.1	35.1

Air Regulator (SAR)

SAR100~600 Series

- With the backflow function, the SAR series incorporates a mechanism which exhausts the air pressure through the outlet side efficiently.


SAR600


SAR400


SAR300


SAR200


SAR100

How to order

SAR 4 00 - ○ 04 BGK

① Air Regulator

② **Body Size**
1 - 1/8
2 - 1/4
3 - 3/8
4 - 1/2, 3/4
6 - 1

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

④ **Port Size**

Symbol	Size	Body size				
		1	2	3	4	6
M5	M5	●				
01	1/8		●			
02	1/4		●	●		
03	3/8			●		
04	1/2				●	
06	3/4				●	●
10	1					●

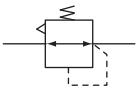
⑤ **Accessory(Optional)**
Nil - None Bracket / None Gauge
B - Bracket
G - Gauge

G	Round type
Gs	Square embedded type

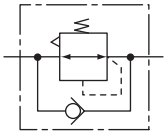
Note) SAR100 is available only round type gauge.
K - With backflow function
Note) SAR100 can not attach a backflow function.

Symbol

SAR



SAR with backflow function



Specification

Fluid	Compressed Air					
Max. operating pressure	10bar (1.0MPa)					
Max. supply pressure	15bar (1.5MPa)					
Ambient and Media temp.	-5~60℃ (No freezing)					
Regulating range	0.5~8.5bar (0.05~0.85MPa)					
Gauge port	SAR100	SAR200	SAR300	SAR400	SAR600	
	1/16	1/8		1/4		
Construction	Relief type					

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

③ Please contact SKP when a circuit requires the use of a regulator having relief sensitivity with high precision and setting accuracy.

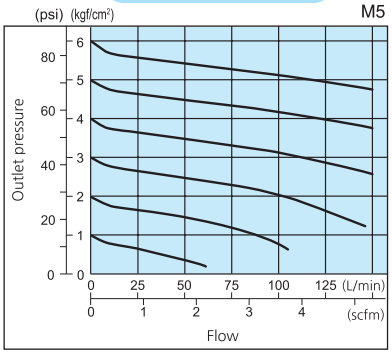
④ Residual pressure release (outlet pressure release) is not complete by releasing the inlet pressure. To release residual pressure, select a model with a back flow mechanism.

Series SAR100~600

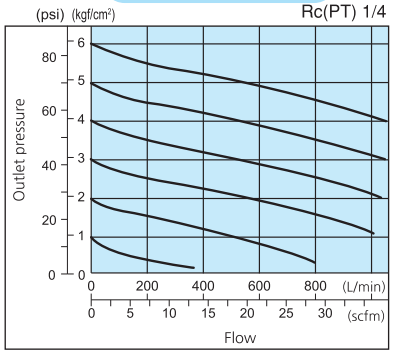
FLOW CHARACTERISTICS

Inlet pressure 7kg/cm²

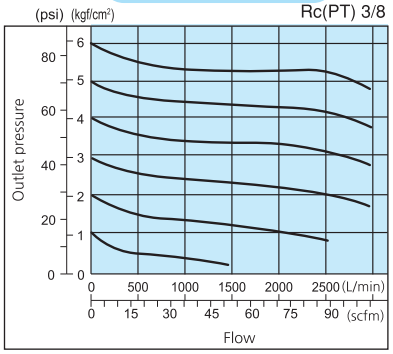
SAR 100



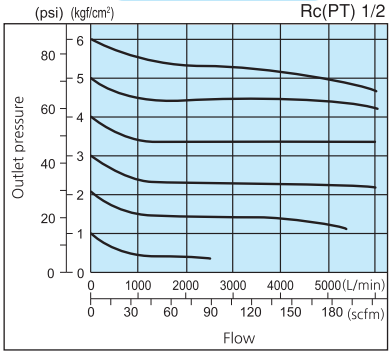
SAR 200



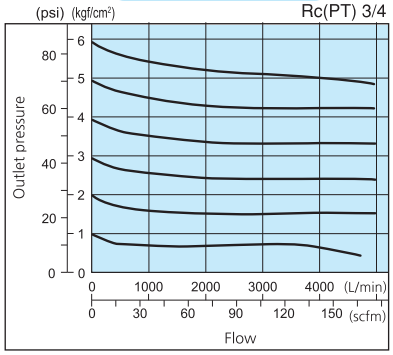
SAR 300



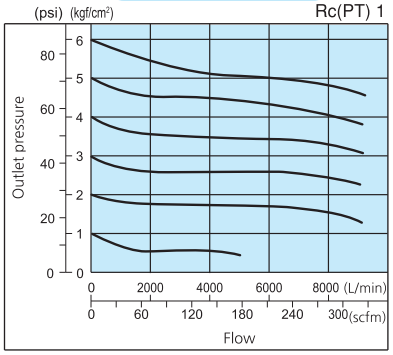
SAR 400-04



SAR 400-06



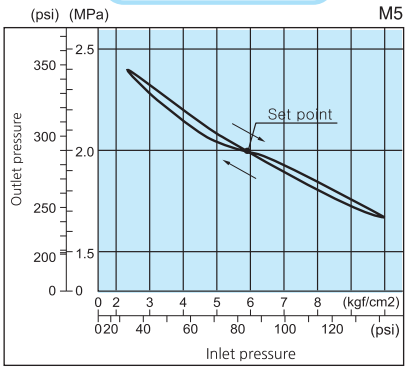
SAR 600



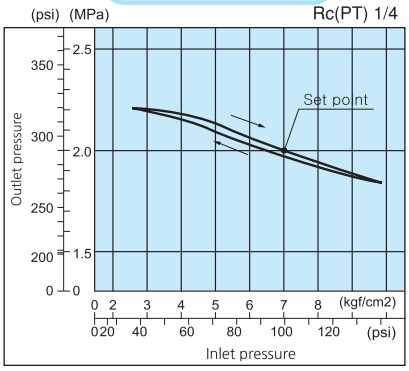
PRESSURE CHARACTERISTICS

Inlet pressure 7kg/cm², Outlet pressure 2kg/cm², Flow 20L/min(ANR)

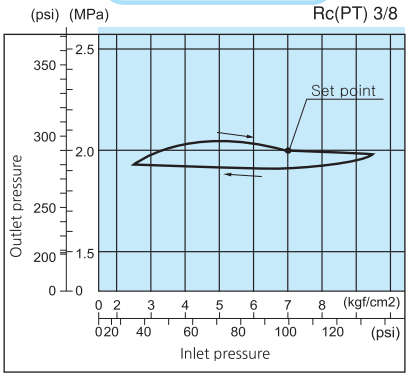
SAR 100



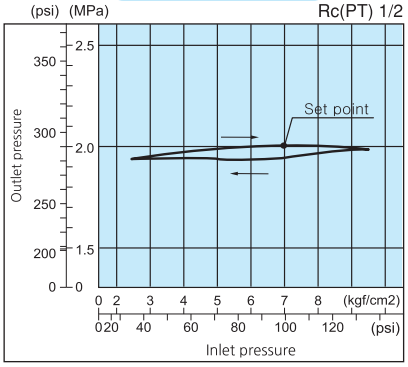
SAR 200



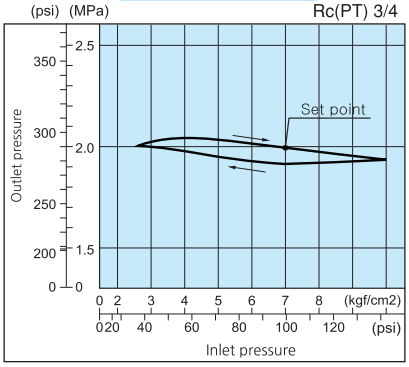
SAR 300



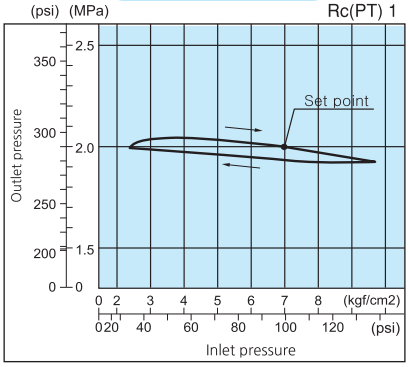
SAR 400-04



SAR 400-06

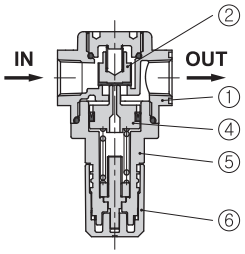


SAR 600

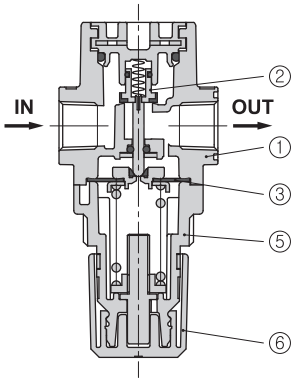


STRUCTURE / PARTS

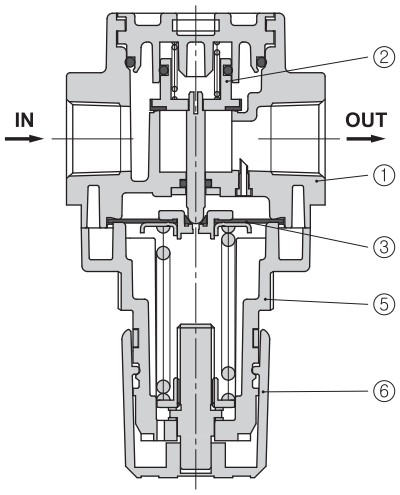
SAR100



SAR200



SAR300 to 600

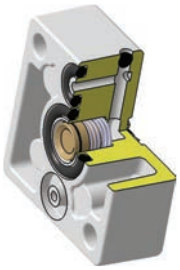


▪ Component Parts

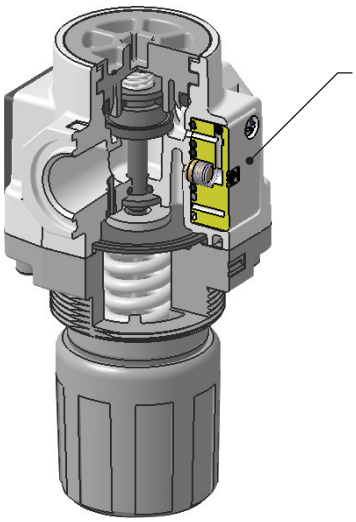
No.	PARTS	MATERIAL
①	Body	ALDC
②	Check valve Ass'y	Brass, NBR
③	Diaphragm Ass'y	NBR
④	Piston [1)]	N66G
⑤	Cover [2)]	N66G
⑥	Handle	ABS

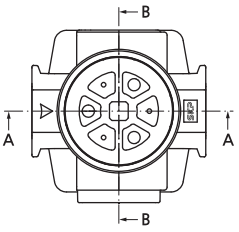
Note : 1. The SAR100 is a piston type. Assembly of a piston and a seal.
2. SAR600 cover material is ALDC

■ Backflow function adapter



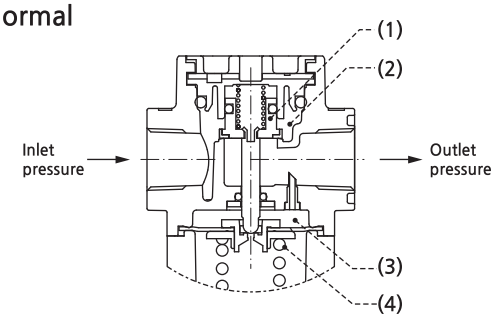
■ Regulator with Backflow function adapter installed.

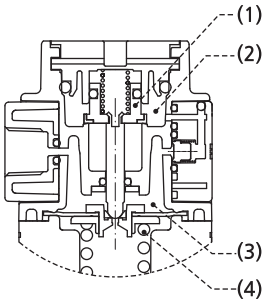


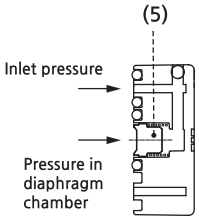


■ AR200~600, AW200~600

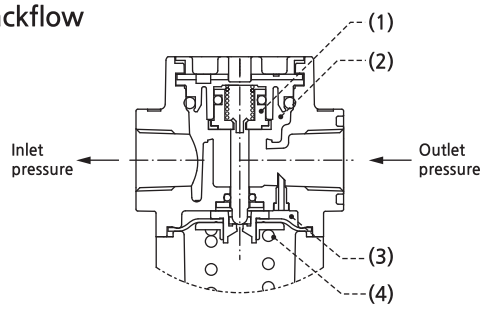
Normal

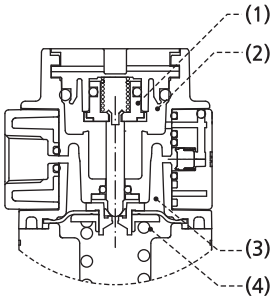


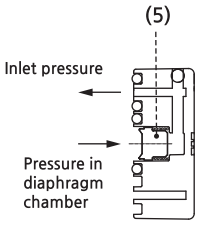




Backflow





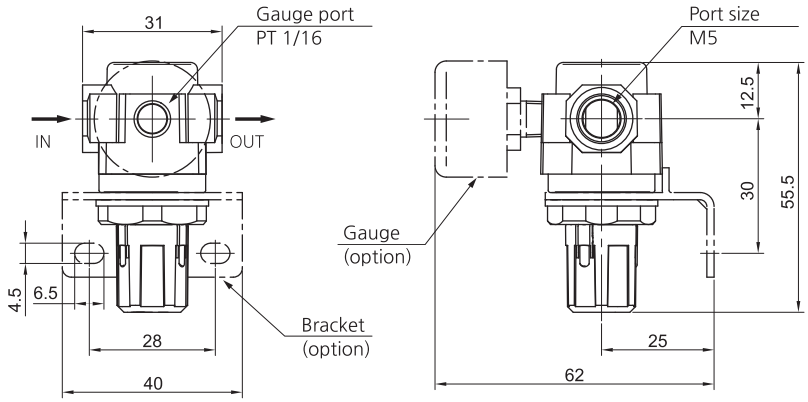


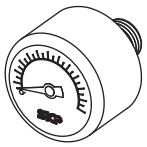
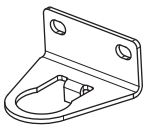
work	Description for the operation state by the backflow function adapter
normal	Because the inlet pressure(1) is higher than the regulating pressure, Check valve(5) closes and operates as a normal regulator.
backflow	When the inlet pressure(1) is shut off and released, the presure in the diaphram chamber (3) is released into the inlet side(1) to open the check valve(5). This lowers the pressure in the diaphragm chamber(3) and the force generated by the pressure of the regulator cover spring(4) opens the regulator check valve(2) The outlet pressure is released to the inlet side(1)

DIMENSIONS (mm)

SAR 100

■ SAR100-□01(M5)□□

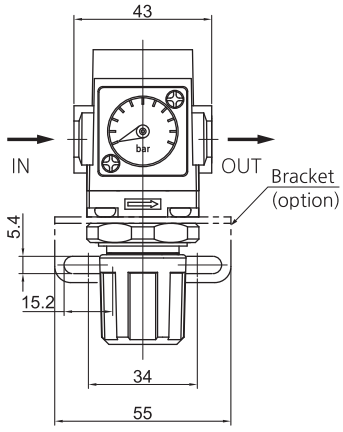


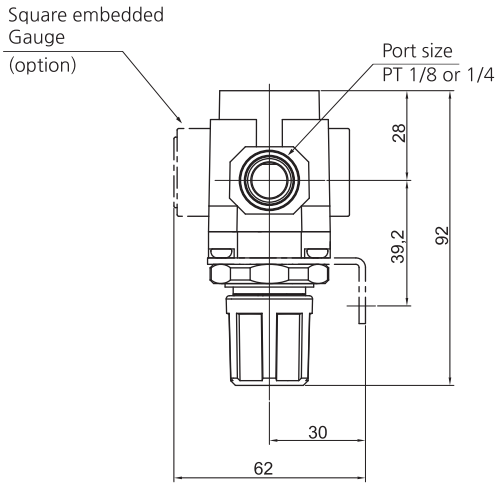
Option	G : Round type Gague	B : Bracket
Model	 Model : G25 R 1/16	 B120

DIMENSIONS (mm)

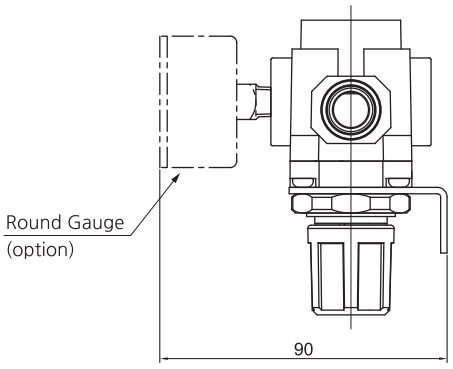
SAR 200

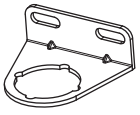
■ SAR200-□02□□





■ Dimensions of each model with an option attached

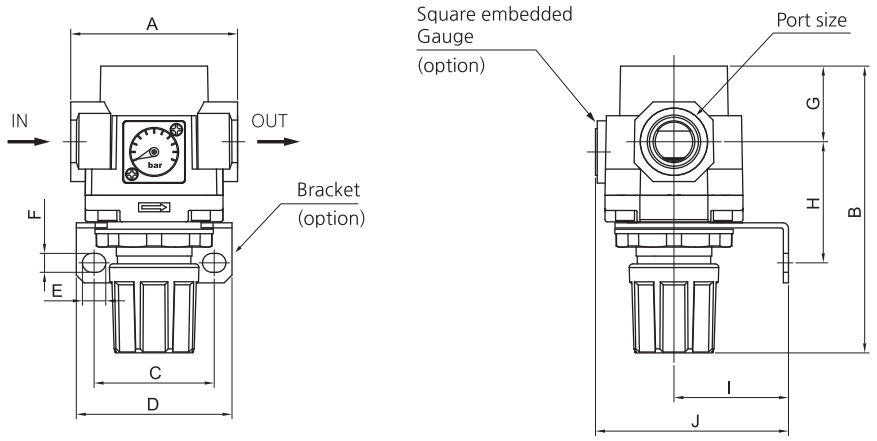


Option	Gs : Square embedded Gauge	G : Round type Gague	B : Bracket
Model	 Gs28	 G40, R1/8	 B220

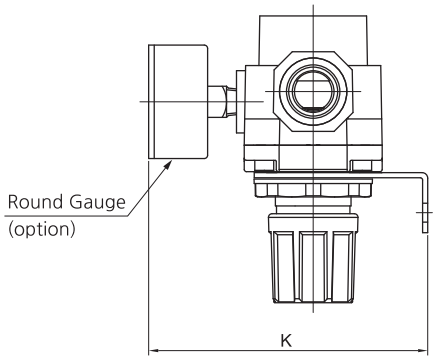
DIMENSIONS (mm)

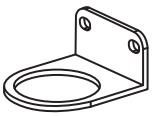
SAR 300~400

■ SAR300-□03□□
SAR400-□04(06)□□



■ Dimensions of each model with an option attached



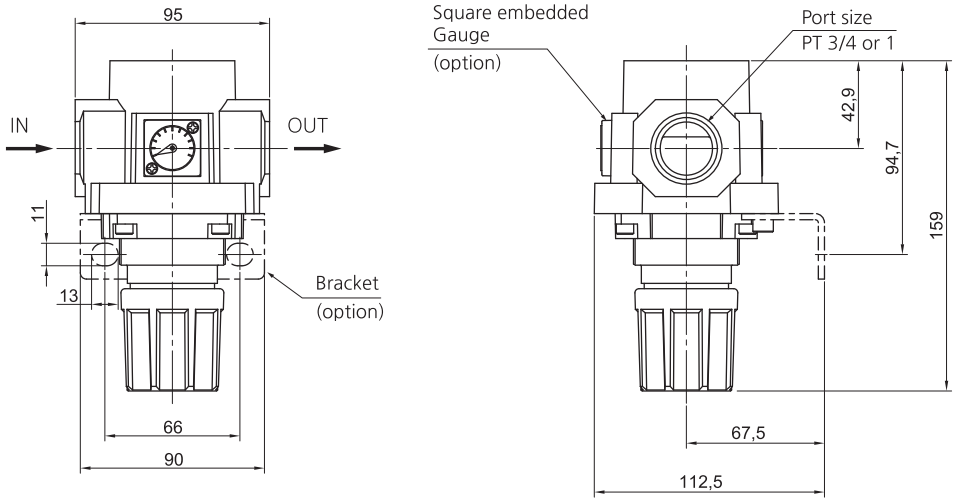
Option	G : Square embedded type Gague	G : Round type Gauge	B : Bracket
Model	 Gs28	 SAR300 : G40, R1/8 SAR400 : G50, R1/4	 SAR300 : B320 SAR400 : B420

Model	Port size	A	B	C	D	E	F	G	H	I	J	K
SAR300-03	1/4, 3/8	57	117	40	53	8	6.5	28.4	45.7	41	72	107
SAR400-04	1/2	75	125	54	70	10.5	8.5	34	54	50	87	127
SAR400-06	3/4	75	127	54	70	10.5	8.5	34.5	55.5	50	87	127

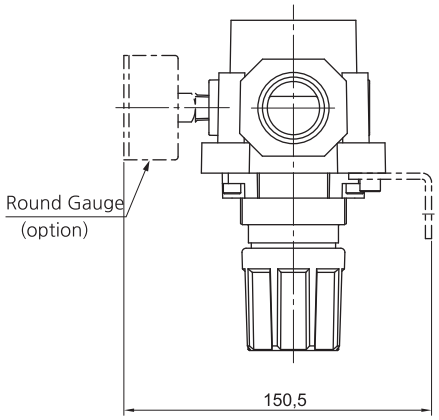
DIMENSIONS (mm)

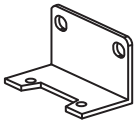
SAR 600

■ SAR600-□06□□
SAR600-□10□□



■ Dimensions of each model with an option attached



Option	G : Square embedded type Gauge	G : Round type Gauge	B : Bracket
Model	 Gs28	 G50, R1/4	 B600

Large Flow Pilot Operated Regulator (SAR)

SAR825~925 Series

- Internal pilot operated relieving style regulator.
- Metal seal relief valve is used to obtain outstanding pressure characteristic.

SAR925

SAR825

How to order

SAR 8 25 - 14 G

① Air Regulator

② **Body Size**
8 - 1 1/4, 1 1/2
9 - 2

③ Pilot type

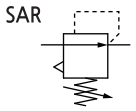
④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port Size**

Symbol	Size	Body size	
		8	9
12	1 1/4	●	
14	1 1/2	●	
20	2		●

⑥ **Accessory(Optional)**
Nil - None Gauge
G - Gauge

Symbol



Specification

Port size	SAR825	1 1/4, 1 1/2
	SAR925	2
Fluid		Compressed Air
Max. operating pressure		10bar (1.0MPa)
Max. supply pressure		15bar (1.5MPa)
Ambient and Media temp.		-5~60℃ (No freezing)
Regulating range		0.5~8.5bar (0.05~0.85MPa)
Construction		Internal pilot relieving style (Pilot air is always bleeding.)
Gauge port		1/4

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

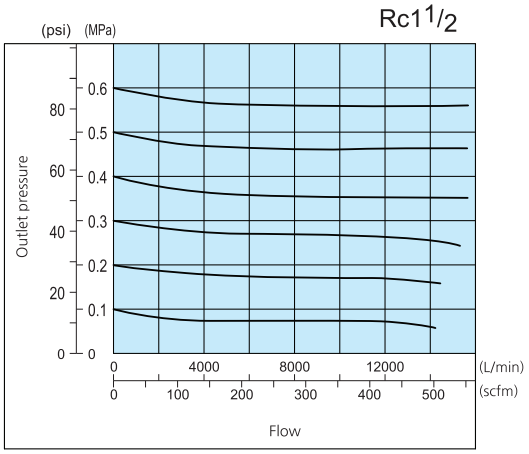
③ Do not use the regulator with flow exceeding the Max. flow indicated in "Flow Characteristics" as this can cause failure in pressure adjustment

Series SAR825~925

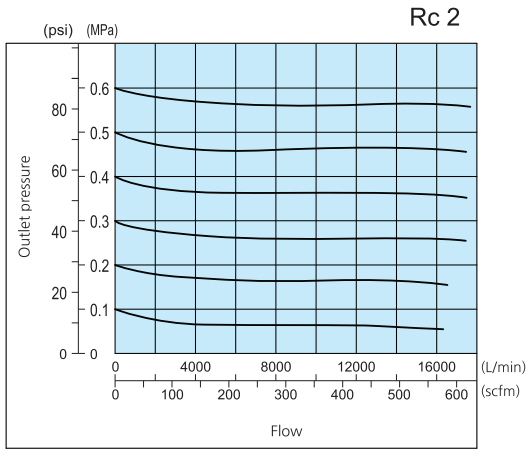
FLOW CHARACTERISTICS

Inlet pressure 7kg/cm²

SAR 825



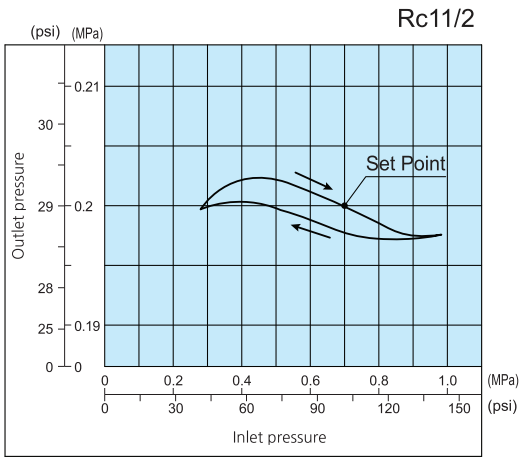
SAR 925



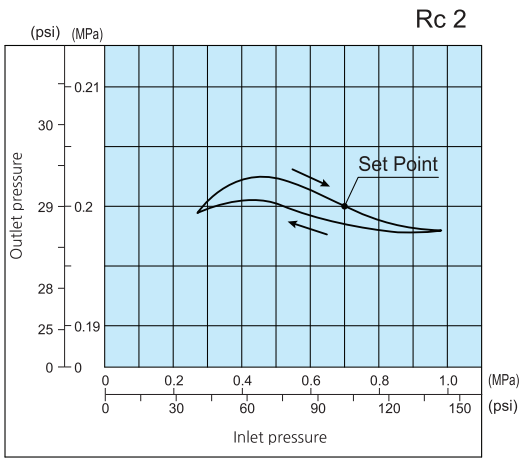
PRESSURE CHARACTERISTICS

Inlet pressure 7kg/cm², Outlet pressure 2kg/cm², Flow 20L/min(ANR)

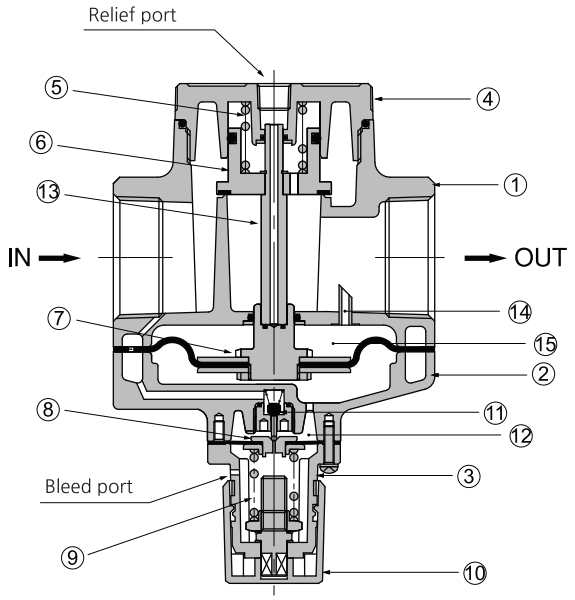
SAR 825



SAR 925



STRUCTURE / PARTS



▪ Component Parts

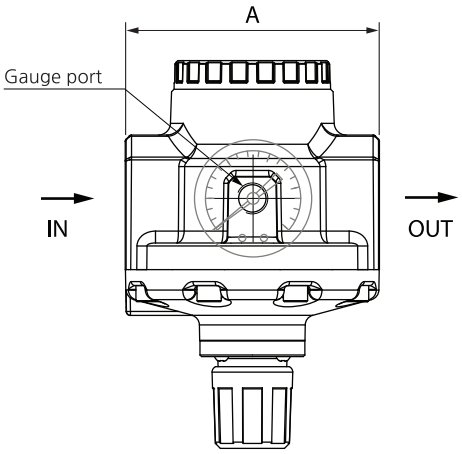
No.	PARTS	MATERIAL
①	Body	ALDC
②	Cover	ALDC
③	ADJ Cover	ALDC
④	Valve guide	ALDC

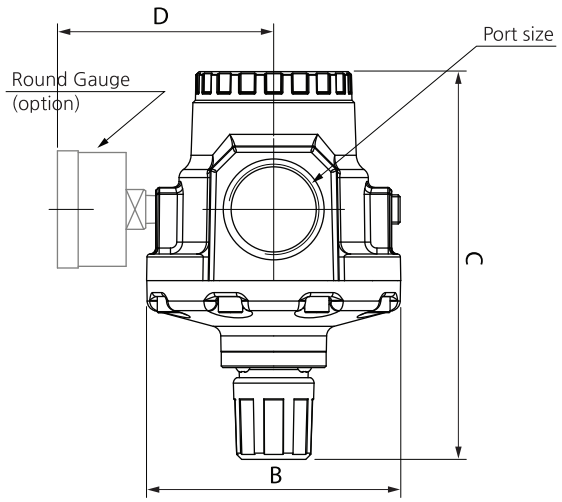
▪ Replacement Parts

No.	PARTS	MATERIAL
⑤	Valve spring	SWP
⑥	Check valve Ass'y	-
⑦	Main diaphragm Ass'y	-
⑧	Pilot diaphragm Ass'y	-
⑨	ADJ spring	SWP
⑩	Handle	PC

When handle⑩ is turned clockwise to compress pressure adjustment spring⑨, the pressure from the IN side passes through diaphragm ⑧, opens pilot valve⑪, and enters upper pilot chamber⑫. This pressure and the force generated by pressure adjustment spring⑨ act as resistance, resulting in equilibrium.
Then, this pressure passes through diaphragm⑦ of the main valve and check valve rod⑬, and pushes check valve⑬ open, thus guiding the pressure to the OUT side.
At the same time, the pressure passes through feedback hole⑭, and enters diaphragm chamber⑮, thus establishing the OUT side pressure (secondary pressure).

DIMENSIONS (mm)





Model	Port size	Gauge port	A	B	C	D
SAR825	1 1/4, 1 1/2	1/4	126	126	198	103
SAR925	2	1/4	160	160	226	119

Air Regulator with T type Handle (SAR)

SAR200T~600T Series

- With the backflow function, the SAR series incorporates a mechanism which exhausts the air pressure through the outlet side efficiently.

SAR300T

SAR400T

SAR600T

How to order

SAR 4 00 T - 04 BGK

① Air Regulator

② **Body Size**
2 - 1/4
3 - 3/8
4 - 1/2, 3/4
6 - 1

③ **Handle type**
T - T type handle

④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port Size**

기호	사이즈	몸체 사이즈			
		2	3	4	6
01	1/8	●			
02	1/4	●	●		
03	3/8		●		
04	1/2			●	
06	3/4			●	●
10	1				●

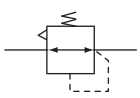
⑥ **Accessory(Optional)**
Nil - None Bracket / None Gauge
B - Bracket
G - Gauge

G	Round type
Gs	Square embedded type

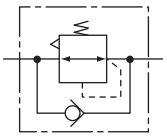
K - With backflow function

Symbol

SAR



SAR with backflow function



Specification

Fluid	Compressed Air			
Max. operating pressure	10bar (1.0MPa)			
Max. supply pressure	15bar (1.5MPa)			
Ambient and Media temp.	-5~60℃ (No freezing)			
Regulating range	0.5~8.5bar (0.05~0.85MPa)			
Gauge port	SAR200T	SAR300T	SAR400T	SAR600T
	1/8		1/4	
Construction	Relief type			

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

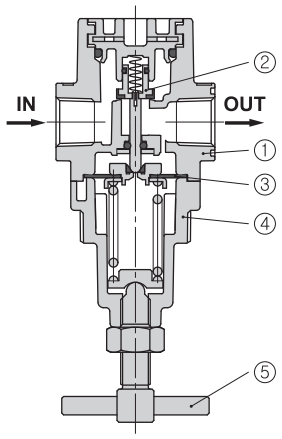
② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

③ Please contact SKP when a circuit requires the use of a regulator having relief sensitivity with high precision and setting accuracy.

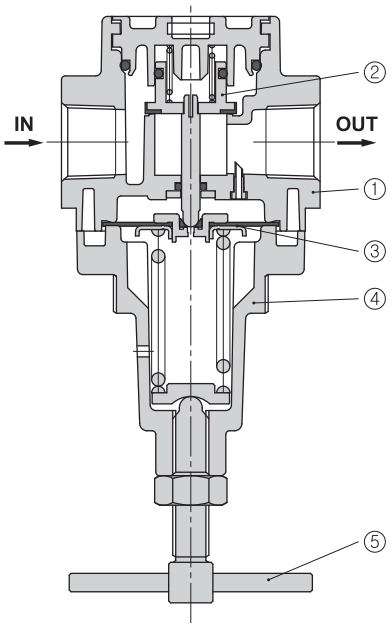
④ Residual pressure release (outlet pressure release) is not complete by releasing the inlet pressure. To release residual pressure, select a model with a back flow mechanism.

STRUCTURE / PARTS

SAR200T



SAR300T to 600T



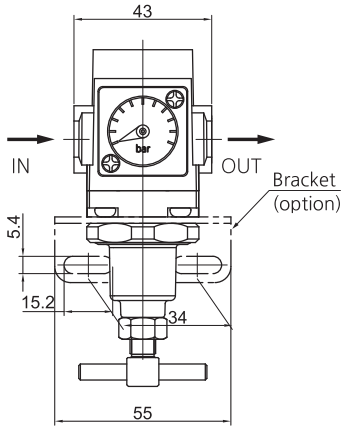
▪ Component Parts

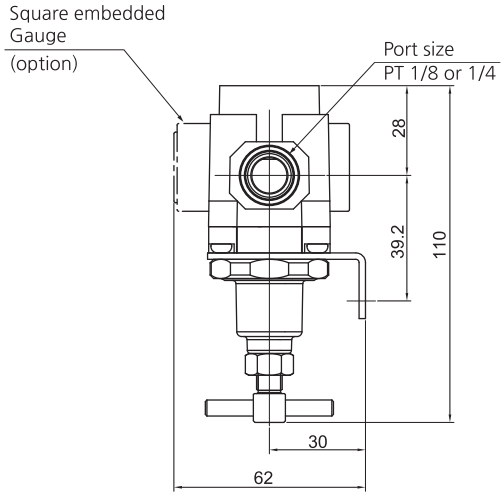
No.	PARTS	MATERIAL
①	Body	ALDC
②	Check valve Ass'y	Brass, NBR
③	Diaphragm Ass'y	NBR
④	Cover	ALDC
⑤	Handle	Steel

DIMENSIONS (mm)

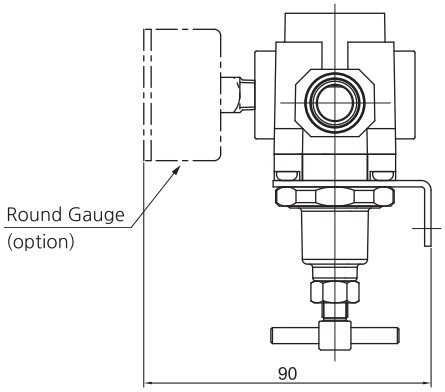
SAR 200T

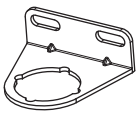
■ SAR200T-□02□□





■ Dimensions of each model with an option attached

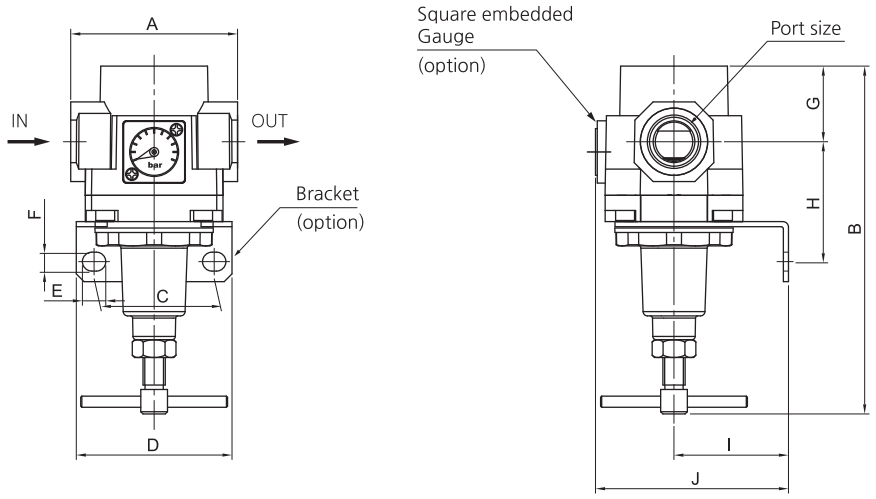


Option	Gs : Square embedded Gauge	G : Round type Gague	B : Bracket
Model	 Gs28	 G40, R1/8	 B220

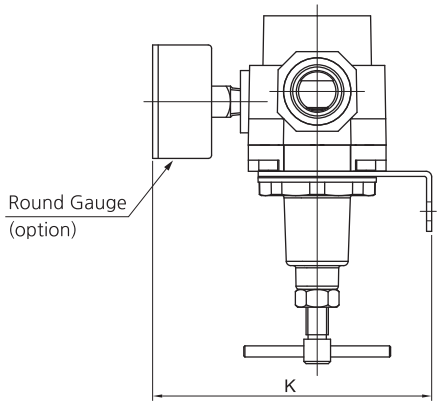
DIMENSIONS (mm)

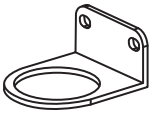
SAR 300T~400T

■ SAR300T-□03□□
SAR400T-□04(06)□□



■ Dimensions of each model with an option attached



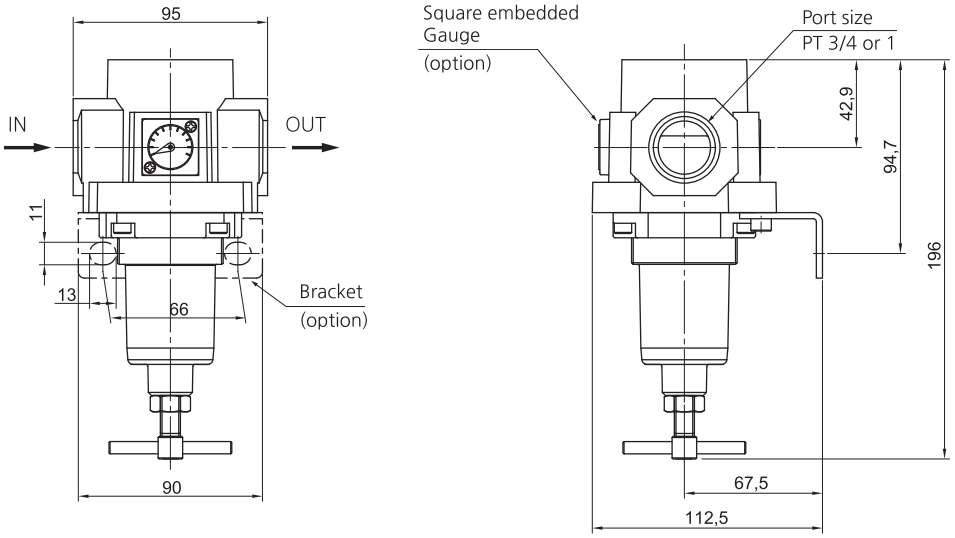
Option	G : Square embedded type Gague	G : Round type Gauge	B : Bracket
Model	 Gs28	 SAR300 : G40, R1/8 SAR400 : G50, R1/4	 SAR300 : B320 SAR400 : B420

Model	Port size	A	B	C	D	E	F	G	H	I	J	K
SAR300T-03	1/4 or 3/8	57	150	40	53	8	6.5	28.4	45.7	41	72	107
SAR400T-04	1/2	75	158	54	70	10.5	8.5	34	54	50	87	127
SAR400T-06	3/4	75	160	54	70	10.5	8.5	34.5	55.5	50	87	127

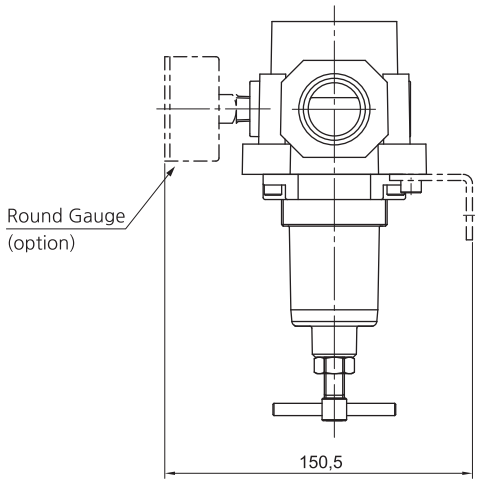
DIMENSIONS (mm)

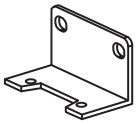
SAR 600T

■ SAR600T-□06□□
SAR600T-□10□□



■ Dimensions of each model with an option attached



Option	G : Square embedded type Gauge	G : Round type Gauge	B : Bracket
Model	 Gs28	 G50, R1/4	 B600

Air Regulator for High Pressure (SAR)

SAR200H~600H Series

- Highly durable materials are used in the manufacturing of air regulators intended for high pressure operation.

SAR200H

SAR300H

SAR400H

SAR600H

How to order

SAR 4 00 H - ☐ 04 BG

① Air Regulator

② **Body Size**
- 2 - 1/4
- 3 - 3/8
- 4 - 1/2
- 6 - 1

③ for high pressure

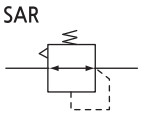
④ **Thread type**
- Nil - Rc(PT)
- N - NPT
- G - G(PF)

⑤ **Port Size**

기호	사이즈	몸체 사이즈			
		2	3	4	6
01	1/8	●			
02	1/4	●	●		
03	3/8		●		
04	1/2			●	
06	3/4			●	●
10	1				●

⑥ **Accessory(Optional)**
- Nil - None Bracket / None Gauge(Adapter Only)
- B - Bracket
- G - Gauge(Round type)

Symbol



Specification

Fluid	Compressed Air			
Max. supply pressure	30bar (3MPa)			
Max. operating pressure	20bar (2MPa)			
Ambient and Media temp.	-5~60℃ (No freezing)			
Regulating range	1~17bar (0.1~1.7MPa)			
Gauge port	SAR200H	SAR300H	SAR400H	SAR600H
	1/8		1/4	
Construction	Relief type			

Precautions

① Set the outlet pressure range for the regulator in a range that is 85% or less of the inlet pressure. If set above 85%, the inlet pressure will be easily effected by fluctuations in the flow rate and inlet pressure, and will become unstable.

② To set the pressure using the knob, turn the knob in the direction that increases pressure and lock the knob after the pressure is set. If this is done in the direction that decreases pressure, the pressure may drop from the original set pressure.
Turning the knob clockwise increases the outlet pressure, and turning it counterclockwise reduces the pressure.

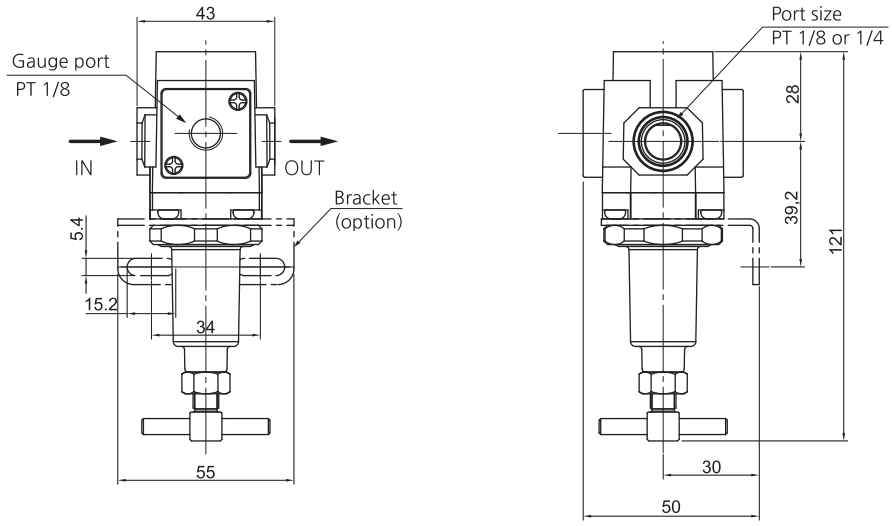
③ Please contact SKP when a circuit requires the use of a regulator having relief sensitivity with high precision and setting accuracy.

④ Residual pressure release (outlet pressure release) is not complete by releasing the inlet pressure. To release residual pressure, select a model with a back flow mechanism.

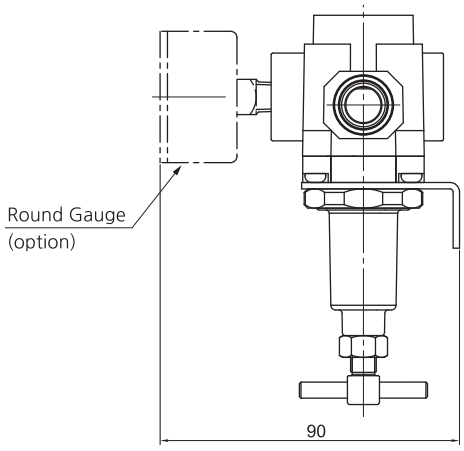
DIMENSIONS (mm)

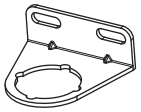
SAR 200H

■ SAR200H-□02□□



■ Dimensions of each model with an option attached

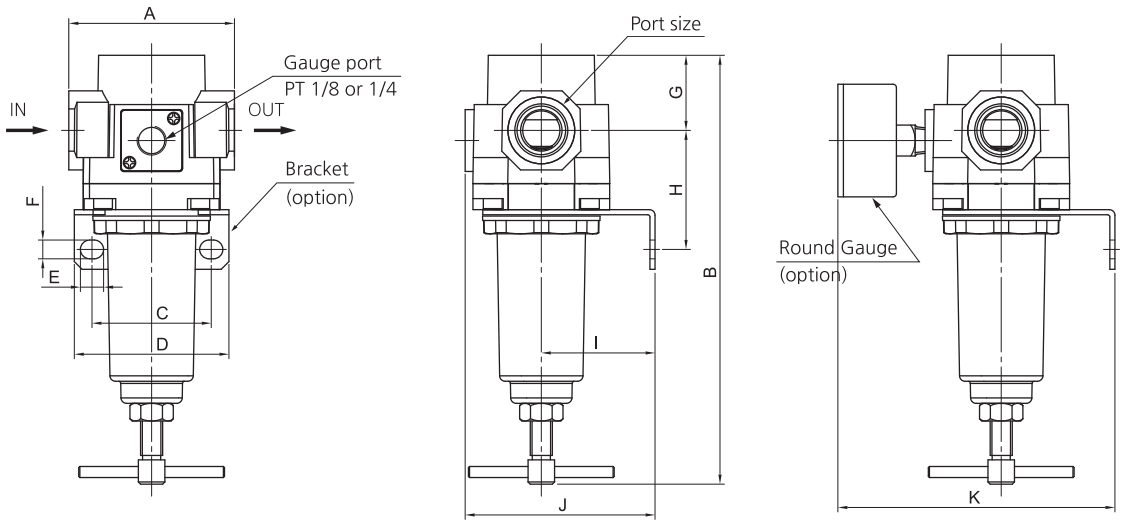


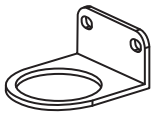
Option	G : Round type Gague	B : Bracket
Model	 Gh40, R1/8	 B220

DIMENSIONS (mm)

SAR 300H~400H

■ SAR300H□-□03□□
SAR400H□-□04(06)□□



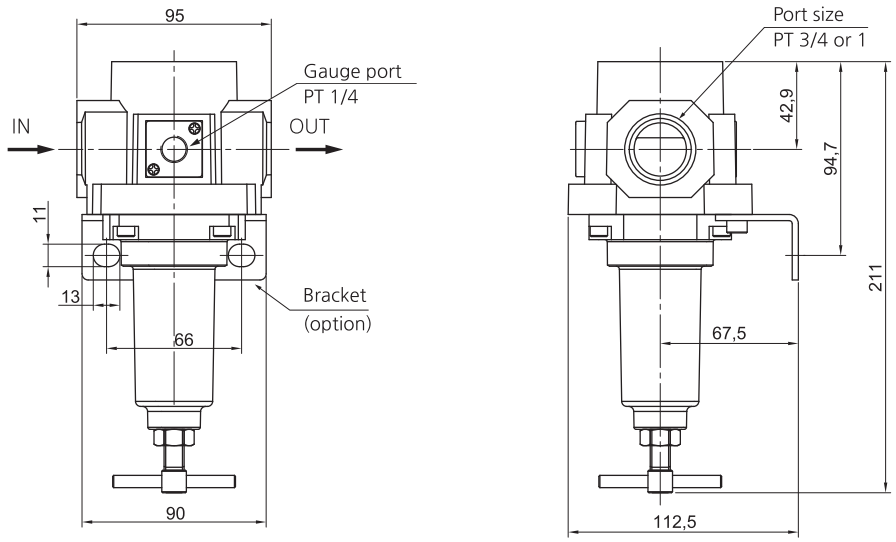
Option	G : Round type Gauge	B : Bracket
Model	 SAR300H : Gh40, R1/8 SAR400H : Gh50, R1/4	 SAR300H : B320 SAR400H : B420

Model	Port size	A	B	C	D	E	F	G	H	I	J	K
SAR300H-03	1/4, 3/8	57	164	40	53	8	6.5	28.4	45.7	41	72	107
SAR400H-04	1/2	75	188	54	70	10.5	8.5	34	54	50	86	127
SAR400H-06	3/4	75	190	54	70	10.5	8.5	34.5	55.5	50	86	127

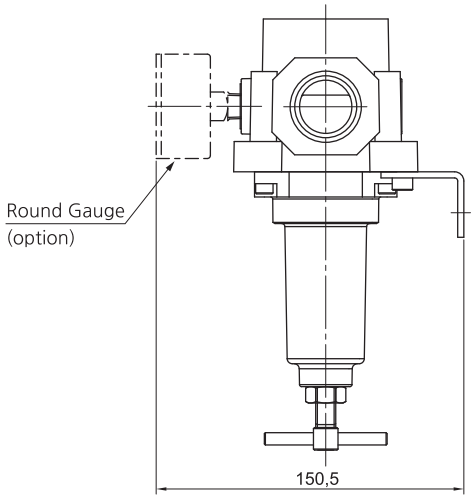
DIMENSIONS (mm)

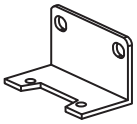
SAR 600H

■ SAR600H□-□06□□
SAR600H□-□10□□



■ Dimensions of each model with an option attached



Option	G : Round type Gauge	B : Bracket
Model	 Gh50, R1/4	 B600

Precision Regulator (SRP)

SRP2000~3000 Series

SRP 2000

SRP 3000

How to order

SRP 20 00 – 02 BG

① Precision Regulator

② **Body Size**
20 - 1/4
30 - 3/8

③ **Regulating pressure range**
00 - 0.2~8 bar
20 - 0.1~2 bar
40 - 0.1~4 bar

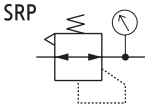
④ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

⑤ **Port Size**

Symbol	Size	Body size	
		20	30
02	1/4	●	
03	3/8		●
04	1/2		●

⑥ **Accessory(Optional)**
Nil - None Bracket / None Gauge
B - Bracket
G - Precision Gauge

Symbol



Specification

Fluid		Compressed Air
Max. operating pressure		10bar (1.0MPa)
Min. supply pressure [1]	SRP2000	Set pressure +0.5bar
	SRP3000	Set pressure +1bar
Regulating range		0.2~8bar (0.02~0.8MPa)
		0.1~4bar (0.01~0.4MPa)
		0.1~2bar (0.01~0.2MPa)
Sensitivity		Within 0.2% of full span
Repeatability		Within ±0.5% of full span
Air consumption [2] (At supply pressure of 10bar)	SRP2000	5 L/min
	SRP3000	11 L/min
Ambient and fluid temperature		-5~60℃ (No freezing)
Gauge port		1/8
Port size	SRP2000	1/4
	SRP3000	3/8, 1/2

Note : 1. With the condition of no flow on the output side.
2. Air is normally being discharged to the atmosphere from a bleed hole or an exhaust port.

Precautions

① If the supply pressure line contains drainage, particulate, or other debris, the fixed throttle can become clogged leading to malfunction. To avoid malfunctions, in addition to an air filter (Series SAF), installation of a mist separator (Series SAM, SAFM) is required.

② If the drain removal from air filter and mist separator is missed, drain will be flown out to the outlet side and may result in a malfunction of the pneumatic equipment. When removing drain is difficult, use of a filter with an autodrain is recommended.

③ Never use a lubricator on the supply side of the regulator, as this will positively cause the fixed throttle to become clogged and result in a malfunction. If lubrication is required for terminal devices, connect a lubricator on the output side of the regulator.

④ If a directional switching valve (solenoid valve, mechanical valve, etc.) is mounted on the supply side of the regulator and repeatedly switched ON and OFF, wear of the nozzle/flapper section will be accelerated and a discrepancy in the setting value may occur. Therefore, avoid using a directional switching valve on the supply side. In the event a directional switching valve will be used, install it on the output side of the regulator.

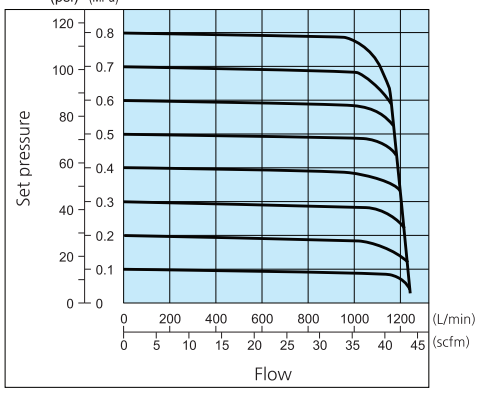
⑤ Air is normally released from the bleed hole (the hole on the side of the body's mid-section). This is a necessary consumption of air based on the construction of the precision regulator, and is not an abnormality.

Series SRP2000~3000

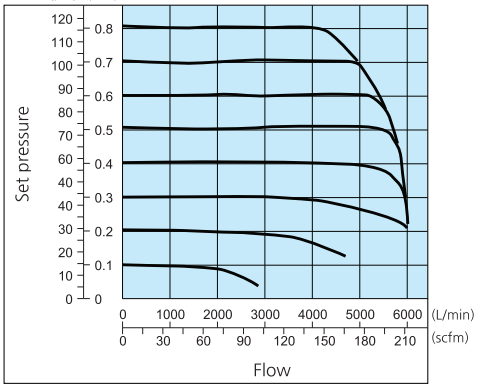
FLOW CHARACTERISTICS

Supply pressure : 1MPa

RP2000 Rc 1/4



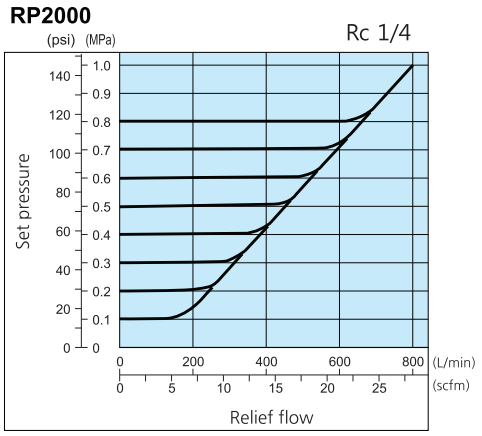
RP3000 Rc 3/8



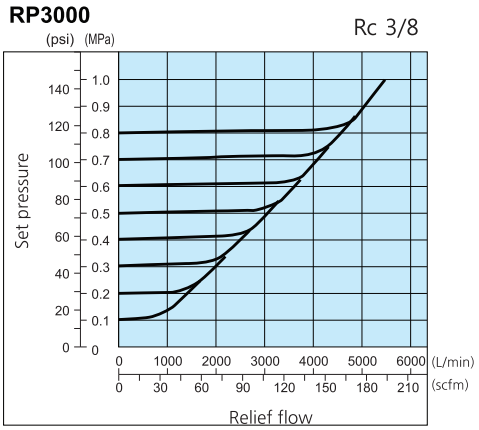
RELIEF CHARACTERISTICS

Back pressure : 1MPa

RP2000 Rc 1/4



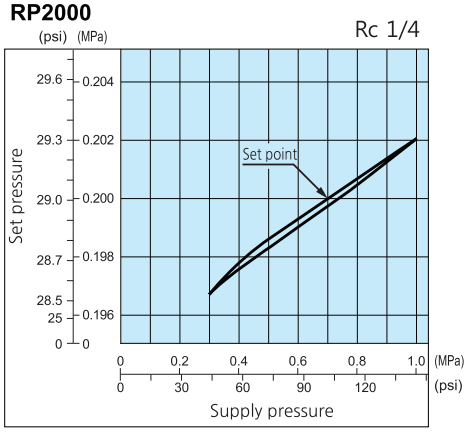
RP3000 Rc 3/8



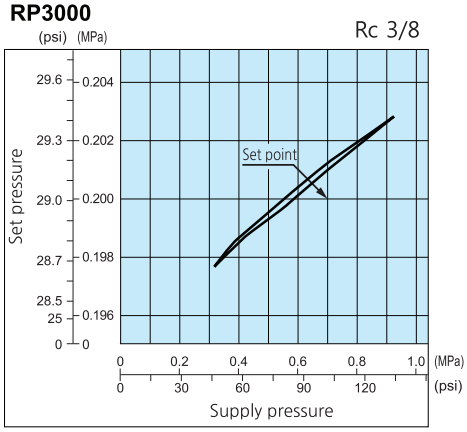
PRESSURE CHARACTERISTICS

Supply pressure: 0.7 MPa, Set pressure: 0.2 MPa, Flow rate: 0 L/min (ANR)

RP2000 Rc 1/4

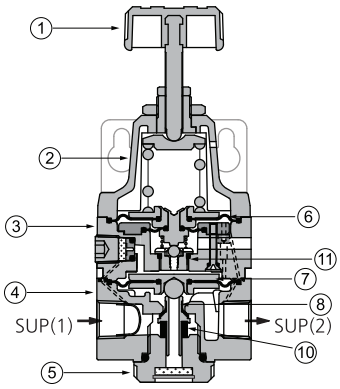


RP3000 Rc 3/8

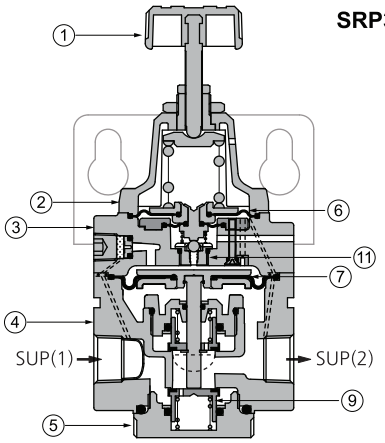


STRUCTURE / PARTS

SRP2000



SRP3000



▪ Working principle (For SRP2000)

When the knob is turned, the nozzle closes by the flapper, allowing supply pressure(SUP(1)) to enter and pass through fixed orifice and apply on diaphragm ⑦ as back pressure. Back pressure causes check valve ⑧ to be pushed down to allow supply pressure to flow out to the downstream side(SUP(2)). Supply pressure applied to Diaphragm ⑦ also is applied to Diaphragm ⑥ which creates an opposing force against compression force of the setting spring and becomes the set pressure.
When set pressure increases significantly, Diaphragm ⑥ is pushed up and space between flapper and nozzle widens causing nozzle back pressure to drop. Drop in nozzle back pressure causes Diaphragm ⑦ drop, closes the check valve ⑧ and opens the exhaust valve.
Precise pressure adjustment is achieved by using this nozzle flapper type mechanism.

▪ Component Parts

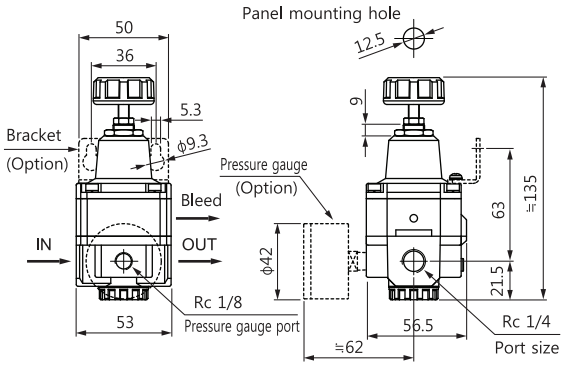
No.	PARTS	MATERIAL
①	Handle	NYLON
②	Cover	ALDC
③	Disk	ALDC
④	Body	ALDC
⑤	Valve guide	ALDC

▪ Repacement Parts

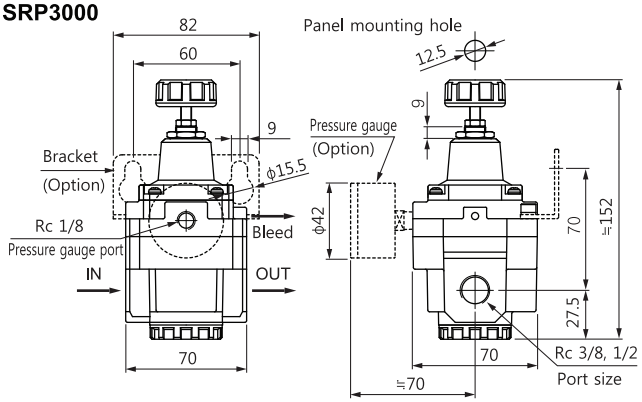
No.	PARTS	MATERIAL
⑥	Diaphragm Ass'y	NBR, others
⑦	Main Diaphragm Ass'y	NBR, others
⑧	Check valve	SUS, NBR
⑨	Check valve	Brass, NBR
⑩	Damper	NBR
⑪	Nozzle Ass'y	Brass, others

DIMENSIONS (mm)

SRP2000



SRP3000



Air Lubricator (SAL)

SAL100~600 Series

SAL100 SAL200 SAL300 SAL400 SAL600

How to order

SAL 4 00 - 04 B - MeP

① Air Lubricator

② **Body Size**
1 - 1/8
2 - 1/4
3 - 3/8
4 - 1/2, 3/4
6 - 1

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

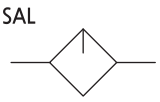
④ **Port Size**

Symbol	Size	Body size				
		1	2	3	4	6
M5	M5	●				
01	1/8		●			
02	1/4		●	●		
03	3/8			●		
04	1/2				●	
06	3/4				●	●
10	1					●

⑤ **Accessory(Optional)**
Nil - None Bracket
B - Bracket

⑥ **Bowl**
Nil - Polycarbonate bowl with Nylon guard
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

Symbol



Specification

Fluid	Compressed Air
Max. operating pressure	10bar (1.0MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and Media temp.	-5~60℃ (No freezing)
Recommended oil	Turbin oil (ISO VG32)
Bowl material	Poly-carbonate (option: ALDC)
Bowl guard material	Nylon

Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

② Do not introduce air from the outlet side as this can damage the damper.

③ Use a check valve (SACM series) to prevent back flow of the lubricant when redirecting the air flow before the lubricator.

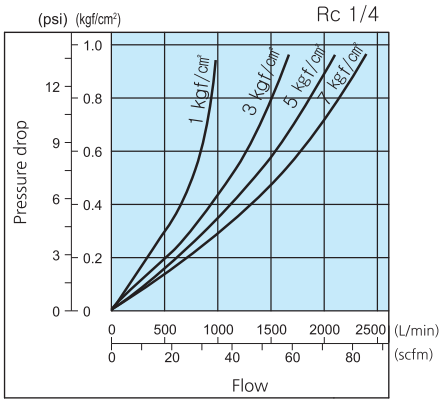
④ Avoid riser piping and branch lines on the outlet side to prevent inferior lubrication.

⑤ Adjustment of the oil regulating valve should be carried out manually. Turning it counterclockwise increases the dripping amount, and turning it clockwise reduces the dripping amount.

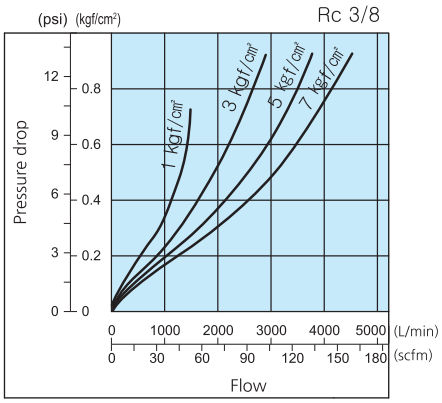
⑥ Check the usage rate once a day. If the lubricant is not normally consumed, problems may occur to the lubricated objects.

FLOW CHARACTERISTICS

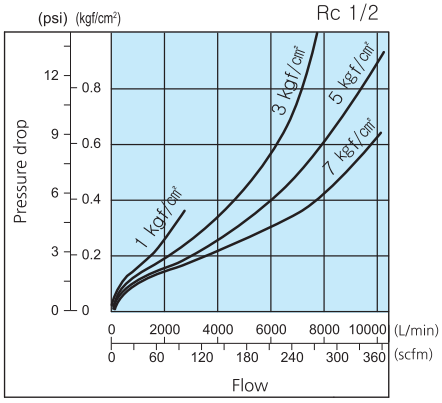
SAL 200



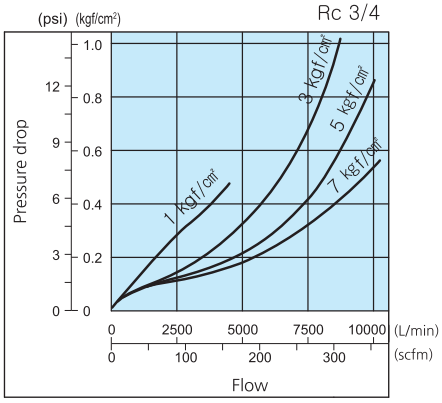
SAL 300



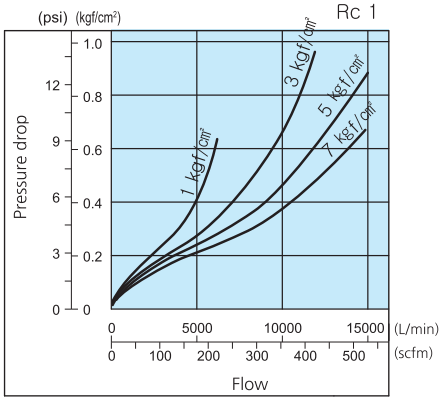
SAL 400-04



SAL 400-06

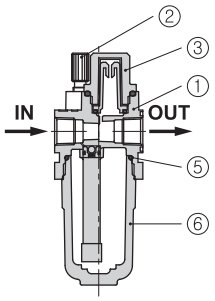


SAL 600

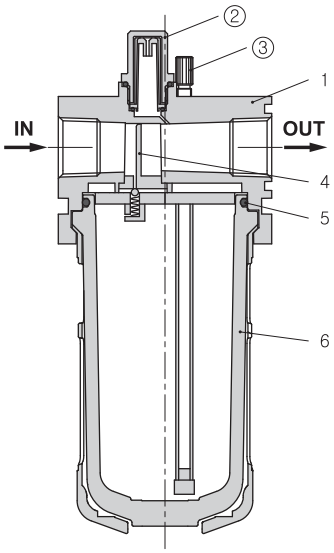


STRUCTURE / PARTS

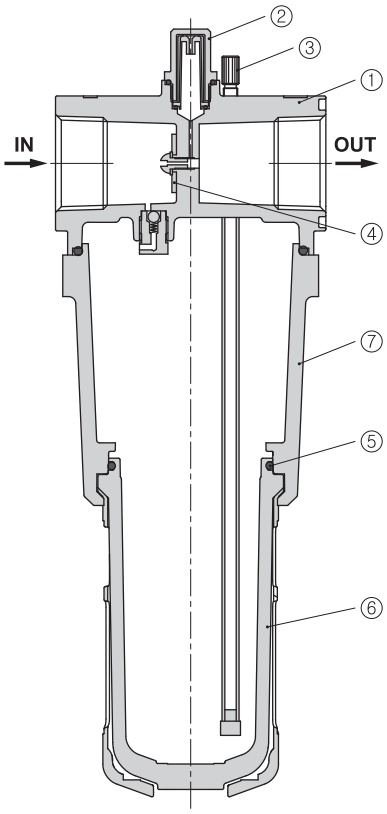
SAL100



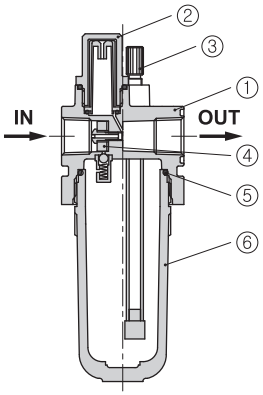
SAL300, SAL400



SAL600



SAL200



▪ Component Parts

No.	PARTS	MATERIAL
①	Body	ALDC
②	Oil cap	Nylon
③	Throttle screw	Bs
④	Damper Ass'y	Ur, NBR
⑥	Bowl Ass'y [1)]	PC & Nylon
⑦	Housing	ALDC

1) Bowl Ass'y for the SAL300 to SAL600 models comes with a bowl guard (steel band material).

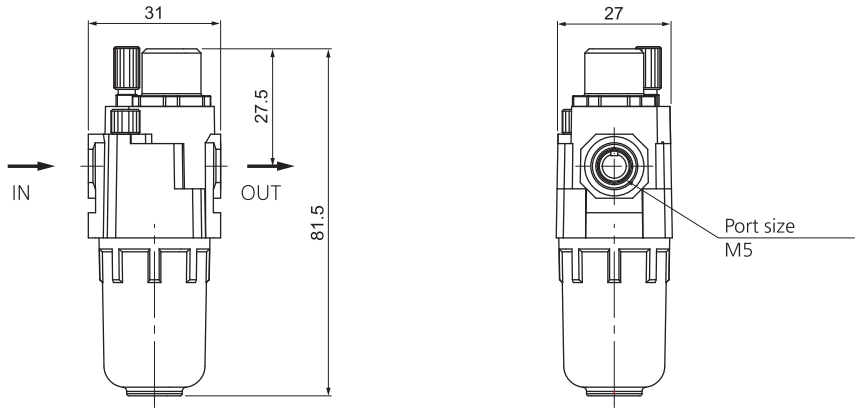
▪ Replacement Parts

No.	PARTS	MATERIAL	Part no.				
			SAL100	SAL200	SAL300	SAL400	SAL600
⑤	O-ring	NBR	S22	U024	38x2	U137	U137

DIMENSIONS (mm)

SAL 100

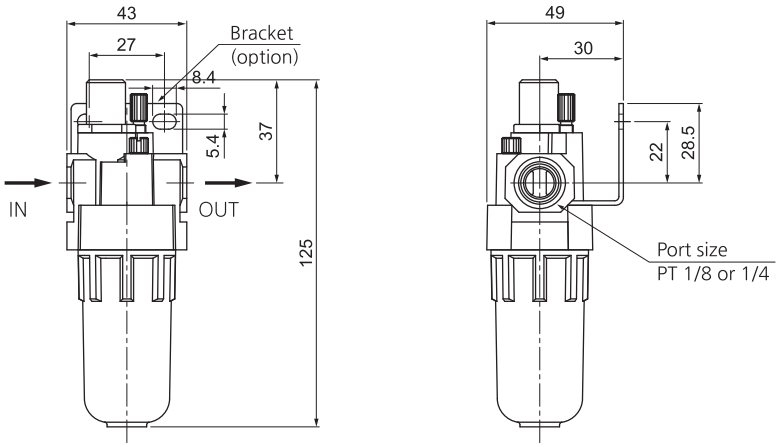
■ SAL100-□01(M5)



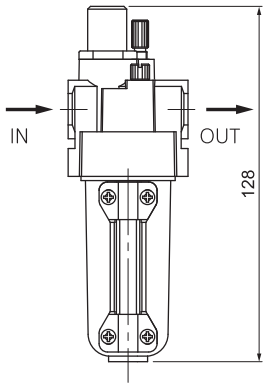
DIMENSIONS (mm)

SAL 200

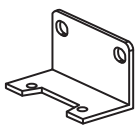
■ SAL200-□02□



■ Dimensions of each model with an option attached



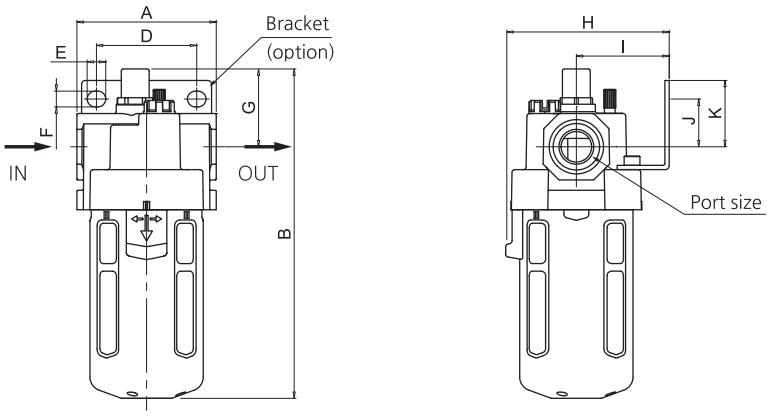
Metal bowl type

Option	B : Bracket
Model	 B200

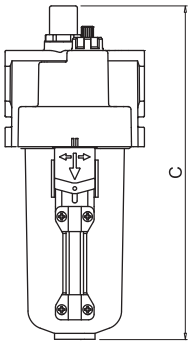
DIMENSIONS (mm)

SAL 300~400

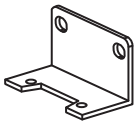
■ SAL300-□03□□
SAL400-□04(06)□□



■ Dimensions of each model with an option attached



Metal bowl type

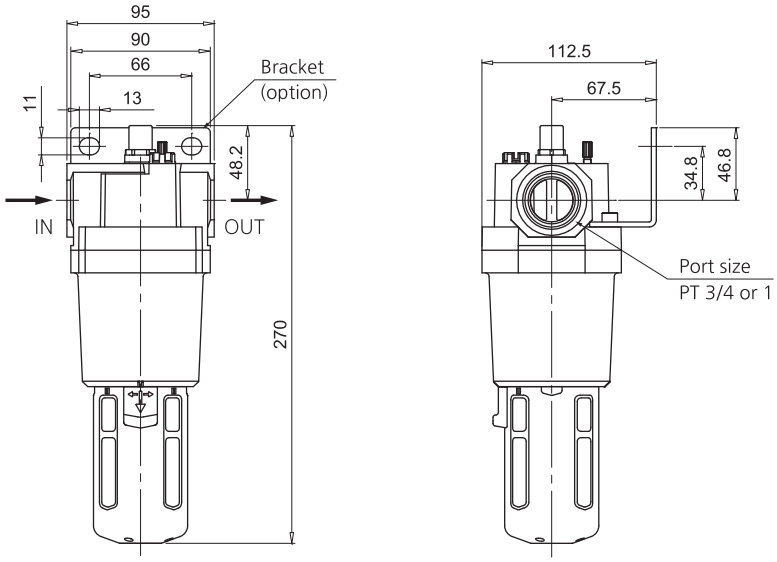
Option	B : Bracket
Model	 SAL300 : B300 SAL400 : B400

Model	Port size	A	B	C	D	E	F	G	H	I	J	K
SAL300-03	1/4, 3/8	57	147	160	40	7.9	6.3	14	65	36.5	14	21
SAL400-04	1/2	75	177.5	177	54	10	8.5	41.9	85	50	25.7	35.7
SAL400-06	3/4	75	181.5	181	54	10	8.5	43.8	85	50	25.1	35.1

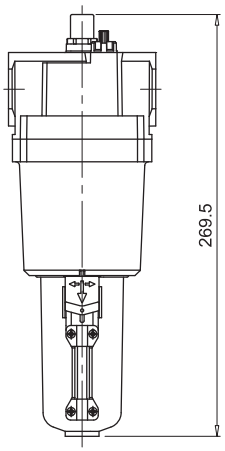
DIMENSIONS (mm)

SAL 600

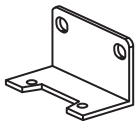
■ SAL600-□06□□
SAL600-□10□□



■ Dimensions of each model with an option attached



Metal bowl type

Option	**B** : Bracket
Model	 B600

Large Flow Air Lubricator (SAL)

SAL800~900 Series

SAL900

How to order

SAL 8 00 - ○ 14 B - MeP

① Air Lubricator

② **Body Size**
8 - 1 1/4, 1 1/2
9 - 2

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

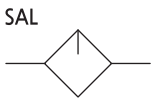
④ **Port Size**

Symbol	Size	Body size	
		8	9
12	1 1/4	●	
14	1 1/2	●	
20	2		●

⑤ **Accessory(Optional)**
Nil - None Bracket
B - Bracket

⑥ **Bowl**
PcS - Polycarbonate bowl with Steel guard
MeP - Metal bowl with pipe type sight glass

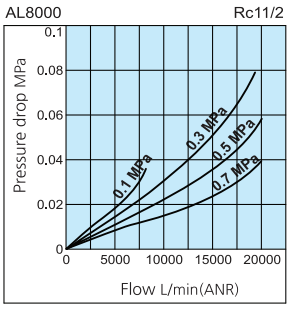
Symbol

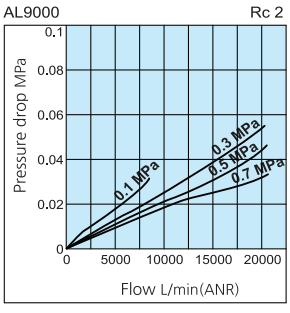


Specification

Port size	SAL800	1 1/4, 1 1/2
	SAL900	2
Fluid		Compressed Air
Max. operating pressure		10bar (1.0MPa)
Max. supply pressure		15bar (1.5MPa)
Ambient and Media temp.		-5~60℃ (No freezing)
Recommended oil		Turbin oil (ISO VG32)
Bowl material		Poly-carbonate (option: ALDC)

Flow Characteristics





Precautions

① Do not use Poly-carbonate bowls in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.

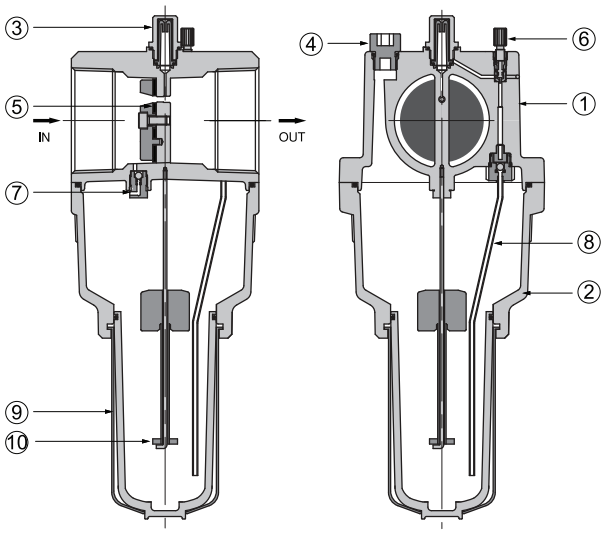
② Do not introduce air from the outlet side as this can damage the damper.

③ Adjustment of the oil regulating valve should be carried out manually. Turning it counterclockwise increases the dripping amount, and turning it clockwise reduces the dripping amount.

④ Check the usage rate once a day. If the lubricant is not normally consumed, problems may occur to the lubricated objects.

Series SAL800~900

STRUCTURE / PARTS



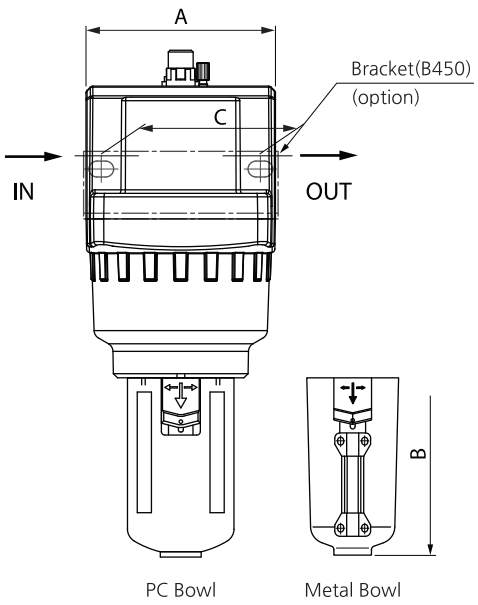
▪ Component Parts

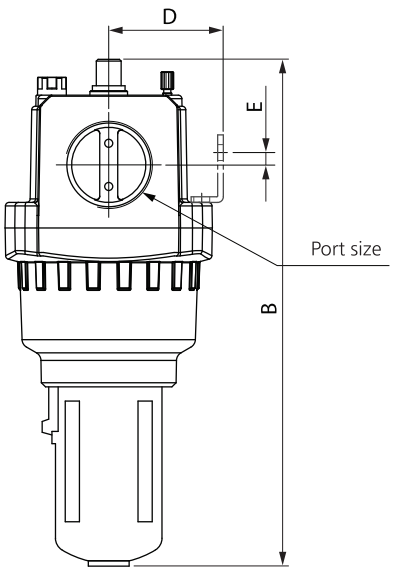
No.	PARTS	MATERIAL
①	Body	ALDC
②	Cover	ALDC

▪ Replacement Parts

No.	PARTS	MATERIAL
③	Oil cap	Nylon
④	Lubrication plug	N66G
⑤	Bumper Ass'y	NBR
⑥	Throttle screw	Bs
⑦	Check valve Ass'y	Brass
⑧	Siphon tube Ass'y	Cu
⑨	Bowl Ass'y	PC
⑩	Oil level	POM

DIMENSIONS (mm)





Model	Port size	A	B		C	D	E
			PC	Metal			
SAL800	1 1/4, 1 1/2	116	286	284	90	64	6.8
SAL900	2	116	286	284	90	64	6.8

AutoDrain Kit (SAD)

SAD200~400 Series

- Convenient use by attached one-touch fitting.
- Auto-drain kit for both automatic and manual operation.
- Diverse port size for drain hose allows for various options.

SAD200

SAD300

SAD400

SAD400-N

How to order

SAD 400 -

① Auto Drain

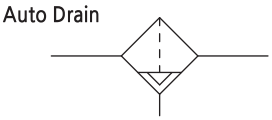
② **Body Size**
200 - Drain bolt size Φ12
300 - Drain bolt size Φ14
400 - Drain bolt size Φ16

③ **Drain connector**
Nil - One-touch fitting

Body size	Drain guide
200	Φ4
300	Φ6
400	Φ6

N - Nipple Rc(PT)1/8
Note) SAD200 does not have nipple type.

Symbol



Specification

Fluid	Compressed air
Max. operating pressure	10bar (1.0MPa)
Min. operating pressure	1.5bar (0.15MPa)
Max. supply pressure	15bar (1.5MPa)
Ambient and media temp.	1.5~60℃
Pressure to close drain	Greater than 0.5bar
Pressure to open drain	Less than 0.3bar

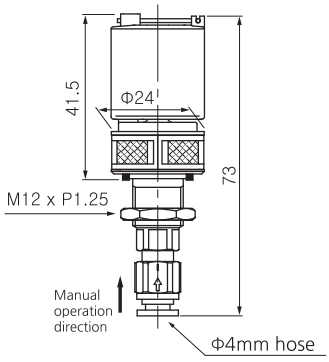
Material

- Cylinder, Cover and Buoy : Acetal
- Gaskeets : NBR
- Packing and Valve : NBR
- Spring : Stainless steel
- PIF collet : Zn plated diecasting
- O-ring : NBR
- One-touch fitting, Manual pusher : Br

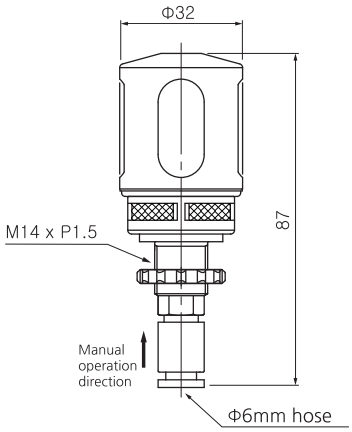
Series SAD200~400

DIMENSIONS (mm)

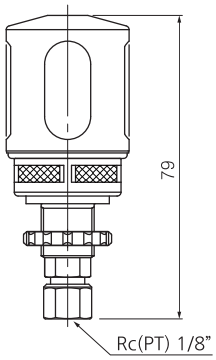
SAD 200



SAD 300

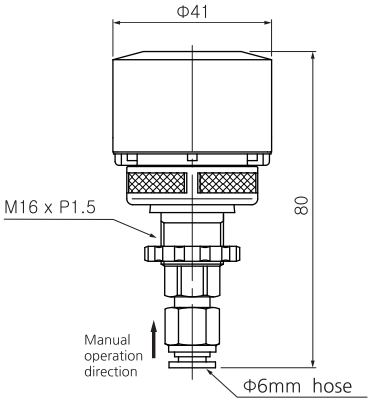


SAD300

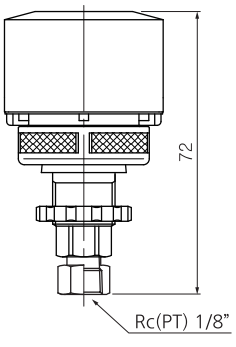


SAD300-N

SAD 400



SAD400

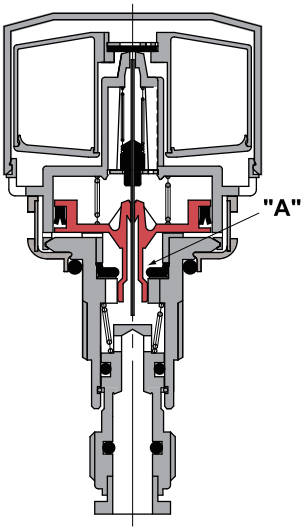


SAD400-N

Working principle

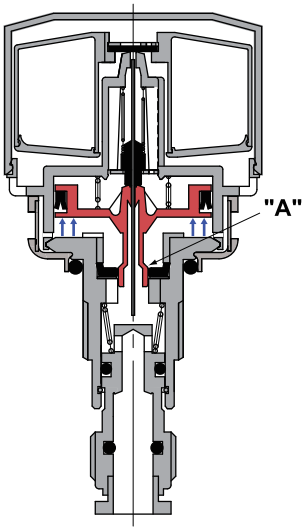
① When unpressurized up to ~0.5 bar

Spring pushes down the piston and opens "A" to drain air in the bowl.



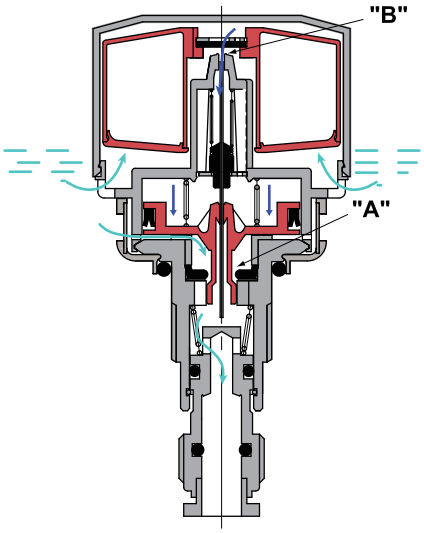
② When pressure is above 0.5 bar in the bowl

Pressure surpasses the force of spring and closes "A" to seal the bowl



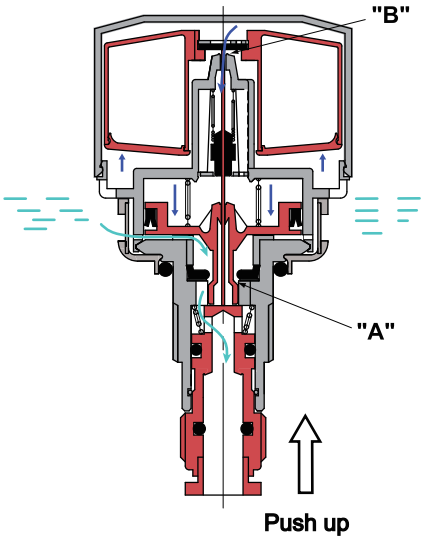
③ When there is accumulation in the bowl

Collected liquid lifts the float to open valve "B" allowing pressurized air to enter and push the piston down to open “A” to drain



Manual Operation

When the fitting is pushed upward, float is lifted thus opening the valve "B" to let pressurized air to enter and push the piston down to open “A” to drain



Pressure Relief 3port Valve (SHVS)

SHVS200~600 Series

- SHVS can prevent accidents caused by inadvertent air supply problems.

SHVS400

SHVS300

How to order

SHVS 3 00- 03

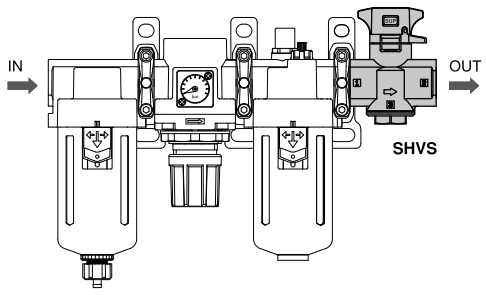
① Pressure relief 3port valve

② **Body Size**
- 2 - 1/4
- 3 - 3/8
- 4 - 1/2
- 6 - 1

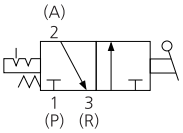
③ **Thread type**
- Nil - Rc(PT)
- N - NPT
- G - G(PF)

④ **Port Size**

Symbol	Size	Body size			
		2	3	4	6
02	1/4	●			
03	3/8		●		
04	1/2			●	
06	3/4				●
10	1				●



Symbol



Specification

Model		SHVS200	SHVS300	SHVS400	SHVS600	
Port size	IN, OUT	1/4	3/8	1/2	3/4	1
	EXH	1/8	1/4	3/8	1/2	
Cv	IN→OUT	0.88	1.72	3.8	5.0	6.5
	OUT→EXH	0.84	1.66	2.4	2.8	3.1
Fluid		Compressed air				
Proof pressure		15bar (1.5MPa)				
Operating pressure range		1~10bar (0.1~1MPa)				
Ambient and fluid temp.		-5~60℃ (No freezing)				
Handle switching angle		90°				

Precautions

① Do not supply air pressure from ports other than the 1 (P) port. The valve will malfunction when air pressure is supplied from other ports.

② Do not apply negative pressure. It may result in malfunction.

③ The valve must be switched to each position instantly and securely. Stopping the knob between the extreme positions may cause malfunction.

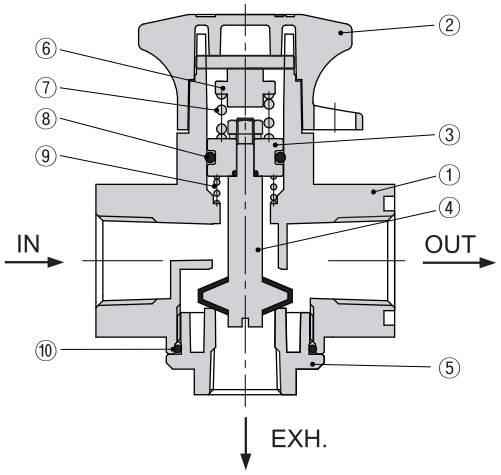
④ Do not remove the mounting screws from the bonnet. As this may cause malfunction.

* A spacer or spacer with bracket is required if the valve is combined with modular F.R.L. Please order it separately.

Pressure relief 3port valve	Spacer part no.	Spacer with bracket part no.	Applicable air preparation equipment
SHVS200	B21S	B21T	AU200
SHVS300	B31S	B31T	AU300
SHVS400	B41S	B41T	AU400-04
SHVS600	B61S	B61T	AU600

STRUCTURE / PARTS

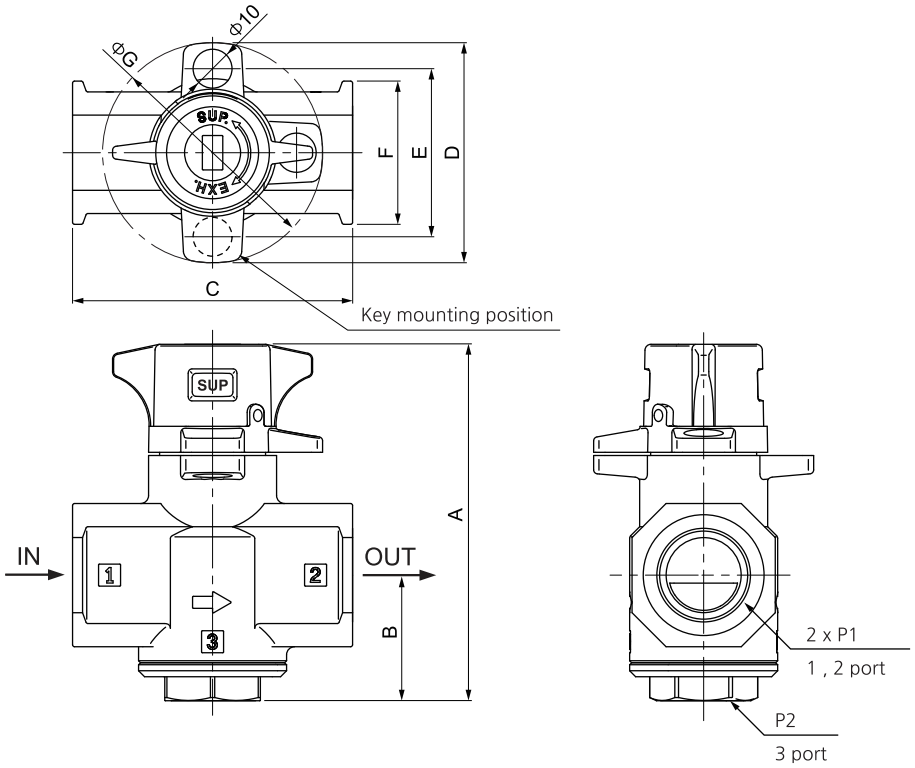
SHVS 200~600



No.	PARTS	MATERIAL
①	Body	ALDC
②	Handle	ALDC
③	Piston	Brass
④	Spool	Brass + NBR
⑤	Cover	ALDC
⑥	Spring guide	SUM
⑦	Spool spring	SUS
⑧	Piston o-ring	NBR
⑨	Spring	SUS
⑩	Cover o-ring	NBR

DIMENSIONS (mm)

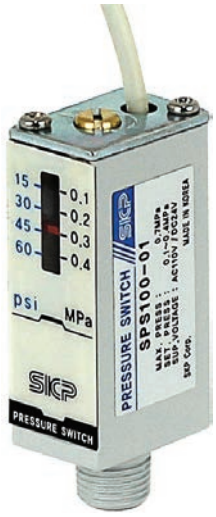
SHVS 200~600



Model	P1	P2	A	B	C	D	E	F	G
SHVS 200	1/4	1/8	60	20	40	46	33	25	45.8
SHVS 300	3/8	1/4	79.5	28.5	53	55	42	30	55
SHVS 400	1/2	3/8	89	31.5	70	55	42	35.8	55
SHVS 600	3/4, 1	1/2	119	39.8	90	68	54	52	67.5

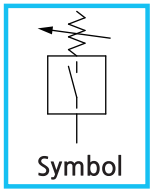
Pressure Switch (SPS)

SPS 100 Series



SPS100

- SPS100 is designed to easily detect a pressure drop of the air line.
- SPS100 can be connected to Modular type F.R.L. units.



How to order

SPS 100 - ○ 01 ○ - ○

① Pressure switch

② **Thread type**
- Nil - Rc(PT)
- N - NPT

③ **Lead wire length**
- Nil - 0.5m
- L - 3m
- Z - 5m

④ **Set pressure range**
- Nil - 1~4bar(0.1~0.4MPa)
- 6 - 2~6bar(0.2~0.6MPa)

Specification

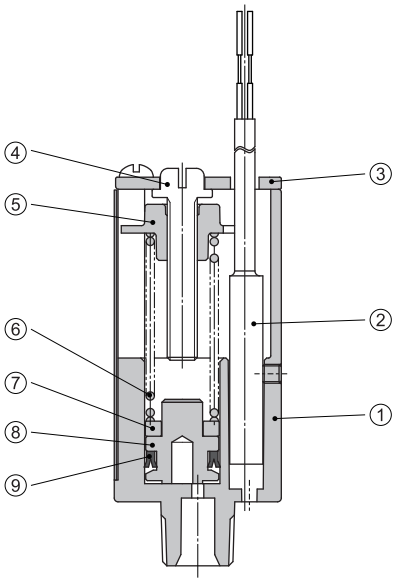
Fluid		Air	
Max. operating pressure		7bar (0.7MPa)	
Proof pressure		10bar (1MPa)	
Ambient and fluid temp.		-5~60℃ (No freezing)	
Set pressure range	Nil	1~4bar (0.1~0.4MPa)	
	6	2~6bar (0.2~0.6MPa)	
Contacts		1a	
Error of scale		±0.5 bar (0.05 MPa) or less	
Hysteresis		1.2bar (0.12MPa)	
Repeatability		±0.5bar (0.05MPa) or less	
Wiring specifications		Grommet, Lead wire length: 0.5 m	
Port size		1/8	
Voltage		DC24V	AC100
Operating current range		50mA	20mA

Cautions

① Allowable operating fluids are either air or inert gas exclusively.
② Avoid use in vacuum applications. Switch may be imploded.
③ Connect load before connecting with power source. The switch will break instantly if no load is connected.
④ Make the wiring length as short as possible. (within 5m)
⑤ Do not use in an environment where water or oil is splashed. Since it is an open type construction, if water or oil come in contact with the internal parts, the electric circuit will be corroded and may result in a malfunction or damage.
⑥ Avoid using a switch in a magnetic environment. It may cause a malfunction.
⑦ Apply a wrench to the bottom of the product when screwing.
Turning it by applying a wrench on the top of the main body may cause damage to the product.
⑧ The pressure displayed on the scale plate is a guideline only. Measure the accurate pressure with the pressure gauge.

STRUCTURE / PARTS

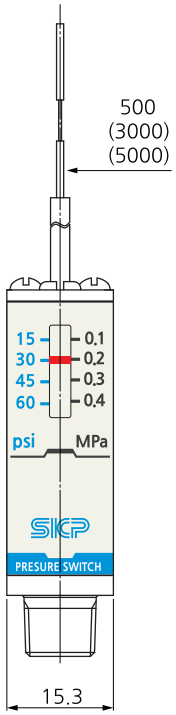
SPS 100

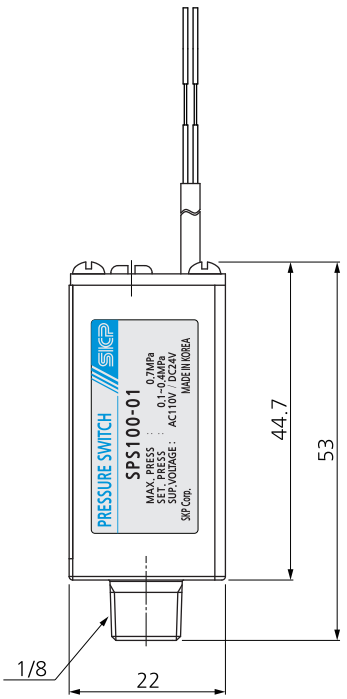


No.	PARTS	MATERIAL
①	Body	ZnDC
②	Switch Ass'y	-
③	Cover	Steel sheet
④	Adjusting screw	Brass
⑤	Indicator	ALDC
⑥	Spring	SUS
⑦	Magnet	-
⑧	Piston	POM
⑨	Piston Packing	NBR

DIMENSIONS (mm)

SPS100





Accessory

Gauge Series

G50

G40

G25

Gs28

GA-01

How to order

G 40 - 10 - 01

① Gauge type
② Body Size
③ Max. display pressure
④ Connection thread

GA - 01

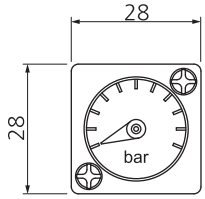
① Gauge Adapter
② Thread type
Nil - Rc(PT)
N - NPT
③ Port Size
01 - 1/8
02 - 1/4

Model		Pressure[1] range	Unit	Connection thread
Standard	G25-10-R1	0~10 (0~1)	Both bar and MPa	R 1/16
	G40-10-01			R 1/8
	G50-10-02			R 1/4
High pressure	Gh40-20-01	0~20 (0~2)		R 1/8
	Gh50-20-02			R 1/4
Precision	Gp40-2-01	0~2 (0~0.2)		R 1/8
	Gp40-4-01	0~4 (0~0.4)		
	Gp40-8-01	0~8 (0~0.8)		
Embedded square	Gs28-10	0~10	bar	-

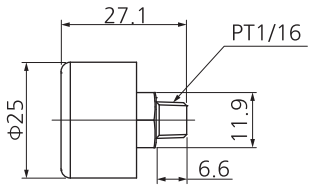
Note : 1. Do not apply pressure more than the maximum display pressure. This will cause a malfunction.

Dimension(mm)

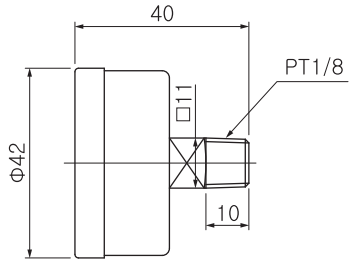
Gs28



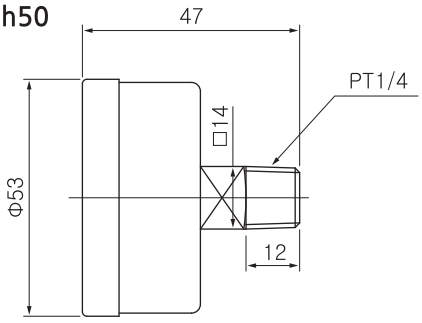
G25



G40, Gh40, Gp40



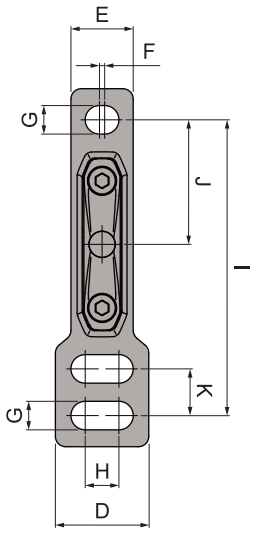
G50, Gh50

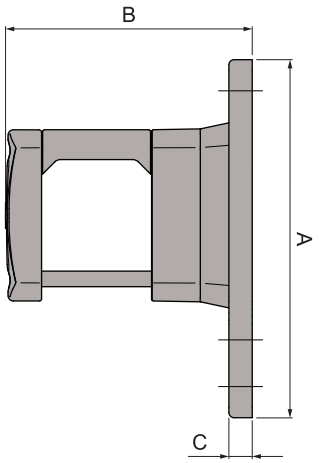


Accessory

Bracket for Air Unit (B11T~B61T / B11S~B61S)

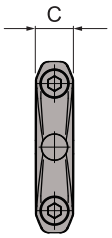
■ Bracket with Modular Spacer

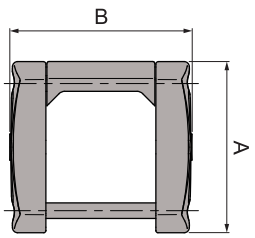




명칭	A	B	C	D	E	F	G	H	I	J	K	적용품명
B11T	56	39	4	13	13	2.3	4.5	2.3	47	20	7	SAU100, 110, 120
B21T	69	48	4.5	18	12	1	5.5	6.5	57	24	9	SAU200, 210~260
B21U	69	53	4.5	18	12	1	5.5	6.5	57	24	9	SAMU150
B31T	87	63	6	23	17	2	7	7	70	35	-	SAU300, 310~320, SAMU250
B31U	87	63	6	23	17	2	7	7	86	35	16	SAU330~360
B41T-04	100	77	7	29	20	2	9	10	80	40	-	SAU400-04, 410-04~460-04, SAMU350
B41T-06	100	80	7	29	20	2	9	10	80	40	-	SAU400-06, 420-06, 430-06
B41U-06	100	85	7	29	20	2	9	10	80	40	-	SAMU450
B61T	125	105	11	33	25	2	11	10	100	50	-	SAU600, 610, 620, SAMU550

■ Modular Spacer





명칭	A	B	C	적용품명
B21S	33	35	7	SAU200, 210~260, SAMU150
B31S	43	44	10	SAU300, 310~360, SAMU250
B41S-04	54	53	12	SAU400-04, 410-04~460~04, SAMU350
B41S-06	59	60	12.4	SAU400-06, 420-06, 430-06, SAMU450
B61S	69	70	15	SAU600, 610, 620, SAMU550

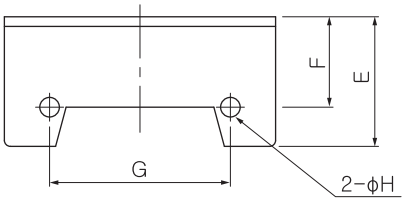
Accessory

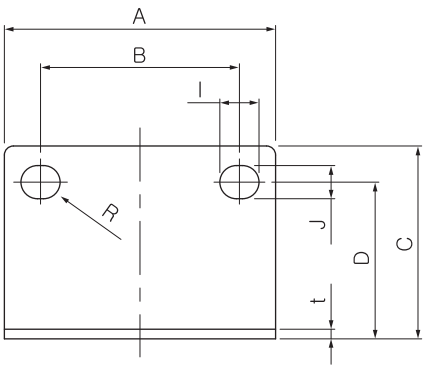
Bracket for SAF / SAL(B200~B600, B620)

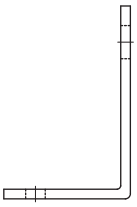
B600

B400

B300





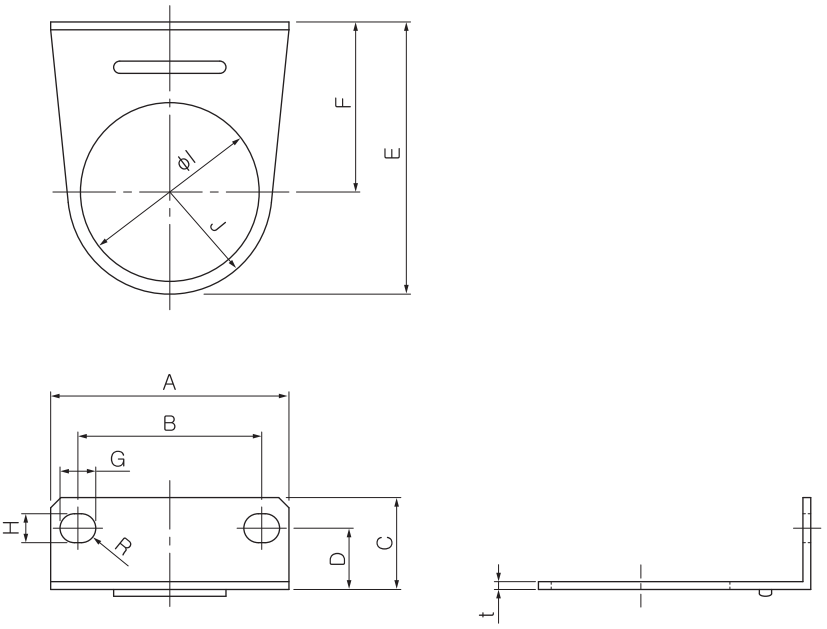


Model	A	B	C	D	E	F	G	H	I	J	R	t	Applicable model
B200	40	27	36.5	30	19.5	15	26	4.5	8.4	5.4	2.7	1.6	SAF200, SAL200, SAFM200, SAFD200
B300	53	40	39	32	26.5	19	35	4.5	8	6.5	3.25	2.3	SAF300, SAL300, SAFM300, SAFD300
B400	70	54	48	38	28.5	20	47	5.5	10	8.5	4.25	2.3	SAF400, SAL400, SAFM400, SAFD400
B600	90	66	64	52	43	30	60	6.5	13	11	5.5	3.2	SAF600, SAL600, SAR600
B622	90	66	41	29	32	21	60	6.5	13	11	5.5	3	SAW600

Accessory

Bracket for SAR / SAW(B120~B420)

B420 B320 B220 B120

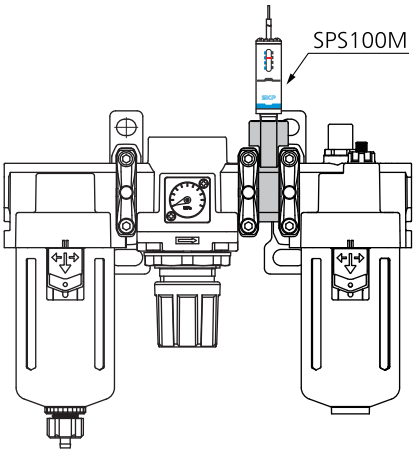


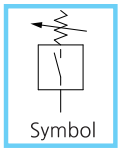
Model	A	B	C	D	E	F	G	H	I	J	R	t	Applicable model
B120	40	28	18.8	13.5	37.5	25	6.5	4.5	18.1	12.5	2.25	1.6	SAR100, SAW100
B220	55	34	21	15	49.5	30	15	5.4	29.8	19.3	5	2	SAR200, SAW200, SAWM200, SAWD200
B320	53	40	22	13.5	67	41	8	6.5	42.5	25	3.25	2.3	SAR300, SAW300, SAWM300, SAWD300
B420	70	54	28	19	80	52	10.5	8.5	42.5	27	4.25	2.3	SAR400, SAW400, SAWM400, SAWD400

Accessory

Pressure Switch with Spacer(SPS100M)

- SPS100M is designed to easily detect a pressure drop of the air line.
- SPS100M can be connected to Modular type F.R.L. units.





How to order

SPS 100M – ○ – ○○

① **Body size**
- 20 - 1/4
- 30 - 3/8
- 40 - 1/2
- 50 - 3/4
- 60 - 1

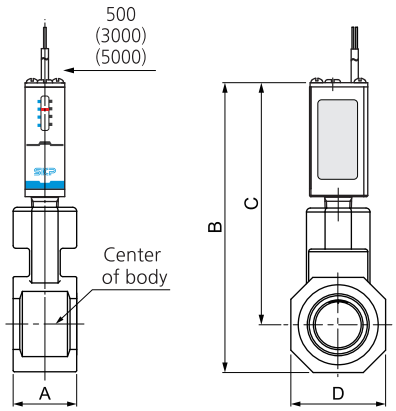
② **Lead wire length**
- Nil - 0.5m
- L - 3m
- Z - 5m

③ **Set pressure range**
- Nil - 1~4bar(0.1~0.4MPa)
- 6 - 2~6bar(0.2~0.6MPa)

Specification

Fluid		Compressed air
Max. operating pressure		7bar (0.7MPa)
Proof pressure		10bar (1MPa)
Ambient and fluid temp.		-5~60℃ (No freezing)
Set pressure range	Nil	1~4bar (0.1~0.4MPa)
	6	2~6bar (0.2~0.6MPa)

Dimension(mm)

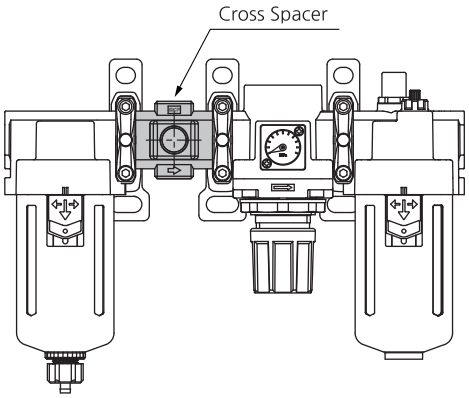


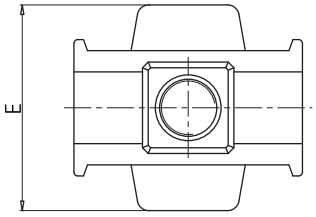
Model	A	B	C	D	Applicable model
PS100M-20	18	89.5	79	25	SAU200, SAU210~260
PS100M-30	19	100	86	30	SAU300, SAU310~360
PS100M-40	24	109	91.1	35.8	SAU400-04, SAU410~460
PS100M-50	24	113	93.2	43.6	SAU400-06, SAU420-06
PS100M-60	28	128	104.3	52.4	SAU600, SAU610~620

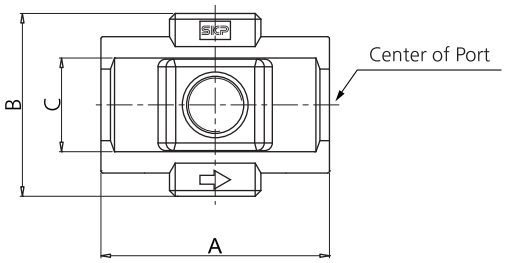
Accessory

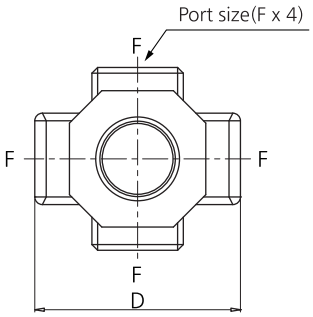
Cross Spacer(B240C~B440C)

1. Piping is possible in all 4 directions.
2. IN/OUT ports are not machined for threads.
   Please contact SKP if threaded (machined) ports are required.
3. When mounting a cross interface directly on the IN side of the lubricator, be sure to use the SACM series check valve between the lubricator and cross interface.









* Unit (mm)

Model	Port size(F)	A	B	C	D	E	Applicable model
B240C-□01	1/8	40	36	21	38	38	SAU200, SAU210~260
B240C-□02	1/4						
B340C-□01	1/8	49	43	28	48	48	SAU300, SAU310~360
B340C-□02	1/4						
B440C-□02	1/4	60	48	35.8	54	54	SAU400-04, SAU410-04~460-04
B440C-□03	3/8						

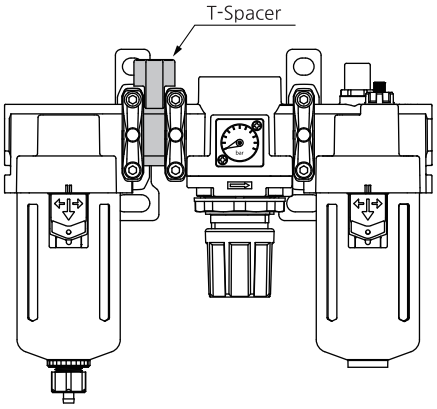
Note : □ in model numbers indicates a pipe thread type.
No indication is necessary for Rc; however, indicate N for NPT, and G for G.

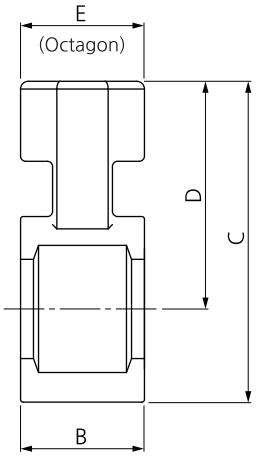
Accessory

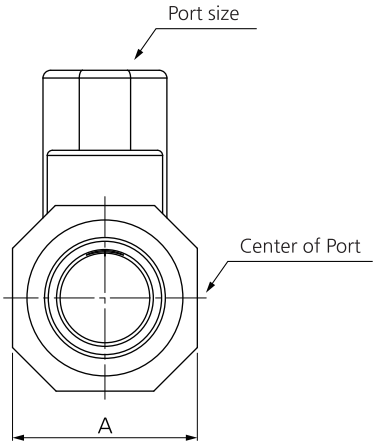
T Spacer(B230T~B630T)

1. Using a T-spacer facilitates the branching of air flow.
2. If a T-spacer is used on the inlet side of the lubricator, lubricant may be mixed.
   Use the SACM series check valve to avoid such possibility.

B430T B230T







Unit (mm)

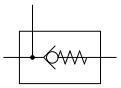
Model	Port size	A	B	C	D	E	Applicable model
B230T-□01	1/8	25	18	42.5	32	19	SAU200, SAU210~260
B230T-□02	1/4						
B330T-□01	1/8	30	19	53	39	19	SAU300, SAU310~360
B330T-□02	1/4						
B430T-□01	1/8	35.8	24	62	44.1	24	SAU400-04, SAU410-04~460-04
B430T-□02	1/4						
B430T-□03	3/8						
B530T-□01	1/8	43.6	24	66	46.2	24	SAU400-06, SAU420-06
B530T-□02	1/4						
B530T-□03	3/8						
B630T-□01	1/8	52.4	28	81	57.3	30	SAU600-06(10), SAU610-06(10), SAU620-06(10)
B630T-□03	3/8						
B630T-□04	1/2						

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

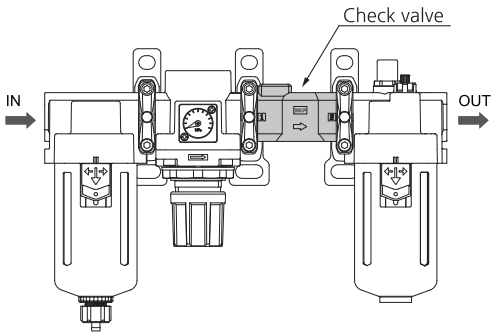
Accessory

Check Valve(SACM200~400)

Symbol



1. 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.
2. Be sure to use check valves when redirecting the air flow on the inlet side of the lubricator. Threads for IN and OUT ports are not machined.



How to order

SACM 4 00 - 02

① Check valve

② **Body size**
2 - 1/4
3 - 3/8
4 - 1/2

③ **Thread type**
Nil - Rc(PT)
N - NPT
G - G(PF)

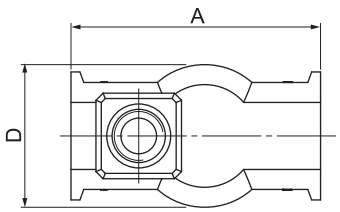
④ **By-pass port size**

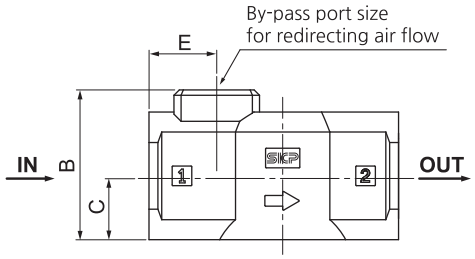
Symbol	Size	Body size		
		2	3	4
01	1/8	●	●	
02	1/4	●	●	●
03	3/8			●

Specification

Fluid	Air
Proof pressure	15bar (1.5MPa)
Max. operating pressure	10bar (1MPa)
Ambient and fluid temp.	-5~60℃ (No freezing)

Dimension(mm)

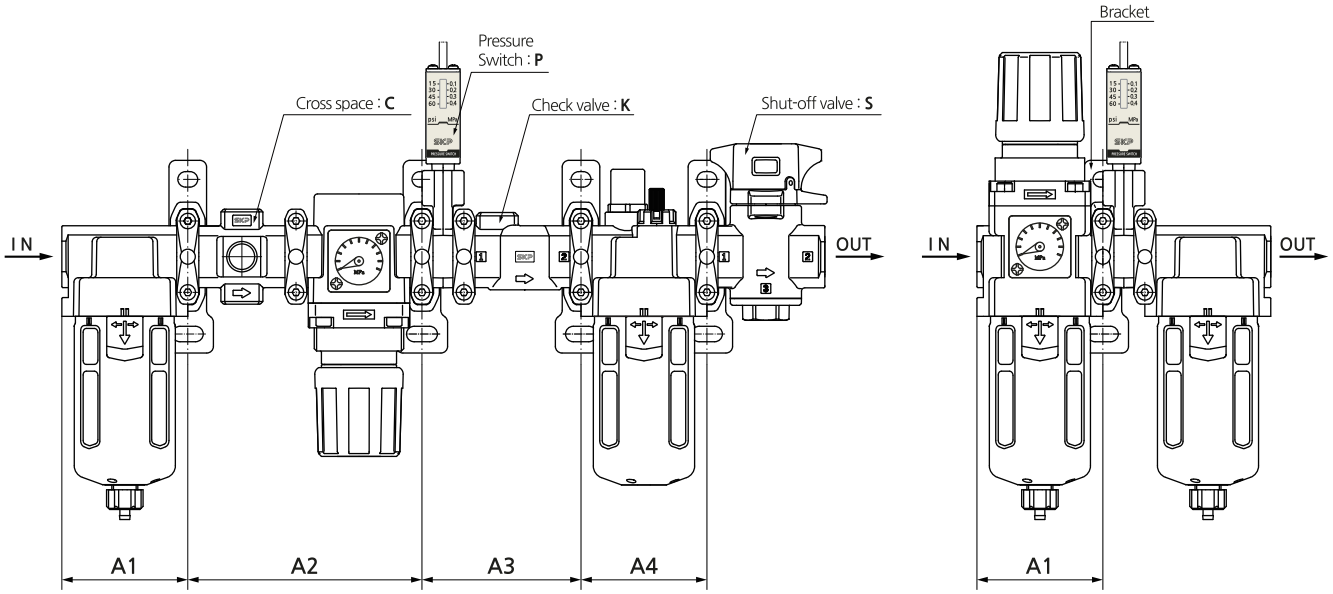




Model	By-pass port size	A	B	C	D	E	Applicable model
SACM200	1/8, 1/4	40	30.5	10.5	27	13.5	SAU200, SAU210~260
SACM300	1/8, 1/4	53	35.5	15	30	15	SAU300, SAU310~360 SAU400, SAU410~460
SACM400	1/4, 3/8	70	42	17.9	40	19	SAU600, SAU610~620

Note : A check valve cannot be mounted on the SAU400-06.

Mounting Position for Spacer with Bracket



Mounting Position for Spacer with Bracket

Attachment / Model	K			P		C		S			KP			CK			KS				CKP		
	A1	A2	A3	A1	A2	A1	A2	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3	A4	A1	A2	A3
SAU100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SAU200	43	43	40	43	43	43	83	43	43	43	43	43	58	43	43	40	43	43	40	43	43	83	58
SAU300	57	57	53	57	57	57	106	57	57	57	57	57	72	57	106	53	57	57	53	57	57	106	72
SAU400-04	75	75	70	75	75	75	135	75	75	75	75	75	94	75	135	70	75	75	70	75	75	135	94
SAU400-06	—	—	—	75	75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SAU600	—	—	—	95	95	—	—	95	95	95	—	—	—	—	—	—	—	—	—	—	—	—	—

Attachment / Model	KPS				KCS				KPCS				PC		PS			PCS			CS		
	A1	A2	A3	A4	A1	A2	A3	A4	A1	A2	A3	A4	A1	A2	A1	A2	A3	A1	A2	A3	A1	A2	A3
SAU100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SAU200	43	43	58	43	43	83	40	43	43	83	58	43	43	83	43	43	61	43	83	61	43	83	43
SAU300	57	57	72	57	57	106	53	57	57	106	72	57	57	106	57	57	76	57	106	76	57	106	57
SAU400-04	75	75	94	75	75	135	70	75	75	135	94	75	75	135	75	75	99	75	135	99	75	135	75
SAU400-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SAU600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75	75	99	—	—	—	—	—	—

Attachment / Model	K		P	S		KP		KS			KPS			PS	
	A1	A2	A3	A1	A2	A1	A2	A1	A2	A3	A1	A2	A3	A1	A2
SAU210	43	40	43	43	43	43	58	43	40	43	43	58	43	43	61
SAU310	57	53	57	57	57	57	72	57	53	57	57	72	57	57	76
SAU410-04	75	70	75	75	75	75	94	75	70	75	75	94	75	75	99
SAU610	—	—	95	95	95	—	—	—	—	—	—	—	—	95	122

Attachment / Model	P		C	S		PS		CS	
	A1	A2	A1	A1	A2	A1	A2	A1	A2
SAU220	43	43	43	43	43	43	43	73	73
SAU320	57	57	57	57	57	57	57	75	135
SAU420-04	75	70	75	75	75	75	94	75	70
SAU420-06	75	75	—	—	—	—	—	—	—
SAU610	95	95	—	95	95	95	95	—	—

Attachment / Model	P		C		S			PS			CS		
	A1	A2	A3	A1	A2	A1	A2	A1	A2	A3	A1	A2	A3
SAU230	43	43	43	83	43	43	43	43	43	61	43	83	43
SAU330	57	57	57	106	57	57	57	57	57	76	57	106	57
SAU430-04	75	75	75	135	75	75	75	75	75	99	75	135	75
SAU430-06	75	75	—	—	—	—	—	—	—	—	—	—	—

Attachment / Model	P		S		PS	
	A1	A2	A3	A1	A2	
SAU240	43	43	43	43	61	
SAU340	57	57	57	57	76	
SAU440	75	75	75	75	99	

Attachment / Model	P		C		S			PS			CS		
	A1	A2	A3	A1	A2	A1	A2	A1	A2	A3	A1	A2	A3
SAU250	43	43	43	83	43	43	43	43	43	61	43	83	43
SAU350	57	57	57	106	57	57	57	57	57	76	57	106	57
SAU450-04	75	75	75	135	75	75	75	75	75	99	75	135	75
SAU450-06	75	75	—	—	—	—	—	—	—	—	—	—	—

Attachment / Model	P		S		PS	
	A1	A2	A3	A1	A2	
SAU260	43	43	43	43	61	
SAU360	57	57	57	57	76	
SAU460	75	75	75	75	99	

L1 : Dimension from the end of the IN side to the center of the mounting hole for the first bracket
L2 : Mounting hole between the first and the second brackets
L3 : Mounting hole between the second and the thrid brackets
L4 : Mounting hole between the thrid and the fourth brackets

* Product attachment order or Bracket dismissed location is recommended.

Troubleshooting

FILTER

Condition	Trouble Cause	Solution
Flow decreases because of large amount of pressure drop.	The orifice of the filter element is clogged.	Elements should be changed.
Condensed water is exhausted on the secondary side right after filtering.	Condensed water reaches to the place of drain element.	Drain should be opened.
Air leaks at the connecting part of a bowl.	Clamp ring is loosened.	Clamp ring should be locked by turning. If air is still leaking after locking, shut off the air source and change the damaged part.
	Flaw is on the O-ring.	
	Damaged bowl.	
Draining function is not working when the drain is opened.	Solid foreign substances are clogging the drain pipe.	Cleaning exhaust pipe is required.
Air leaks at a drain valve.	A drain valve is loose.	Drain valve should be locked. If air is still leaking after locking, shut off air and change the damaged part.
	Foreign substances is inserted into the seat of drain valve or seat is damaged.	
	The bowl attached to the drain valve is damaged.	
Condensed water is not drained when auto drain attached type used.	Float is not operating smoothly because of bent float attached.	After examining its position, fix the bent part.
	A nozzle is filled with dust.	After shutting off air, disassemble and clean in order.
	Operating parts such as valve, etc., are not working because of rust or some other substances.	
	Splashing of oil, etc. in the drain to a float interferes with normal operation.	
Condensed water is constantly drained after once drained when auto drain attached type used.	A valve seat is damaged.	After shutting off air, disassemble and clean or change the damaged part.
	Operating parts such as valve, etc., are not working because of rust or some other substances.	
	Splashing of oil, etc. in the drain to a float interferes with normal operation.	

Troubleshooting

REGULATOR

Condition	Trouble Cause	Solution
Regulating pressure is difficult.	The flow direction between the first side and the second side is reversed.	Direction of flow on both sides should be changed to the correct direction.
	A regulating spring is broken	Disassemble and replace damaged parts.
	A valve spring is broken.	
	A rubber lining of a valve body is broken.	
	A diaphragm is broken.	
	Foreign substances is adhered to valve seat.	Disassemble and clean parts.
	Foreign substances is adhered to the part generating kinetic friction of valve body, so valve body is stuck.	
The secondary pressure is not decreasing after unlocking the regulating spring by turning the handle.	Foreign substances are adhered to valve seat.	Disassemble and clean parts.
	A valve spring is broken.	Disassemble and replace damaged parts.
	A valve and a rubber lining are broken.	
Air leaks around the exterior circumference of diaphragm.	The connecting screw at the upper cover is loose.	Tighten screw.
	A diaphragm is broken.	Replace damaged diaphragm.

Troubleshooting

LUBRICATOR

Condition	Trouble Cause	Solution
Oil is not accumulated in spite of air flowing.	Lubricator is not selected properly according to needed size.	Rechecking the application terms for air flow and least loading amount is required. If necessary, change the size.
	The direction of flow is reversed.	Change direction of flow to the correct direction.
	Regulating loading valve is tightened up excessively.	Proper regulating is required.
	Excess oil in the bowl. (over the maximum limit indicated)	Adjust flow rate to the proper range.
	Oil in the bowl is deficient. (less than the lowest limit indicated)	
	Oil passages like oil pipes or accumulating pipes are filled with dust.	Disassembly, inspection and cleaning are required.
Flow is hardly regulated.	Regulating screws are excessively loose.	Proper regulating is required.
	Regulating screws are hardly tightened because of dust around them.	Disassembly, inspection and cleaning are required.
	Regulating screws or seat parts get flaw.	
Oil leaks at regulating screw parts.	Regulating screws are excessively loose.	Proper regulating is required.
	O-ring is damaged.	Replace damaged parts.
Air leaks at connecting part of bowl.	A clamp ring is loose.	If air is still leaking after tightening the clamp ring, disassemble after shutting off and discharging all air from system. Replace damaged parts.
	O-ring is damaged.	
	A bowl is damaged.	

F.R.L. Units Precautions

⚠ Safety Instructions

Be sure to read before handling.

These safety instructions are intended to prevent hazardous situations and/or equipment damage.
These instructions indicate the level of potential hazard with the labels of "Caution," "Warning" or "Danger."
They are all important notes for safety and must be followed in addition to International Standards (ISO)[1], KS[2]
and other safety regulations.

⚠CAUTION	indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
⚠WARNING	indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
⚠DANGER	indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

1) ISO 4414 : Pneumatic fluid power -- General rules relating to systems.
2) KS B 6376 : 공기압 시스템 통칙

Design / Selection

⚠WARNING

- Pneumatic system design and device specifications selection should be done by the person with professional knowledge.
- Products represented in this catalog are designed only for use in compressed air systems.
  Please contact SKP when using a fluid other than compressed air
- Do not operate at pressures or temperatures, etc., beyond the range of specifications, as this can cause damage or malfunction. (Refer to the specifications.)
  We do not guarantee against any damage if the product is used outside of the specification range.
- The standard bowl for the air filter, filter regulator, and lubricator, as well as the sight dome for the lubricator are made of polycarbonate. Do not use in an environment where they are exposed to or come in contact with organic solvents, chemicals, cutting oil, synthetic oil, alkali, and thread lock solutions.
- Do not use in such a way as to frequently fill in or release the pressure from the standard bowls such as the air filter, filter regulator, lubricator, etc. Damage to the bowl may occur. A metal bowl is recommended in these cases.
- Do not disassemble the product or make any modifications, including additional machining.
  It may cause human injury and/or an accident.

⚠CAUTION

- The mineral grease used on internal sliding parts and seals may come in contact with outlet side components.

Air Supply

⚠WARNING

- Please consult with SKP when using the product in applications other than compressed air.
- If condensation in the drain bowl is not emptied on a regular basis, the bowl will overflow and allow the condensation to enter the compressed air lines. It causes malfunction of pneumatic equipment.
  If the drain bowl is difficult to check and remove, installation of a drain bowl with an auto drain option is recommended.

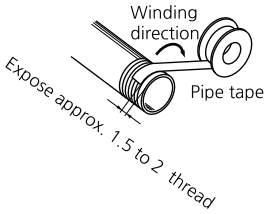
Mounting

⚠WARNING

- When installing the products, allow access for maintenance.
- Tighten threads with the proper tightening torque. Insufficient tightening torque may cause loosening or defective sealing. Over-tightening torque may damage the thread etc.

⚠CAUTION

- When connecting the piping, avoid interchanging the IN and the OUT sides.
  Reversed connections can cause malfunction.
- When screwing piping or fittings into ports, ensure that chips from the pipe threads or sealing material do not enter the piping. Also, if pipe tape is used, leave 1.5 to 2 thread ridges exposed at the end of the threads.



- Components with a bowl, e.g., air filter, filter regulator, lubricator, must be installed vertically with the bowl downward so that faulty drain discharge and dripping can be verified.

Operating Environment

⚠WARNING

- Do not operate under the conditions listed below due to a risk of malfunction.
  1) In locations having corrosive gases, organic solvents, and chemical solutions, or in locations in which these elements are likely to adhere to the equipment.
  2) In locations that are exposed to direct sunlight.
  3) In locations that have a heat source and poor ventilation.
  4) In locations that are exposed to shocks and vibrations.
  5) In locations with high humidity or a large amounts of dust.
- Adhere to the specified fluid temperature and ambient temperature ranges.
  Using the equipment outside of its specification range could cause it to be damaged, malfunction, or operate improperly.

Maintenance

⚠WARNING

- If handled improperly, compressed air can be dangerous.
  Assembly, handling, repair and element replacement of pneumatic systems should be performed by a knowledgeable and experienced person.
- Do not remove components until safety is confirmed.
- Remove drainage from air filters regularly.

⚠CAUTION

- Perform periodical inspections of the filter element and replace it as necessary. Check the element whenever the outlet pressure drops below normal or air does not flow smoothly during operation.