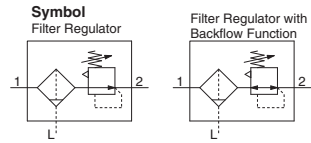


Filter Regulator AW10 to AW60

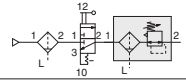
Filter Regulator with Backflow Function AW20K to AW60K



- Integrated filter and regulator units save space and require less piping.
- With the backflow function it incorporates a mechanism to exhaust the air pressure in the outlet side reliably and quickly.

Example)

When the air supply is cut off and releasing the inlet pressure to the atmosphere, the residual pressure release of the outlet side can be ensured for a safety purpose.



How to Order

AW **30** **K** - **03** **BE** - **01** - **01**

① ② ③ ④ ⑤ ⑥

Made to Order

Refer to pages 524 through 527 for details.

- Option/Semi-standard: Select one each for a to i.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) AW30K-03BE-11

	Symbol	Description	①						
			Body size						
			10	20	30	40	60		
②	With backflow function	Nil	Without backflow function	●	●	●	●	●	
		K <small>Note 1)</small>	With backflow function	—	●	●	●	●	
③	Thread type	+	Metric thread (M5)	●	—	—	—	—	
		Nil	Rc	—	●	●	●	●	
		N <small>Note 2)</small>	NPT	—	●	●	●	●	
		F <small>Note 3)</small>	G	—	●	●	●	●	
④	Port size	+	M5	●	—	—	—	—	
		01	1/8	—	●	—	—	—	
		02	1/4	—	●	●	●	—	
		03	3/8	—	—	●	●	—	
		04	1/2	—	—	—	●	—	
		06	3/4	—	—	—	●	●	
		10	1	—	—	—	—	●	
⑤	a	Mounting	Nil	Without mounting option	●	●	●	●	●
			B <small>Note 5)</small>	With bracket	●	●	●	●	●
			H	With set nut (for panel fitting)	●	●	●	●	—
	b	Float type auto drain	Nil	Without auto drain	●	●	●	●	●
			C	Float type auto drain (N.C.)	●	●	●	●	●
			D	Float type auto drain (N.O.)	—	—	●	●	●
	c	Pressure gauge	Nil	Without pressure gauge	●	—	●	●	●
			E	Square embedded type pressure gauge (with limit indicator)	—	—	—	—	—
			G	Round type pressure gauge (without limit indicator)	●	—	—	—	—
			M	Round type pressure gauge (with color zone)	—	●	●	●	●
		Digital pressure switch	E1 <small>Note 6)</small>	Output: NPN output / Electrical entry: Wiring bottom entry	—	●	●	●	●
			E2 <small>Note 6)</small>	Output: NPN output / Electrical entry: Wiring top entry	—	●	●	●	●
E3 <small>Note 6)</small>			Output: PNP output / Electrical entry: Wiring bottom entry	—	●	●	●	●	
E4 <small>Note 6)</small>	Output: PNP output / Electrical entry: Wiring top entry	—	●	●	●	●			
⑥	d	Set pressure	Nil <small>Note 7)</small>	0.05 to 0.85 MPa setting	●	●	●	●	●
			1 <small>Note 8)</small>	0.02 to 0.2 MPa setting	●	●	●	●	●
	e	Bowl <small>Note 9)</small>	Nil	Polycarbonate bowl	●	●	●	●	●
			2	Metal bowl	●	●	●	●	●
			6	Nylon bowl	●	●	●	●	●
8			Metal bowl with level gauge	—	—	●	●	●	
C	With bowl guard	—	●	—	—	—			
6C	Nylon bowl with bowl guard	—	●	—	—	—			

Filter Regulator *Series AW10 to AW60*

Filter Regulator with Backflow Function *Series AW20K to AW60K*



AW20, AW20K AW40, AW40K

- AC-A
- AF-A
- AF□-A
- AR-A
- AL-A
- AW-A
- AC
- AF
- AF□
- AR
- AL
- AW□
- A□G
- E□
- AV
- AF

		Symbol	Description	①					
				Body size					
				10	20	30	40	60	
6	f	Drain port <small>Note 10)</small>	Nil	With drain cock	●	●	●	●	●
			J <small>Note 11)</small>	Drain guide 1/8	—	—	—	—	—
				Drain guide 1/4	—	—	●	●	●
			W <small>Note 12)</small>	Drain cock with barb fitting: For ø6 x ø4 nylon tube	—	—	●	●	●
	g	Exhaust mechanism	Nil	Relieving type	●	●	●	●	●
			N	Non-relieving type	●	●	●	●	●
	h	Flow direction	Nil	Flow direction: Left to right	●	●	●	●	●
			R	Flow direction: Right to left	●	●	●	●	●
	i	Pressure unit	Nil	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa	○	○	○	○	○
			Z <small>Note 13)</small>	Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, "F	○	○	○	○	○
			ZA <small>Note 14)</small>	Digital pressure switch: With unit conversion function	—	△	△	△	△

- Note 1) The AW10 type comes with a backflow function as a standard feature. (K is not available.) When using the AW10 type as w/ backflow function, backflow may not occur with the set pressure 0.15 MPa or less. For AW20K to AW60K, Please set the inlet pressure to at least 0.05 MPa higher than the set pressure.
- Note 2) Drain guide is NPT 1/8 (applicable to the AW20(K)) and NPT 1/4 (applicable to the AW30(K) to AW60(K)). The auto drain port comes with ø3/8" one-touch fitting (applicable to the AW30(K) to AW60(K)).
- Note 3) Drain guide is G 1/4 (applicable to the AW20(K)) and G 1/4 (applicable to the AW30(K) to AW60(K)).
- Note 4) Option B, G, H, M are not assembled and supplied loose at the time of shipment.
- Note 5) Assembly of a bracket and set nuts (AW10, AW20(K) to AW40(K)) including 2 mounting screws for the AW60(K)
- Note 6) When choosing with H (panel mount), the installation space for lead wires will not be secured. In this case, select "wiring top entry" for the electrical entry.
- Note 7) Only the AW10 has a pressure setting of 0.05 to 0.7 MPa.
- Note 8) The only difference from the standard specifications is the adjusting spring for the regulator. It does not restrict the setting of 0.2 MPa or more. When the pressure gauge is attached, a 0.2 MPa pressure gauge will be fitted.
- Note 9) Refer to Chemical Data on page 365 when selecting a case material.
- Note 10) Float type auto drain: The combination of C and D is not possible.
- Note 11) Without a valve function
- Note 12) Metal bowl: The combination of 2 and 8 is not possible.
- Note 13) For thread type: M5 and NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.) The digital pressure switch will be equipped with the unit conversion function, setting to psi initially. The combination of the round type pressure gauge with color zone "M" and a psi display "Z" is not orderable as a standard product. However, this combination is available as a special.
- Note 14) For options: E1, E2, E3, E4. This product is for overseas use only according to the new Measurement Law. (The SI unit is provided for use in Japan.)
- Note 15) ○: For thread type: M5 and NPT only
- Note 16) △: Select with options: E1, E2, E3, E4.

Standard Specifications

Model	AW10	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)
Port size	M5 x 0.8	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1
Pressure gauge port size <small>Note 1)</small>	1/16 <small>Note 2)</small>	1/8		3/4		1/4
Fluid	Air					
Ambient and fluid temperature <small>Note 3)</small>	-5 to 60°C (with no freezing)					
Proof pressure	1.5 MPa					
Maximum operating pressure	1.0 MPa					
Set pressure range	0.05 to 0.7 MPa	0.05 to 0.85 MPa				
Relief pressure <small>Note 4)</small>	Set pressure + 0.05 MPa [at relief flow rate of 0.1 L/min (ANR)]					
Nominal filtration rating	5 μm					
Drain capacity (cm ³)	2.5	8	25	45	45	45
Bowl material	Polycarbonate					
Bowl guard	—	Semi-standard	Standard			
Construction	Relieving type					
Weight (kg)	0.09	0.20	0.40	0.72	0.75	2.00

- Note 1) Pressure gauge connection threads are not available for F.R.L. unit with a square embedded type pressure gauge (AW20(K) to AW60(K)).
- Note 2) Use a bushing (part no.131368) when connecting the R1/8 pressure gauge to the Rc 1/16.
- Note 3) -5 to 50°C for the products with the digital pressure switch
- Note 4) Not applicable to the AW10.



Series AW10 to AW60

Series AW20K to AW60K

Options/Part No.

Optional specifications		Model					
		AW10	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)
Bracket assembly ^{Note 1)}		AR10P-270AS	AW20P-270AS	AR30P-270AS	AR40P-270AS		AW60P-270AS ^{Note 6)}
Set nut		AR10P-260S	AR20P-260S	AR30P-260S	AR40P-260S		— ^{Note 7)}
Pressure gauge	Round type ^{Note 2)}	Standard	G27-10-R1	G36-10-□01	G46-10-□02		
		0.02 to 0.2 MPa setting	G27-10-R1 ^{Note 3)}	G36-2-□01	G46-2-□02		
	Round type ^{Note 2)} (with color zone)	Standard	—	G36-10-□01-L	G46-10-□02-L		
		0.02 to 0.2 MPa setting	—	G36-2-□01-L	G46-2-□02-L		
Square embedded type ^{Note 4)}	Standard	—	GC3-10AS [GC3P-010AS (Pressure gauge cover only)]				
	0.02 to 0.2 MPa setting	—	GC3-2AS [GC3P-010AS (Pressure gauge cover only)]				
Digital pressure switch ^{Note 5)}	NPN output / Wiring bottom entry		—	ISE35-N-25-MLA [ISE35-N-25-M (Switch body only)]			
	NPN output / Wiring top entry		—	ISE35-R-25-MLA [ISE35-R-25-M (Switch body only)]			
	PNP output / Wiring bottom entry		—	ISE35-N-65-MLA [ISE35-N-65-M (Switch body only)]			
	PNP output / Wiring top entry		—	ISE35-R-65-MLA [ISE35-R-65-M (Switch body only)]			
Float type auto drain ^{Note 6)} ^{Note 9)}		N.C.	AD17	AD27	AD37	AD47	
		N.O.	—	—	AD38	AD48	

Semi-standard/Bowl Assembly Part No.

Semi-standard specifications					Model						
Bowl material	Float type auto drain ^{Note 8)} ^{Note 9)}		With drain guide ^{Note 9)}	With barb fitting	With bowl guard	AW10	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)
	N.C.	N.O.	—	—	—	—	—	—	—	—	—
Polycarbonate	—	—	—	—	●	—	C2SF-C	—	—	—	—
	●	—	—	—	●	—	AD27-C	—	—	—	—
	—	—	●	—	—	—	C2SF-J	C3SF-J	—	C4SF-J	—
	—	—	—	●	—	—	—	C3SF-W	—	C4SF-W	—
Nylon	—	—	—	—	—	C1SF-6	C2SF-6	C3SF-6	—	C4SF-6	—
	—	—	—	—	●	—	C2SF-6C	—	—	—	—
	●	—	—	—	—	AD17-6	AD27-6	AD37-6	—	AD47-6	—
	—	●	—	—	—	—	—	AD38-6	—	AD48-6	—
	●	—	—	—	●	—	AD27-6C	—	—	—	—
	—	—	●	—	—	—	C2SF-6J	C3SF-6J	—	C4SF-6J	—
	—	—	—	●	—	—	—	C3SF-6W	—	C4SF-6W	—
	—	—	—	—	●	—	C2SF-6CJ	—	—	—	—
Metal	—	—	—	—	—	C1SF-2	C2SF-2	C3SF-2	—	C4SF-2	—
	●	—	—	—	—	AD17-2	AD27-2	AD37-2	—	AD47-2	—
	—	●	—	—	—	—	—	AD38-2	—	AD48-2	—
	—	—	●	—	—	—	C2SF-2J	C3SF-2J	—	C4SF-2J	—
Metal bowl with level gauge	—	—	—	—	—	—	—	C3LF-8	—	C4LF-8	—
	●	—	—	—	—	—	—	AD37-8	—	AD47-8	—
	—	●	—	—	—	—	—	AD38-8	—	AD48-8	—
	—	—	●	—	—	—	—	C3LF-8J	—	C4LF-8J	—

Note 1) Assembly of a bracket and set nuts

Note 2) □ in part numbers for a round pressure gauge indicates a type of connection thread. No indication is necessary for R; however, indicate N for NPT. Please contact SMC regarding the connection thread NPT and pressure gauge supply for psi unit specifications.

Note 3) Standard pressure gauge

Note 4) Including one O-ring and 2 mounting screws. [] : Pressure gauge cover only

Note 5) Lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screw (2 pcs.) are attached. [] : Switch body only. Also, regarding how to order the digital pressure switch, please refer to page 538. A pressure switch adapter assembly (AW60P-310AS) will be additionally required for the AW60(K) only. Use the attached mounting screw (M3 x 0.5 x 14) for mounting. The mounting screw (M3 x 0.5 x 7) attached to the digital pressure switch assembly will not be required.

Note 6) Assembly of a bracket and 2 mounting screws

Note 7) Please consult SMC regarding the set nuts for the AW60(K).

Note 8) Minimum operating pressure: N.O. type=0.1 MPa; N.C. type=0.1 MPa (AD27) and 0.15 MPa (AD37/47). Please contact SMC for psi and "F unit specifications.

Note 9) Please consult SMC for details on drain piping to fit NPT or G port sizes.

Note) • Bowl O-ring is included for the AW20(K) to AW60(K).

• Bowl assembly for the AW30(K) to AW60(K) models comes with a bowl guard (steel band material). (except when the bowl material is metal)

Series AW10 to AW60

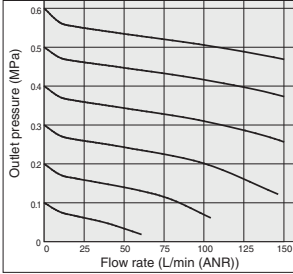
Series AW20K to AW60K

Flow Characteristics (Representative values)

Condition: Inlet pressure 0.7 MPa

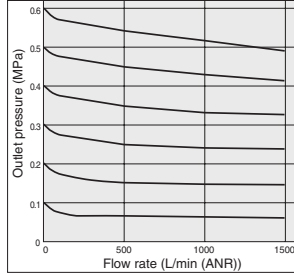
AW10

M5



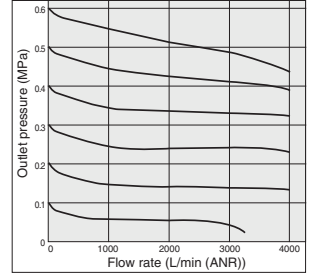
AW30(K)

Rc 3/8



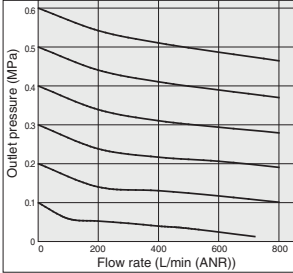
AW40(K)-06

Rc 3/4



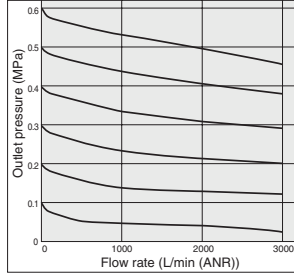
AW20(K)

Rc 1/4



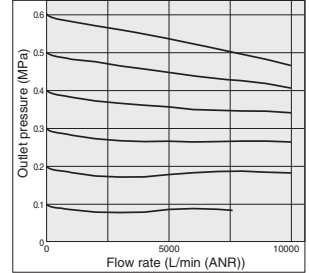
AW40(K)

Rc 1/2



AW60(K)

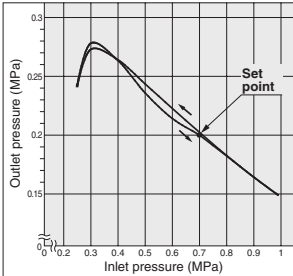
Rc 1



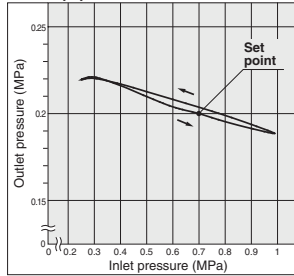
Pressure Characteristics (Representative values)

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

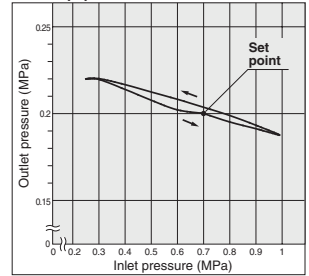
AW10



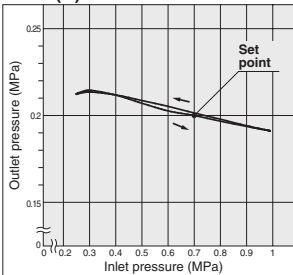
AW30(K)



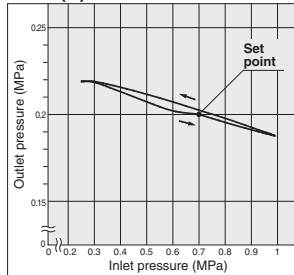
AW40(K)-06



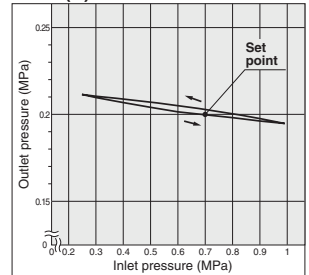
AW20(K)



AW40(K)



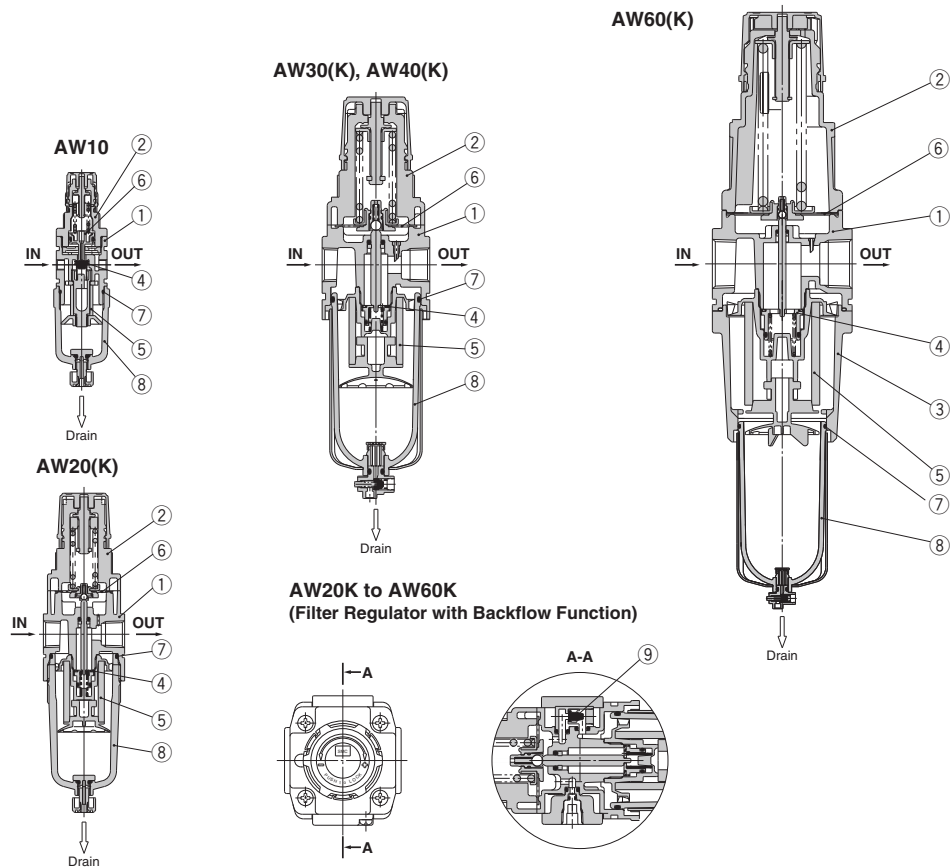
AW60(K)



Filter Regulator *Series AW10 to AW60*

Filter Regulator with Backflow Function *Series AW20K to AW60K*

Construction



AC-A
AF-A
AF□-A
AR-A
AL-A
AW-A
AC
AF
AF□
AR
AL
AW□
□G
E□
AV
AF

Component Parts

No.	Description	Material	Model	Color
1	Body	Zinc die-cast	AW10	Platinum silver
		Aluminum die-cast	AW20(K) to AW60(K)	
2	Bonnet	Polycetal	AW10 to AW40(K)	Black
		Aluminum die-cast	AW60(K)	
3	Housing	Aluminum die-cast	AW60(K)	Platinum silver

Replacement Parts

No.	Description	Material	Part no.					
			AW10	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)
4	Valve assembly	Brass, HNBR	AR10P-090S	AW20P-340AS	AW30P-340AS	AW40P-340AS	AW40P-340AS	AW60P-090AS
5	Filter element	Non-woven fabric	AF10P-060S	AF20P-060S	AF30P-060S	AF40P-060S	AF40P-060S	AW60P-060S
6	Diaphragm assembly	Weatherable NBR	AR10P-150AS <small>Note 1)</small>	AR20P-150AS	AR30P-150AS	AR40P-150AS	AR40P-150AS	AR50P-150AS
7	Bowl O-ring	NBR	C1SFP-260S	C2SFP-260S	C3SFP-260S	C4SFP-260S		
8	Bowl assembly <small>Note 2)</small>	Polycarbonate	C1SF	C2SF	C3SF <small>Note 3)</small>	C4SF <small>Note 3)</small>		
9	Check valve assembly <small>Note 4)</small>	—	—	—	C3SF <small>Note 3)</small>	AR20KP-020AS		

Note 1) The AW10 is a piston type. Assembly of a piston and a seal (KSY-P-13).

Note 2) Bowl O-ring is included for the AW20(K) to AW60(K). Please contact SMC regarding the bowl assembly supply for psi and "F" unit specifications.

Note 3) Bowl assembly for the AW30(K) to AW60(K) models comes with a bowl guard (steel band material).

Note 4) Check valve assembly is applicable for a filter regulator with backflow function (AW20K to AW60K) only.

Assembly of a check valve cover, check valve body assembly and 2 screws



Series AW10 to AW60

Series AW20K to AW60K

Working Principle (Filter Regulator with Backflow Function)

AW10



When the inlet pressure is higher than the regulating pressure, the check valve operates as a normal regulator (Figure 1). When the inlet pressure is shut off and exhausted, any inlet pressure applied to the valve ① will be lost. The force for seating the valve ① is the valve spring force ② only. When the valve ① is opened using the outlet force, the outlet pressure will be exhausted at the inlet side. (Figure 2)

When the set pressure is 0.15 MPa or less, valve ① may not open due to the valve spring ② force.

AW20K to AW60K

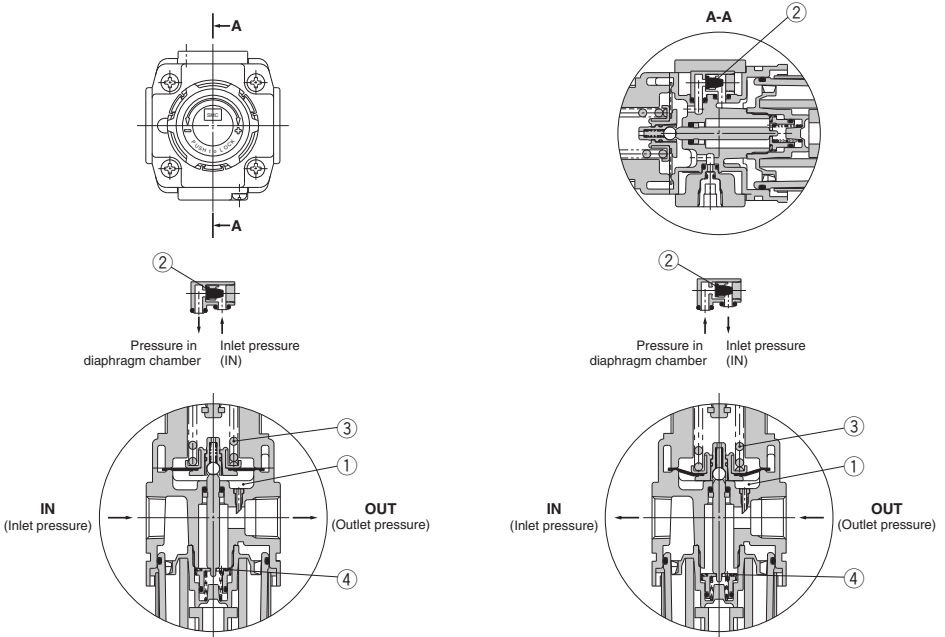


Figure 1 Normal

Figure 2 Backflow

When the inlet pressure is higher than the regulating pressure, the check valve ② closes and operates as a normal regulator (Figure 1). When the inlet pressure is shut off and released, the check valve ② opens and the pressure in the diaphragm chamber ① is released into the inlet side (Figure 2).

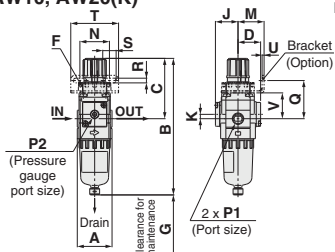
This lowers the pressure in the diaphragm chamber ① and the force generated by the pressure regulator spring ③ lifts the diaphragm. Valve ④ opens through the stem, and the outlet pressure is released to the inlet side (Figure 2).

Filter Regulator *Series AW10 to AW60*

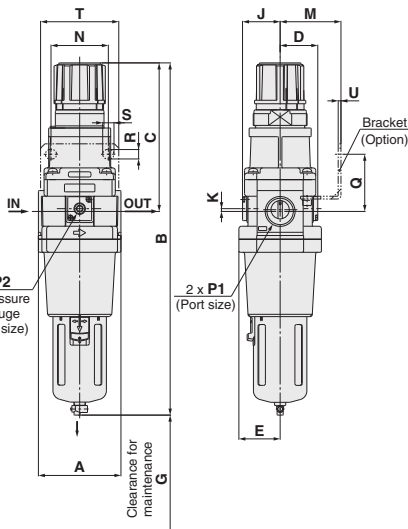
Filter Regulator with Backflow Function *Series AW20K to AW60K*

Dimensions

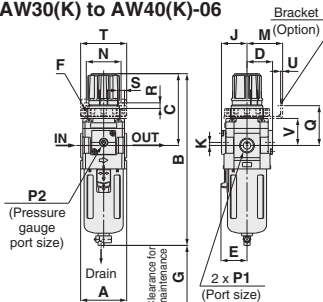
AW10, AW20(K)



AW60(K)



AW30(K) to AW40(K)-06



Applicable model	AW20(K) to AW60(K)		AW10, AW20(K) to AW60(K)		AW20(K) to AW60(K)	
	Option	Square embedded type pressure gauge	Digital pressure switch	Round type pressure gauge	Round type pressure gauge (with color zone)	
Dimensions						

Applicable model	AW10, AW20(K)		AW20(K)		AW30(K) to AW60(K)				
	Optional/Semi-standard specifications	With auto drain (N.C.)	Metal bowl	With drain guide	With auto drain (N.O./N.C.)	Metal bowl	Metal bowl with level gauge	With drain guide	Drain cock with barb fitting
Dimensions									

Model	Standard specifications											Optional specifications							
												Square type pressure gauge		Digital pressure switch		Round type pressure gauge		Round type pressure gauge (with color zone)	
	P1	P2	A	B (Note)	C	D	E	F	G	J	K	H	J	H	J	H	J	H	J
AW10	M5 x 0.8	1/16	25	108	48	12.5	—	M18 x 1	25	12.5	0	—	—	—	—	—	—	—	—
AW20(K)	1/8, 1/4	1/8	40	160	73	26	—	M28 x 1	40	26	5	□28	27	□27.8	37.5	□37.5	62.5	□37.5	63
AW30(K)	1/4, 3/8, 1/2	1/8	53	201	86	29.5	30	M38 x 1.5	55	29.5	3.5	□28	30.5	□27.8	41	□37.5	66	□37.5	66
AW40(K)	1/4, 3/8, 1/2	1/4	70	239	92	37.5	38	M42 x 1.5	80	37.5	1.5	□28	38.5	□27.8	49	□42.5	76	□42.5	76
AW40(K)-06	3/4	1/4	75	242	93	37.5	38	M42 x 1.5	80	37.5	1.2	□28	38.5	□27.8	49	□42.5	76	□42.5	76
AW60(K)	3/4, 1	1/4	95	409	175	43.5	47.5	—	20	43.5	3.2	□28	44.5	□27.8	61.5	□42.5	82	□42.5	84

Model	Optional specifications											Semi-standard specifications							
	Bracket mount						Panel mount					With auto drain		With barb fitting		With drain guide	Metal bowl		Metal bowl with level gauge
	M	N	Q	R	S	T	U	V	W	Y	Z	B (Note)	B (Note)	B (Note)	B (Note)	B (Note)	B (Note)	B (Note)	
AW10	25	28	30	4.5	6.5	40	2	18	18.5	—	—	125	—	—	—	107	—	—	
AW20(K)	30	34	44	5.4	15.4	55	2.3	30	28.5	14	6	177	—	—	164	160	—	—	
AW30(K)	41	40	46	6.5	8	53	2.3	31	38.5	19	7	242	209	208	214	234	—	—	
AW40(K)	50	54	54	8.5	10.5	70	2.3	35.5	42.5	21	7	278	247	246	252	272	—	—	
AW40(K)-06	50	54	56	8.5	10.5	70	2.3	37	42.5	21	7	282	251	249	255	275	—	—	
AW60(K)	70	66	66	11	13	90	3.2	—	—	—	—	448	417	416	422	442	—	—	

Note) The total length of B dimension is the length when the filter regulator knob is unlocked.



- AC-A
- AF-A
- AF□-A
- AR-A
- AL-A
- AW-A
- AC
- AF
- AF□
- AR
- AL
- AW□
- G
-
- AV
- AF

Filter Regulator AW20 to AW60 Made to Order Specifications:



Please contact SMC for detailed dimensions, specifications, and lead times.

① Special Temperature Environment

Special materials are used in the manufacturing of seals and resin parts to allow them to withstand various temperature conditions in cold or tropical (hot) climates.

Specifications

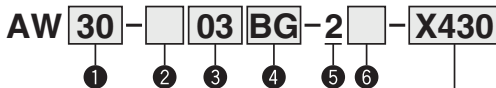
Made-to-order part no.	-X430	-X440
Environment	Low temperature	High temperature
Ambient temperature (°C)	-30 to 60	-5 to 80
Fluid temperature (°C)	-5 to 60 (with no freezing)	
Material	Rubber parts	Special NBR FKM
	Main parts	Metal (Aluminum die-cast), etc.



AW30-03G-2-X440

Applicable Model

Model	AW30	AW40	AW40-06	AW60
Port size	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1



For high/low temperature

X430	Low temperature
X440	High temperature

- Option/Semi-standard: Select one each for a to g.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) AW30-03BG-2N-X430

		Symbol	Description	① Body size			
				30	40	60	
②	Thread type	NII	Rc	●	●	●	
		N	NPT	●	●	●	
		F	G	●	●	●	
③	Port size	+		●	●	—	
		02	1/4	●	●	—	
		03	3/8	●	●	—	
		04	1/2	—	●	—	
		06	3/4	—	●	—	
		10	1	—	—	●	
④	a Mounting	NII	Without mounting option	●	●	●	
		B (Note 2)	With bracket	●	●	●	
		H	With set nut (for panel fitting)	●	●	—	
b	Pressure gauge	NII	Without pressure gauge	●	●	●	
		G (Note 3)	Round type pressure gauge (without limit indicator)	●	●	●	
⑤	Bowl (Note 4)	+		●	●	●	
		2	Metal bowl	●	●	●	
⑥	c	Set pressure	NII	0.05 to 0.85 MPa setting	●	●	●
			1 (Note 5)	0.02 to 0.2 MPa setting	●	●	●
	d	Drain port	+		●	●	●
			J (Note 6)	Drain guide 1/4	●	●	●
	e	Exhaust mechanism	NII	Relieving type	●	●	●
			N	Non-relieving type	●	●	●
	f	Flow direction	+		●	●	●
			R	Flow direction: Right to left	●	●	●
	g	Pressure unit	NII	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa	●	●	●
			Z (Note 7)	Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, °F	○ (Note 8)	○ (Note 8)	○ (Note 8)

Note 1) Option B, G, H are not assembled and supplied loose at the time of shipment.

Note 2) Assembly of a bracket and set nuts (AW30 to AW40)

Including 2 mounting screws for the AW60

Note 3) Mounting thread for pressure gauge: 1/8 for the AW30, 1/4 for the AW40 and AW60. Pressure gauge type: G43

Note 4) Only metal bowl 2 is available.

Note 5) The only difference from the standard specifications is the adjusting spring for the regulator. It does not restrict the setting of 0.2 MPa or more. When the pressure gauge is attached, a 0.2 MPa pressure gauge will be fitted.

Note 6) Without a valve function

Note 7) For thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

Note 8) ○: For thread type: NPT only

② High Pressure

Strong materials are used in the manufacturing of air filters intended for high pressure operation. Also, construction modification allows a wider regulating pressure range.

Specifications

Made-to-order part no.	-X425
Proof pressure (MPa)	3.0
Maximum operating pressure (MPa)	2.0
Set pressure range (MPa)	0.1 to 1.7
Ambient and fluid temperature (°C)	-5 to 60°C (with no freezing)

Applicable Model

Model	AW20	AW30	AW40	AW40-06	AW60
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1



AW30-03-2-X425

AW **30** - **03** **BG** - **2** **□** - X425

① ② ③ ④ ⑤ ⑥

For high pressure

- Option/Semi-standard: Select one each for a to f.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) AW30-03BG-2N-X425

	Symbol	Description	① Body size			
			20	30	40	60
② Thread type	NII	Rc	●	●	●	●
	N	NPT	●	●	●	●
	F	G	●	●	●	●
+						
③ Port size	01	1/8	●	—	—	—
	02	1/4	—	●	●	—
	03	3/8	—	●	●	—
	04	1/2	—	—	●	—
	06	3/4	—	—	●	●
	10	1	—	—	—	●
+						
④ Option	a Mounting	NII	Without mounting option			
		B ^{Note 2)}	With bracket			
		H	With set nut (for panel fitting)			
+						
b Pressure gauge	NII	Without pressure gauge				
	G ^{Note 3)}	Round type pressure gauge (with limit indicator)				
+						
⑤ Bowl ^{Note 4)}	2	Metal bowl				
	8	Metal bowl with level gauge				
+						
⑥ Semi-standard	c Exhaust mechanism	NII	Relieving type			
		N	Non-relieving type			
	+					
d Drain port	NII	With drain cock				
	J ^{Note 5)}	Drain guide 1/8				
	J ^{Note 5)}	Drain guide 1/4				
+						
e Flow direction	NII	Flow direction: Left to right				
	R	Flow direction: Right to left				
+						
f Pressure unit	NII	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa				
	Z ^{Note 6)}	Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, °F				
+						
			○ ^{Note 7)}	○ ^{Note 7)}	○ ^{Note 7)}	○ ^{Note 7)}

Note 1) Option B, G, H are not assembled and supplied loose at the time of shipment.

Note 2) Assembly of a bracket and set nuts (AW20 to AW40)

Including 2 mounting screws for the AW60

Note 3) Mounting thread for pressure gauge: 1/8 for the AW20 and AW30, 1/4 for the AW40 and AW60. Pressure gauge type: G46-20-□

Note 4) Only metal bowl 2 and 8 are available.

Note 5) Without a valve function

Note 6) For thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

Note 7) ○: For thread type: NPT only

AC-A

AF-A

AF□-A

AR-A

AL-A

AW-A

AC

AF

AF□

AR

AL

AW□

A□G

E□

AV

AF

Filter Regulator *AW10 to AW60* Filter Regulator with Backflow Function *AW20K to AW60K* Made to Order Specifications:



Please contact SMC for detailed dimensions, specifications, and lead times.

③ 0.4 MPa Setting

The maximum set pressure is 0.4 MPa. When a pressure gauge is included, the display will show a range from 0 to 0.4 MPa.

Specifications

Proof pressure	1.5 MPa
Maximum operating pressure	1.0 MPa
Set pressure range	0.05 to 0.4 MPa

Applicable Model

Model	AW10	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)
Port size	M5	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1

④ Long Bowl

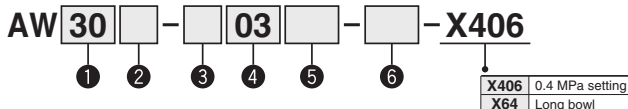
Drain capacity is greater than that of standard models.

Applicable Model/Drain Capacity

Model	AW10	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)
Port size	M5	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1
Drain capacity (cm ³)	9	19	43	88		

Note) Please consult SMC for dimensions.

How to Order



- Option/Semi-standard: Select one each for a to h.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) AW30K-03BE-2N-X406

		Symbol	Description	① Body size				① Body size					
				10	20	30	40	60	10	20	30	40	60
②	With backflow function	Nil	Without backflow function	●	●	●	●	●	●	●	●	●	●
		K Note 1)	With backflow function	—	●	●	●	●	—	●	●	●	●
③	Thread type	Nil	Metric thread (M5)	●	—	—	—	—	●	—	—	—	—
		N Note 2)	Rc	—	●	●	●	●	—	●	●	●	●
		F Note 3)	NPT	—	●	●	●	●	—	●	●	●	●
			G	—	●	●	●	●	—	●	●	●	●
④	Port size	M5	M5	●	—	—	—	—	●	—	—	—	—
		01	1/8	—	●	—	—	—	—	●	—	—	—
		02	1/4	—	●	●	—	—	—	●	●	—	—
		03	3/8	—	●	●	●	—	—	●	●	●	—
		04	1/2	—	—	●	●	—	—	—	●	●	—
		06	3/4	—	—	—	●	●	—	—	—	●	●
		10	1	—	—	—	—	●	—	—	—	—	●
⑤ Option	a Mounting	Nil	Without mounting option	●	●	●	●	●	●	●	●	●	●
		B Note 5)	With bracket	●	●	●	●	●	●	●	●	●	●
		H	With set nut (for panel fitting)	●	●	●	●	—	●	●	●	●	—
	b Float type auto drain	Nil	Without auto drain	●	●	●	●	●	—	—	—	—	—
		C	Float type auto drain (N.C.)	—	●	●	●	●	—	—	—	—	—
		D	Float type auto drain (N.O.)	—	—	●	●	●	—	—	—	—	—
	c Pressure gauge	Nil	Without pressure gauge	—	●	●	●	●	—	●	●	●	●
		E	Square embedded type pressure gauge (with limit indicator)	—	—	—	—	—	—	—	—	—	—
		G	Round type pressure gauge (without limit indicator)	—	—	—	—	—	—	—	—	—	—
		H	Round type pressure gauge (with limit indicator)	—	—	—	—	—	—	—	—	—	—
M		Round type pressure gauge (with color zone)	—	—	—	—	—	—	—	—	—	—	
Digital pressure switch		E1 Note 6)	Output: NPN output / Electrical entry; Wiring bottom entry	—	●	●	●	●	—	●	●	●	●
E2 Note 6)	Output: NPN output / Electrical entry; Wiring top entry	—	●	●	●	●	—	●	●	●	●		
E3 Note 6)	Output: PNP output / Electrical entry; Wiring bottom entry	—	●	●	●	●	—	●	●	●	●		
E4 Note 6)	Output: PNP output / Electrical entry; Wiring top entry	—	●	●	●	●	—	●	●	●	●		

Note 1) The AW10 type comes with a backflow function as a standard feature. (K is not available.) When using the AW10 type as w/ backflow function, backflow may not occur with the set pressure 0.15 MPa or less. Please set the inlet pressure to at least 0.05 MPa higher than the set pressure.

Note 2) Drain guide is NPT 1/8 (applicable to the AW20(K)) and NPT 1/4 (applicable to the AW30(K) to AW60(K)). The auto drain port comes with ø3/8" One-touch fitting (applicable to the AW30(K) to AW60(K)).

Note 3) Drain guide is G 1/8 (applicable to the AW20(K)) and G 1/4 (applicable to the AW30(K) to AW60(K)).

Note 4) Option B, G, H, M are not assembled and supplied loose at the time of shipment.

Note 5) Assembly of a bracket and set nuts. (AW10, AW20(K) to AW40(K)). Including 2 mounting screws for the AW60(K).

Note 6) When choosing with H (panel mount), the installation space for lead wires will not be secured. In this case, select "wiring down entry" for the electrical entry.

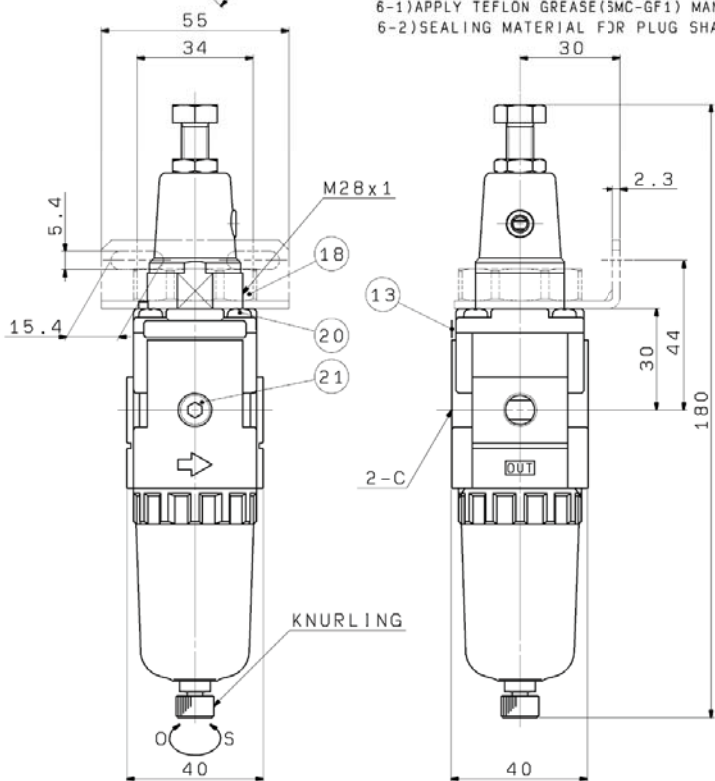
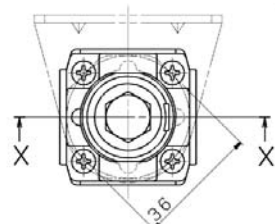
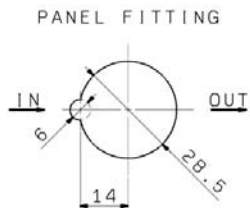
Filter Regulator *Series AW10 to AW60*

Filter Regulator with Backflow Function *Series AW20K to AW60K*

- AC-A
- AF-A
- AF□-A
- AR-A
- AL-A
- AW-A
- AC
- AF
- AF□
- AR
- AL
- AW□
- A□G
- E□
- AV
- AF

		Symbol	Description	0.4 MPa Setting					Long Bowl									
				①					①									
				Body size					Body size									
				10	20	30	40	60	10	20	30	40	60					
6	Semi-standard	d	Set pressure	Nil <small>Note 7)</small> 1 <small>Note 8)</small>	0.05 to 0.85 MPa setting		0.02 to 0.2 MPa setting		—	—	—	—	—	●	●	●	●	●
				+					—	—	—	—	—	●	●	●	●	●
		e	Bowl <small>Note 9)</small>	Nil	Polycarbonate bowl		●	●	●	●	●	●	●	●	●	●		
				2	Metal bowl		●	●	●	●	●	●	●	●	●	●		
				6	Nylon bowl		●	●	●	●	●	●	●	●	●	●		
				8	Metal bowl with level gauge		—	—	●	●	●	—	—	—	—	—		
				C	With bowl guard		—	—	●	●	●	—	—	—	—	—		
				6C	Nylon bowl with bowl guard		—	●	—	—	—	—	●	—	—	—		
				+			—	—	—	—	—	—	●	—	—	—		
		f	Drain port <small>Note 10)</small>	Nil	With drain cock		●	●	●	●	●	●	●	●	●	●		
				J <small>Note 11)</small>	Drain guide 1/8		—	●	—	—	—	—	●	—	—	—		
				W <small>Note 12)</small>	Drain guide 1/4		—	—	●	●	●	—	—	●	●	●		
					Drain cock with barb fitting: For ø6 x ø4 nylon tube		—	—	—	●	●	—	—	—	●	●		
				+			—	—	—	—	—	—	—	—	—	—		
		g	Exhaust mechanism	Nil	Relieving type		●	●	●	●	●	●	●	●	●	●		
		N	Non-relieving type		●	●	●	●	●	●	●	●	●	●				
		+			—	—	—	—	—	—	—	—	—	—				
h	Flow direction	Nil	Flow direction: Left to right		●	●	●	●	●	●	●	●	●	●				
		R	Flow direction: Right to left		●	●	●	●	●	●	●	●	●	●				
		+			—	—	—	—	—	—	—	—	—	—				
i	Pressure unit	Z <small>Note 13)</small>	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa		○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>				
		ZA <small>Note 14)</small>	Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, °F		—	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>	—	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>				
			Digital pressure switch: With unit conversion function		—	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>	—	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>				

Note 7) Only the AW10 has a pressure setting of 0.05 to 0.7 MPa.
 Note 8) The only difference from the standard specifications is the adjusting spring for the regulator. It does not restrict the setting of 0.2 MPa or more. When the pressure gauge is attached, a 0.2 MPa pressure gauge will be fitted.
 Note 9) Refer to Chemical Data on page 365 when selecting a case material.
 Note 10) Float type auto drain: The combination of C and D is not possible.
 Note 11) Without a valve function
 Note 12) Metal bowl: The combination of 2 and 8 is not possible.
 Note 13) For thread type: M5 and NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)
 The digital pressure switch will be equipped with the unit conversion function, setting to psi initially.
 Note 14) For options: E1, E2, E3, E4. This product is for overseas use only according to the new Measurement Law. (The SI unit is provided for use in Japan.)
 Note 15) ○: For thread type: M5 and NPT only
 Note 16) △: Select with options: E1, E2, E3, E4.



ORDER SPECIFICATION CODE

AW20- [] - [] - 2 [] -X2257

PORT SIZE	ACCESSORY	OPTIONS
O1 Rc 1/8	NIL	2 METAL-BOWL
O2 Rc 1/4	B BRACKET ASSEMBLY	R FLOW DIRECTION-RIGHT TO LEFT
F01 G 1/8	H SET NUT	
F02 G 1/4		
N01 NPT 1/8		
N02 NPT 1/4		

WHEN SPECIFYING MORE THAN ONE OPTION, PLEASE LIST NUMERICALLY THEN ALPHABETICALLY.

COMBINATION OF ACCESSORY	COMBINATION OF OPTIONS
B []	2 []
H []	2R []

CAUTIONS CONCERNING SPECIFICATIONS, ASSEMBLY, AND INSPECTION OF CUSTOM-MADE PRODUCTS

- #DIFFERENCE FROM THE STANDARD TYPE, (AW20-(F,N)01~(F,N)02(B,H)-2(R))
- PARTS WITH * MARK OUTSIDE OF THE PARTS LIST ARE DIFFERENT.
 - AMBIENT TEMP. IS DIFFERENT. (FOR LOW TEMP. AND HIGH TEMP.)
 - EXTERNAL METAL AND EXTERNAL SPECIFIED PARTS: STAINLESS STEEL. (PLUG IS EXCLUDED)
 - THE PRESSURE GAUGE PORT HAS BEEN PROCESSED DIRECTLY TO THE BODY.
 - THE HANDLE SHAPE IS SPECIAL.
 - ATTENTION FOR MANUFACTURE
 - 6-1) APPLY TEFLON GREASE(SMC-GF1) MANUFACTURED BY DOW CORNING.
 - 6-2) SEALING MATERIAL FOR PLUG SHALL BE SEAL TAPE.

SPECIFICATIONS

PROOF PRESS.	1.5	MPa
MAX. WORKING PRESS.	1.0	MPa
SET PRESS.	0.05~0.85	MPa
WORKING FLUID	AIR	
AMBIENT TEMP.	-40~85	°C
WORKING FLUID TEMP.	-5~60	°C (SHOULD BE NO FREEZING)
RATED FILTRATION	5	μm
PORT SIZE	2-A	
GAUGE PORT SIZE	2-C	

ATTENTION

- ACCESSORIES ARE PACKED TOGETHER.

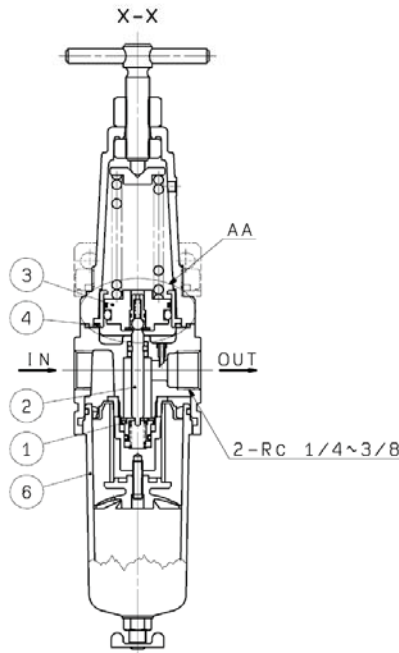
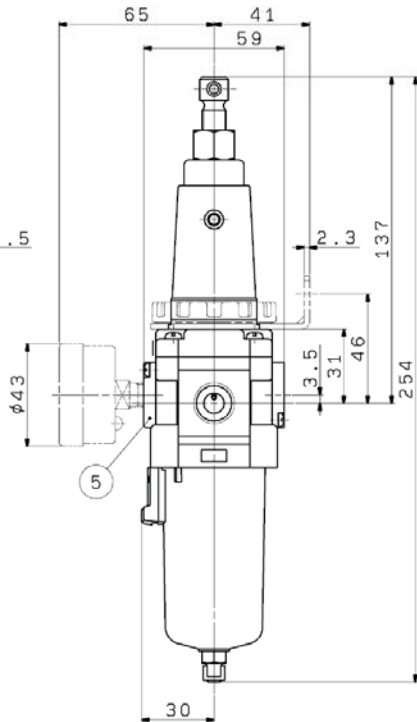
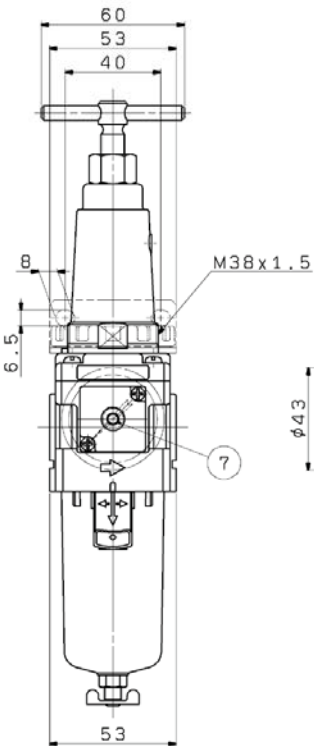
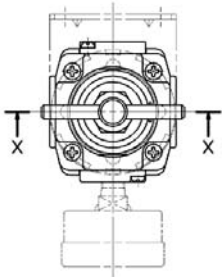
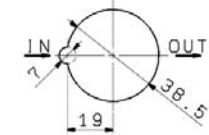
TABLE.1. PORT SIZE AND COMPONENT PART NO.

MODEL NO.	A	C	① BODY	② PLUG
AW20-01-02(B,H)-2(R)-X2257	Rc 1/8~1/4	Rc 1/8	AW20P-012-01-02-X2242	R 1/8(TB00143)
AW20-F01~F02(B,H)-2(R)-X2257	G 1/8~1/4	G 1/8	AW20P-012-F01~F02-X2242	R 1/8(TB00217)
AW20-N01~N02(B,H)-2(R)-X2257	NPT 1/8~1/4	NPT 1/8	AW20P-012-N01~N02-X2242	NPTF 1/8(TB00248)

ITEM	PART NO.	PART NAME	MATERIAL	QTY	REMARKS	
★	21	REFER TO TABLE.1	P-UG	STEEL	2	NI PLATING
★	20	QB00087	TAP TITE	STAINLESS STEEL	4	M4x0.7x12, TAPPING SCREW FOR HEAD, W/SPAN
★	19	AA00233	SCREW	STEEL WIRE	1	M4x0.7x10, NI PLATING
★	18	AR20P-260S-X470	SET NUT	BRASS BAR	1	NI PLATING WITH H
★	18	AW20P-270AS-X470	BACKET ASSEMBLY		1	WITH B
★	17	C25F-2-X2257	BOWL ASSEMBLY		1	BOWL MATERIAL: ADC
★	16	AW20P-060S-7-5B	ELEMENT	SINTERED BRONZE	1	
★	15	AF20P-040S-X430	BAFFLE PLATE	PBT	1	
★	14	AF20P-030-X430	DEFLECTOR	PBT	1	
★	13	AR25P-300	NAME PLATE	POLYETHYLENE	1	COMPLETE PRODUCT NO. INDICATED
★	12	AR20P-680-X2242	ADJUST SCREW	STAINLESS STEEL	1	
★	11	AR20P-570-X425	NUT	STEEL	1	Zn CHROMATE TREATMENT
★	10	DG00002	NUT	STAINLESS STEEL	1	M8X1
★	9	AW20P-540-X2242	ADJUST SPRING HOLDER	STEEL PLATE	1	Zn CHROMATE TREATMENT
★	8	AW20P-520AS-X2242	PISTON ASSEMBLY		1	*O-RING MATERIAL: NBR(FOR LOW TEMP.)
★	7	AW20P-500-X2242	BONNET	ALUMINIUM DIE CASTING	1	CHROMATE TREATMENT
★	6	AW20P-180-X2242	ADJUST SPRING	STEEL WIRE	1	Zn CHROMATE TREATMENT
★	5	AW20P-550-X2242	VALVE GUIDE	ALUMINIUM BAR	1	CHROMATE TREATMENT
★	4	AW20P-360A-X2242	STEM ASSEMBLY		1	*O-RING MATERIAL: NBR(FOR LOW TEMP.)
★	3	AW20P-350	VALVE SPRING	STAINLESS STEEL	1	
★	2	AW20P-340AS-X2220	VALVE ASSEMBLY		1	RUBBER MATERIAL-LINING & *O-RING: NBR(FOR LOW TEMP.)
★	1	REFER TO TABLE.1	BDDY	ALUMINIUM DIE CASTING	1	CHROMATE TREATMENT

Unless otherwise noted along with a separate contract or agreement within the Product Specifications, the safety instructions specified in the product catalog are applied. Please contact your local SMC Sales office for further details.

PANEL FITTING



ORDER SPECIFICATION CODE

AW30- [] - [] - 2 [] -X2220

PORT SIZE	ACCESSORY	OPTIONS
02 Rc 1/4	NIL	1 0.2MPa SETTING
03 Rc 3/8	B BRACKET ASSEMBLY	2 METAL-BOWL
	G PRESSURE GAUGE	N NON-RELIEVING
	H SET NUT	R FLOW DIRECTION:RIGHT TO LEFT

WHEN SPECIFYING MORE THAN ONE OPTION,PLEASE LIST NUMERICALLY THEN ALPHABETICALLY.

COMBINATION OF ACCESSORY		COMBINATION OF OPTIONS		
B	BG	2	12	2NR
G	GH	2N	12N	12NR
H		2R	12R	

NOTE

- ACCESSORIES ARE PACKED TOGETHER.
- THIS PRODUCT ENSURES NO EXTERNAL LEAKAGE AT -40°C AND 80°C OF AMBIENT TEMP., CHARACTERISTICS ARE CONFIRMED AT NORMAL TEMP.

TABLE.1 PISTON ASSEMBLY PORTION AA (1:1)

OPTIONS	2	2N
NO.	AF30P-520AS-X2220	AR30P-520AS-N-X2220
CONSTRUCTION		

SPECIFICATIONS

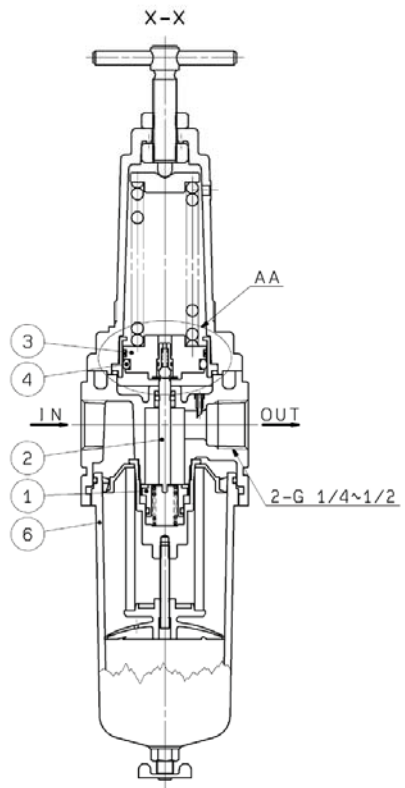
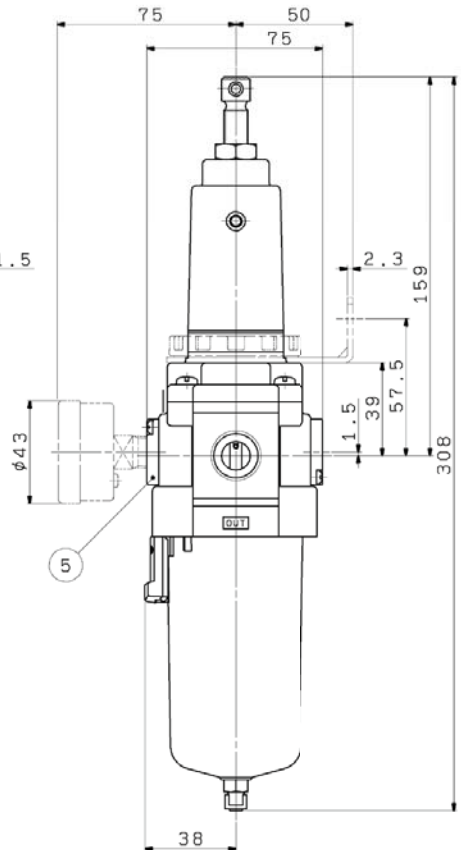
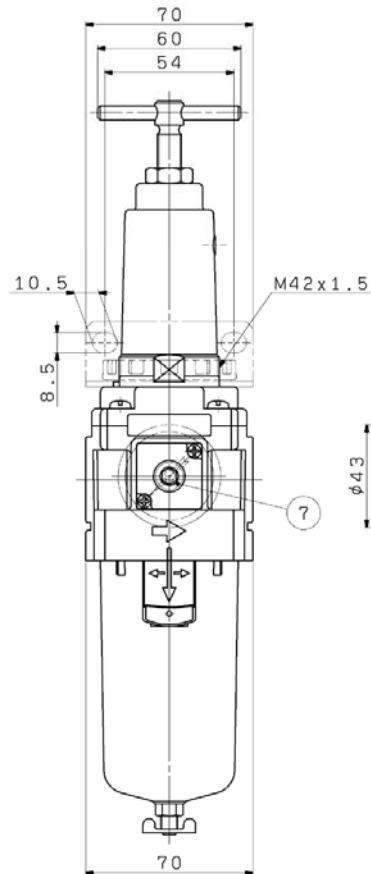
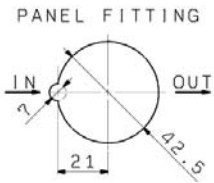
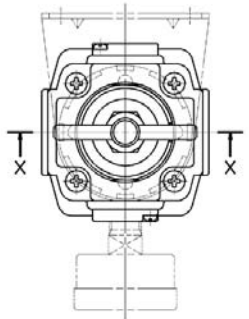
PROOF PRESS.	1.5	MPa
MAX.WORKING PRESS.	1.0	MPa
SET PRESS.	0.05~0.85MPa	
0.2MPa SETTING	0.02~0.2	MPa
WORKING FLUID	AIR	
AMBIENT TEMP.	-40~80	°C
WORKING FLUID TEMP.	-5~60	°C(SHOULD BE NO FREEZING)
RATED FILTRATION	5	μm
PORT SIZE	2-Rc 1/4~3/8	
GAUGE PORT SIZE	2-Rc 1/8	

CAUTIONS CONCERNING SPECIFICATIONS,ASSEMBLY, AND INSPECTION OF CUSTOM-MADE PRODUCTS

- #DIFFERENCE FROM THE STANDARD TYPE,
{AW30-02~03(B,G,H)-2(1,N,R)-X430}
- PARTS IN THE TITLE COLUMN DIFFER FROM STANDARD.
 - LOW TEMP. AND HIGH TEMP. SPECIFICATION.
(AMBIENT TEMP.: -40~80°C)
 - CAUTIONS FOR MANUFACTURING
 - APPLY TEFLON GREASE (SMC-GF1).
 - SEALING MATERIAL FOR PLUG SHALL BE SEAL TAPE.

ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS
7	TB00143	PLUG	STEEL	1	R 1/8 WITH PRESSURE GAUGE
				2	NI PLATING WITHOUT PRESSURE GAUGE
6	C35F-2-X2220	BOWL ASSEMBLY		1	BOWL MATERIAL:ADC
5	AR20P-310AS-01-X2220	PRESSURE GAUGE ADAPTOR ASSEMBLY		2	"O" RING MATERIAL :NBR(FOR LOW TEMP.)
4	AR30P-830-X2220	"O" RING	NBR	1	FOR LOW TEMP.
3	REFER TO TABLE.1	PISTON ASSEMBLY		1	RUBBER LINING:"O" RING MATERIAL:NBR(FOR LOW TEMP.)
2	AW30P-360A-X2220	STEM ASSEMBLY		1	"O" RING MATERIAL :NBR(FOR LOW TEMP.)
1	AW30P-340AS-X2220	VALVE ASSEMBLY		1	RUBBER LINING MATERIAL :NBR(FOR LOW TEMP.)

Unless otherwise noted along with a separate contract or agreement within the Product Specifications, the safety instructions specified in the product catalog are applied. Please contact your local SMC Sales office for further details.



ORDER SPECIFICATION CODE

AW40- [] - [] - 2 [] -X2515

PORT SIZE	ACCESSORY	OPTIONS
F02 G 1/4	NIL	1 0.2MPa SETTING
F03 G 3/8	B BRACKET ASSEMBLY	2 METAL-BOWL
F04 G 1/2	G PRESSURE GAUGE	N NON-RELIEVING
	H SET NUT	R FLOW DIRECTION:RIGHT TO LEFT

WHEN SPECIFYING MORE THAN ONE OPTION,PLEASE LIST NUMERICALLY THEN ALPHABETICALLY.

COMBINATION OF ACCESSORY		COMBINATION OF OPTIONS		
B	BG	2	12	2NR
G	GH	2N	12N	12NR
H		2R	12R	

TABLE.1 PISTON ASSEMBLY PORTION AA (1:1)

OPTIONS	2	2N
NO.	AR40P-520AS-X2220	AR40P-520AS-N-X2220
CONSTRUCTION		

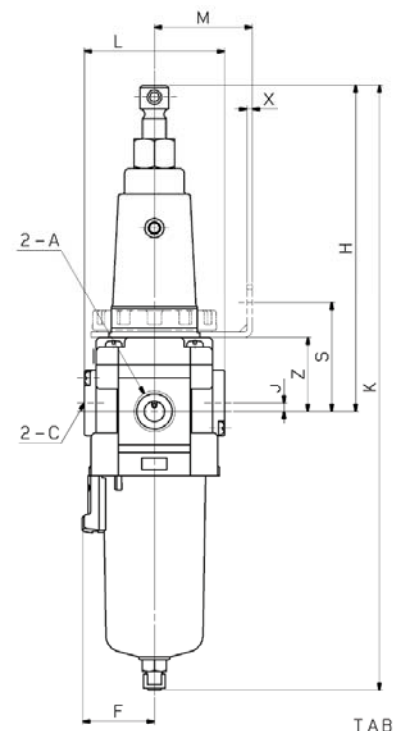
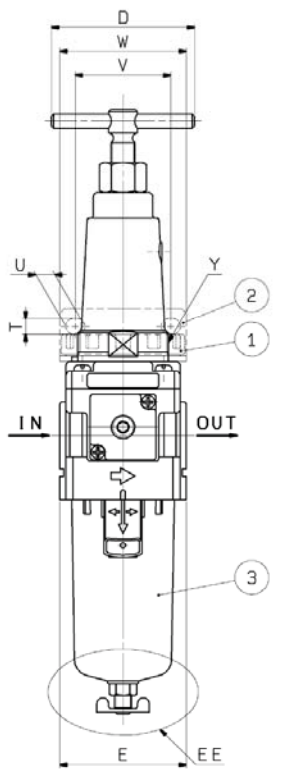
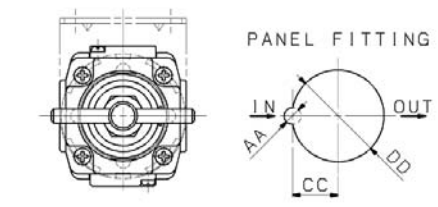
SPECIFICATIONS	
PROOF PRESS.	1.5 MPa
MAX.WORKING PRESS.	1.0 MPa
SET PRESS.	0.05~0.85MPa
0.2MPa SETTING	0.02~0.2 MPa
WORKING FLUID	AIR
AMBIENT TEMP.	-40~80 °C
WORKING FLUID TEMP.	-5~60 °C(SHOULD BE NO FREEZING)
RATED FILTRATION	5 μm
PORT SIZE	2-G 1/4~1/2
GAUGE PORT SIZE	2-G 1/4

NOTE
 1.ACCESSORIES ARE PACKED TOGETHER.
 2.THIS PRODUCT ENSURES NO EXTERNAL LEAKAGE AT -40°C AND 80°C OF AMBIENT TEMP..
 CHARACTERISTICS ARE CINFIRMED AT NORMAL TEMP.

CAUTIONS CONCERNING SPECIFICATIONS,ASSEMBLY, AND INSPECTION OF CUSTOM-MADE PRODUCTS
 *DIFFERENCE FROM THE STANDARD TYPE,
 (AW40-F02~F04(B,G,H)-2(1,N,R)-X430)
 1.PARTS IN THE TITLE COLUMN DIFFER FROM STANDARD.
 2.LOW TEMP. AND HIGH TEMP. SPECIFICATION.
 (AMBIENT TEMP.: -40~80°C)
 3.CAUTIONS FOR MANUFACTURING
 1) APPLY TEFLON GREASE (SMC-GF1).
 2) SEALING MATERIAL FOR PLUG SHALL BE SEAL TAPE.

ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS
7	TB00280	PLUG	STEEL	1	R 1/4 WITH PRESSURE GAUGE
				2	NI PLATING WITHOUT PRESSURE GAUGE
6	C45F-2-X2220	BOWL ASSEMBLY		1	BOWL MATERIAL:ADC
5	AR20P-310AS-F02-X2220	PRESSURE GAUGE ADAPTOR ASSEMBLY		2	*O' RING MATERIAL :NBR(FOR LOW TEMP.)
4	AR40P-860-X2220	"O" RING	NBR	1	FOR LOW TEMP.
3	REFER TO TABLE.1	PISTON ASSEMBLY		1	RUBBER LINING:"O" RING MATERIAL:NBR(FOR LOW TEMP.)
2	AW40P-360A-X2220	S"EM ASSEMBLY		1	*O' RING MATERIAL :NBR(FOR LOW TEMP.)
1	AW40P-340AS-X2220	VALVE ASSEMBLY		1	RUBBER LINING MATERIAL :NBR(FOR LOW TEMP.)

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ORDER SPECIFICATION CODE

AW - - 2 -X2023

BODY SIZE	PORT SIZE	ACCESSORY	OPTIONS
30 3/8	02 Rc 1/4	NIL	2 METAL-BOWL
40 1/2	03 Rc 3/8	B BRACKET ASSEMBLY	J DRAIN GUIDE Rc 1/4
	04 Rc 1/2	H SET NUT	N NON-RELIEVING
	06 Rc 3/4		R FLOW DIRECTION-RIGHT TO LEFT

WHEN SPECIFYING MORE THAN ONE OPTION, PLEASE LIST NUMERICALLY THEN ALPHABETICALLY.

COMBINATION OF ACCESSORY	COMBINATION OF OPTIONS
B H	2 2JN
	2J 2JR
	2N 2NR
	2R 2JNR

SPECIFICATIONS

PROOF PRESS.	3.0	MPa
MAX. WORKING PRESS.	2.0	MPa
SET PRESS.	0.1~1.7	MPa
WORKING FLUID	AIR	
AMBIENT TEMP.	-30~60°C	
WORKING FLUID TEMP.	-5~60°C (SHOULD BE NO FREEZING)	
RATED FILTRATION	5 μm	
PORT SIZE	2-A (REFER TO TABLE.3)	
GAUGE PORT SIZE	2-C (REFER TO TABLE.3)	

CAUTIONS CONCERNING SPECIFICATIONS, ASSEMBLY, AND INSPECTION OF CUSTOM-MADE PRODUCTS

DIFFERENCE FROM THE STANDARD TYPE, (AW30~40-(B,H)-2(J,N,R))
 1. HIGH PRESSURE SPECIFICATION.
 2. LOW TEMP. SPECIFICATION.

NOTE

1. ACCESSORIES ARE PACKED TOGETHER.

TABLE.1 BOWL ASSEMBLY PORTION EE

MODEL No.	AW30		AW40		AW40-06	
OPTIONS	2	2J	2	2J	2	2J
No.	C35F-2-X430	C35F-2J-X430	C45F-2-X430	C45F-2J-X430	C45F-2-X430	C45F-2J-X430
EXTERNAL APPEARANCE DRAWING						
K	254	259	308	313	311	317

TABLE.2

MODEL No.	AW30	AW40	AW40-06
① SET NUT	AR30P-260S	AR40P-260S	
② BRACKET ASSEMBLY	AR30P-270AS	AR40P-270AS	

ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS
3	REFER TO TABLE.1	BOWL ASSEMBLY		1	BOWL MATERIAL:ADC
2	REFER TO TABLE.2	BRACKET ASSEMBLY		1	
1	REFER TO TABLE.2	SET NUT	POLYACETAL	1	

TABLE.3 DIMENSION OF EACH PART

DWG No.	A	C	D	E	F	H	J	L	M	S	T	U	V	W	X	Y	Z	AA	CC	DD
AW30-02~03(B,H)-2(J,N,R)-X2023	Rc 1/4, 3/8	Rc 1/8	60	53	30	137	3.5	59	41	46	6.5	8	40	53	2.3	M38x1.5	31	7	19	38.5
AW40-02~04(B,H)-2(J,N,R)-X2023	Rc 1/4, 3/8, 1/2	Rc 1/4	60	70	38	159	1.5	75	50	57.5	8.5	10.5	54	70	2.3	M42x1.5	39	7	21	42.5
AW40-06(B,H)-2(J,N,R)-X2023	Rc 3/4	Rc 1/4	60	75	38	161	1.2	75	50	59	8.5	10.5	54	70	2.3	M42x1.5	40.5	7	21	42.5

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