Modular Type Filter Regulator AW Series

٩F
+
AB
+
ΑF

AC

AF + AR

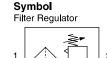
Attachments | AW + AFM | AF + AFM + AR

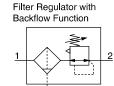
Filter Regulator AW Series	Model	Port size	Set pressure	Options
	AW20(K)-D	1/8, 1/4		
p. 113 to 129	AW30(K)-D	1/4, 3/8		Bracket Set nut (for panel mount) Float type auto drain
	AW40(K)-D	1/4, 3/8, 1/2	0.05 to 0.85 MPa 0.02 to 0.2 MPa	Square embedded type pressure gauge Digital pressure switch Round type pressure gauge
	AW40(K)-06-D	3/4		
	AW60(K)-D	3/4, 1		Bracket Float type auto drain Square embedded type pressure gauge Digital pressure switch Round type pressure gauge

Filter Regulator

AW20-D to AW60-D Filter Regulator with Backflow Function

AW20K-D to AW60K-D

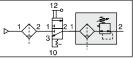




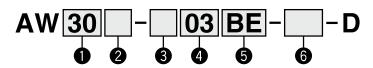
- · Integrated filter and regulator units save space and require less piping.
- Models with the backflow function include a mechanism which allows for the air pressure in the outlet side to be released to the inlet side.

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



Option and Semi-standard Symbol Selection

- · Select one each for a to i.
- · When more than one specification is required, indicate in alphanumeric order.

Example) AW30K-F03BE-1NR-D

	_							D	
		\		Symbol	Description				
				Symbol	Description	00	· · · · · ·	/ size	60
						20	30	40	60
2		∧/ith	backflow function	Nil	Without backflow function		•	•	•
•	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ VIUII	Dackilow fullclion	K *1	With backflow function		•	•	•
				+		,			
				Nil	Rc		•	•	•
8		Pi	pe thread type	N	NPT		•	•	•
				F	G		•		•
				+			1		
				01	1/8		_	_	
				02	1/4	<u> </u>	•	•	
4			Port size	03	3/8	 	•	•	
				04	1/2	-	_	•	_
				06	3/4	 	_	•	•
				10	1		_	_	•
				+	Without mounting ontion				
			Marration	Nil B*3	Without mounting option		•	•	•
		а	Mounting	B*3	With bracket			•	•
				H +	With set nut (for panel mount)				_
				H Nil	Without auto drain		•		_
		b	Float type auto	C*5	N.C. (Normally closed) Drain port is closed when pressure is not applied.		•	•	
		ט	drain*4	D*6	N.O. (Normally open) Drain port is closed when pressure is not applied. N.O. (Normally open) Drain port is open when pressure is not applied.				_
	n*2			+	11.0. (140 maily open) Drain port is open when pressure is not applied.			•	•
6	Option*2			Nil	Without pressure gauge		•		•
	ŏ			E	Square embedded type pressure gauge (with limit indicator)		•	•	•
			Pressure gauge*7	G	Round type pressure gauge (with limit indicator)				•
				M	Round type pressure gauge (with milit indicator)				•
		С		E1	Output: NPN output, Electrical entry: Wiring bottom entry		•	•	•
			Digital pressure	E2	Output: NPN output, Electrical entry: Wiring top entry		•	•	•
			switch*8	E3	Output: PNP output, Electrical entry: Wiring bottom entry		•	•	•
				E4	Output: PNP output, Electrical entry: Wiring top entry	1	•	•	•
				+					
		el l	Cot 10110 *0	Nil	0.05 to 0.85 MPa setting	•	•	•	•
		d	Set pressure*9	1	0.02 to 0.2 MPa setting	•	•	•	•
				+	•				
				Nil	Polycarbonate bowl		•	•	•
	ام			2	Metal bowl		•	•	•
	ndard	e	Bowl*10	6	Nylon bowl		•	•	•
6		6	DOWI	8	Metal bowl with level gauge		•	•	•
U	Semi-star			С	With bowl guard	•	*11	*11	*11
	em			6C	With bowl guard (Nylon bowl)		*12	*12	*12
	$ \infty $			+		,			
				Nil	With drain cock	•	•	•	•
		f	Drain port*13	J*14	Drain guide 1/8	•	_	_	_
			Diam port	J	Drain guide 1/4	<u> </u>	•	•	•

Filter Regulator AW20-D to AW60-D Series

Filter Regulator with Backflow Function AW20K-D to AW60K-D Series



AW30-D

	_	_	_	Symbol	Description		D. I)	
				Syllibol	Description	20	Body 30	40	60
		_	Evhauat maahaniam	Nil	Relieving type	•	•	•	•
		g	Exhaust mechanism	N	Non-relieving type	•	•	•	•
	힏			+					
	g	h	Flow direction	Nil	Flow direction: Left to right	•	•	•	•
6	sta		Flow direction	R	Flow direction: Right to left	•	•	•	•
	Semi-standard			+					
	S			Nil	Unit on product label: MPa, °C, Pressure gauge in SI units: MPa	•	•	•	•
		i	Unit	Z *16	Unit on product label: psi, °F, Pressure gauge: MPa/psi dual scale	○*18	○*18	○*18	○*18
				ZA *17	Digital pressure switch: With unit selection function	△*19	△*19	△*19	△*19

- Set the inlet pressure to at least 0.05 MPa higher than the set pressure.
- *2 Options B, G, H, and M are not assembled and supplied loose at the time of shipment. *3 The assembly consists of a bracket and set nuts (applicable to the AW20(K)-D to AW40(K)-D) For the ÁW60(K)-D, the assembly consists of 2 types of the bracket and 2
 - mounting screws.
- The auto drain port is ø10 One-touch fitting (3) Pipe thread type: Rc, G) or ø3/8"
- One-touch fitting (Pipe thread type: NPT)

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

 *6 If the compressor is small (0.75 kW, discharge flow is less than 100 L/min (ANR)), air leakage from the drain cock may occur during the start of operations. N.C. type is recommended.
- *7 When the pressure gauge is attached, a 1.0 MPa pressure gauge will be fitted for standard (0.85 MPa) type. 0.4 MPa pressure gauge for 0.2 MPa type.
- *8 When choosing with H (panel mount), the installation space for lead wires will not be secured. In this case, select "wiring bottom entry" for the electrical entry.

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

 *10 Refer to chemical data on page 129 for chemical resistance of the bowl.

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

- *12 A bowl guard is provided as standard equipment (nylon).
 *13 The combination of float type auto drain C and D is not available.
 *14 Without a valve function. The mounting screws are the same as the thread of ③.
- *15 The combination of metal bowl 2 and 8 is not available.
 *16 For the pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.) Cannot be used with M: Round type pressure gauge (with color zone). Available by request for special. The digital pressure switch will be equipped with the unit selection function, setting to psi initially.
- *17 For options: E1, E2, E3, E4
 This product is for overseas use only according to the New Measurement Act. The SI unit type is provided for use in Japan.)

 *18 ○: For the pipe thread type: NPT only

 *19 △: Select with options: E1, E2, E3, E4.

AC

Standard Specifications

Me	odel	AW20-D	AW30-D	AW40-D	AW40-06-D	AW60-D					
Port size		1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1					
Pressure gauge port	size*1			1/8							
Fluid				Air							
Ambient and fluid ten	nperatures*2		-5	to 60°C (No freezing	ng)						
Proof pressure				1.5 MPa							
Max. operating press	ure	1.0 MPa									
Auto drain minimum	N.C.	0.1 MPa		0.15	MPa						
operating pressure	N.O.	— 0.1 MPa									
Set pressure range				0.05 to 0.85 MPa							
Nominal filtration rati	ng* ³			5 μm							
Compressed air purit	y class*4		ISO	8573-1:2010 [6 : 4	: 4]* ⁵						
Drain capacity		8 cm ³	25 cm ³		45 cm ³						
Bowl material				Polycarbonate							
Bowl guard		Semi-standard (Steel) Standard (Polycarbonate)									
Construction		Relieving type									
Weight		0.18 kg	0.34 kg 0.64 kg 0.69 kg 1.76								

^{*1} Pressure gauge connection threads are not available for F.R.L. unit with a square embedded type pressure gauge or with a digital pressure switch.

Bowl Assembly/Part Nos.

Bowl	Drain discharge	Duning as and	Other			Model				
material	mechanism	Drain port	Other	AW20-D	AW30-D	AW40-D	AW40-06-D	AW60-D		
		With drain cock	_	C2SF-D	_					
		With drain cock	With bowl guard	C2SF-C-D	C3SF-D		C4SF-D			
	Manual	Drain cock with barb fitting	With bowl guard	_	C3SF-W-D		C4SF-W-D			
Polycarbonate		With drain guide	_	C2SF□-J-D	_		_			
Polycarbonale		(without valve function)	With bowl guard	C2SF□-CJ-D	C3SF□-J-D		C4SF□-J-D			
		Normally closed	1	AD27-D	_					
	Automatic*1	(N.C.)	With bowl guard	AD27-C-D	AD37□-D	AD47□-D				
	(Auto drain)	Normally open (N.O.)	With bowl guard	_	AD38□-D	AD48□-D				
		With drain cock	_	C2SF-6-A	_					
		with drain cock	With bowl guard	C2SF-6C-A	C3SF-6-A	C4SF-6-A				
	Manual	Drain cock with barb fitting	With bowl guard		C3SF-6W-A	C4SF-6W-A				
Niulan		With drain guide	_	C2SF□-6J-A	_		_			
Nylon		(without valve function)	With bowl guard	C2SF□-6CJ-A	C3SF□-6J-A		C4SF□-6J-A			
		Normally closed	-	AD27 - 6-A	_		_			
	Automatic*1	(N.C.)	With bowl guard	AD27-6C-A	AD37□-6-A		AD47□-6-A			
	(Auto drain)	Normally open (N.O.)	With bowl guard	_	AD38□-6-A		AD48□-6-A			
		Mith ducin code	_	C2SF-2-A	C3SF-2-A		C4SF-2-A			
	Manual	With drain cock	With level gauge	_	C3LF-8-A		C4LF-8-A			
	Iviariuai	With drain guide	_	C2SF□-2J-A	C3SF□-2J-A		C4SF□-2J-A			
Metal		(without valve function)	With level gauge	_	C3LF□-8J-A		C4LF□-8J-A			
ivietai		Normally closed	_	AD27-2-A	AD37□-2-A		AD47□-2-A			
	Automatic*1	(N.C.)	With level gauge	_	AD37□-8-A		AD47□-8-A			
	(Auto drain)	Normally open	_	_	AD38□-2-A	AD48□-2-A				
		(N.O.)	With level gauge	_	AD38□-8-A	AD48□-8-A				

^{*1} The bowl assembly comes with a bowl seal.

 ^{**}T Pressure gauge confliction threats are into available of P.N.L. thit will a square embedded type pressure gauge of wint a digital pressure switch
 **5 For the following conditions in accordance with [Test condition: ISO 8573-4:2001 compliant, Test method ISO 12500-3:2009 compliant]
 **Conditions: When a new element is used, and the flow capacity, inlet pressure, and the amount of solid bodies on the filter inlet side are stable
 **A The compressed air purity class is indicated based on ISO 8573-1:2010 Compressed air – Part 1: Contaminants and purity classes.
 For details on this standard, refer to page 131.

^{*5} The compressed air quality class on the inlet side is [7:4:4].

[☐] in bowl assembly part numbers indicates a pipe thread type (applicable tubing for auto drain).

No indication is necessary for Rc thread; however, indicate N for NPT thread, and F for G thread. (For auto drain, Nil: ø10, N: ø3/8")

Please contact SMC separately for psi and °F unit display specifications.

Filter Regulator AW20-D to AW60-D Series

Filter Regulator with Backflow Function AW20K-D to AW60K-D Series

Option/Part Nos.

	Ontional appointments				Model					
	Optional specification	ons	AW20(K)-D	AW30(K)-D	AW40(K)-D	AW40(K)-06-D	AW60(K)-D			
Bracket as	sembly*1		AW23P-270AS	AR33P-270AS	AR43F	2-270AS	AR54P-270AS			
Set nut			AR23P-260S	AR33P-260S	AR43	<u></u> *2				
		Standard	G36-1	0-□01	G46-10-□01					
	Round type	0.02 to 0.2 MPa setting	G36-4	4-□01	G46-4-□01					
_		Standard	G36-10)-□01-L						
Pressure gauge*3	Round type (with color zone)	0.02 to 0.2 MPa setting	G36 - 4	-□01-L	G46-4-□01-L					
	Sanoro	Standard	GC3-10AS-D [GC3P-030AS (Pressure gauge cover only)]							
	Square embedded type*4	0.02 to 0.2 MPa setting		GC3-4AS-D [GC3F	P-030AS (Pressure	gauge cover only)]				
		NPN output, Wiring bottom entry	IS	SE35-N-25-MLA-X5	23 [ISE35-N-25-M	(Switch body only)]	*5			
Divital ava	aarus arribah	NPN output, Wiring top entry	IS	SE35-R-25-MLA-X5	23 [ISE35-R-25-M	(Switch body only)]	*5			
Digital pre	Digital pressure switch		IS	SE35-N-65-MLA-X5	23 [ISE35-N-65-M	(Switch body only)]	*5			
			IS	*5						

- *1 The assembly consists of a bracket and set nuts. For the AW60(K)-D, the assembly consists of a bracket A/B and 2 mounting screws.
- *2 Please contact SMC regarding the set nuts for the AW60(K)-D.
- *3 🗆 in part numbers for a round type pressure gauge indicates a pipe thread type. No indication is necessary for R; however, indicate N for NPT. Please contact SMC regarding the pressure gauge supply for both MPa and psi unit specifications.

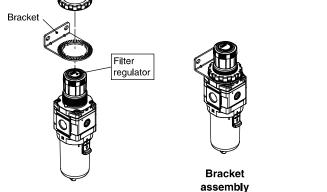
AW60(K)-D

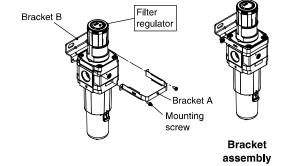
- *4 Including one O-ring and 2 mounting screws. []: Pressure gauge cover only
- *5 In addition to the pressure switch body, lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screws (2 pcs.) are attached.

 []: Switch body only (Regarding how to order the digital pressure switch, refer to page 130.)

AW20(K)-D to AW40(K)-06-D







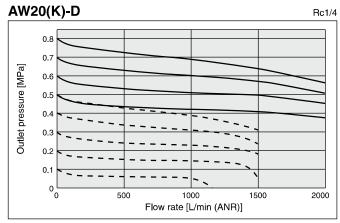
Replacement Parts

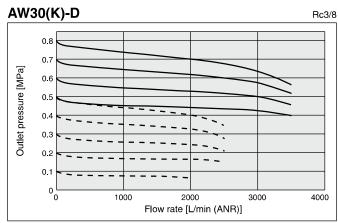
· replace											
Doo	aulatia a			Part no.							
Des	cription	AW20(K)-D	AW30(K)-D	AW40(K)-D	AW40(K)-06-D	AW60(K)-D					
Valve assemb	oly	AW24P-060AS	AW34P-060AS	AW44P-060AS	AW49P-060AS	AW64P-060AS					
Filter element	1	AF20P-060S	AF30P-060S	AF40F	AW60P-060S						
Baffle		AF24P-040S	AF34P-040S	AF44F	AW64P-030S						
Diaphragm	Relieving type	AR24P-150AS	AR34P-150AS	AR44P	-150AS	AR54P-150AS					
assembly	Non-relieving type	AR24P-150AS-N	AR34P-150AS-N	AR44P-	150AS-N	AR54P-150AS-N					
Bowl seal		C2SFP-260S	C32FP-260S		C42FP-260S						
Bowl assemb	ly*1, *2		Refer	to "Bowl Assembly/Par	t Nos."						
Check valve a	ssembly*3	AR24KP-020AS									

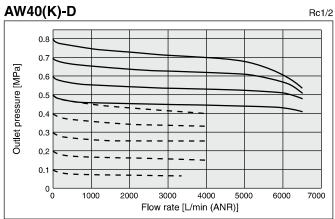
- *1 The bowl assembly comes with a bowl seal.
- *2 Please contact SMC separately for psi and °F unit display specifications.
- *3 The check valve assembly is applicable for a filter regulator with backflow function (AW20K-D to AW60K-D) only. The assembly consists of a check valve cover, check valve body assembly, and 2 mounting screws.

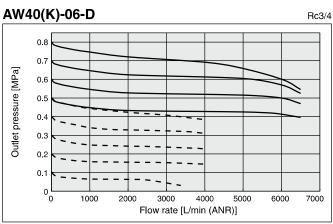
Flow Rate Characteristics (Representative values)

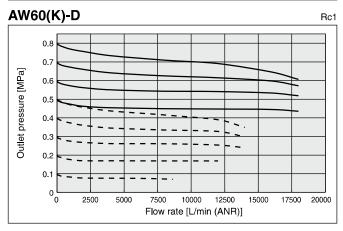
Inlet pressure: 1.0 MPa





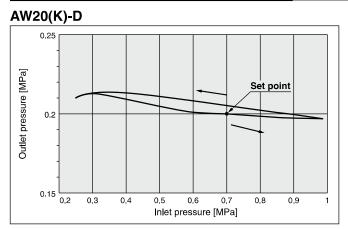


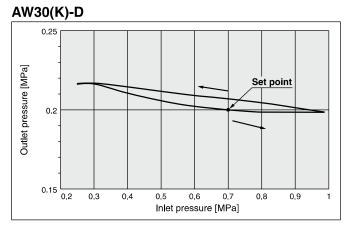


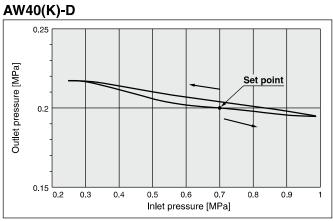


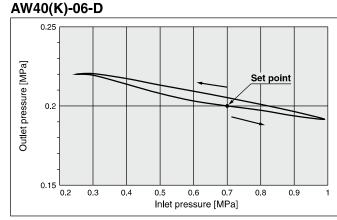
Pressure Characteristics (Representative values)

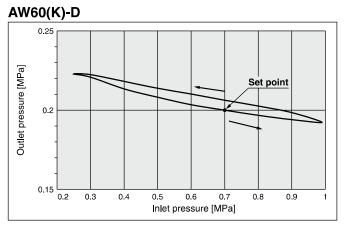
Conditions: Inlet pressure of 0.7 MPa, Outlet pressure of 0.2 MPa, Flow rate 20 L/min (ANR)











AC

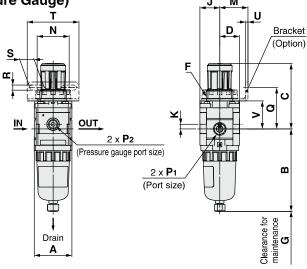
AW + AL

AF + AR

AF + AFM + AR

Dimensions

Standard (Round Type Pressure Gauge) AW20-D



Panel cutout dimensions

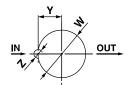
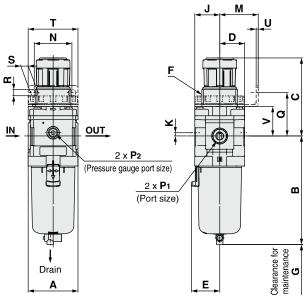
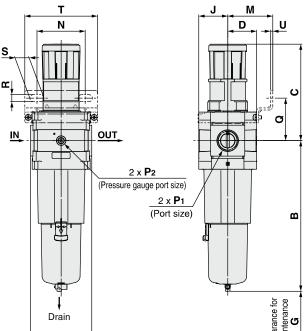


Plate thickness AW20-D to AW30-D : Max. 3.5 AW40-D to AW40-06-D: Max. 5

AW30-D to AW40-06-D



AW60-D

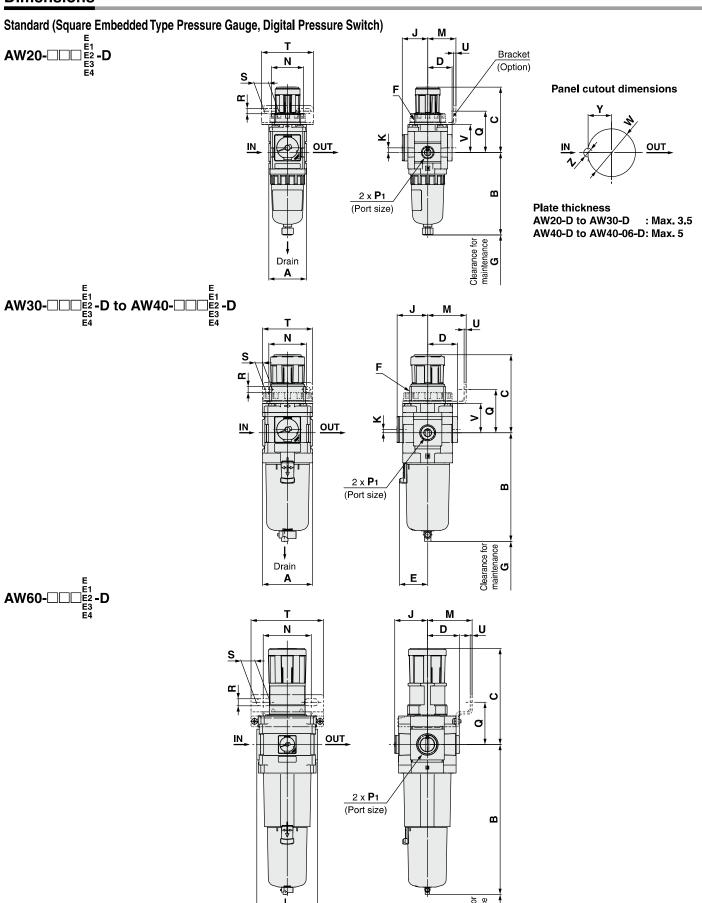


													Opt	tional sp	ecificati	ions	
Model	Standard specifications													Round type pressure gauge (Semi-standard: Z)		Round type gauge (with	
	P1 P2 A B C*1 D E F G J K												J	Н	J	Н	J
AW20-D	1/8, 1/4	1/8	40	87.6	71.8	21	_	M28 x 1	40	21	5	ø37.5	57.5	ø37.5	58.5	ø37.5	58.5
AW30-D	1/4, 3/8	1/8	53	115.3	86.5	26.5	30	M38 x 1.5	55	26.5	3.5	ø37.5	63	ø37.5	64	ø37.5	64
AW40-D	1/4, 3/8, 1/2	1/8	70	147.1	91.5	35.5	38.4	M42 x 1.5	80	35.5		ø42.5	73	ø42.5	73	ø42.5	73
AW40-06-D	3/4	1/8	75	149.1	93	35.5	38.4	M42 x 1.5	80	35.5	_	ø42.5	73	ø42.5	73	ø42.5	73
AW60-D	3/4, 1	_	_	30	45	_	ø42.5	82.5	ø42.5	82.5	ø42.5	82.5					

					Opt	ional s	pecific	ations					Semi-standard						
Model			Bro	cket m	ount				Panel m	ount		With			Metal bowl		Metal bowl with level gauge		
Model									i and mount				With barb fitting	With drain guide	With drain cock	With drain guide	With drain cock	With drain guide	
	М	N	Q	R	S	Т	U	V	W	Υ	Z	В	В	В	В	В	В	В	
AW20-D	30	34	43.9	5.4	15.4	55	2.3	29.7	28.5	14	6	104.9	_	91.4	87.4	93.9	_	_	
AW30-D	41	40	46	6.5	8	53	2.3	31.3	38.5	19	7	157	123.9	122.2	117.8	122.3	137.8	142.3	
AW40-D	50	54	54	8.5	10.5	70	2.3	35.5	42.5	21	7	186.9	155.6	153.9	149.5	154	169.5	174	
AW40-06-D	50	54	55.5	8.5	10.5	70	2.3	37	42.5	21	7	188.9	157.6	155.9	151.5	156	171.5	176	
AW60-D	70	75	66	11	22	113	3.2	_	_	_	_	273.9	242.6	240.9	236.5	241	256.5	261	

 $[\]ast 1\,$ The dimension of C is the length when the filter regulator knob is unlocked.

Dimensions



Drain

A P 11	Optional specifications			Semi-stand	dard		
Applicable model	With auto drain	PC/PA bo	wl	Met	al bowl	Metal bowl v	vith level gauge
model	vviiii auto urairi	Drain cock with barb fitting	With drain guide	With drain cock	With drain guide	With drain cock	With drain guide
AW20-D	M5 x 0.8		Midth across flats 14	B	1/8 Width across flats 14		
AW30-D to AW60-D	N.C.: Black N.C.: Gray Thread type/Rc, G: ø10 One-touch fitting Thread type/NPT: ø3/8" One-touch fitting	Barb fitting applicable tubing: T0604	width across flats 17	B	width across flats 17	B	m 1/4 Width across flats 17

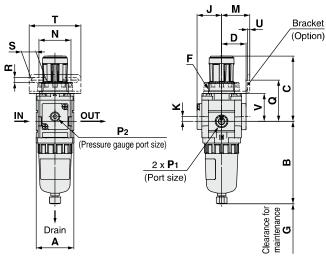
				Standard	l an a sifir	ations						pecifications		
Model			`		Square embedded Digital pressure type pressure gauge Switch									
	P ₁	Α	В	C*1	D	E	F	G	K	Н	J	Н	J	
AW20-D	1/8, 1/4	40	87.6	71.8	26	_	M28 x 1	40	5	□28	27	□27.8	37.5	
AW30-D	1/4, 3/8	53	115.3	86.5	31.5	30	M38 x 1.5	55	3.5	□28	32.5	□27.8	43	
AW40-D	1/4, 3/8, 1/2	70	147.1	91.5	40.5	38.4	M42 x 1.5	80	_	□28	41.5	□27.8	52	
AW40-06-D	3/4	75	149.1	93	40.5	38.4	M42 x 1.5	80	_	□28	41.5	□27.8	52	
AW60-D	3/4, 1	95	234.1	155	50	_	_	30	_	□28	51	□27.8	61.5	

	Optional specifications								Semi-standard									
Model			Pro	cket m	ou n t			With Panel mount auto							Metal bowl		Metal bowl with level gauge	
Wodel			Dia	CKELIII	ount							drain	With barb fitting	With drain guide	With drain cock	With drain guide	With drain cock	With drain guide
	M N Q R S T U V W Y Z		В	В	В	В	В	В	В									
AW20-D	30	34	43.9	5.4	15.4	55	2.3	29.7	28.5	14	6	104.9	_	91.4	87.4	93.9	_	_
AW30-D	41	40	46	6.5	8	53	2.3	31.3	38.5	19	7	157	123.9	122.2	117.8	122.3	137.8	142.3
AW40-D	50	54	54	8.5	10.5	70	2.3	35.5	35.5 42.5 21 7 1			186.9	155.6	153.9	149.5	154	169.5	174
AW40-06-D	50	54	55.5	8.5	10.5	70	2.3	37	42.5	21	7	188.9	157.6	155.9	151.5	156	171.5	176
AW60-D	70	75	66	11	22	113	3.2	_	_	_	_	273.9	242.6	240.9	236.5	241	256.5	261

^{*1} The dimension of C is the length when the filter regulator knob is unlocked.

Dimensions

With Backflow Function (Round Type Pressure Gauge, Square Embedded Type Pressure Gauge, Digital Pressure Switch) AW20K-D



Panel cutout dimensions

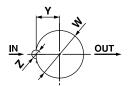
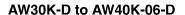
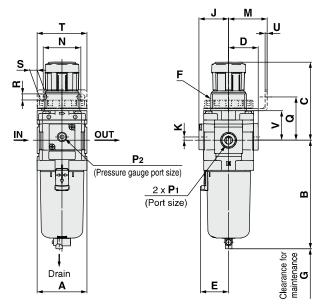


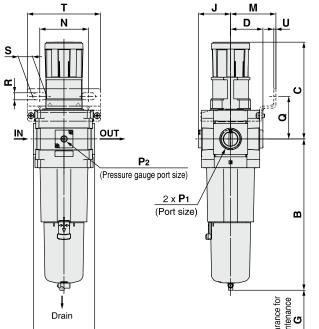
Plate thickness

AW20K-D to AW30K-D : Max. 3.5 AW40K-D to AW40K-06-D: Max. 5





AW60K-D



A 12 1.1	Optional specifications			Semi-stand	dard		
Applicable model	With auto drain	PC/PA bo	wl	Met	al bowl	Metal bowl v	vith level gauge
model	Willi auto dialii	Drain cock with barb fitting	With drain guide	With drain cock	With drain guide	With drain cock	With drain guide
AW20K-D	M5 x 0.8		1/8 Width across flats 14	m	1/8 Width across flats 14		
AW30K-D to AW60K-D	N.O.: Black N.C.: Gray Thread type/Rc, G: ø10 One-touch fitting Thread type/NPT: ø3/8" One-touch fitting	Barb fitting applicable tubing: T0604	width across flats 17	B	Midth across flats 17	B	m 1/4 Width across flats 17

														Opt	ional s	pecificati	ons		
Model		Standard specifications										Square e type press		'		Round type pressure gauge		Round type pressure gauge (Semi-standard: Z)	
	P1	P ₂	Α	В	C*1	D	Е	F	G	J	K	Н	J	Н	J	Н	J	Н	J
AW20K-D	1/8, 1/4	1/8	40	87.6	71.8	26	_	M28 x 1	40	26	5	□28	27	□27.8	37.5	ø37.5	62.5	ø37.5	63.5
AW30K-D	1/4, 3/8	1/8	53	115.3	86.5	31.5	30	M38 x 1.5	55	31.5	3.5	□28	32.5	□27.8	43	ø37.5	68	ø37.5	69
AW40K-D	1/4, 3/8, 1/2	1/8	70	147.1	91.5	40.5	38.4	M42 x 1.5	80	40.5	_	□28	41.5	□27.8	52	ø42.5	78	ø42.5	78
AW40K-06-D	3/4 1/8 75 149.1 93 40.5 38.4 M42 x 1.5 80 40.5 —						_	□28	41.5	□27.8	52	ø42.5	78	ø42.5	78				
AW60K-D	3/4, 1	1/8	95	234.1	155	50	_	_	30	50	_	□28	51	□27.8	61.5	ø42.5	87.5	ø42.5	87.5

						Optio	nal spe	cifica	tions						Semi-standard						
Model	Round pressure	, ·			Broo	kot m	ount			With Panel mount auto				PC/PA	\ bowl	Metal bowl		Metal bowl with level gauge			
Model				drain	With barb fitting	With drain guide	With drain cock	With drain guide	With drain cock	With drain guide											
	Н	J	М	N	Q	R	S	Т	U	٧	W	Υ	Z	В	В	В	В	В	В	В	
AW20K-D	ø37.5	63.5	30	34	43.9	5.4	15.4	55	2.3	29.7	28.5	14	6	104.9	_	91.4	87.4	93.9	_	_	
AW30K-D	ø37.5	69	41	40	46	6.5	8	53	2.3	31.3	38.5	19	7	157	123.9	122.2	117.8	122.3	137.8	142.3	
AW40K-D	ø42.5	78	50	54	54	8.5	10.5	70	2.3	35.5	35.5 42.5 21 7			186.9	155.6	153.9	149.5	154	169.5	174	
AW40K-06-D	ø42.5	78	50	54	55.5	8.5	10.5	70	2.3	37	37 42.5 21		7	188.9	157.6	155.9	151.5	156	171.5	176	
AW60K-D	ø42.5	87.5	70	75	66	11	22	113	3.2	_	_	_	_	273.9	242.6	240.9	236.5	241	256.5	261	

^{*1} The dimension of C is the length when the filter regulator knob is unlocked.

Made to Order

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



1 0.4 MPa Setting

The setting specification is 0.4 MPa.

When a pressure gauge is included, the display will show a range from 0 to 0.7 MPa.

Specifications

Made-to-order part no.	-X406
Proof pressure [MPa]	1.5
Max. operating pressure [MPa]	1.0
Set pressure range [MPa]*1	0.05 to 0.4

*1 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

Applicable Models

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

2 Long Bowl

Drain capacity is greater than that of standard models.

Applicable Models/Drain Capacity

Model	AW20(K)-D	AW30(K)-D	AW40(K)-D	AW40(K)-06-D	AW60(K)-D
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1
Drain capacity [cm	³] 19	43		88	
B dimension [mm]	108.1	137.3	167.2	169.2	254.2

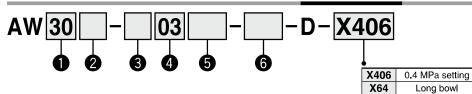
*1 For polycarbonate bowls. Please contact SMC for other bowl materials.

AW20-D





How to Order



Option and Semi-standard Symbol Selection

- · When more than one specification is required, indicate in alphanumeric order. Example) AW30K-F03BE-2NR-D-X406

0.4 MPa Setting

Long bowl

Long Bowl

Exc	ampie	<i>5) A</i> V	V30K-F03 <u>BE-2</u>	<u> </u>	06								
	_	_		Symbol	Description								
				Cymbol	Безоправл	20	30	/ size 40	60	20	Body 30	40	60
2	\A/i+	h ha	ckflow function	Nil	Without backflow function	•	•	•	•	•	•	•	•
9	VVIII	II Dat	CKIIOW IUIICIIOII	K *1	With backflow function	•	•	•	•		•	•	•
_				+									
				Nil	Rc	•	•	•	•	•	•	•	•
3	F	Pipe	thread type	N	NPT	•	•	•	•		•	•	•
				F	G	•	•	•	•		•	•	
				+				,					
				01	1/8	•	_	_			_	_	_
				02	1/4	•	•	•	_	•	•	•	_
4		Р	ort size	03	3/8		•	•	_		•	•	_
		·	0.10.20	04	1/2			•			_	•	_
				06	3/4			•	•			•	•
				10	1	_	_	_	•		_	_	
				+	AAPOL A P. P.				_		_		
				Nil	Without mounting option	•	•	•	•	•	•	•	•
		а	Mounting	B*3	With bracket	•	•	•	•	•	_	•	•
				H +	With set nut (for panel mount)	•	•	•		•	•	•	
					AMfala and annual advanta				_		1		
			Float type auto	Nil C*5	Without auto drain	•	•	•	•				_
		b	drain*4	D*6	Float type auto drain (N.C.): Drain port is closed when pressure is not applied.	•			-			_	
	Option*2				Float type auto drain (N.O.): Drain port is open when pressure is not applied.		•	•	•		_	_	_
6	₫			Nil	Without pressure gauge		•	•	•			•	
	8		Pressure	E	Square embedded type pressure gauge (with limit indicator)	•		•		•	•		
			gauge*7	G	Round type pressure gauge (with limit indicator)		•	•	-		•	•	
			gaago	М	Round type pressure gauge (with limit indicator) Round type pressure gauge (with color zone)				-				
		С		E1	Output: NPN output, Electrical entry: Wiring bottom entry				-				
			Digital	E2	Output: NPN output, Electrical entry: Wiring bottom entry Output: NPN output, Electrical entry: Wiring top entry				-				
			proseuro	E3	Output: NPN output, Electrical entry: Wiring top entry Output: PNP output, Electrical entry: Wiring bottom entry			•	_			•	
				E4	Output: PNP output, Electrical entry: Wiring bottom entry Output: PNP output, Electrical entry: Wiring top entry								
				⊑ 4	Output. Five output, Electrical entry. Wining top entry								

- *1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.

 *2 Options B, G, H, and M are not assembled and supplied loose at the time of shipment.

 *3 The assembly consists of a bracket and set nuts (applicable to the AW20(K)-D to AW40(K)-D). The AR60(K)-D assembly includes 2 types of brackets and 2 mounting screws.

 *4 The auto drain port is of 0 One-touch fitting (⑤ Pipe thread type: Rc, G) or ø3/8"
- One-touch fitting (Pipe thread type: NPT) *5 When pressure is not applied, condensate which does not start the auto drain
- *6 If the compressor is small (0.75 kW, discharge flow is less than 100 L/min (ANR)), air leakage from the drain cock may occur during the start of operations. N.C. type
- *7 When the pressure gauge is attached, a 1.0 MPa pressure gauge will be fitted for standard (0.85 MPa) type. 0.4 MPa pressure gauge for 0.2 MPa type. 0.7 MPa pressure gauge for 0.4 MPa type (-X406).
- *8 When choosing with H (panel mount), the installation space for lead wires will not

Filter Regulator AW20-D to AW60-D Series

Filter Regulator with Backflow Function AW20K-D to AW60K-D Series

0.4 MPa Setting

Long Bowl

	_						((
		_		Symbol	Description			/ size			Body		
						20	30	40	60	20	30	40	60
		d	Set pressure*9	Nil	0.05 to 0.85 MPa setting	_	I –	_	_	•	•	•	•
	i i	l a	Set pressure**	1	0.02 to 0.2 MPa setting	_	_	_	_	•	•	•	•
			•	+				•					
				Nil	Polycarbonate bowl	•	•	•	•	•	•	•	•
				2	Metal bowl	•	•	•	•	•	•	•	•
		l e	Bowl*10	6	Nylon bowl	•	•	•	•	•	•	•	•
		•	DOMI	8	Metal bowl with level gauge	_	•	•	•	-	_	_	_
				С	With bowl guard	•	*11	<u></u> *11	*11		*11	<u>*11</u>	<u></u> *11
				6C	With bowl guard (Nylon bowl)	•	*12	*12	*12	•	*12	<u></u> *12	*12
	ا م			+									
	ga			Nil	With drain cock	•	•	•	•		•	•	•
6	tan		Drain port*13	J *14	Drain guide 1/8	•	_	_			_	_	_
U	<u>-</u>	'	Diam port 19		Drain guide 1/4	_	•	•	•		•	•	•
	Semi-standard			W *15	Drain cock with barb fitting	_	•	•	•]	•	•	
	တ			+									
		g	Exhaust	Nil	Relieving type	•	•	•	•		•	•	•
		l a	mechanism	N	Non-relieving type	•	•	•			•	•	
		_	1	+									
		l h	Flow direction	Nil	Flow direction: Left to right	•	•	•	•		•	•	•
			Tion direction	R	Flow direction: Right to left	•	•	•			•	•	
		_		+						1			
				Nil	Unit on product label: MPa, °C, Pressure gauge in SI units: MPa	•	•	•	•		•	•	•
		ı	Unit	Z *16	Unit on product label: psi, °F, Pressure gauge: MPa/psi dual scale	O*18	O*18	O*18	O*18	O*18	O*18	O*18	O*18
				ZA *17	Digital pressure switch: With unit selection function	△*19	△*19	∆*19	∆*19	△*19	∆*19	△*19	△*19

- *9 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- *10 Refer to chemical data on page 129 for chemical resistance of the bowl.

- 11 A bowl guard is provided as standard equipment (polycarbonate).
 12 A bowl guard is provided as standard equipment (nylon).
 13 The combination of float type auto drain C and D is not available.
 14 Without a valve function. The mounting screws are the same as the thread of .
 15 The combination of metal bowl 2 and 8 is not available.
 16 For the price thread types. NET.
- *16 For the pipe thread type: NPT This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.) Cannot be used with M: Round type pressure gauge (with color zone). Available by request for special. The digital pressure switch will be equipped with the unit selection function, setting to
- *17 For options: E1, E2, E3, E4 This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)
- *18 O: For the pipe thread type: NPT only *19 \(\triangle : \text{ Select with options: E1, E2, E3, E4.}\)

₹

AF + AR + AL

AW + AL

+ AR

AF + AFM + AR

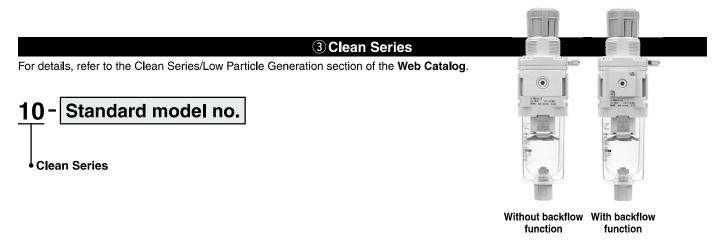
AW + AFM

Attachments

AFM / AFD

Made to Order

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



(4) Copper, Fluorine and Silicone-free + Low Particle Generation

For details, refer to the Clean Series/Low Particle Generation section of the Web Catalog.



Copper, Fluorine and Silicone-free + Low Particle Generation

AR-D/AW-D Series Option

Knob Cover

Can be mounted on the knob of a regulator or filter regulator in order to prevent the accidental operation of the knob



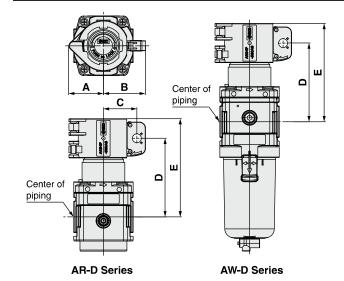
♦	Size
	24
	34
	44
	54
_	

Standard Specifications

Ambient temperature	−5 to 60°C



Dimensions



Part no.	Α	В	С	D	Е	Applicable model
AR24P-580AS	22 5	20.1	24.5	53.1	69.1	AR20-D
AN24P-300A3	23.5	32.1	24.5	58.1	74.1	AW20-D
AR34P-580AS	30.7	37.4	29.8	70	87.5	AR30-D, AW30-D
AR44P-580AS	20.0	20.4	31.8	74.5	97	AR40-D, AW40-D
AR44P-30UAS	32.8	39.4	31.0	76	98.5	AR40-06-D, AW40-06-D
AR54P-580AS	42	48.9	41.3	99.6	133.6	AR50-D
AR54P-580AS	42	46.9	41.3	129.6	163.6	AR60-D, AW60-D

Detailed dimensions of the lock hole 9.6 2 x ø1.5 * Recommended lock dimensions

Mounting Precautions

Before mounting the knob cover, confirm that the knob is in the locked state (in which the orange line is not visible). Mount the cover in accordance with the mounting instructions below.

Mount the knob cover on the knob.

2 Close the lock cover.

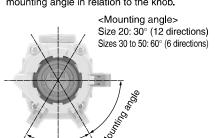




3 Secure with a lock (provided by the customer).



The knob cover can be mounted facing each mounting angle in relation to the knob.



AC

AF + AR + AL

AW + AL

AF + AR

| AF + AFM + AR

Attachments AW + AFM

Щ

AFM / AFD

AB

AL

¥