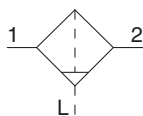


Air Filter

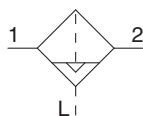
AF20-A to AF40-A

JIS Symbol

Air Filter



Air Filter with Auto Drain



AF20-A



AF40-A

How to Order

AF **30** - **03** **BD** - **A**

① ② ③ ④ ⑤

- 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) AF30-03BD-CR-A

	Symbol	Description	① Body size		
			20	30	40
② Thread type	Nil	Rc	●	●	●
	N Note 1)	NPT	●	●	●
	F Note 2)	G	●	●	●
+					
③ Port size	01	1/8	●	—	—
	02	1/4	●	●	●
	03	3/8	—	●	●
	04	1/2	—	—	●
	06	3/4	—	—	●
+					
④ Option	a Mounting	Nil	Without mounting option	●	●
		B Note 3)	With bracket	●	●
	b Float type auto drain	Nil	Without auto drain	●	●
		C Note 4)	N.C. (Normal close) Drain port is closed when pressure is not applied.	●	●
		D Note 5)	N.O. (Normal open) Drain port is open when pressure is not applied.	—	●
⑤ Semi-standard	c Bowl Note 6)	Nil	Polycarbonate bowl	●	●
		C	With bowl guard	●	— Note 7)
	d Drain port	Nil	With drain cock	●	●
		J Note 8)	Drain guide1/8	●	—
			Drain guide1/4	—	●
		W	Drain cock with barb fitting (for ø6 x ø4 nylon tube)	—	●
	e Flow direction	Nil	Flow direction: Left to right	●	●
		R	Flow direction: Right to left	●	●
	f Pressure unit	Nil	Name plate and caution plate for bowl in imperial units: MPa	●	●
		Z Note 9)	Name plate and caution plate for bowl in imperial units: psi, °F	○ Note 10)	○ Note 10)

Note 1) Drain guide is NPT1/8 (applicable to the AF20-A) and NPT1/4 (applicable to the AF30-A to AF40-A).

The auto drain port comes with ø3/8" One-touch fitting (applicable to the AF30-A to AF40-A).

Note 2) Drain guide is G1/8 (applicable to the AF20-A) and G1/4 (applicable to the AF30-A to AF40-A).

Note 3) A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

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

Note 5) If the compressor is small (0.75 kW, discharge flow is less than 100 L/min[ANR]), air leakage from the drain cock may occur during start of operations. N.C. type is recommended.

Note 6) Refer to Chemical data on page 32 for chemical resistance of the bowl.

Note 7) Standard material (polycarbonate)

Note 8) Without a valve function.

Note 9) 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 10) ○: For thread type: NPT only

Air Filter *Series AF20-A to AF40-A*

Standard Specifications

Model	AF20-A	AF30-A	AF40-A	AF40-06-A
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4
Fluid	Air			
Ambient and fluid temperature	−5 to 60°C (with no freezing)			
Proof pressure	1.5 MPa			
Maximum operating pressure	1.0 MPa			
Nominal filtration rating	5 μm			
Drain capacity (cm³)	8	25	45	
Bowl material	Polycarbonate			
Bowl guard	Semi-standard (Steel)	Standard (Polycarbonate)		
Weight (kg)	0.08	0.18	0.36	0.41

Options/Part No.

Optional specifications		Model			
		AF20-A	AF30-A	AF40-A	AF40-06-A
Bracket assembly ^{Note 1)}		AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS
Float type auto drain ^{Note 2) Note 3)}	N.C.	AD27-A	AD37-A	AD47-A	
	N.O.	—	AD38-A	AD48-A	

Semi-standard/Bowl Assembly Part No.

Semi-standard specifications						Model			
Bowl material	Note 2) Note 3) Float type auto drain		Note 3) With drain guide	With barb fitting	With bowl guard	AF20-A	AF30-A	AF40-A	AF40-06-A
	N.C.	N.O.							
Polycarbonate bowl	—	—	—	—	●	C2SF-C-A	—	—	—
	●	—	—	—	●	AD27-C-A	—	—	—
	—	—	●	—	—	C2SF-J-A	C3SF-J-A	C4SF-J-A	—
	—	—	—	●	—	—	C3SF-W-A	C4SF-W-A	—
	—	—	●	—	●	C2SF-CJ-A	—	—	—

Note 1) Assembly of a bracket and 2 mounting screws.

Note 2) Minimum operating pressure: N.O. type—0.1 MPa; N.C. type—0.1 MPa (AD27-A) and 0.15 MPa (AD37-A/47-A).

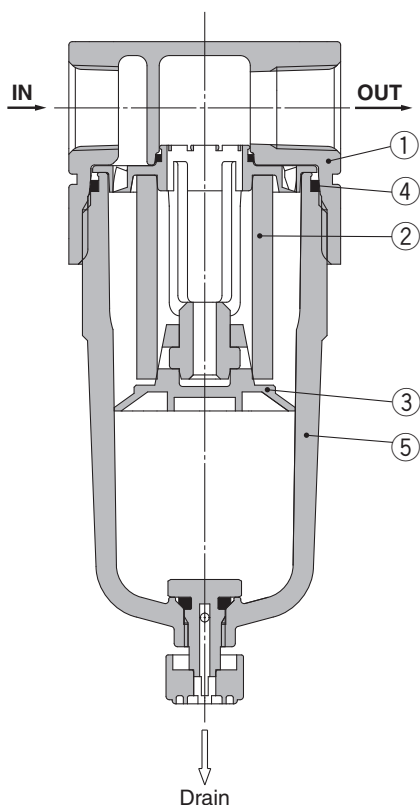
Please consult with SMC separately for psi and °F unit display specifications.

Note 3) Please consult with SMC for details on drain piping to fit NPT or G port sizes.

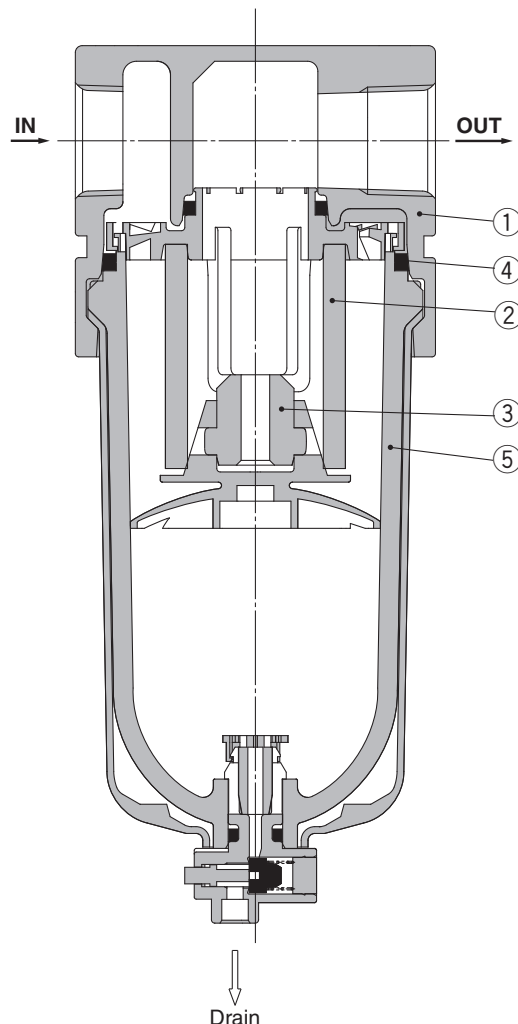
Note) Bowl assembly for the AF20-A to AF40-A models comes with a bowl O-ring.

Construction

AF20-A



AF30-A to AF40-06-A



Component Parts

No.	Description	Material	Color
1	Body	Aluminum die-cast	White

Replacement Parts

No.	Description	Material	Part no.			
			AF20-A	AF30-A	AF40-A	AF40-06-A
2	Filter element	Non-woven fabric	AF20P-060S	AF30P-060S	AF40P-060S	
3	Baffle	PBT	AF22P-040S	AF32P-040S	AF42P-040S	
4	Bowl O-ring	NBR	C2SFP-260S	C32FP-260S	C42FP-260S	
5	Bowl assembly Note)	Polycarbonate	C2SF-A	C3SF-A	C4SF-A	

Note) Bowl O-ring is included. Please contact SMC regarding the bowl assembly supply for psi and °F unit specifications.

AC

AF+AR+AL

AW+AL

AF+AR

AF+AFM+AR

AW+AFM

Attachment

AF

AFM / AFD

AR

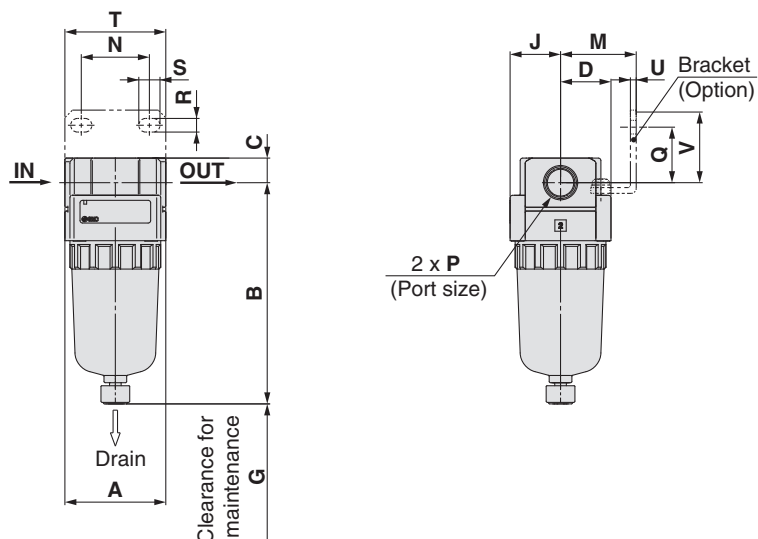
AL

AW

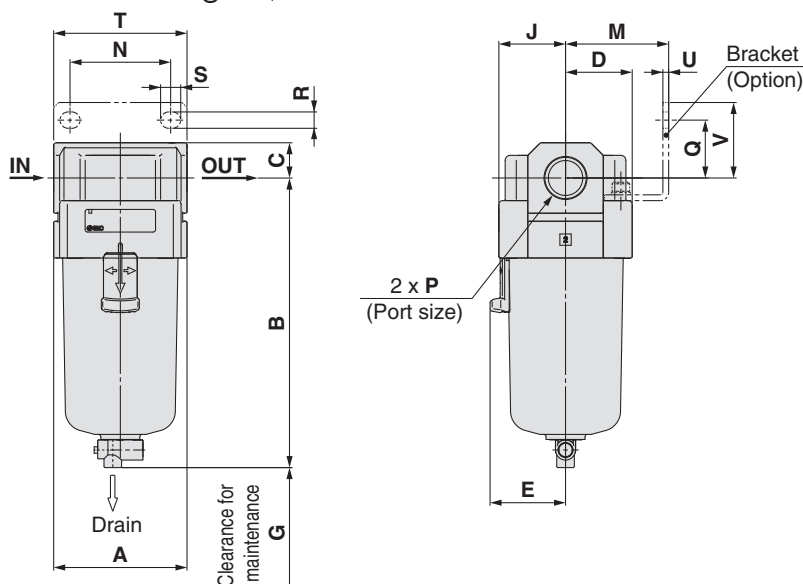
Series AF20-A to AF40-A

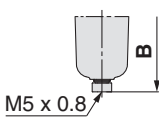
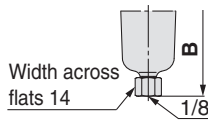
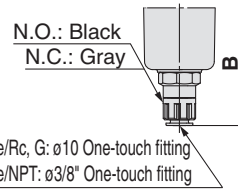
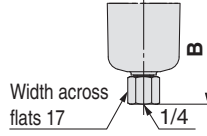
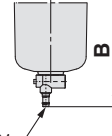
Dimensions

AF20-A



AF30-A to AF40-06-A



Applicable model	AF20-A		AF30-A to AF40-06-A		
Optional/Semi-standard specifications	With auto drain (N.C.)	With drain guide	With auto drain (N.O./N.C.)	With drain guide	Drain cock with barb fitting
Dimensions			 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

Model	Standard specifications								Optional specifications								
									Bracket mount							With auto drain	
	P	A	B	C	D	E	G	J	M	N	Q	R	S	T	U	V	B
AF20-A	1/8, 1/4	40	87.6	9.8	20	—	25	20	30	27	22	5.4	8.4	40	2.3	28	104.9
AF30-A	1/4, 3/8	53	115.1	14	26.7	30	35	26.7	41	40	23	6.5	8	53	2.3	30	156.8
AF40-A	1/4, 3/8, 1/2	70	147.1	18	35.5	38.4	40	35.5	50	54	26	8.5	10.5	70	2.3	35	186.9
AF40-06-A	3/4	75	149.1	20	35.5	38.4	40	35.5	50	54	25	8.5	10.5	70	2.3	34	188.9

Model	Semi-standard specifications	
	With barb fitting	With drain guide
	B	B
AF20-A	—	91.4
AF30-A	123.6	121.9
AF40-A	155.6	153.9
AF40-06-A	157.6	155.9