




# Modular Type Air Filters

## Series AF/AFM/AFD

<b>Air Filter Series AF</b>    <b>P.35 to 43</b>	<b>Model</b>  <b>AF10-A</b> <b>AF20-A</b> <b>AF30-A</b> <b>AF40-A</b> <b>AF40-06-A</b> <b>AF50-A</b> <b>AF60-A</b>	<b>Port size</b>  M5 x 0.8 1/8, 1/4 1/4, 3/8 1/4, 3/8, 1/2 3/4 3/4, 1 1	<b>Filtration μm</b>  5	<b>Options</b>  Bracket (Except AF10-A)  Float type auto drain
<b>Mist Separator Series AFM</b>    <b>P.45 to 52</b>	<b>AFM20-A</b> <b>AFM30-A</b> <b>AFM40-A</b> <b>AFM40-06-A</b>	1/8, 1/4 1/4, 3/8 1/4, 3/8, 1/2 3/4	0.3	Bracket  Float type auto drain
<b>Micro Mist Separator Series AFD</b>    <b>P.45 to 52</b>	<b>AFD20-A</b> <b>AFD30-A</b> <b>AFD40-A</b> <b>AFD40-06-A</b>	1/8, 1/4 1/4, 3/8 1/4, 3/8, 1/2 3/4	0.01	Bracket  Float type auto drain

AC

AF+AR+AL

AW+AL

AF+AR

AF+AFM+AR

AW+AFM

Attachment

AF

AFM / AFD

AR

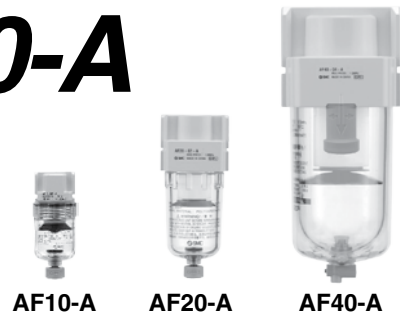
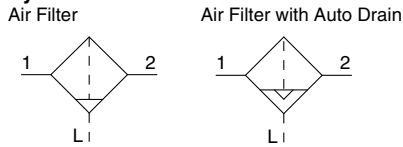
AL

AW

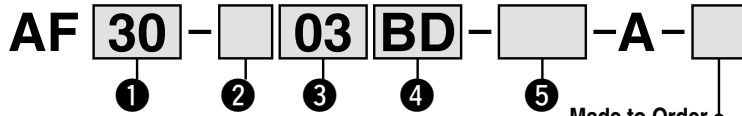
# Air Filter

## AF10-A to AF60-A

### Symbol



### How to Order



(Refer to pages 42 and 43 for details.)

- 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-R-A

	Symbol	Description	① Body size						
			10	20	30	40	50	60	
② Pipe thread type	Nil	Metric thread (M5)	●	—	—	—	—	—	
	N <small>Note 1)</small>	Rc	—	●	●	●	●	●	
	F <small>Note 2)</small>	NPT	—	●	●	●	●	●	
		G	—	●	●	●	●	●	
③ Port size	M5	M5 x 0.8	●	—	—	—	—	—	
	01	1/8	—	●	—	—	—	—	
	02	1/4	—	●	●	—	—	—	
	03	3/8	—	—	●	●	—	—	
	04	1/2	—	—	—	●	—	—	
	06	3/4	—	—	—	●	●	—	
	10	1	—	—	—	—	●	●	
④ Option	a Mounting	Nil Without mounting option	●	●	●	●	●	●	
	B <small>Note 3)</small>	With bracket	—	●	●	●	●	●	
b Float type auto drain	Nil	Without auto drain	●	●	●	●	●	●	
	C <small>Note 4)</small>	N.C. (Normally closed) Drain port is closed when pressure is not applied.	●	●	●	●	●	●	
	D <small>Note 5)</small>	N.O. (Normally open) Drain port is open when pressure is not applied.	—	—	●	●	●	●	
⑤ Semi-standard	c Bowl <small>Note 6)</small>	Nil	Polycarbonate bowl	●	●	●	●	●	●
		2	Metal bowl	●	●	●	●	●	●
		6	Nylon bowl	●	●	●	●	●	●
		8	Metal bowl with level gauge	—	—	●	●	●	●
		C	With bowl guard	—	●	— <small>Note 7)</small>	— <small>Note 7)</small>	— <small>Note 7)</small>	— <small>Note 7)</small>
		6C	With bowl guard (Nylon bowl)	—	●	— <small>Note 8)</small>	— <small>Note 8)</small>	— <small>Note 8)</small>	— <small>Note 8)</small>
	d Drain port <small>Note 9)</small>	Nil	With drain cock	●	●	●	●	●	●
J <small>Note 10)</small>	Drain guide 1/8	—	●	—	—	—	—		
W <small>Note 11)</small>	Drain guide 1/4	—	—	●	●	●	●		
		Drain cock with barb fitting	—	—	●	●	●	●	
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 <small>Note 12)</small>	Name plate and caution plate for bowl in imperial units: psi, °F	○ <small>Note 13)</small>	○ <small>Note 13)</small>	○ <small>Note 13)</small>	○ <small>Note 13)</small>	○ <small>Note 13)</small>	○ <small>Note 13)</small>	

Note 1) Drain guide is NPT1/8 (applicable to the AF20-A) and NPT1/4 (applicable to the AF30-A to AF60-A).

The auto drain port comes with  $\phi 3/8$ " One-touch fitting (applicable to the AF30-A to AF60-A).

Note 2) Drain guide is G1/8 (applicable to the AF20-A) and G1/4 (applicable to the AF30-A to AF60-A).

The auto drain port comes with  $\phi 10$  One-touch fitting (applicable to the AF30-A to AF60-A).

Note 3) Option B is not assembled and supplied loose at the time of shipment. Assembly of a bracket and 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 38 for chemical resistance of the bowl.

Note 7) A bowl guard is provided as standard equipment (polycarbonate).

Note 8) A bowl guard is provided as standard equipment (nylon).

Note 9) The combination of float type auto drain: C and D is not available.

Note 10) Without a valve function

Note 11) The combination of metal bowl: 2 and 8 is not available.

Note 12) For pipe thread type: M5, NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

Note 13) ○: For pipe thread type: M5, NPT only

# Air Filters Series AF10-A to AF60-A

## Standard Specifications

Model	AF10-A	AF20-A	AF30-A	AF40-A	AF40-06-A	AF50-A	AF60-A
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	1
Fluid	Air						
Ambient and fluid temperature	23 to 140°F (-5 to 60°C) (with no freezing)						
Proof pressure	218 psi (1.5 MPa)						
Maximum operating pressure	145 psi (1.0 MPa)						
Nominal filtration rating	5 μm						
Drain capacity (cm <sup>3</sup> )	2.5	8	25	45			
Bowl material	Polycarbonate						
Bowl guard	—	Semi-standard (Steel)	Standard (Polycarbonate)				
Weight (kg)	0.06	0.08	0.18	0.36	0.41	0.87	1.00

## Options/Part No.

Optional specifications	Model						
	AF10-A	AF20-A	AF30-A	AF40-A	AF40-06-A	AF50-A	AF60-A
Bracket assembly <sup>Note)</sup>	—	AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS	AF52P-050AS	

Note) Assembly of a bracket and 2 mounting screws

## Bowl Assembly/Part No.

Bowl material	Drain discharge mechanism	Drain port	Other	Model							
				AF10-A	AF20-A	AF30-A	AF40-A	AF40-06-A	AF50-A	AF60-A	
Polycarbonate bowl	Manual discharge	With drain cock	—	C1SF-A	C2SF-A	—	—				
			With bowl guard	—	C2SF-C-A	C3SF-A	C4SF-A				
		Drain cock with barb fitting	With bowl guard	—	—	C3SF-W-A	C4SF-W-A				
			With bowl guard	—	C2SF□-J-A	—	—				
	Automatic discharge <sup>Note)</sup> (Auto drain)	Normally closed (N.C.)	With bowl guard	—	AD17-A	AD27-A	—	—			
			With bowl guard	—	AD27-C-A	AD37□-A	AD47□-A				
Nylon bowl	Manual discharge	With drain cock	—	C1SF-6-A	C2SF-6-A	—	—				
			With bowl guard	—	C2SF-6C-A	C3SF-6-A	C4SF-6-A				
		Drain cock with barb fitting	With bowl guard	—	—	C3SF-6W-A	C4SF-6W-A				
			With bowl guard	—	C2SF□-6J-A	—	—				
	Automatic discharge <sup>Note)</sup> (Auto drain)	Normally closed (N.C.)	With bowl guard	—	AD17-6-A	AD27-6-A	—	—			
			With bowl guard	—	AD27-6C-A	AD37□-6-A	AD47□-6-A				
Metal bowl	Manual discharge	With drain cock	—	C1SF-2-A	C2SF-2-A	C3SF-2-A	C4SF-2-A				
			With level gauge	—	—	C3LF-8-A	C4LF-8-A				
		With drain guide (without valve function)	With level gauge	—	—	C2SF□-2J-A	C3SF□-2J-A	C4SF□-2J-A			
			With level gauge	—	—	C3LF□-8J-A	C4LF□-8J-A				
	Automatic discharge <sup>Note)</sup> (Auto drain)	Normally closed (N.C.)	With level gauge	—	AD17-2-A	AD27-2-A	AD37□-2-A	AD47□-2-A			
			With level gauge	—	—	AD37□-8-A	AD47□-8-A				
Normally open (N.O.)	With level gauge	—	—	AD38□-2-A	AD48□-2-A						
	With level gauge	—	—	AD38□-8-A	AD48□-8-A						

Note) Minimum operating pressure: N.O. type—15 psi (0.1 MPa) (AD38-A, AD48-A); N.C. type—15 psi (0.1 MPa) (AD17-A, AD27-A) and 22 psi (0.15 MPa) (AD37-A, AD47-A).

Bowl assembly for the AF20-A to AF60-A models comes with a bowl seal.

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