Compressed Air Preparation Filter

New

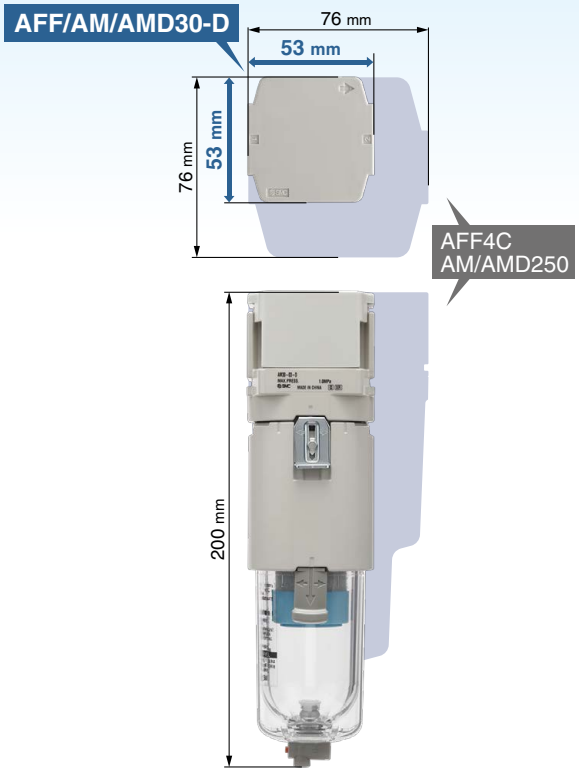
RoHS

Compressed Air Purity Class **ISO 8573**

Line Filter *AFF30*	1 µm	Water droplet removal
Mist Separator *AM30*	0.1 µm	Oil mist separation and removal
Micro Mist Separator *AMD30*	0.01 µm	Oil mist separation and removal

Face-to-face and depth dimensions reduced by 30%

AFF/AM□30: □**53 mm** (Existing model: □76 mm)



No tools are required.

Easier replacement of the element

Improved filtration performance

AFF: **1 µm**
(Existing model: 3 µm)

AM: **0.1 µm**
(Existing model: 0.3 µm)

Transparent bowl guard (Double layer design)

- The inside is visible from 360°.
- The bowl is completely protected from the environment, allowing for improved safety.

Weight reduced by 30%

AFF/AM□30: **0.39 kg** (Existing model: 0.55 kg)

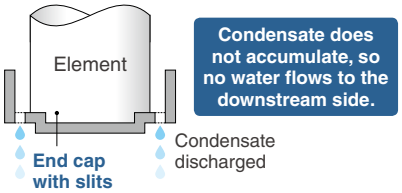
Flow capacity increased by 50%

AMD30: **750 L/min** (Same flow capacity for all series)
AMD250C: 500 L/min (Existing model)

Pressure drop: 10 kPa or less

An end cap with slits is used for the element.

This eliminates the accumulation of condensate. Even high-velocity fluid is prevented from spattering. The result is a compact bowl design.

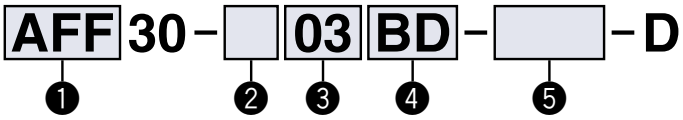


Condensate does not accumulate, so no water flows to the downstream side.

AFF/AM/AMD30

SMC

How to Order



			Symbol	Description
❶	Filter type	Line filter	**AFF**	Nominal filtration rating: 1 μm Water droplet removal ratio: 99%
		Mist separator	**AM**	Nominal filtration rating: 0.1 μm Oil mist density at outlet: 1 mg/m^3
		Micro mist separator	**AMD**	Nominal filtration rating: 0.01 μm Oil mist density at outlet: 0.1 mg/m^3
			+	
❷	Thread type		**Nil**	Rc
			N∗1	NPT
			F∗2	G
			+	
❸	Port size		**02**	1/4
			03	3/8
			+	
❹	Option	**a** Mounting	**Nil**	Without mounting option
			B∗3	With bracket
			+	
		b Float type auto drain	**Nil**	Without auto drain
			C∗4	N.C. (Normally closed)
			D∗5	N.O. (Normally open)
			+	
❺	Semi-standard	**c** Bowl	**Nil**	Polycarbonate bowl
			2	Metal bowl
			6	Nylon bowl
			8	Metal bowl with level gauge
			+	
		d Drain port∗6	**Nil**	With drain cock
			J∗7	Drain guide 1/4
			W∗8	Drain cock, Barb fitting (ø6)
			+	
		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 SI units: MPa
			Z∗9	Name plate and caution plate for bowl in imperial units: psi, °F

∗1 Drain guide is NPT1/4. The auto drain port comes with ø3/8" One-touch fitting.
∗2 Drain guide is G1/4.
∗3 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws
∗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.
∗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.
∗6 The combination of float type auto drain: C and D is not available.
∗7 Without a valve function
∗8 The combination of metal bowl: 2 and 8 is not available.
∗9 For 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.)

Standard Specifications

Model			AFF30	AM30	AMD30
Fluid			Air		
Ambient and fluid temperatures		°C	–5 to 60 (No freezing)		
Proof pressure		MPa	1.5		
Maximum operating pressure		MPa	1.0		
Minimum operating pressure	Auto drain (N.C.)	MPa	0.15		
	Auto drain (N.O.)	MPa	0.1		
Nominal filtration rating		μm	1 (Filtration efficiency: 99%)	0.1 (Filtration efficiency: 99%)	0.01 (Filtration efficiency: 99.9%)
Water droplet removal ratio		%	99*1	—	—
Oil mist density at outlet		mg/m³ (ANR)	—	Max. 1.0*2	Max. 0.1*3
Rated flow*4		L/min (ANR)	750		
Weight		kg	0.39		

*1 Conditions: Water droplet at inlet: 33 mL/m³ (ANR), At rated flow
*2 Conditions: Oil mist density at inlet: 10 mg/m³ (ANR), At rated flow
*3 Conditions: Oil mist density at inlet: 1 mg/m³ (ANR), At rated flow
*4 Condition: Inlet pressure of 0.7 MPa

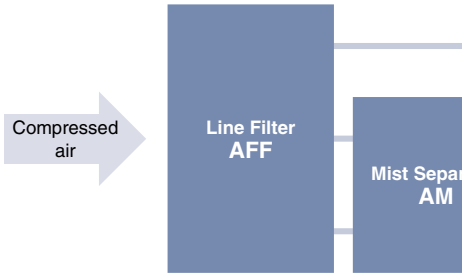
Option Part Nos.

Bracket assembly*1		AF34P-070AS
Float type auto drain*2, 3	N.C.	AD37-A
	N.O.	AD38-A

*1 Assembly of a bracket and 2 mounting screws
*2 Minimum operating pressure: N.O. type–0.1 MPa; N.C. type–0.15 MPa
Please consult with SMC separately for psi and °F unit display specifications.
*3 Please consult with SMC for details on drain piping to fit NPT or G port sizes.

Compliant with ISO 8573 Compressed Air Purity Class

System which conforms to the degree of purity required for compressed air



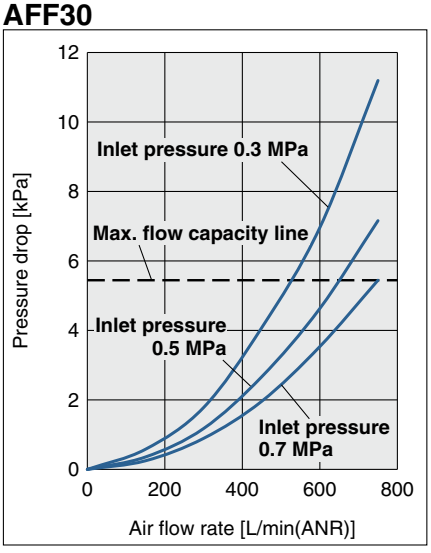
Purity class as a system		
Particles	Liquid water	Oil
4	7	—
2	7	3
1	7	2

The class indicates the compressed air purity according to ISO 8573-1:2010 (JIS B 8392-1:2012) and indicates the maximum purity class which can be obtained using that system. Note, however, that this value will differ according to the inlet air conditions.

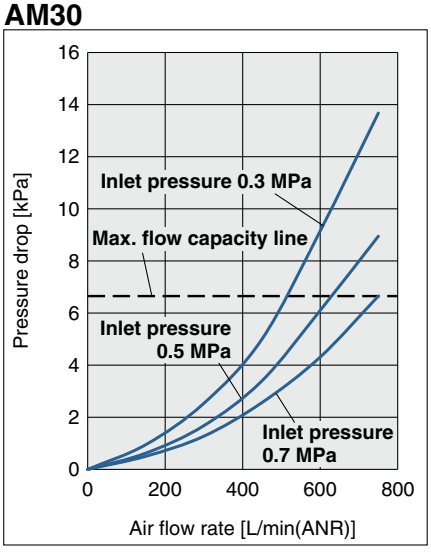
Flow Rate Characteristics/Select a model which falls under the max. flow capacity line.

* Compressed air over the max. flow capacity line in the tables below may not meet the specifications of the product.

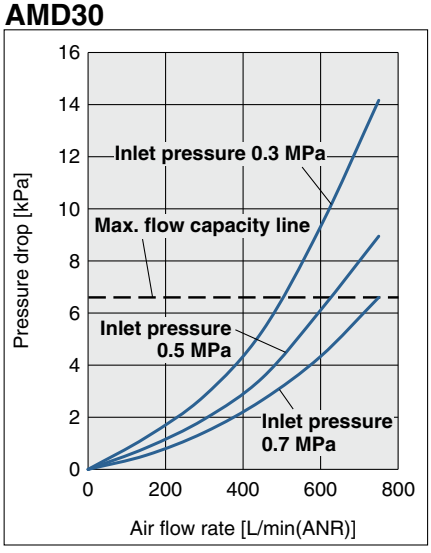
AFF30



AM30

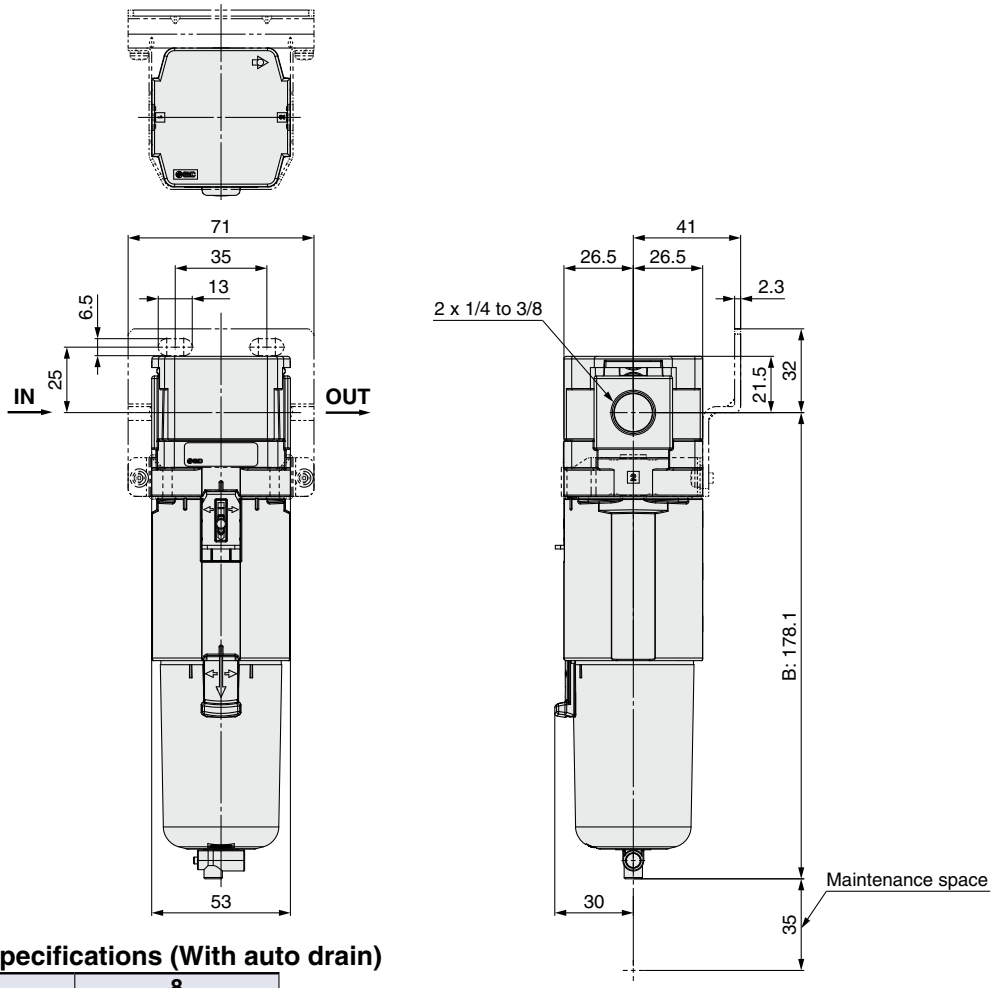


AMD30

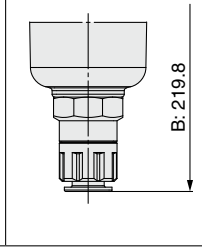
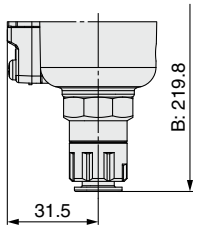


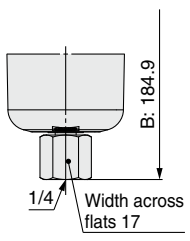
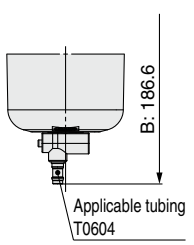
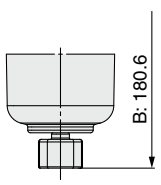
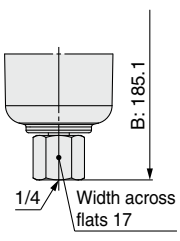
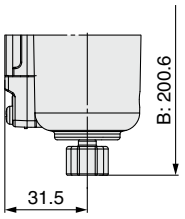
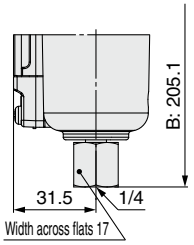
Dimensions

AFF/AM/AMD30



Semi-standard Bowl Specifications (With auto drain)

Semi-standard symbol	2	8
Appearance		

Semi-standard symbol	J	W	2	2J	8	8J
Appearance						

⚠ Safety Instructions	Be sure to read the “Handling Precautions for SMC Products” (M-E03-3) and “Operation Manual” before use.