

Micro Mist Separator Series **AMD**

Can separate and remove aerosol state oil mist in compressed air and remove particles such as carbon or dust of more than 0.01 μm .
Use this product as a pre-filter for compressed air for precision instruments or clean room requiring higher clean air.

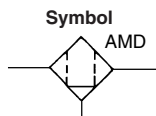
Modular connection is possible with AMD150C to 550C.
(For details, refer to page 61.)



AMD150C to 550C



AMD650/850



Made to Order
(For details, refer to page 67.)

Model

Model	AMD150C	AMD250C	AMD350C	AMD450C	AMD550C	AMD650	AMD850
Rated flow (l/min (ANR)) <small>Note)</small>	200	500	1000	2000	3700	6000	12000
Port size	1/8, 1/4	1/4, 3/8	3/8, 1/2	1/2, 3/4	3/4, 1	1, 1 1/2	1 1/2, 2
Mass (kg)	0.38	0.55	0.9	1.4	2.1	4.2	10.5



Note) Max. flow at 0.7 MPa.

Max. flow varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 29) and "Maximum Air Flow" (page 28).

Model/Free Standing Type

Model	AMD800	AMD900	AMD1000
Rated flow (l/min (ANR))	8000	24000	40000
Port size	50(2B)JIS 10K FF flange	50(2B), 80(3B), 100(4B)JIS 10K FF flange	100(4B), 150(6B)JIS 10K FF flange
Mass (kg)	100	220	430

Model/Piping Support Type

Model	AMD801	AMD901
Rated flow (l/min (ANR))	8000	24000
Port size	50(2B)JIS 10K FF flange	50(2B), 80(3B), 100(4B)JIS 10K FF flange
Mass (kg)	50	140

Specifications

Fluid	Compressed air
Max. operating pressure	1.0 MPa
Min. operating pressure*	0.05 MPa
Proof pressure	1.5 MPa
Ambient and fluid temperature	5 to 60°C
Nominal filtration rating	0.01 μm (Filtration efficiency: 99.9%)
Oil mist density at outlet	Max. 0.1 mg/m ³ (ANR)* (Before saturated with oil, less than 0.01 mg/m ³ (ANR) \approx 0.008 ppm)
Element life	2 years (1 year for flange type) or when pressure drop reached 0.1 MPa

* With auto drain: 0.1 MPa (N.O. type) or 0.15 MPa (N.C. type)

* Oil mist density at 30 mg/m³ (ANR) blown out by compressor.

Accessory

Applicable model	AMD150C	AMD250C	AMD350C	AMD450C	AMD550C	AMD650	AMD850
Bracket assembly (with 2 mounting screws)	AM-BM101	AM-BM102	AM-BM103	AM-BM104	AM-BM105	BM56	BM57

⚠ Caution

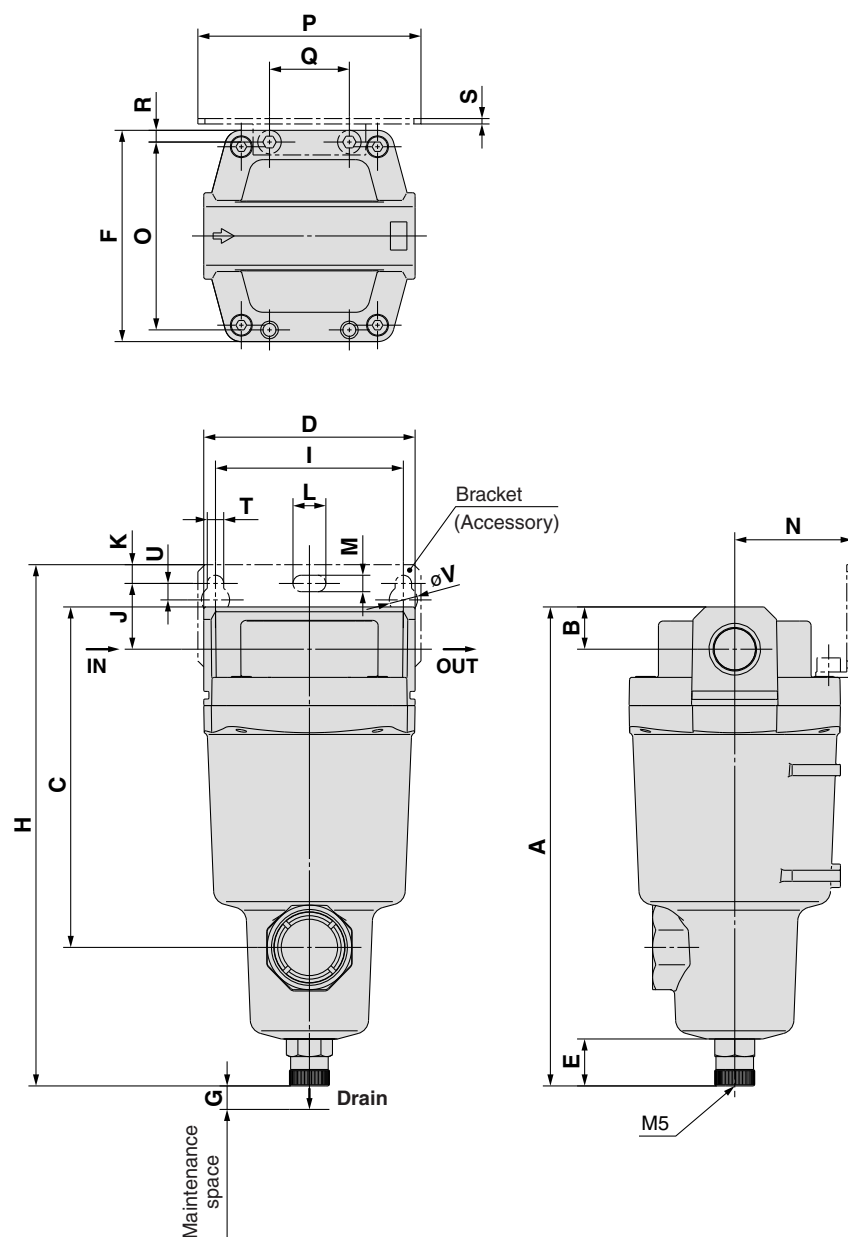
Be sure to read this before handling.

Refer to back pages 1 and 2 for Safety Instructions, "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions, and back pages 3 through to 7 for Specific Product Precautions.

Series AMD

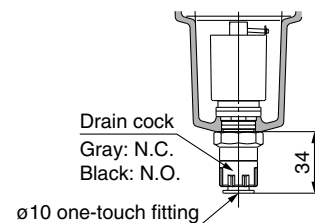
Dimensions

AMD150C to 550C

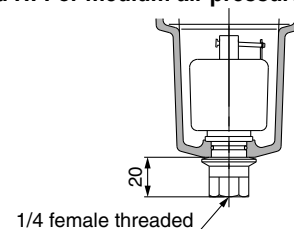


Auto drain

C: With auto drain (N.C.)
D: With auto drain (N.O.)

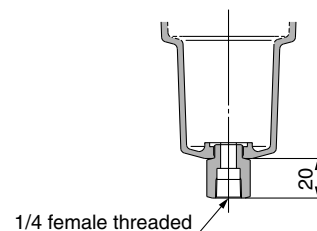


Combination of D: With auto drain (N.O.)
and H: For medium air pressure

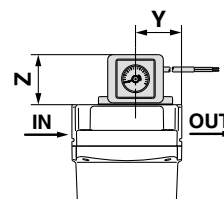


Option

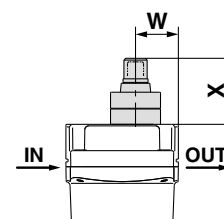
J: Drain guide 1/4 female threaded



S, U: With differential pressure switch (with indicator)



T: With element service indicator



(mm)																											
Model	Port size	A	B	C	D	E	F	G	Bracket related dimensions														Element service indicator related dimensions		Differential pressure switch related dimensions		
									H	I	J	K	T	U	L	M	V	N	O	P	Q	R	S	W	X	Y	Z
AMD150C	1/8, 1/4	158	10	99	63	20	63	10	173	56	20	5	6	6	12	6	10	35	54	70	26	4.5	1.6	24	37	32	41
AMD250C	1/4, 3/8	172	14	113	76	20	76	10	190	66	24	8	6	6	12	6	10	40	66	80	28	5	2	27	37	36	41
AMD350C	3/8, 1/2	204	18	145	90	20	90	10	222	80	28	8	7	7	14	7	12	50	80	95	34	5	2.3	32	37	42	41
AMD450C	1/2, 3/4	225	20	166	106	20	106	10	246	90	31	10	9	9	18	9	15	55	88	111	50	9	3.2	37	37	43	41
AMD550C	3/4, 1	259	24	200	122	20	122	15	278	100	33	10	9	9	18	9	15	65	102	126	60	10	3.2	39	37	51	41



Series AM□/AFF

Specific Product Precautions 4

Be sure to read this before handling. Refer to back pages 1 and 2 for Safety Instructions, and “Precautions for Handling Pneumatic Devices” (M-03-E3A) for Common Precautions.

Maintenance

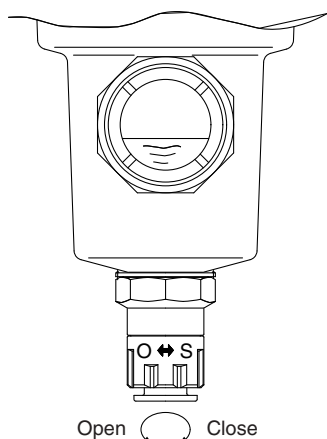
Caution

3. In the case of a type with auto drain

- The auto drain operates when the drainage level reaches the top of the sight glass, and the drain will be discharged.
- When using the AFF2C to 22C, 37B, AM□150C to 550C, 650 with auto drain, the drain is automatically discharged with the knob tightened to the “S” side. Manual drain discharge, however, is also possible.

<Manual operation>

A manual knob attached to the auto drain end is tightened to the “S” side in normal operation. The drain can be discharged by loosening it to the “O” side. (Be careful, however, if pressure remains inside the filter when the drain is discharged, the drain will blow out from the drain port.)



4. The drain exhaust parts replacement method and necessary parts are different depending on when it was manufactured.

Description	Necessary parts		Applicable size
	Manufactured Dec. 2002 or before [Up to manufacturing lot No. GZ]	Manufactured Jan. 2003 onwards [Manufacturing lot No. HO onwards]	
Drain cock	AM-SA002		2C to 22C 2B to 37B 150C to 550C 150 to 650
Drain guide	AM-SA003		
N.O. auto drain	Auto drains cannot be replaced alone since those cannot be assembled without dedicated assembly tools. The entire bowl assembly must be replaced. (Refer to “How to Order Bowl Assembly” on page 63.)	AD43PA-D	2C to 22C 2B to 22B 150C to 550C 150 to 550
N.C. auto drain		AD53PA-D	
Ball valve set	AM-SA004		75B, 850
N.O. auto drain	AD34PA-D (Note)		

(Note) Jig (AM-SA005) for replacing auto drain is necessary for the 75B or 850.

Others

Caution

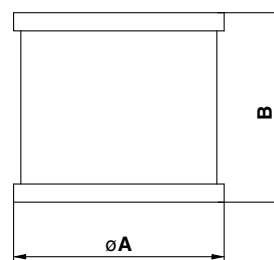
1. Element interchange

Following is the element dimensions for the AFF and AM□ series:

Since elements for the same body size has the same dimensions, they are interchangeable.

However, do not interchange them easily since it can cause various kinds of problems.

If interchanging the elements is unavoidable, replace the product model number label, too.



Element Dimensions

Model	Element dimensions (Reference value)	
	øA	B
AFF2C, AFF2B, AM150C, AM150 AMD150C, AMD150, AMH150C, AMH150	49	42
AFF4C, AFF4B, AM250C, AM250 AMD250C, AMD250, AMH250C, AMH250	58	52
AFF8C, AFF8B, AM350C, AM350 AMD350C, AMD350, AMH350C, AMH350	70	78
AFF11C, AFF11B, AM450C, AM450 AMD450C, AMD450, AMH450C, AMH450	82	88
AFF22C, AFF22B, AM550C, AM550 AMD550C, AMD550, AMH550C, AMH550	96	118
AFF37B, AM650 AMD650, AMH650	122	144
AFF75B, AM850 AMD850, AMH850	142	223

2. About oil-free products

The AFF and AM□ series includes parts (such as resin parts, rubber parts, and elements) that does not allow degreasing wash. Therefore, oil-free products with all parts degreasing washed is not available.

3. Degreasing wash

Certain parts such as the body and housing can be degreasing washed. Contact SMC after confirming the specifications. (available as Option or Made to Order)

4. Change of oil

On the AFF and AM□ series, no oil such as grease is applied to parts exposed to compressed air. However, for certain specifications, there are some parts to which oil is applied. It is possible to change the type of applied oil (as Option or Made to Order).