



Micro Mist Separator with Prefilter

Series *AMH*

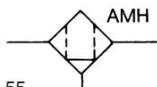
Series AMH can separate and remove aerosol state oil mist in compressed air and remove carbon or dust of more than 0.01 μm .

It should be used as prefilter of compressed air for precision instruments or clean room required for higher clean air.

The conventional pneumatic pressure line Series AM + Series AMD have been integrated to achieve a reduction in installation space, savings in piping installation labor, and reduced costs.



JIS Symbol



P. 14-20-55

Model

Model	AMH150	AMH250	AMH350	AMH450	AMH550	AMH650	AMH850
Rated flow (Note) (m^3/min (ANR))	200	500	1000	2000	3500	6000	12000
Port size (Nominal size B)	1/8, 1/4, 3/8	1/4, 3/8, 1/2	3/8, 1/2, 3/4	1/2, 3/4, 1	3/4, 1	1, 1 1/2	1 1/2, 2
Weight (kg)	0.38	0.55	0.9	1.4	2.1	4.2	10.5



Note) Max. flow capacity at pressure of 0.7 MPa. It varies depending on operating pressure. Refer to "Flow Characteristics" (page 14-20-32) and figure of "Max. Air Flow" (page 14-20-30).

Specifications

Fluid	Compressed air
Max. operating pressure	1.0 MPa
Min. operating pressure ⁽¹⁾	0.05 MPa
Proof pressure	1.5 MPa
Ambient and fluid temperature	5 to 60°C
Filtration	0.01 μm (95% particle size collection)
Oil mist removal rate	Max. 0.1 mg/m^3 (ANR) ⁽²⁾ (At saturation of element oil, less than 0.01 mg/m^3 (ANR) = 0.008 ppm)
Element life	2 years or when pressure drop reaches 0.1 MPa

Note 1) 0.1 MPa (N.O. type) or 0.15 MPa (N.C. type) in the case of types with auto-drain.

Note 2) At oil mist density of 30 mg/m^3 ANR is blown out by compressor.



Refer to "Made to Order Specifications" on page 14-20-55.

Accessory (Option)

Applicable model	AMH150	AMH250	AMH350	AMH450	AMH550	AMH650	AMH850
Bracket assembly (With cap bolt and spring washer)	BM51	BM52	BM53	BM54	BM55	BM56	BM57

Model Selection

Select the model in accordance with the following procedure taking the inlet pressure and max. air flow into consideration.

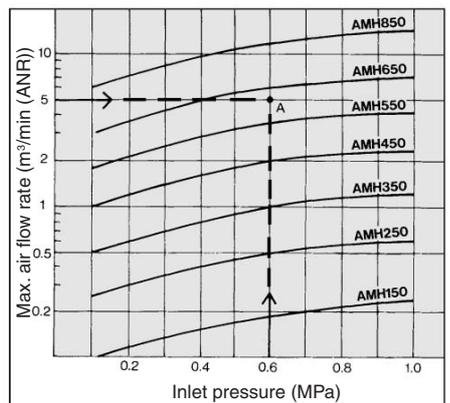
(Example) Inlet pressure: 0.6 MPa
Max. air flow capacity: 5 m^3/min (ANR)

1. Select the point of contact A of inlet pressure and max. air capacity in the graph.
2. AMH650 is obtained when the max. flow line is above the point of intersection A in the graph.



Note) Make sure to select a model that has the maximum flow rate line above the obtained intersecting point. With a model that has the maximum flow rate line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

Max. Air Flow



Caution

Be sure to read before handling. Refer to pages 14-21-3 to 4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, pages 14-14-6 to 8 for Precautions on every series, and pages 14-20-62 to 64 for more detailed precautions on every series.

Micro Mist Separator with Prefilter Series AMH

How to Order

AMH150 to AMH850

AMH **250** **03** **B** **J**

Body size

150	1/8 Standard
250	1/4 Standard
350	3/8 Standard
450	1/2 Standard
550	3/4 Standard
650	1 Standard
850	1 1/2 Standard

Thread type

Nil	Rc
F	G
N	NPT

Port size

01	1/8 ^B	06	3/4 ^B
02	1/4 ^B	10	1 ^B
03	3/8 ^B	14	1 1/2 ^B
04	1/2 ^B	20	2 ^B

Option

J	Drain guide 1/4 ^B female thread
R	IN-OUT reversal direction
T	Element service indicator

Accessory (Option) *

Symbol	Description
Nil	—
B	Bracket
C	N.C. auto-drain
D	N.O. auto-drain

* Refer to the table below for accessory/option combinations.



Note) Refer to "How to Order Bowl Assembly" on page 14-20-59.

Accessory/Option Combinations

○ Available □ Not available ○ Depends on model

Accessory (Option)	Accessory	Option specifications					Applicable model							
		C	D	J	R	T	AMH150	AMH250	AMH350	AMH450	AMH550	AMH650	AMH850	
Accessory	N.C. auto-drain	C	□	□	○	○	○	○	○	○	○	○	○	○
	N.O. auto-drain	D	□	□	○	○	○	○	○	○	○	○	○	○
Option	Drain guide 1/4 B	-J	○	○	○	○	○	○	○	○	○	○	○	○
	IN-OUT reversal direction	-R	○	○	○	○	○	○	○	○	○	○	○	○
	Element service indicator	-T	○	○	○	○	○	○	○	○	○	○	○	○

HA □

AT

ID □

AMG

AFF

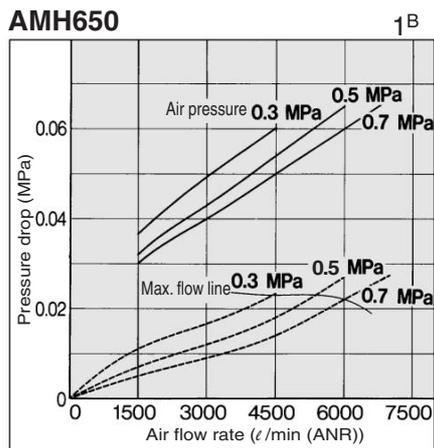
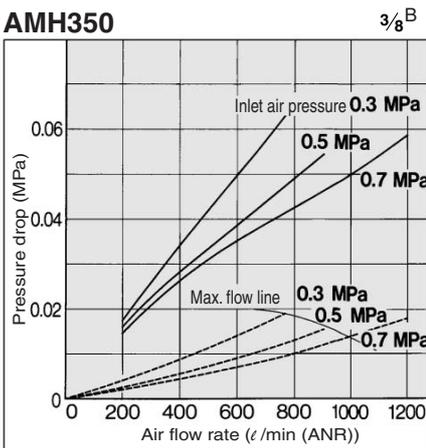
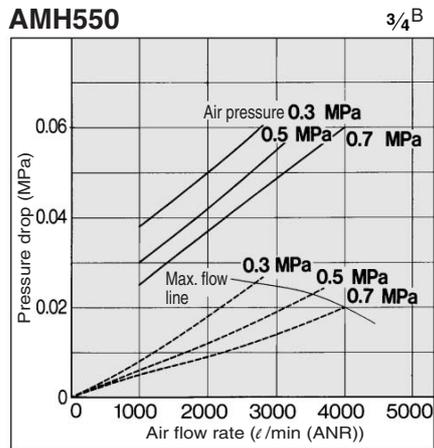
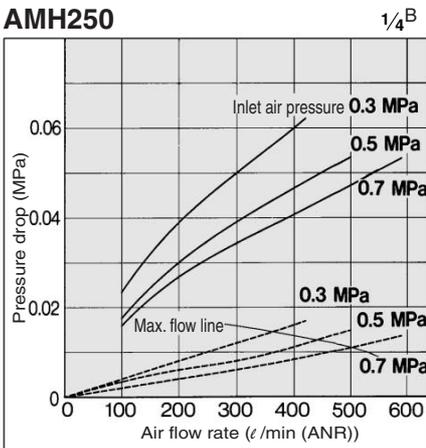
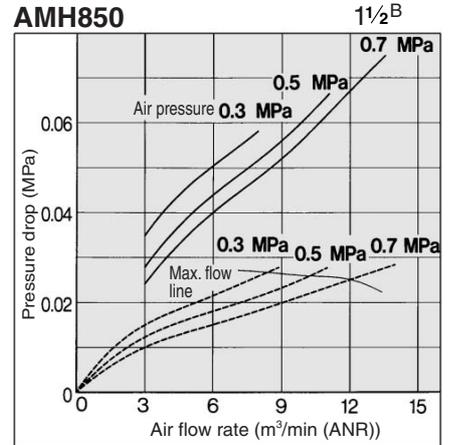
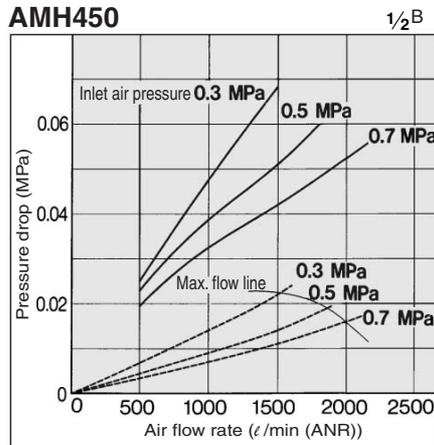
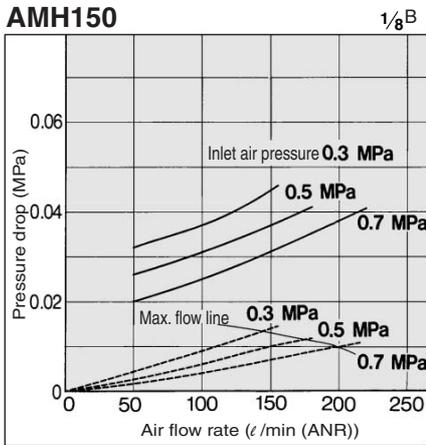
AM □

Misc.

Series AMH

Flow Characteristics/Select the model taking the max. flow capacity into account ——— Element oil saturation - - - - - Initial condition

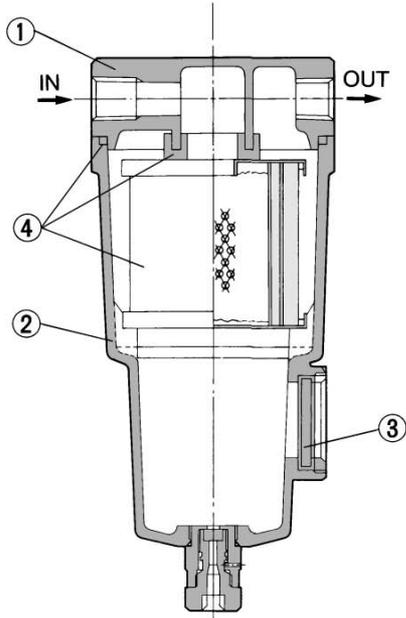
 Note) Compressed air over max. flow line in the table below may not meet the specifications of the product. It may cause damage to the element.



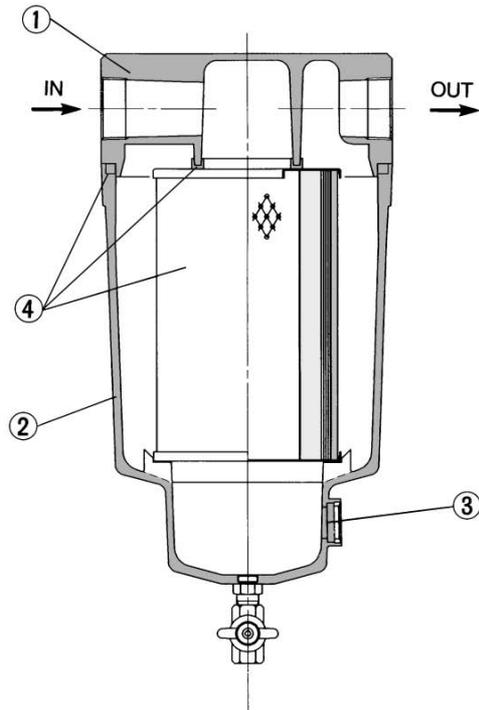
Micro Mist Separator with Prefilter Series AMH

Construction

AMH150 to AMH650



AMH850



Component Parts

No.	Description	Material	Note
①	Body	Aluminum die-casted	Chrome treated
②	Housing	Aluminum die-casted*	Epoxy coating on inner surface
③	Sight glass	Tempered glass	

* AMH850 is aluminum casted.



Note: Refer to page 14-20-59 for "How to Order Bowl Assembly".



Note: Sight glass is indicated in the figure above for easy understanding of parts, however mounting position is different. Refer to dimensions on pages 14-20-34 to 14-20-35 for details.

Replacement Parts

No.	Description	Material	Model						
			AMH150	AMH250	AMH350	AMH450	AMH550	AMH650	AMH850
④	Element assembly	Glass fiber, Others	AMH-EL150	AMH-EL250	AMH-EL350	AMH-EL450	AMH-EL550	AMH-EL650	AMH-EL850

* Element assembly: With gasket and O-ring

HA

AT

ID

AMG

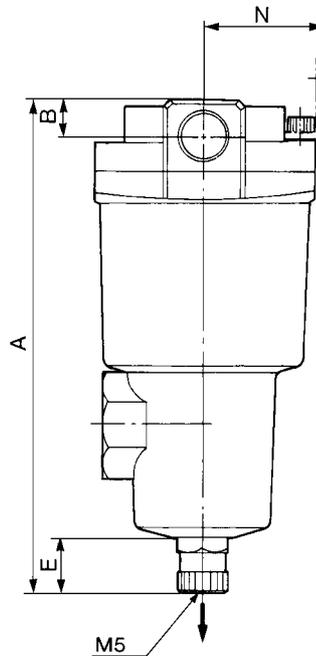
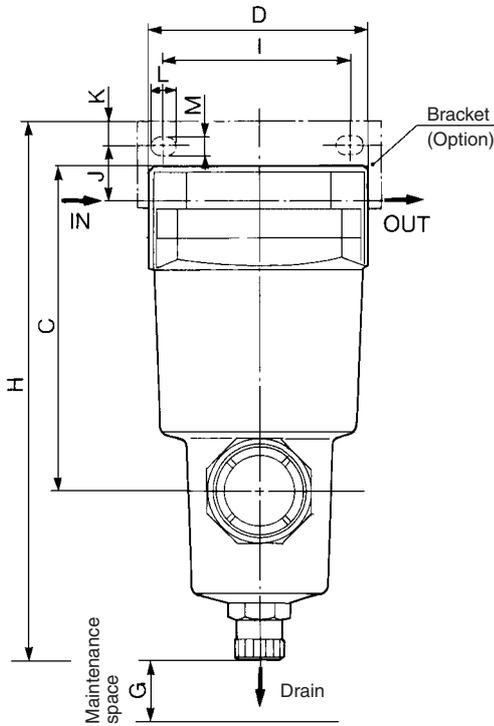
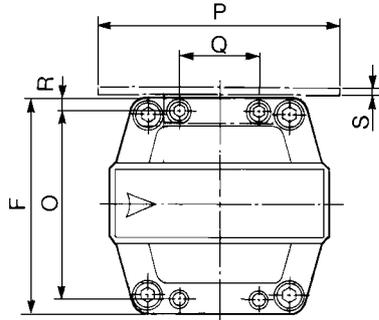
AFF

AM

Misc.

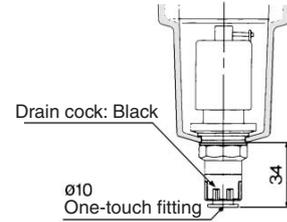
Series AMH

AMH150 to AMH650 Dimensions

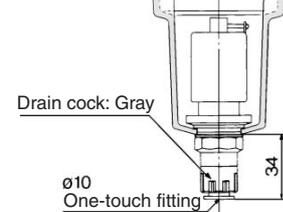


Accessory

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



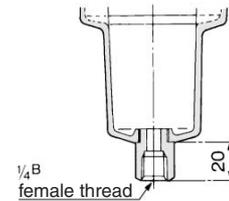
C: With auto-drain (N.C.)



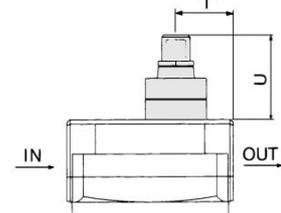
* N.C. auto-drain not available for AMH650.

Option

J: With drain guide



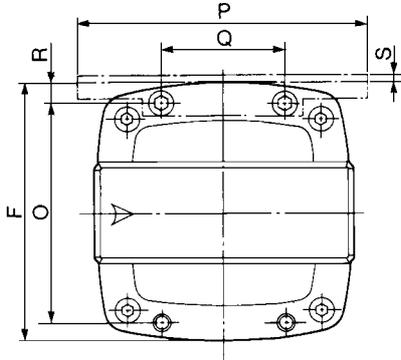
T: With element service indicator



Model	Port size (Nominal size B)	A	B	C	D	E	F	G	Dimensions with mounting bracket											Element service indicator		
									H	I	J	K	L	M	N	O	P	Q	R	S	T	U
AMH150	1/8, 1/4, 3/8	159	13	100	63	20	63	10	166	56	15	5	9	5.5	35	54	70	26	4.5	1.6	24	37
	1/4, 3/8	172	13	113	76	20	76	10	187	66	20	8	12	6	40	66	84	28	5	2	27	37
AMH250	1/2	178	16	119	76	20	76	10	187	66	17	8	12	6	40	66	84	28	5	2	27	37
	3/8, 1/2	204	16	145	90	20	90	10	218	80	22	8	14	7	50	80	100	34	5	2.3	32	37
AMH350	3/4	210	19	151	90	20	90	10	218	80	19	8	14	7	50	80	100	34	5	2.3	32	37
	1/2, 3/4	225	19	166	106	20	106	10	241	90	25	10	14	9	55	88	110	50	9	3.2	37	37
AMH450	1	232	22	173	106	20	106	10	241	90	21	10	14	9	55	88	110	50	9	3.2	37	37
	3/4, 1	259	22	200	122	20	122	10	277	100	30	10	16	9	65	102	130	60	10	4.5	39	37
AMH650	1, 1 1/2	311	32	253	160	20	160	10	334	150	40	15	20	11	85	136	180	76	12	4.5	55	37

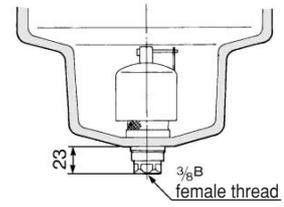
Micro Mist Separator with Prefilter Series AMH

AMH850 Dimensions



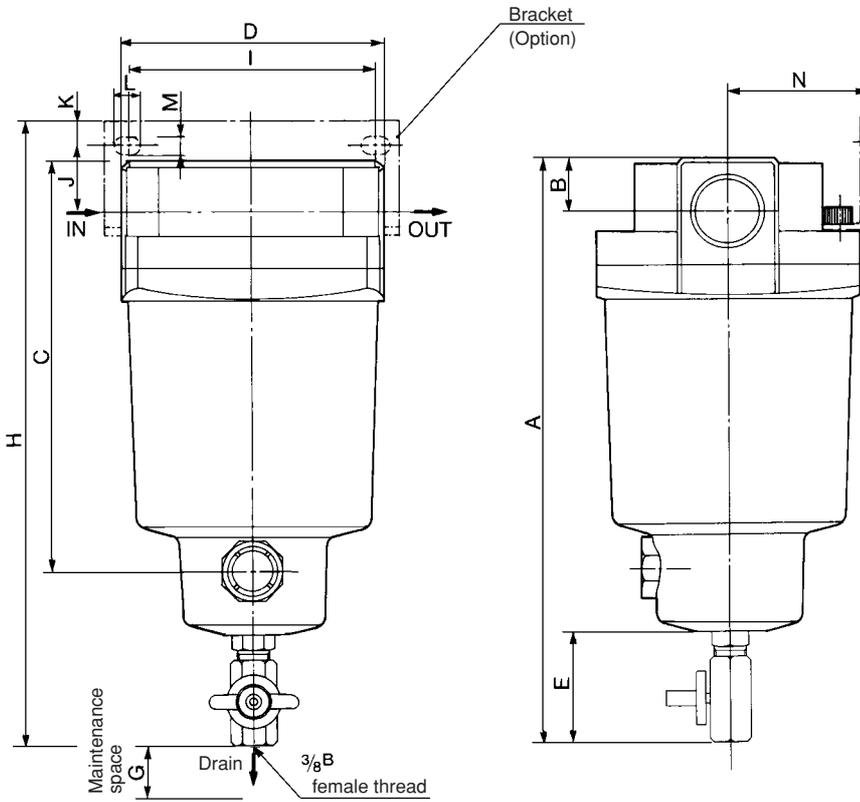
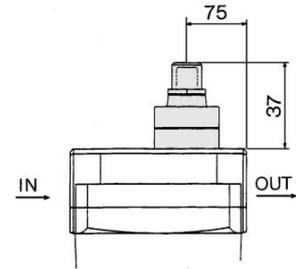
Accessory

D: With auto-drain (N.O.) for AMD850



Option

T: With element service indicator



- HA
- AT
- ID
- AMG
- AFF
- AM**
- Misc.

Model	Port size (Nominal size B)	A	B	C	D	E	F	G	Dimensions with mounting bracket											
									H	I	J	K	L	M	N	O	P	Q	R	S
AMH850	1 1/2, 2	460.5	42	348	220	57.5	220	10	463.5	180	30	15	24	13	120	184	220	110	18	6.0

Please refer to Made to Order Specifications of Series AMH on pages 14-20-55 to 14-20-57.