

# Micro Mist Separator with Prefilter

SAMH

## SAMH250~850 Series

- SAMH series can separate and remove aerosol state oil mist in compressed air and remove carbon or dust of more than  $0.01\mu\text{m}$ . 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 AM Series + AMD Series have been integrated to achieve a reduction in installation space, savings in piping installation labor, and reduced costs.



### How to order

**SAMH 350 - 04 BD - MeP - S**

① Micro Mist Separator with Prefilter

② Body Size

250 - 1/4  
350 - 1/2  
450 - 3/4  
550 - 1  
650 - 1 1/2  
850 - 2

③ Port Size

|               | Body size |     |     |     |     |     |
|---------------|-----------|-----|-----|-----|-----|-----|
|               | 250       | 350 | 450 | 550 | 650 | 850 |
| 02 (Rc1/4)    | ●         |     |     |     |     |     |
| 03 (Rc3/8)    | ●         | ●   |     |     |     |     |
| 04 (Rc1/2)    |           | ●   |     |     |     |     |
| 06 (Rc3/4)    |           |     | ●   | ●   |     |     |
| 10 (Rc1)      |           |     |     | ●   |     |     |
| 14 (Rc 1 1/2) |           |     |     |     | ●   | ●   |
| 20 (Rc2)      |           |     |     |     | ●   | ●   |

④ Accessory(Optional)

Nil - None bracket / Manual Drain

B - Bracket

D - Auto Drain

| Symbol | Drain connect           | Material |
|--------|-------------------------|----------|
| D      | One-touch fitting(Φ6mm) | Acetal   |
| Dn     | Nipple(PT 1/8)          | Brass    |

⑤ Bowl

Nil - PC Bowl

MeP - Metal Bowl with pipe type sight glass

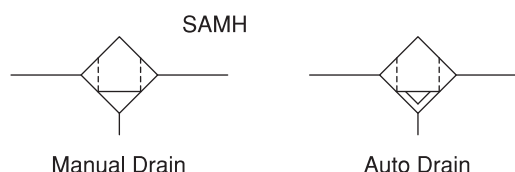
MeF - Metal Bowl with flat type sight glass

⑥ Option

Nil - None

S - Differential Pressure Indicator

### Symbol



### Specification

|                               |                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------|
| Fluid                         | Compressed air                                                                           |
| Max. operating pressure       | 1.0MPa [10.2 kgf/cm <sup>2</sup> ]                                                       |
| Min. operating pressure       | 0.15MPa [1.5 kgf/cm <sup>2</sup> ]                                                       |
| Max. supply pressure          | 1.5MPa [15.3 kgf/cm <sup>2</sup> ]                                                       |
| Ambient and media temperature | 5 ~ 60 °C                                                                                |
| Filtration                    | 0.01μm(95% particle size collection)                                                     |
| Oil mist removal rate         | Max.0.1mg/m3 (ANR)<br>(At saturation of element oil, less than 0.01mg/m3(ANR){0.008ppm}) |
| Life of element               | When pressure drop reaches at 0.1MPa[1 kgf/cm <sup>2</sup> ]                             |

### Precautions

- ① Filter element should be changed after 2 years of using or when pressure drops to 1.0kgf/cm<sup>2</sup>.
- ② When auto drain is used :  
Drain piping should be both 4mm or greater in diameter and less than 1m in length.  
Also should avoid setting drain piping upwards.
- ③ When auto drain is out of order, it is possible to drain manually by operating one-touch-fitting vertically.
- ④ With a drain cock attached, drain can be done when the head of liquid is shown at the glass indication tube.

# Micro Mist Separator with Prefilter Series **SAMH**

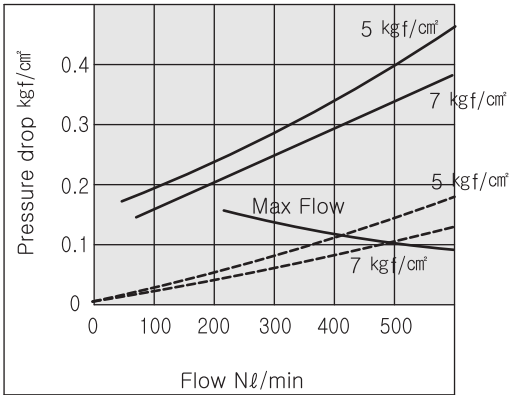
## ● FLOW CHARACTERISTICS

Select the model taking the max. flow capacity into consideration.

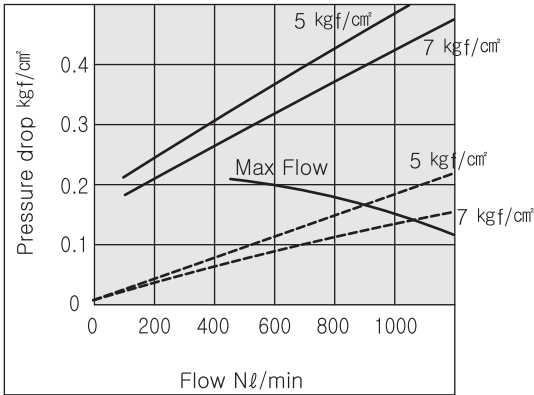
—— Element oil saturation      - - - - Initial condition

Note) If compressed air is above max. flow, micro mist separator with prefilter cannot operate well.

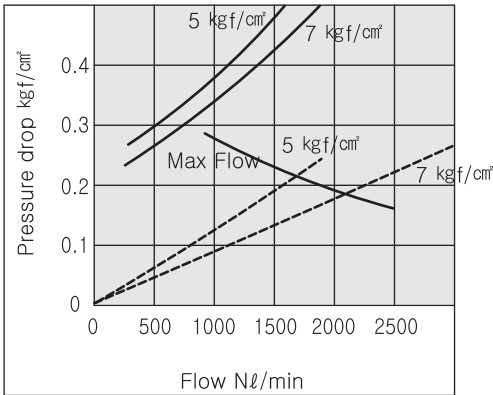
### SAMH 250



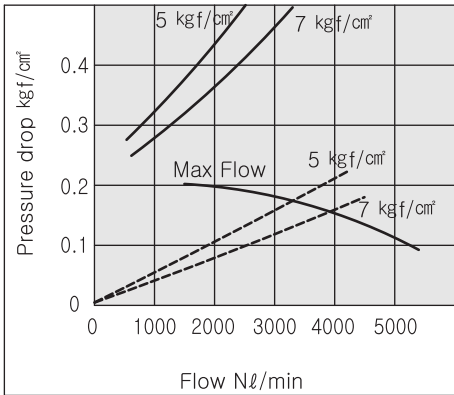
### SAMH 350



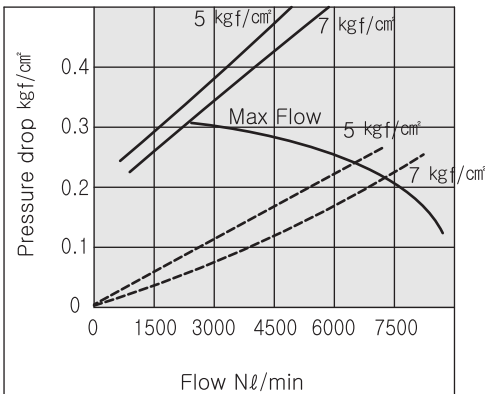
### SAMH 450



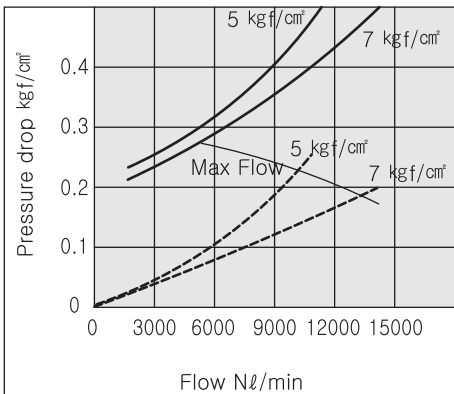
### SAMH 550



### SAMH 650

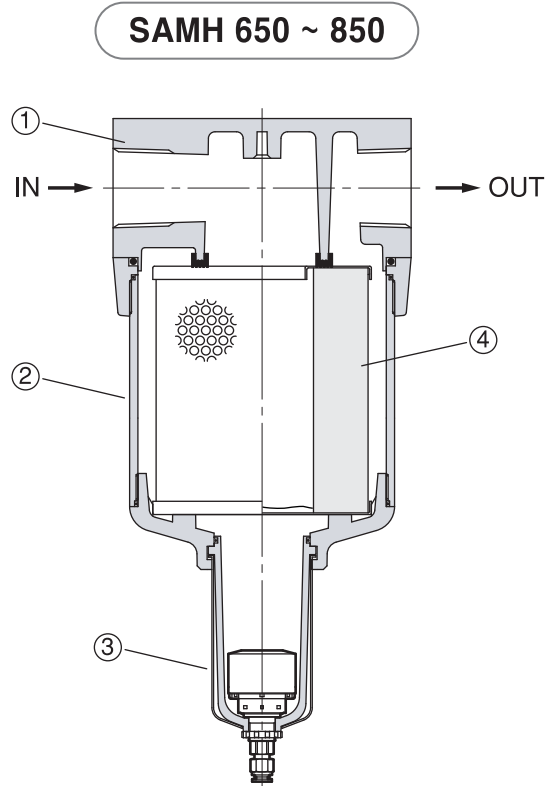
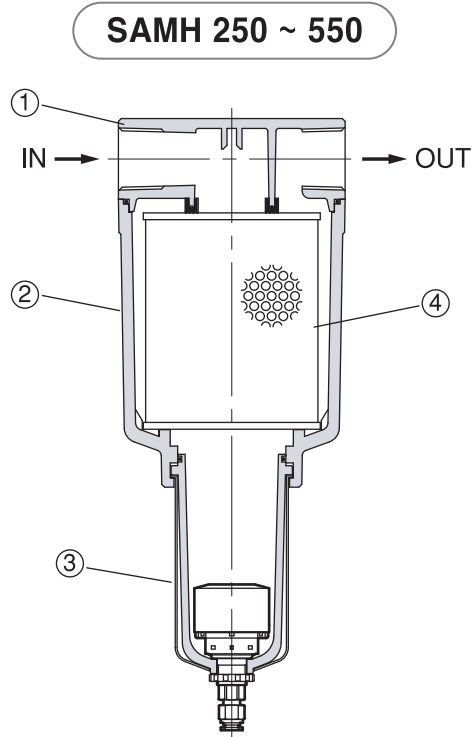


### SAMH 850



SAMH

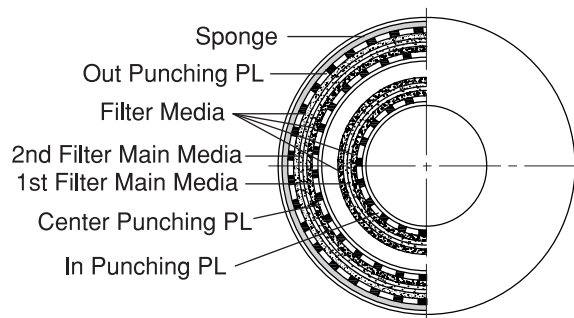
### STRUCTURE / PARTS



#### Component Parts

| No. | PARTS   | MATERIAL          |
|-----|---------|-------------------|
| ①   | Body    | Aluminum die cast |
| ②   | Housing | Aluminum die cast |
|     |         | Pipe              |
| ③   | Bowl    | PC + Guard        |
|     |         | ALDC ( MeF type)  |
|     |         | ALDC( MeP type)   |

#### Sectional drawing (SAMH Filter)



#### Replacement Parts

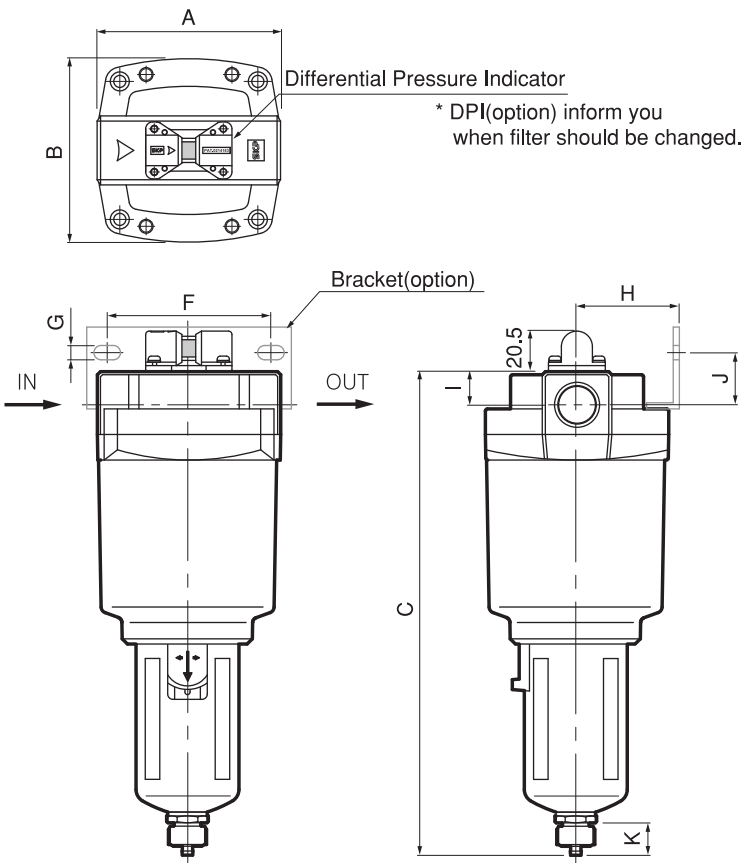
| No. | PARTS   | MATERIAL         | Part No.  | Size ( $\Phi$ x height )<br>(mm) |
|-----|---------|------------------|-----------|----------------------------------|
| ④   | Element | with Fiber Glass | AMH-EL250 | 58 x 52.5                        |
|     |         |                  | AMH-EL350 | 70 x 77                          |
|     |         |                  | AMH-EL450 | 82 x 87                          |
|     |         |                  | AMH-EL550 | 95 x 117                         |
|     |         |                  | AMH-EL650 | 130 x 150                        |
|     |         |                  | AMH-EL850 | 130 x 260                        |

# Micro Mist Separator with Prefilter Series **SAMH**

**SAMH**

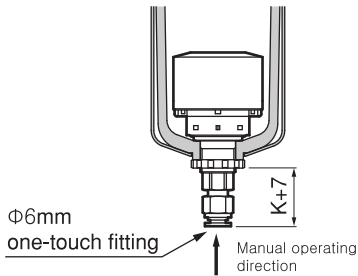
## ● DIMENSIONS (mm)

### SAMH 250~850

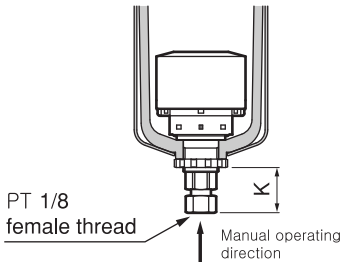


#### Accessory(option)

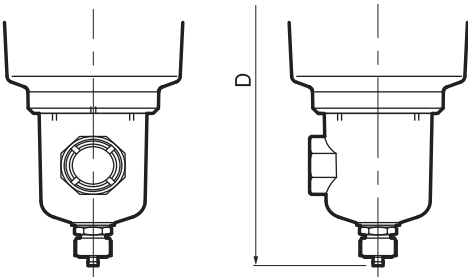
**D** : With auto drain ( N.O.)



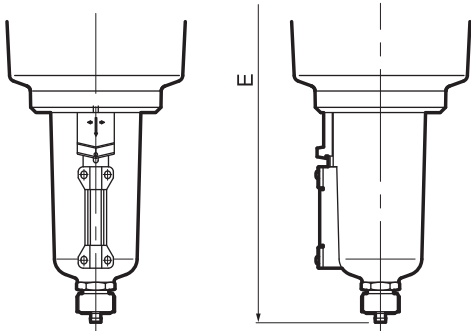
**Dn** : With auto drain ( N.O.)



● **MeF** : Metal Bowl with flat type sight glass



● **MeP** : Metal Bowl with pipe type sight glass



\* MeF type bowl not available for all 250 series.

| Model           | Port size<br>(PT) | A   | B   | Height (without auto drain) |        |        | F   | G  | H   | I  | J  |
|-----------------|-------------------|-----|-----|-----------------------------|--------|--------|-----|----|-----|----|----|
|                 |                   |     |     | C                           | D(MeF) | E(MeP) |     |    |     |    |    |
| <b>SAMH 250</b> | 1/4               | 76  | 76  | 202                         | -      | 225    | 66  | 6  | 40  | 13 | 20 |
| <b>SAMH 350</b> | 3/8, 1/2          | 90  | 90  | 250                         | 217    | 252    | 80  | 7  | 50  | 16 | 22 |
| <b>SAMH 450</b> | 3/4               | 106 | 106 | 283                         | 250    | 285    | 90  | 9  | 55  | 19 | 25 |
| <b>SAMH 550</b> | 3/4, 1            | 122 | 122 | 320                         | 287    | 322    | 100 | 9  | 65  | 22 | 30 |
| <b>SAMH 650</b> | 1 1/2             | 180 | 180 | 396                         | 363    | 398    | 150 | 13 | 100 | 42 | 30 |
| <b>SAMH 850</b> | 1 1/2, 2          | 180 | 180 | 507                         | 474    | 509    | 150 | 13 | 100 | 42 | 30 |