

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.

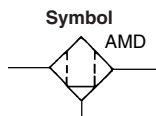
Modular connection is possible with AMD150C to 550C.
(For details, refer to page 61.)



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)) ^{Note)}	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.

How to Order



AMD150C to 550C

AMD **550C** - **10** - - - -

Body size

150C
250C
350C
450C
550C

Thread type

Symbol	Type
Nil	Rc
F	G*1
N	NPT

*1 Conforms to ISO1179-1.

Port size

Symbol	Size	Applicable body size				
		150C	250C	350C	450C	550C
01	1/8	●				
02	1/4	●	●			
03	3/8		●	●		
04	1/2			●	●	
06	3/4				●	●
10	1					●

Accessory

Symbol	Description
Nil	—
B	Bracket *2

*2 Bracket is included, (but not assembled).

Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

Symbol	Description	Page for details
Nil	—	—
X6	With differential pressure gauge (GD40-2-01)	P.68
X15	With IN-OUT flange	P.69
X17	With differential pressure gauge (GD40-2-01) and IN-OUT flange	P.69
X26	N.C., N.O. auto drain, drain piping type	P.70

Option *3

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
J	Drain guide 1/4 female thread *4
R	IN-OUT reversal direction
S	With differential pressure switch (125 VAC, 30 VDC) *5, (Note)
U	With differential pressure switch (30 VDC) *5, (Note)
T	With element service indicator
V	Degreasing wash, *6 white vaseline

*4 Drain piping and piping for a stop valve such as ball valve are required.

*5 Differential pressure gauge is included, (but not assembled).

*6 Only body/housing is degreasing washed.

Note) Order "U" if conformity to the EU directive is required.

Auto Drain Specifications/Option Combinations

○ : Available □ : Not available

○, △ : Plural options cannot be selected.

(i.e. Combinations such as C-FV, D-FHV, J-ST are not possible.)

Symbol	F	H	R	S	U	T	V
Auto drain specifications	○	○	○	○	○	○	○
Nil	○	○	○	○	○	○	○
C	△	△	○	○	○	○	△
D	△	△	○	○	○	○	△
J	○	○	○	○	○	○	○

Auto drain *3

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

*3 Refer to "Auto Drain Specifications/Option Combinations".

Options

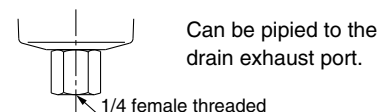
Symbol F: Rubber material: Fluororubber

Fluororubber is used for the parts such as O-ring and gasket.

Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

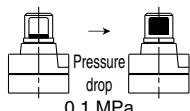
Symbol J: Drain guide 1/4 female threaded



Symbol R: IN-OUT reversal direction

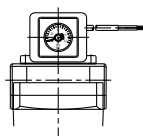
Air flow in the separator is changed to right to left.
(Air flow direction of the standard: Left to right.)

Symbol T: With element service indicator



Saturation of the separator can be observed visually.
(Element life check)

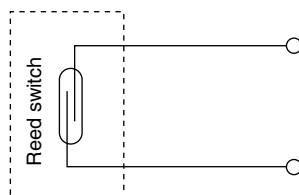
Symbol S: With differential pressure switch (with indicator)



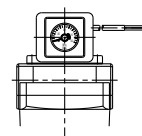
Saturation of the separator can be observed visually or by an electrical signal.
(Element life check)

* The rated contact voltage is different from "U".

Max. contact capacity: 10 VA AC, 10 W DC
Rated contact voltage (max. operating current): 125 V AC (0.08 A), 30 V DC (0.33 A)



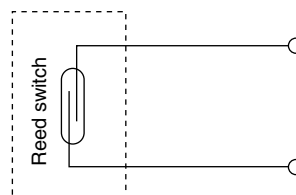
Symbol U: With differential pressure switch (with indicator)



Saturation of the separator can be observed visually or by an electrical signal.
(Element life check)

* The rated contact voltage is different from "S".

Max. contact capacity: 10 W DC
Rated contact voltage (max. operating current): 30 V DC (0.33 A)

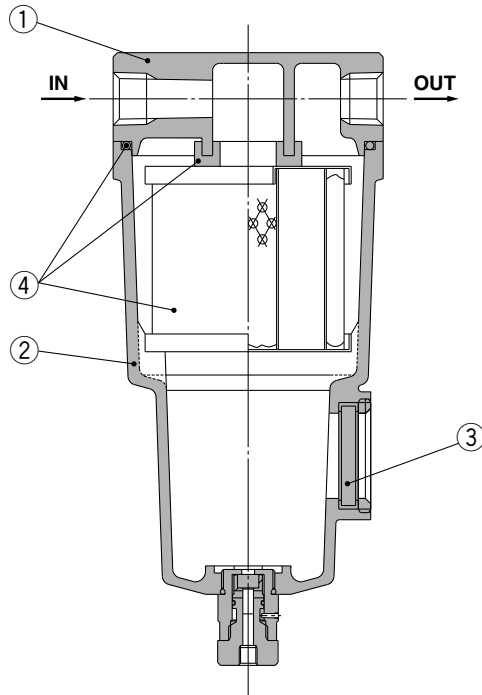


Symbol V: Degreasing wash, white vaseline

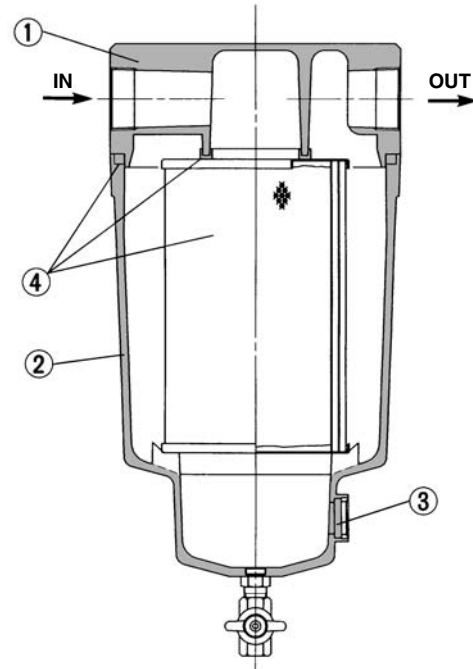
Body/housing is degreasing washed. The lubrication grease for O-ring and gasket is changed to white vaseline.

Construction

AMD150C to 550C, AMD650



AMD850



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	—

* The AMD850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 63.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to dimensions on pages 31 through to 34 for details.

Replacement Parts

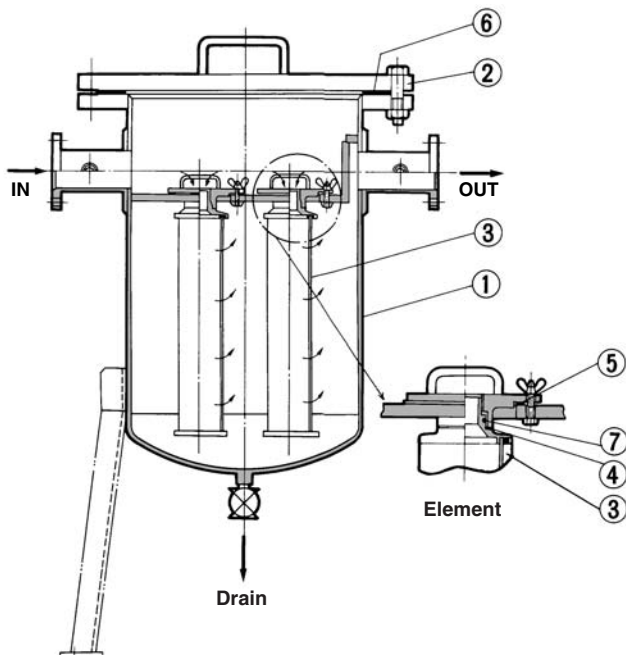
No.	Description	Material	Applicable model	Model						
				AMD150C	AMD250C	AMD350C	AMD450C	AMD550C	AMD650	AMD850
4	Element assembly	Glass fiber, others	Except option F	AMD-EL150	AMD-EL250	AMD-EL350	AMD-EL450	AMD-EL550	AMD-EL650	AMD-EL850
			For option F	AMD-EL150-F	AMD-EL250-F	AMD-EL350-F	AMD-EL450-F	AMD-EL550-F	—	—

* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

* Refer to back page 6 for replacement of auto drain.

* Element assemblies for Made to Order (X6, X12, X15, X17, X20, X26, X37) are same as those for standard (see the above table).

AMD80□/81□/9□0/9□1/10□0



Component Parts/Material

No.	Description	Model		Note
		AMD800/810/9□0/10□0	AMD801/811/9□1	
1	Filter case	SGP-E, SS400	SGP-E, SS400	
2	Cover	SS400	SGP-E, SS400	

Replacement Parts

No.	Description	Material	Model				
			AMD800/810	AMD801/811	AMD9□0	AMD9□1	AMD10□0
3	Element	—	63174	63174	63174 3 pcs.	63174 3 pcs.	63174 5 pcs.
4	Seal	NBR	63148	63148	63148 3 pcs.	63148 3 pcs.	63148 5 pcs.
5	Seal	NBR	O.D112 x I.D90 x T3	—	O.D112 x I.D90 x T3 3 pcs.	—	O.D112 x I.D90 x T3 5 pcs.
6	Gasket	V#6500	AL-61S	AL-60S	AL-63S	AL-62S	AL-31S
7	O-ring	NBR	JIS B2401G35 1 pc.	JIS B2401G35 1 pc.	JIS B2401G35 3 pcs.	JIS B2401G35 3 pcs.	JIS B2401G35 5 pcs.