

Micro Mist Separator Series AMD

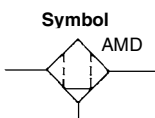
Can separate and remove aerosol state oil mist in compressed air and remove particles such as carbon or dust of more than 0.01 μm . Use this product as a pre-filter for compressed air for precision instruments or clean room requiring higher clean air.

Modular connection is possible with AMD150C to 550C. (For details, refer to page 204.)

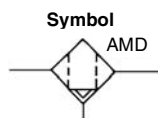


AMD150C to 550C

AMD650/850



(Drain cock specifications)



(Auto drain specifications)



Made to Order
(For details, refer to page 210.)

Model

Model	AMD150C	AMD250C	AMD350C	AMD450C	AMD550C	AMD650	AMD850
Rated flow (Note) (ℓ/min (ANR))	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 172) and "Maximum Air Flow" (page 171).

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 ^{*1}	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) ^{*2} (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

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

*2 Oil mist density at 30 mg/m^3 (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 before handling.
Refer to front matters 42 and 43 for Safety Instructions and pages 6 to 8 for Air Preparation Equipment 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).

*3 The model with bracket is not available for -X15 and -X17.

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.211
X15	With IN-OUT flange *3	P.212
X17	With differential pressure gauge (GD40-2-01) and IN-OUT flange *3	P.212
X26	N.C., N.O. auto drain, drain piping type	P.213

Option

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
J	Drain guide 1/4 female thread *5
R	IN-OUT reversal direction
S	With differential pressure switch (125 VAC, 30 VDC) *6, Note)
U	With differential pressure switch (30 VDC) *6
T	With element service indicator
V	Degreasing wash, *7 white vaseline

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

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

*7 Only body/housing is degreasing washed.

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

Drain Exhaust Specifications/Option Combinations

○: All types of drain exhaust specifications are available. (including drain guide, "J" specification)

△: N.C. auto drain ("C" specification) is not available.

▼: Both N.C. and N.O. auto drain ("C", "D" specification) are not available.

	Nil	F	H	R	S	U	T	V
Nil		○	△	○			Note	○
F	○		▼	○				▼
H	△	▼		△				▼
R	○	○	△				Note	○
S								
U	Note			Note				
T								○
V	○	▼	▼	○			○	

Note: Only one drain exhaust method can be selected.

■: Not available

Options

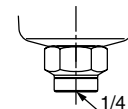
Symbol F: Rubber material: Fluororubber

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



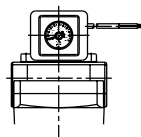
Can be piped to the drain exhaust port.

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.)

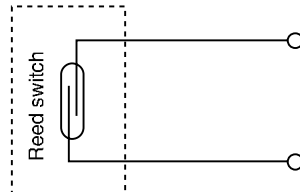
Symbol S: With differential pressure switch (with indicator)



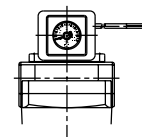
Saturation of the separator can be observed visually or by an electrical signal. (Element life check)

* 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)



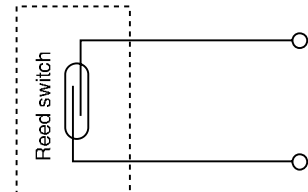
Symbol U: With differential pressure switch (with indicator)



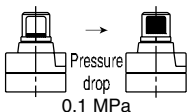
Saturation of the separator can be observed visually or by an electrical signal. (Element life check)

* 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 T: With element service indicator



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

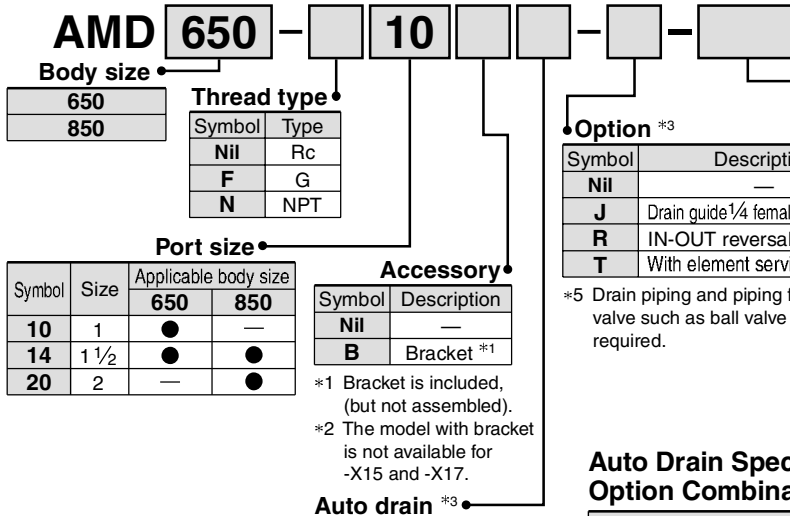
Symbol V: Degreasing wash, white vaseline

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



How to Order

AMD650/850



Port size

Symbol	Size	Applicable body size	
		650	850
10	1	●	—
14	1 1/2	●	●
20	2	—	●

Accessory

Symbol	Description
Nil	—
B	Bracket *1

*1 Bracket is included, (but not assembled).
*2 The model with bracket is not available for -X15 and -X17.
*3 Refer to "Auto Drain Specifications/Option Combinations".

Option *3

Symbol	Description
Nil	—
J	Drain guide 1/4 female threaded*5
R	IN-OUT reversal direction
T	With element service indicator

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

Symbol	Description	Page for details
Nil	—	—
X6	With differential pressure gauge (GD40-2-01)	P.211
X37	With differential pressure switch (With indicator, 125 VAC, 30 VDC)	P.211
X15	With IN-OUT flange *2	P.212
X17	With differential pressure gauge (GD40-2-01) and IN-OUT flange *2	P.212
X26	N.C., N.O. auto drain, drain piping type	P.213
X12	White vaseline specifications	P.213

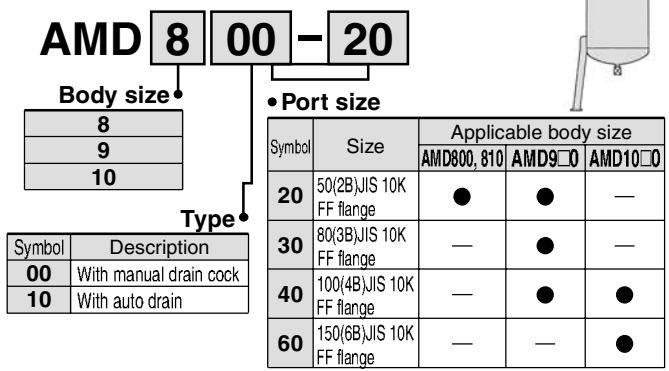
Note) Refer to "How to Order Bowl Assembly" on page 206.

Auto Drain Specifications/Option Combinations

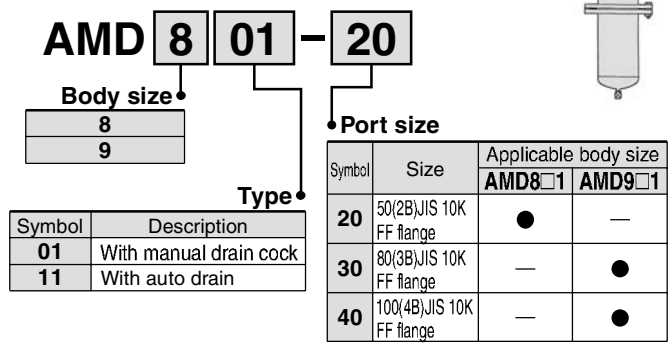
Auto drain specifications/Option		Auto drain specifications			Option			Applicable model	
		D	J	R	T	AMD650	AMD850		
Auto drain specifications	N.O. auto drain	D	—	—	—	—	—	—	—
Option	Drain guide 1/4	J	—	—	—	—	—	—	—
	IN-OUT reversal direction	R	—	—	—	—	—	—	—
	With element service indicator	T	—	—	—	—	—	—	—

○ : Available □ : Not available

Free standing type AMD800/810 to 10□□



Piping support type AMD801/811/9□1



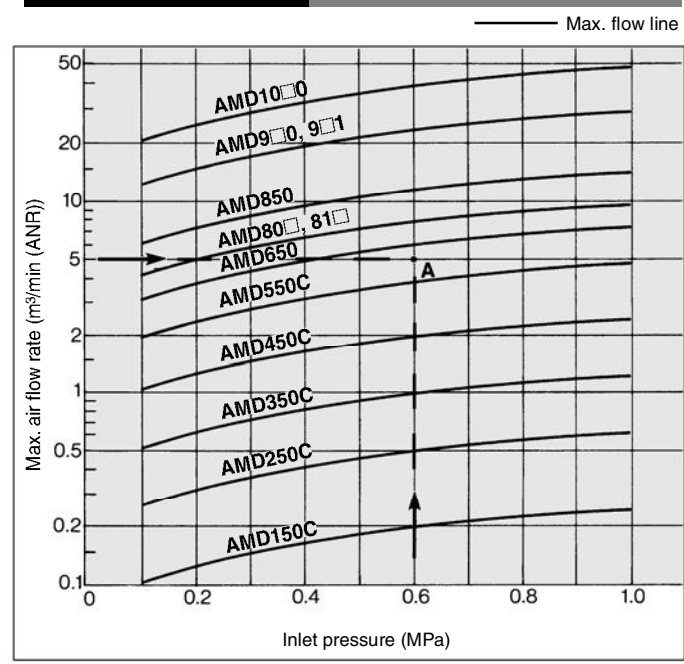
Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the max. air flow rate into consideration.
(Example) Inlet pressure: 0.6 MPa
Max. air flow rate: 5 m³/min (ANR)

- Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
- The AMD650 is obtained when the max. flow line is above the intersecting point A in the graph.


Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow 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.

Maximum Air Flow

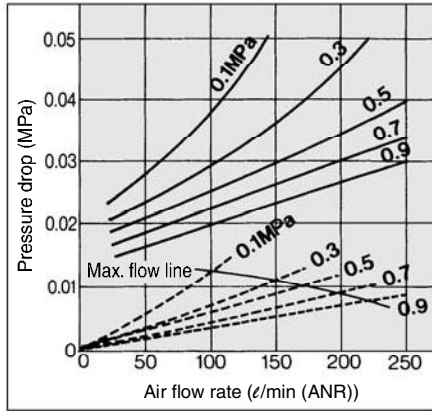


Series AMD

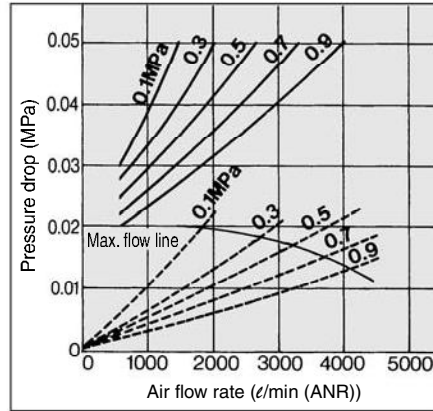
Flow Characteristics (Representative values) Select the model taking the max. flow capacity into consideration. (— Element oil saturation - - - - Initial condition)

 Note) Compressed air over max. flow line in the table below may not meet the specifications of the product.

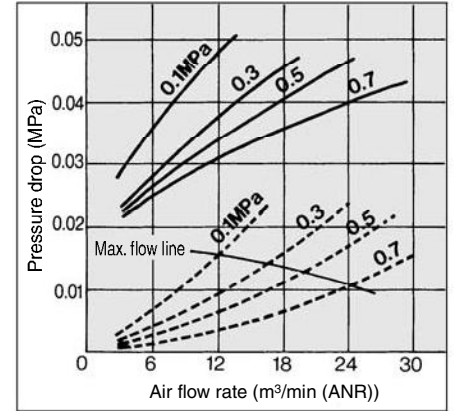
AMD150C



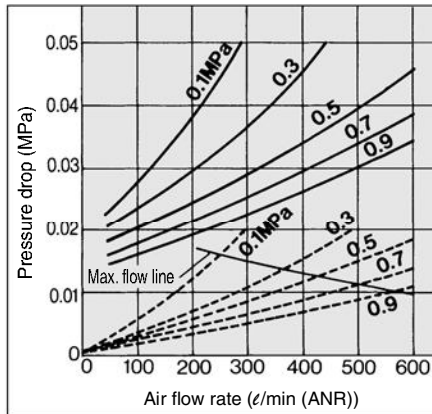
AMD550C



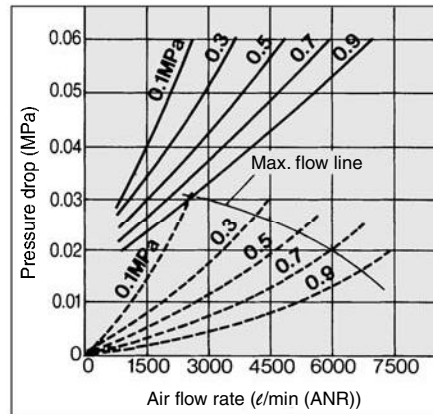
AMD9□0/9□1



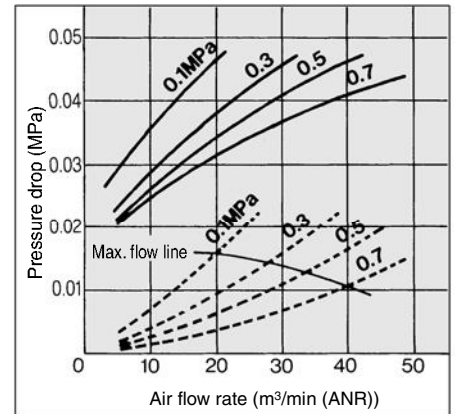
AMD250C



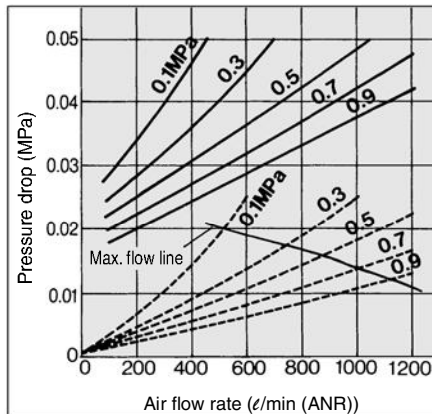
AMD650



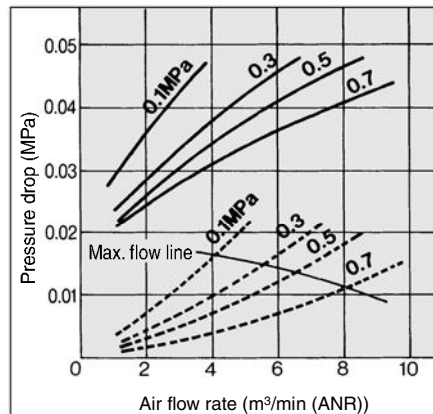
AMD10□0



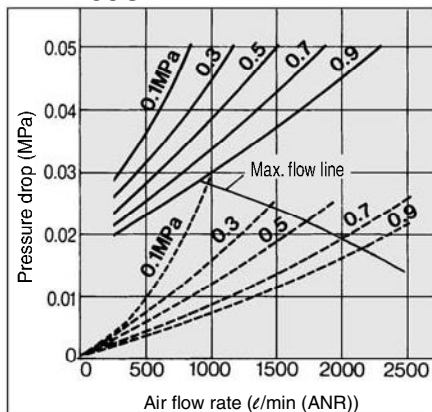
AMD350C



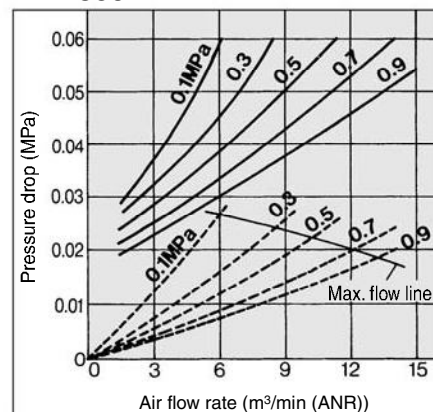
AMD80□/81□



AMD450C

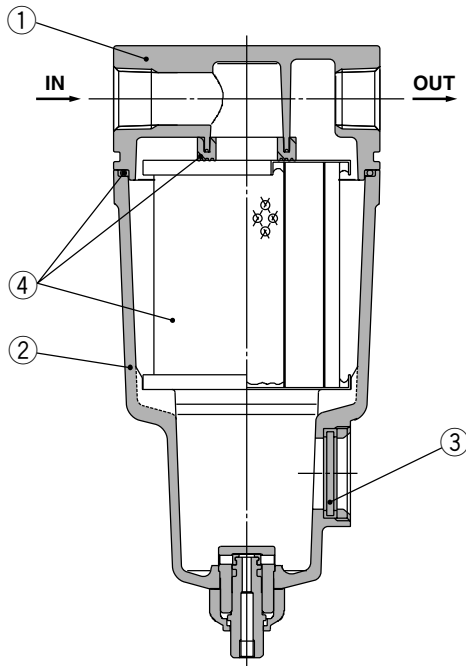


AMD850

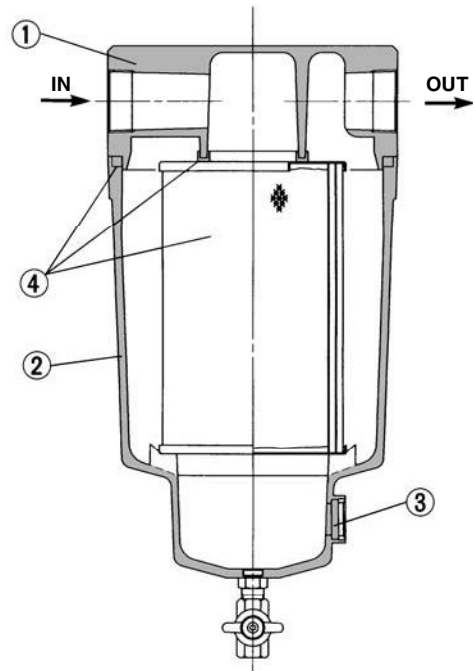


Construction

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 206.



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 174 through to 177 for details.

Replacement Parts

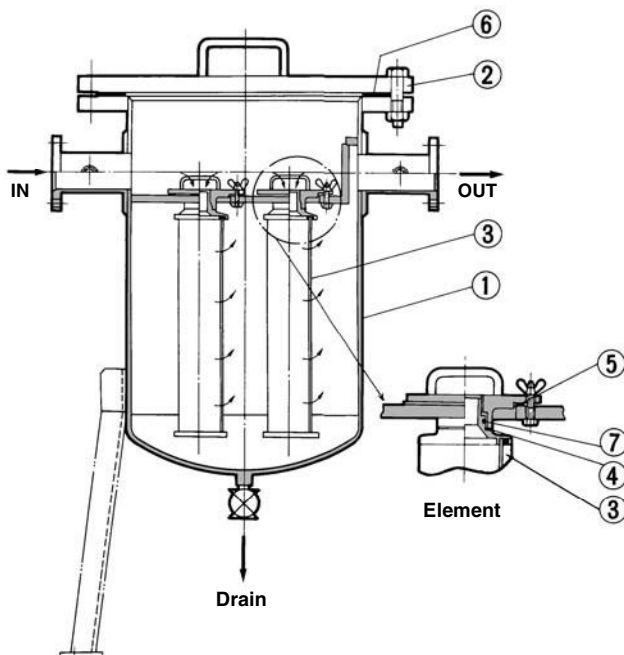
No.	Description	Material	Applicable model	Model						
				AMD150C	AMD250C	AMD350C	AMD450C	AMD550C	AMD650	AMD850
4	Element assembly	Glass fiber, others	Except option F For option F	AMD-EL150 AMD-EL150-F	AMD-EL250 AMD-EL250-F	AMD-EL350 AMD-EL350-F	AMD-EL450 AMD-EL450-F	AMD-EL550 AMD-EL550-F	AMD-EL650 —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

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

* Refer to page 219 for replacement of auto drain.

* Element assemblies for Made to Order (X6, X12, X15, X17, 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	
		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

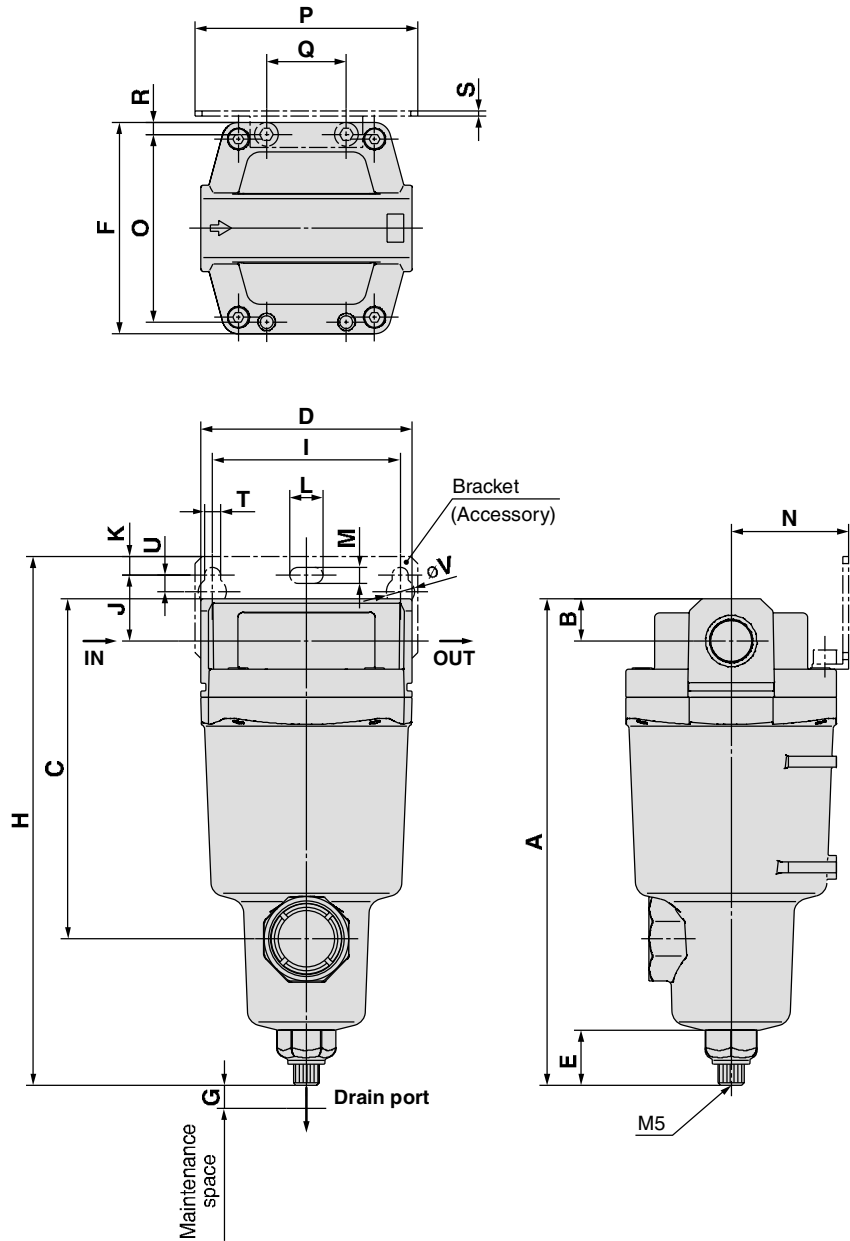
Replacement Parts

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	∅.D112 x L.D90 x T3	—	∅.D112 x L.D90 x T3 3 pcs.	—	∅.D112 x L.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.

Series AMD

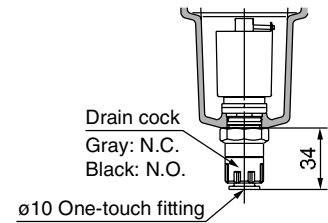
Dimensions

AMD150C to 550C

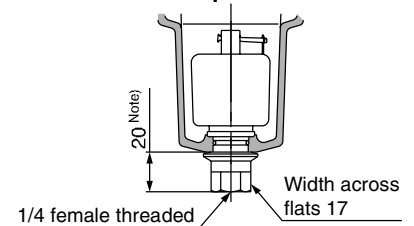


Auto drain

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



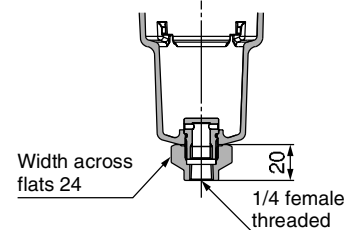
Combination of D: With auto drain (N.O.)
and H: For medium air pressure



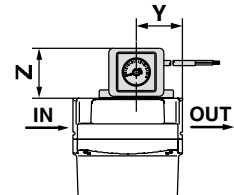
Note) 23 for AMD250C.

Option

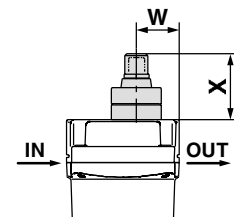
J: Drain guide 1/4 female threaded



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



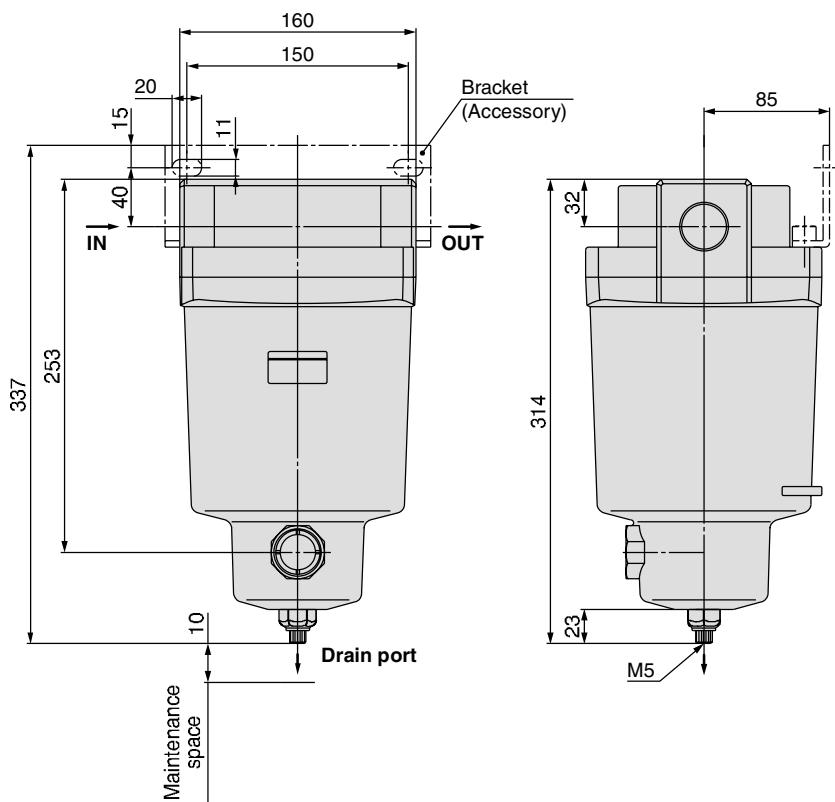
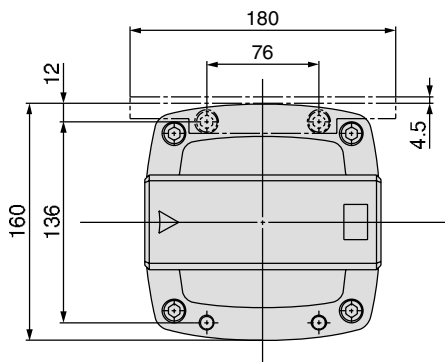
T: With element service indicator



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	161	10	99	63	23	63	10	176	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	175	14	113	76	23	76	10	193	66	24	8	6	6	12	6	10	40	66	80	28	5	2	27	37	36	41
AMD350C	3/8, 1/2	207	18	145	90	23	90	10	225	80	28	8	7	7	14	7	12	50	80	95	34	5	2.3	32	37	42	41
AMD450C	1/2, 3/4	228	20	166	106	23	106	10	249	90	31	10	9	9	18	9	15	55	88	111	50	9	3.2	37	37	43	41
AMD550C	3/4, 1	262	24	200	122	23	122	15	281	100	33	10	9	9	18	9	15	65	102	126	60	10	3.2	39	37	51	41

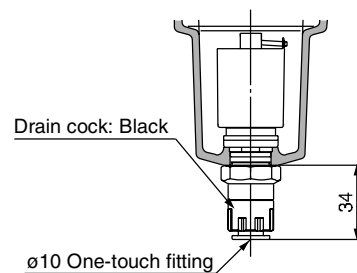
Dimensions

AMD650



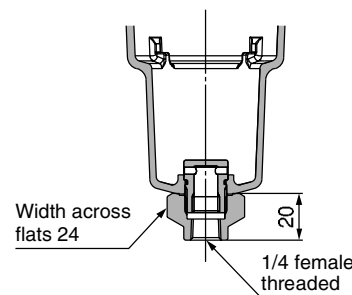
Auto drain

D: With auto drain (N.O.)

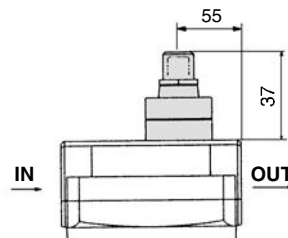


Option

J: Drain guide 1/4 female threaded



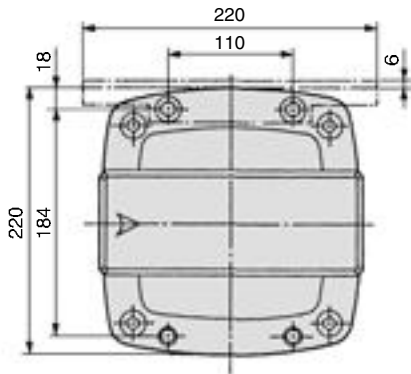
T: With element service indicator



Series AMD

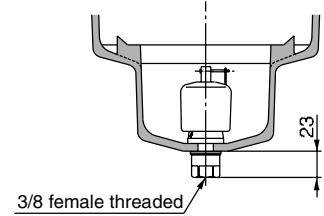
Dimensions

AMD850



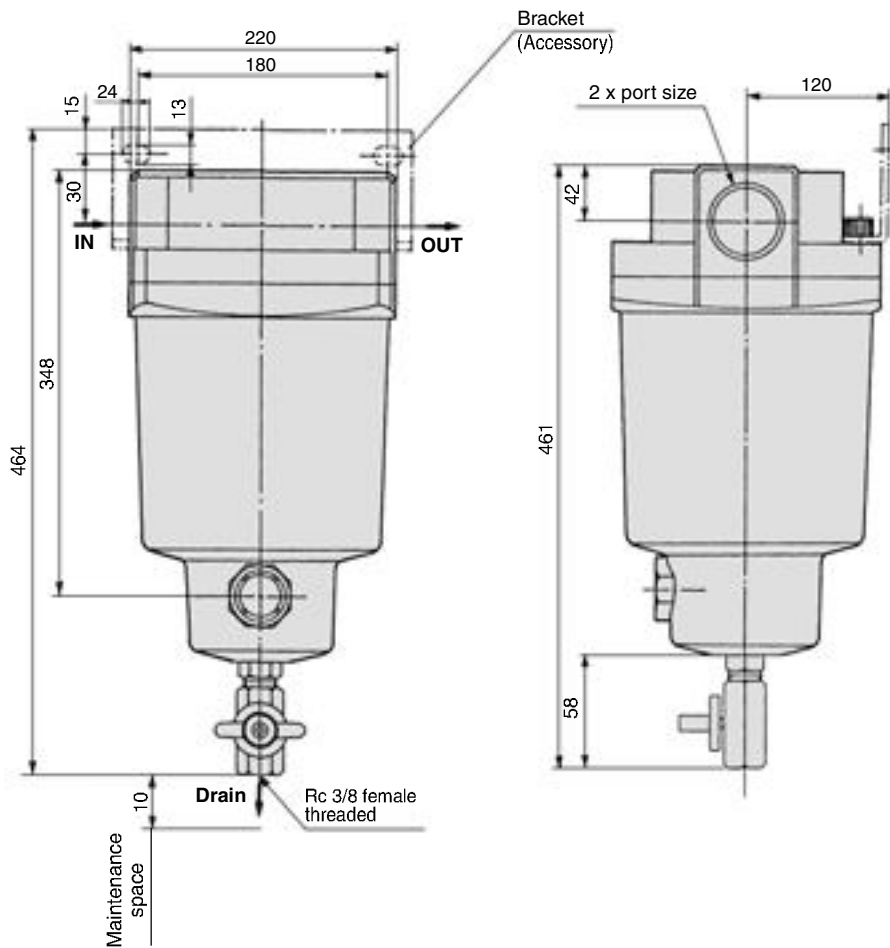
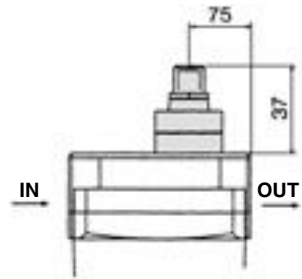
Auto drain

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



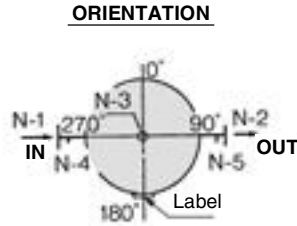
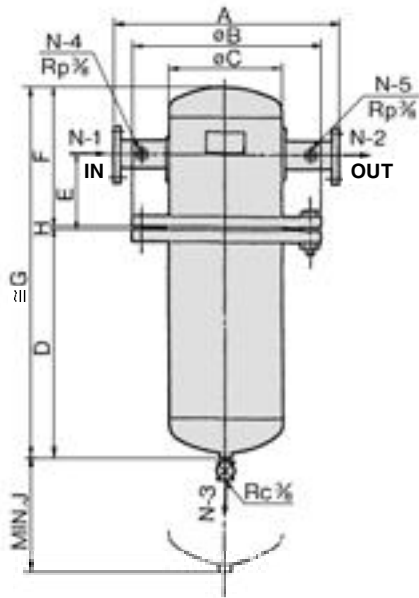
Option

T: With element service indicator



Dimensions

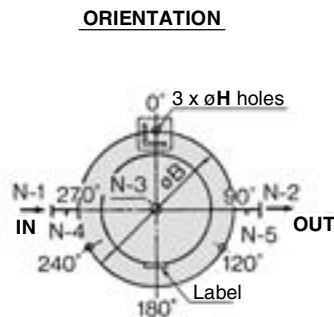
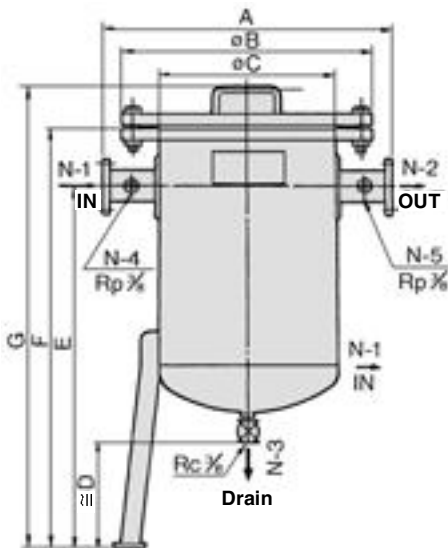
AMD801/811/9□1



Model	Connection (Flange)	A	øB	øC	D	E	F	G	H	J
AMD801/811	50(2B)JIS 10K FF flange	400	280	150(6B)	760	150	270	1033	3	887
AMD9□1	50(2B), 80(3B), 100(4B)JIS 10K FF flange	620	445	300(12B)	795	300	520	1318	3	972

(mm)

AMD800/810/9□0/10□0



Model	Connection (Flange)	A	øB	øC	D	E	F	G	H	
AMD800/810	50(2B), 80(3B)JIS 10K FF flange	500	300	200(8B)	300	1300	1430	1520	20	Anchor bolt
AMD9□0	50(2B), 80(3B), 100(4B)JIS 10K FF flange	720	560	400	300	1320	1480	1585	24	M20 x ℓ 500
AMD10□0	100(4B), 150(6B)JIS 10K FF flange	870	745	550	300	1380	1610	1740	24	M20 x ℓ 500

(mm)