

Mist Separator Series AM

Can remove oil mist in compressed air and separate and remove particles such as rust or carbon of more than 0.3 μm.

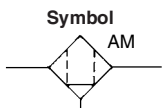
Modular connection is possible with AM150C to 550C.
(For details, refer to page 204.)



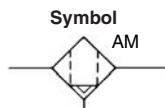
AM150C to 550C



AM650/850



(Drain cock specifications)



(Auto drain specifications)



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

Model

Model	AM150C	AM250C	AM350C	AM450C	AM550C	AM650	AM850
Rated flow (d/min (ANR)) ^{Note)}	300	750	1500	2200	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 164) and "Maximum Air Flow" (page 165).



Note) Refer to "Made to Order" (page 214) for high flow type of AM850 or more.

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	0.3 μm (Filtration efficiency: 99.9%)
Oil mist density at outlet	Max. 1 mg/m ³ (ANR) (≈0.8 ppm) ^{*2)}
Element life	2 years 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/m³ (ANR) blown out by compressor.

Accessory

Applicable model	AM150C	AM250C	AM350C	AM450C	AM550C	AM650	AM850
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



AM150C to 550C

AM **550C** - **10** - - - -

Body size

Symbol	Applicable compressor output (guide)
150C	2.2 kW
250C	3.7 kW
350C	7.5 kW
450C	11 kW
550C	22 kW

Thread type

Symbol	Type
Nil	Rc
F	G*1
N	NPT

*1 Conforms to ISO1179-1.

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	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

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 -17.

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

Option *4

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
J	Drain guide 1/4 female threaded *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	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.

Auto drain *4

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

*4 Refer to "Drain Exhaust Specifications/Option Combinations".
(Only one drain exhaust method can be selected.)

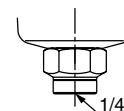
Symbol F: Rubber material: Fluororubber

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



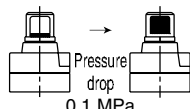
Can be piped to the drain exhaust port.

1/4 female threaded

Symbol R: IN-OUT reversal direction

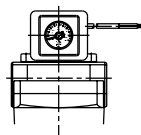
Air flow in the separator is changed to right to left.
(Air flow direction of the standard: Left to right.)

Symbol T: With element service indicator



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

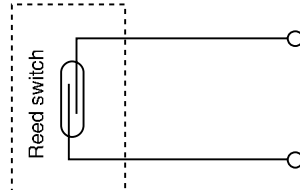
Symbol S: With differential pressure switch (with indicator)



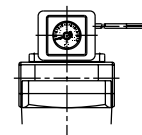
Saturation of the separator can be observed visually or by an electrical signal. (Element life check)

* 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)



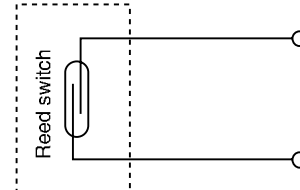
Symbol U: With differential pressure switch (with indicator)



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

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

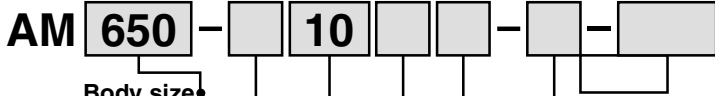
Max. contact capacity: 10 W DC
Rated contact voltage (max. operating current): 30 V DC (0.33 A)





How to Order

AM650/850



Body size

Symbol	Applicable compressor output (guide)
650	37 kW
850	75 kW

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

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.

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
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

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.

Auto drain *3

Symbol	Description
Nil	Drain cock (Without auto drain) *4
D	N.O. auto drain

- *3 Refer to "Auto Drain Specifications/Option Combinations".
- *4 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded). Mount a piping adapter IDF-AP609 (page 205) to the ball valve if NPT 3/8 female threaded is required.



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

Auto Drain Specifications/Option Combinations

◎ : Available ◻ : Not available

Auto drain specifications/Option			Auto drain specifications		Option			Applicable model	
			D	J	R	T	AM650	AM850	
Auto drain specifications	N.O. auto drain	D	◻	◻	◎	◎	◎	◎	
	Drain guide 1/4	J	◻	◻	◎	◎	◎	◻	
Option	IN-OUT reversal direction	R	◎	◎	◻	◎	◎	◎	
	With element service indicator	T	◎	◎	◎	◻	◎	◎	

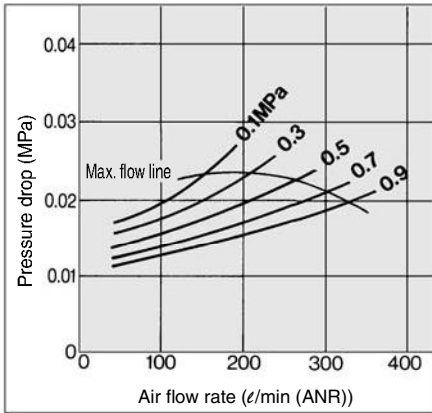
Series AM

Flow Characteristics (Representative values) (Element oil saturation)

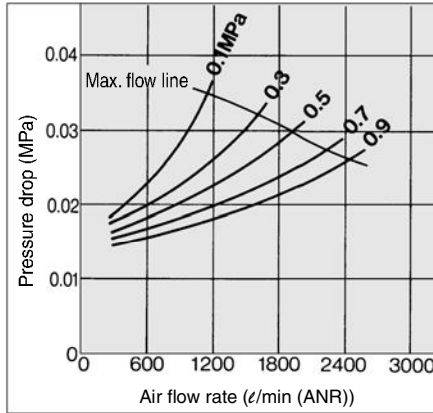


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product.

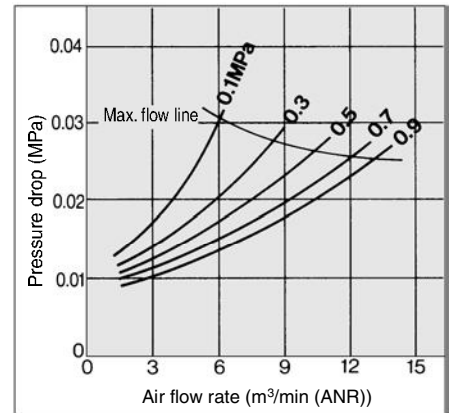
AM150C



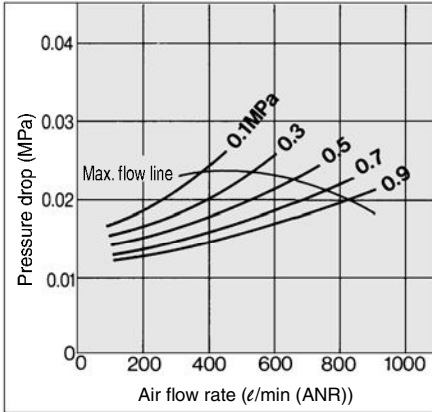
AM450C



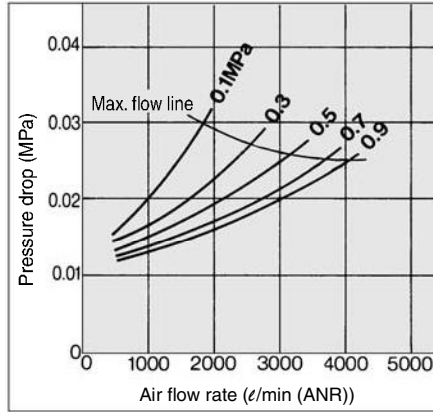
AM850



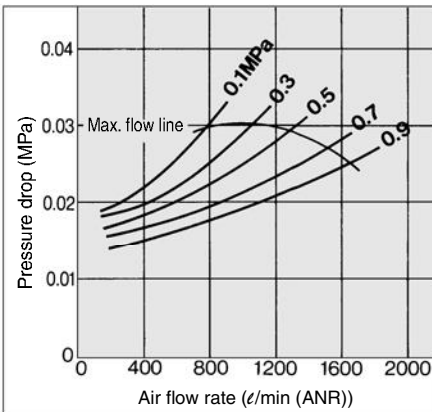
AM250C



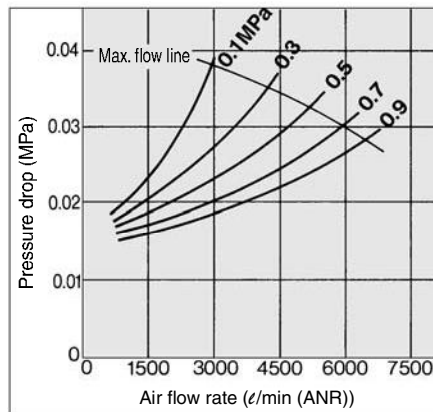
AM550C



AM350C

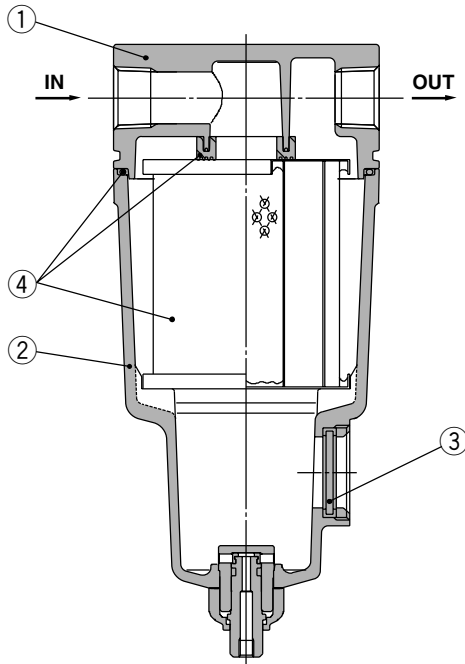


AM650

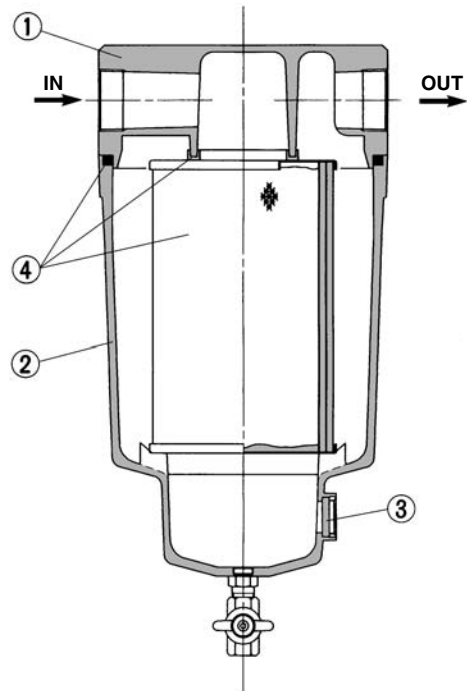


Construction

AM150C to 550C, AM650



AM850



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 AM850 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 166 through to 168 for details.

Replacement Parts

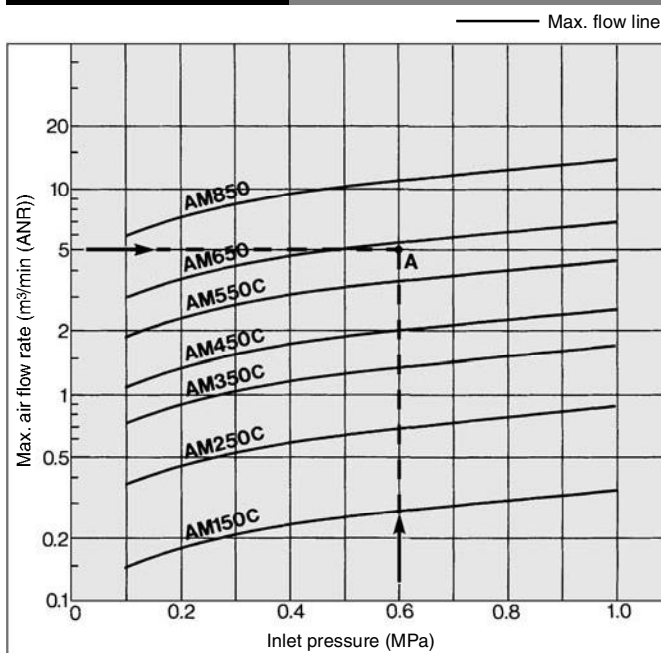
No.	Description	Material	Applicable model	Model						
				AM150C	AM250C	AM350C	AM450C	AM550C	AM650	AM850
4	Element assembly	Glass fiber, others	Except option F For option F	AM-EL150 AM-EL150-F	AM-EL250 AM-EL250-F	AM-EL350 AM-EL350-F	AM-EL450 AM-EL450-F	AM-EL550 AM-EL550-F	AM-EL650	AM-EL850

* 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).

Maximum Air Flow



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)

1. Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
2. The AM650 is obtained when the max. flow line is above the intersecting point A in the graph.

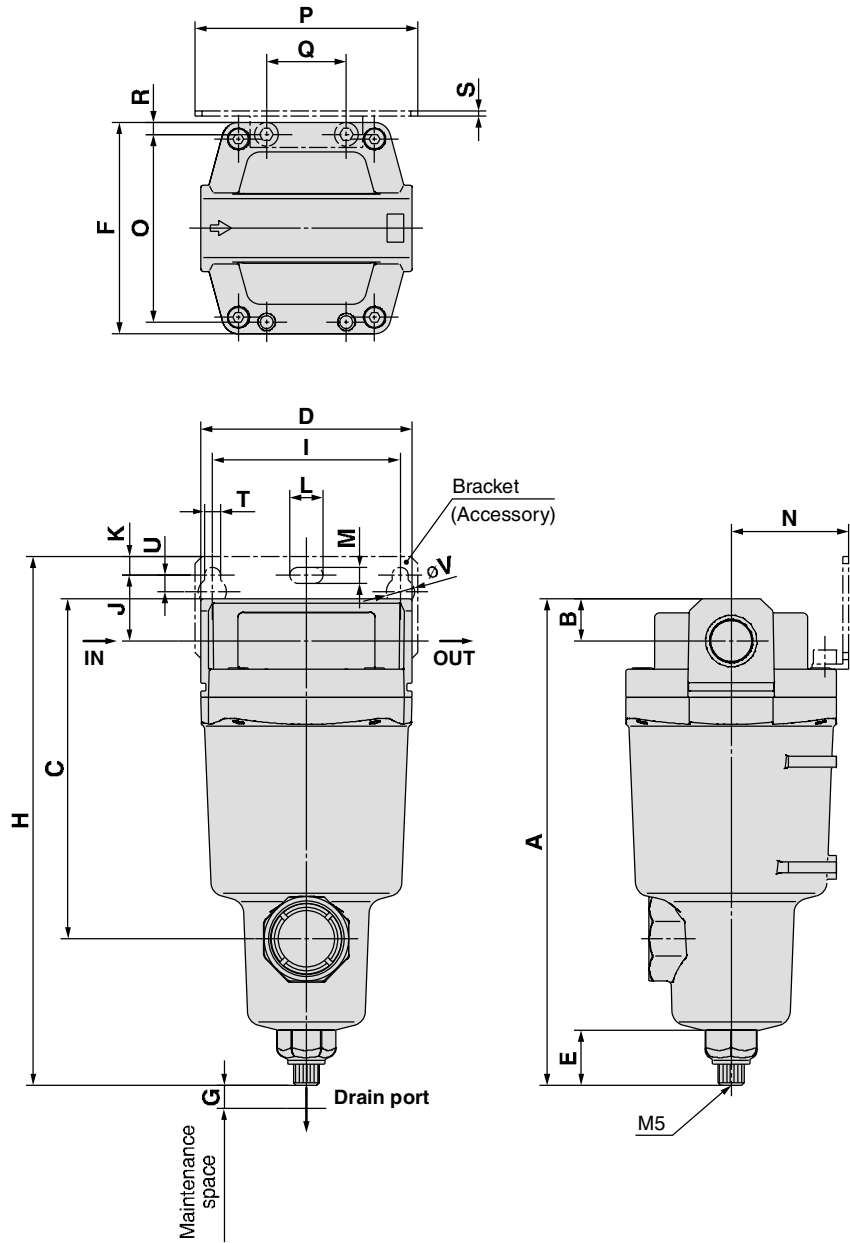


Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

Series AM

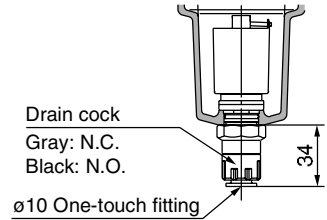
Dimensions

AM150C to 550C

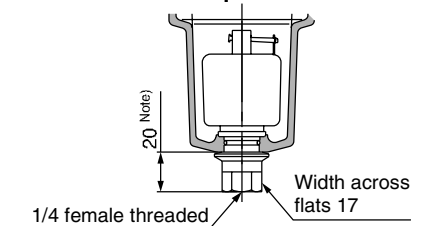


Auto drain

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



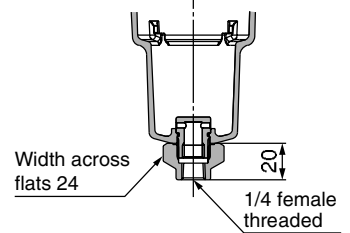
Combination of D: With auto drain (N.O.)
and H: For medium air pressure



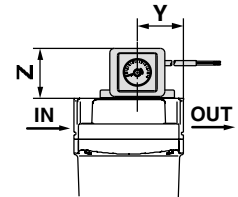
Note) 23 for AM250C.

Option

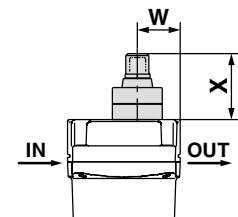
J: Drain guide 1/4 female threaded



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



T: With element service indicator

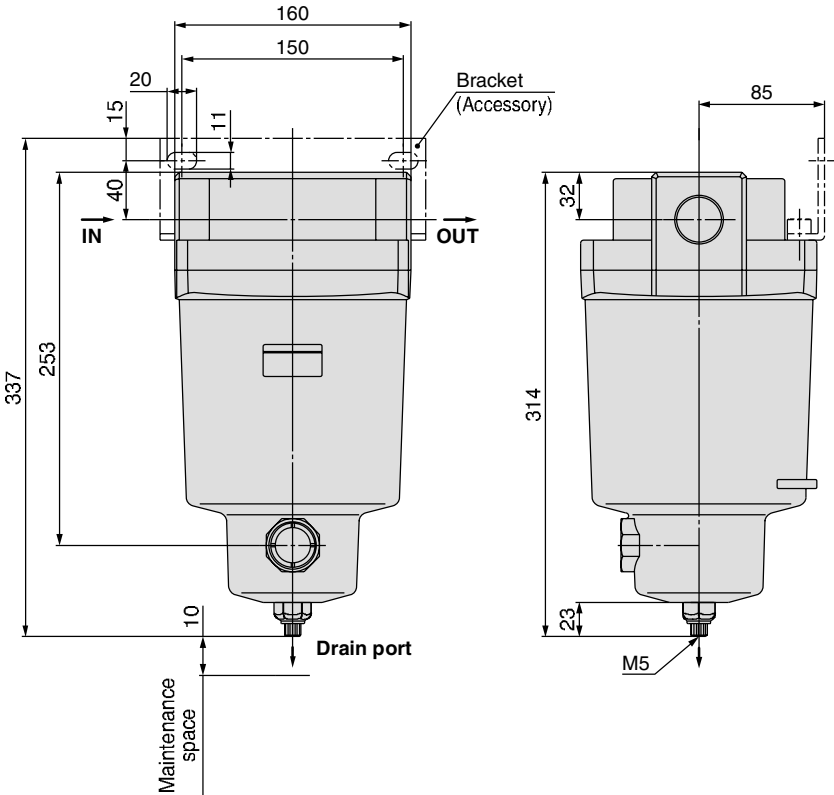
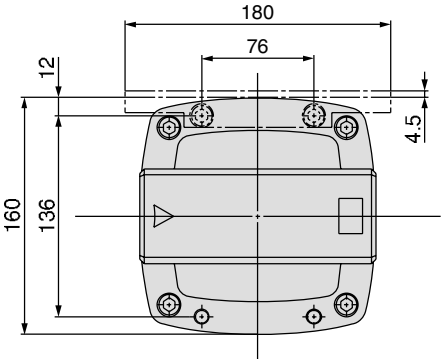


(mm)

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
AM150C	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
AM250C	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
AM350C	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
AM450C	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
AM550C	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

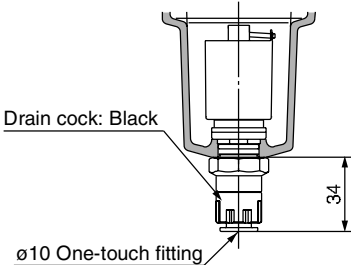
Dimensions

AM650



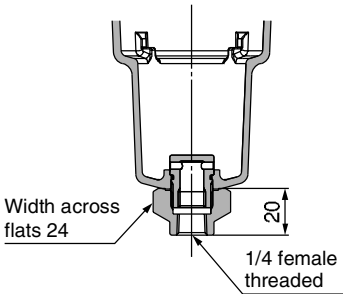
Auto drain

D: With auto drain (N.O.)

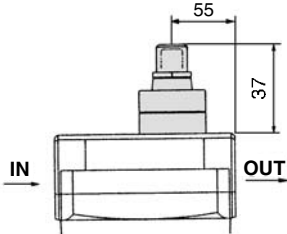


Option

J: Drain guide 1/4 female threaded



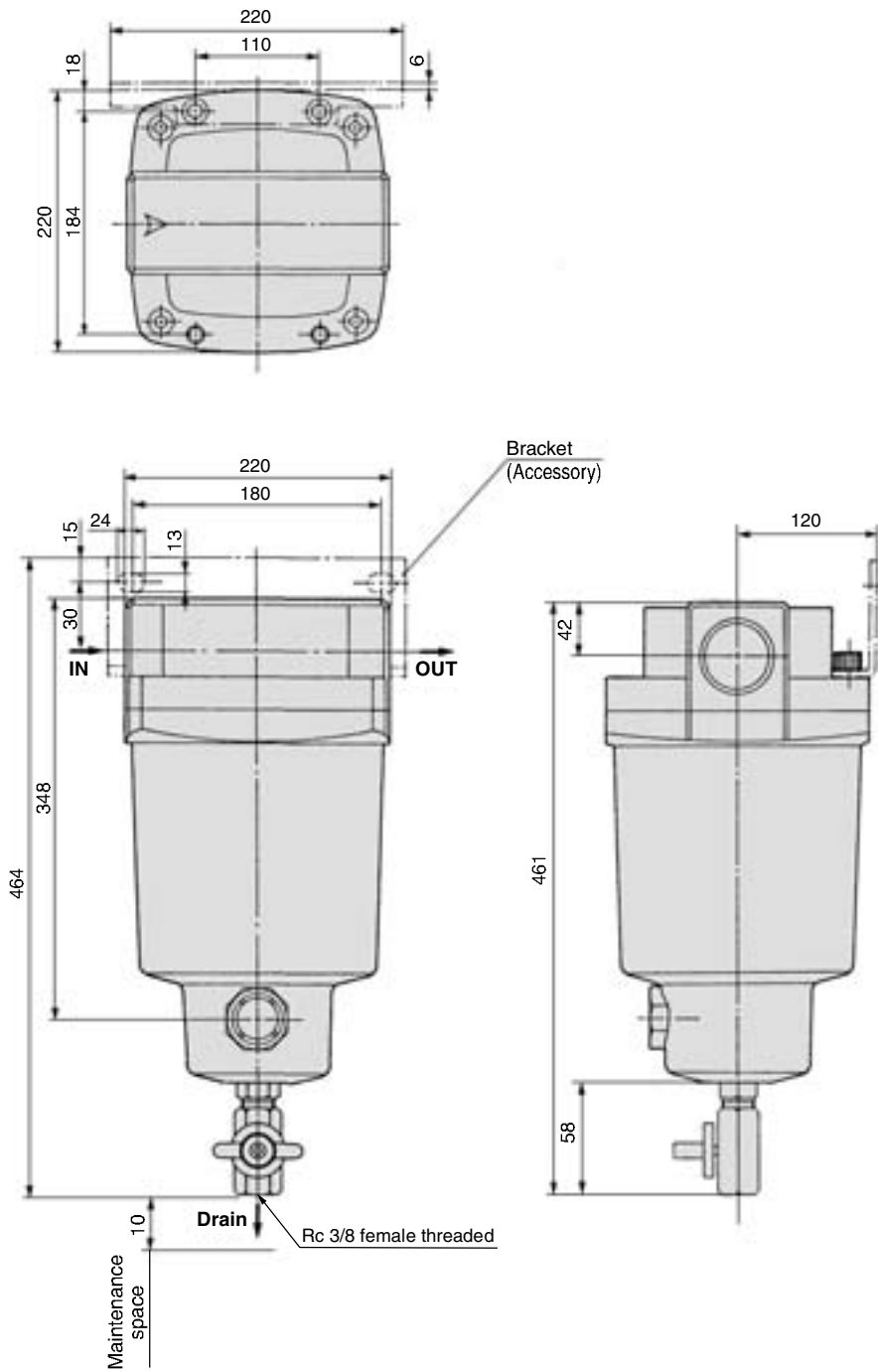
T: With element service indicator



Series AM

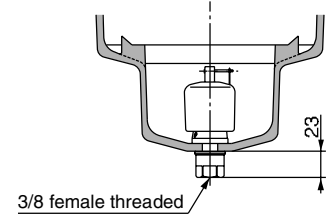
Dimensions

AM850



Auto drain

D: With auto drain (N.O.)
for AM850



Option

T: With element service indicator

