

Compressed Air Cleaning Filter Series

Series 10-AFF/10-AM□

	Series	Nominal filtration rating	Oil mist density at outlet	Smell	Page
Solid/Oil Separator	Series 10-AFF • Main Line Filter Eliminates impurities such as oil and foreign matter, etc. in compressed air.	3 μm (Filtration efficiency: 99%)	—	—	P.2
	Series 10-AM • Mist Separator Eliminates oil mist in compressed air or rust sized 0.3 μm or more, and foreign matter such as carbon.	0.3 μm (Filtration efficiency: 99.9%)	1 mg/m³ [ANR] (≈0.8 ppm) (after oil saturation)		P.9
	Series 10-AMD • Micro Mist Separator Eliminates foreign matter sized 0.01 μm or more, or oil particles in an aerosol state.	0.01 μm (Filtration efficiency: 99.9%)	0.1 mg/m³ [ANR] (≈0.08 ppm) (after oil saturation)		P.16
	Series 10-AMH • Micro Mist Separator with Pre-filter Oil separator, which incorporates pre-filter (equivalent to the AM series) into micro mist separator.	0.3 + 0.01 μm (Filtration efficiency: 99.9%)			P.23
	Series 10-AME • Super Mist Separator Captures foreign matter sized 0.01 μm or more and adsorbs oil particles in an aerosol state.	0.01 μm (Filtration efficiency: 99.9%)	0.01 mg/m³ [ANR] (≈0.008 ppm)	Reduces oil smell.	P.30
Deodorizer	Series 10-AMF • Odor Removal Filter Eliminates odor from compressed air.	0.01 μm (Filtration efficiency: 99.9%)	0.004 mg/m³ [ANR] (≈0.0032 ppm)	Deodorizes oil smell.	P.37
Modular Connection Examples					P.44
How to Order Bowl Assembly					P.45
Options	• Seal material: Fluororubber • IN-OUT reversal direction • For medium air pressure • With element service indicator				Refer to “How to Order” of respective models.
Specific Product Precautions					P.49

Main Line Filter

Series 10-AFF

Can remove impurities such as oil, water and foreign matter in compressed air and can improve the function of a dryer in the downstream, extend the life of precision filter, and prevent trouble with the equipment.

Modular connection is possible with 10-AFF2C to 22C.

(For details, refer to page 44.)



10-AFF2C to 22C



10-AFF37B/75B

Caution

Be sure to read this before handling.
Refer to "Handling Precautions for SMC Products" (M-E03-3) for Safety Instructions and Air Preparation Equipment Precautions.

Model

Model	10-AFF2C	10-AFF4C	10-AFF8C	10-AFF11C	10-AFF22C	10-AFF37B	10-AFF75B
Rated flow ^{Note)} (L/min [ANR])	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
Weight (kg)	0.38	0.55	0.9	1.4	2.1	4.2	10.5



Note) Maximum flow capacity at 0.7 MPa.

Maximum flow capacity varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 5) and "Max. Flow Capacity Line" below.

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	3 μm (Filtration efficiency: 99%)
Element life	2 years or when pressure drop reached 0.1 MPa

Accessory/For 10-AFF2C to 22C, 10-AFF37B/75B

Applicable model	10-AFF2C	10-AFF4C	10-AFF8C	10-AFF11C	10-AFF22C	10-AFF37B	10-AFF75B
Bracket assembly (with 2 mounting screws)	10-AM-BM101	10-AM-BM102	10-AM-BM103	10-AM-BM104	10-AM-BM105	10-BM56	10-BM57

Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the maximum flow capacity into consideration.

(Example) Inlet pressure: 0.6 MPa

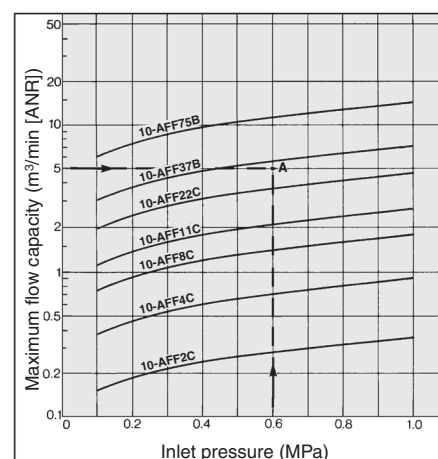
Maximum flow capacity: 5 m³/min [ANR]

1. Obtain the intersecting point A of inlet pressure and maximum flow capacity in the graph.
2. The AFF37B is obtained when the max. flow capacity line is above the intersecting point A in the graph.



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





How to Order

10-AFF2C to 10-AFF22C

10-AFF 22C - 10 - J

Clean series

Body size

Symbol	Applicable compressor output (guide)
2C	2.2 kW
4C	3.7 kW
8C	7.5 kW
11C	11 kW
22C	22 kW

Thread type

Symbol	Type
Nil	Rc
F	G*1
N	NPT

*1 Conforms to ISO1179-1.

Port size

Symbol	Size	Applicable body size				
		2C	4C	8C	11C	22C
01	1/8	●				
02	1/4	●	●			
03	3/8		●	●		
04	1/2			●	●	
06	3/4				●	●
10	1					●

Option

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
R	IN-OUT reversal direction
T	With element service indicator

Drain guide*3 1/4 female thread

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

Accessory

Symbol	Description
Nil	—
B	Bracket *2

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

Options

Symbol F: Rubber material: Fluororubber

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

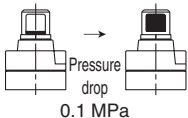
Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

Symbol 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

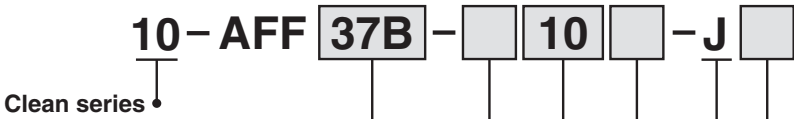


Saturation of the separator can be observed visually.
(Element life check)

How to Order



10-AFF37B, 75B



Body size

Symbol	Applicable compressor output (guide)
37B	37 kW
75B	75 kW

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size	
		37B	75B
10	1	●	—
14	1 1/2	●	●
20	2	—	●

Option

Symbol	Description
Nil	—
R	IN-OUT reversal direction
T	With element service indicator

- Drain guide*2 1/4 female thread (10-AFF37B), 3/8 female thread (10-AFF75B)

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

Accessory

Symbol	Description
Nil	—
B	Bracket *1

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



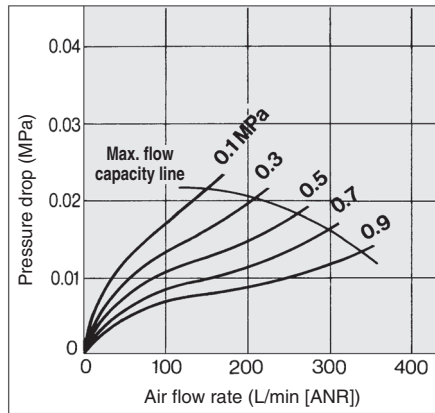
Note) Refer to "How to Order Bowl Assembly" on page 45.

Flow Characteristics/Select the model under the max. flow capacity line. (Element oil saturation)

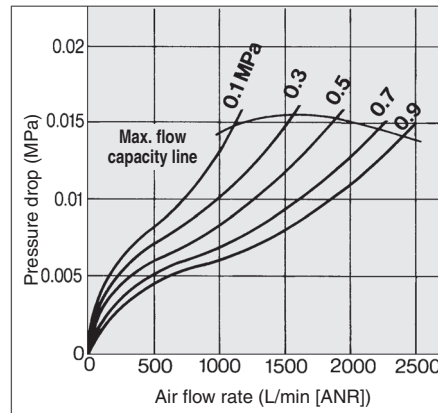


Note) Compressed air over max. flow capacity line in the table below may not meet the specifications of the product.

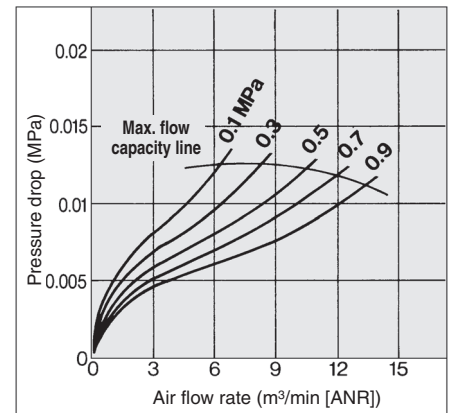
10-AFF2C



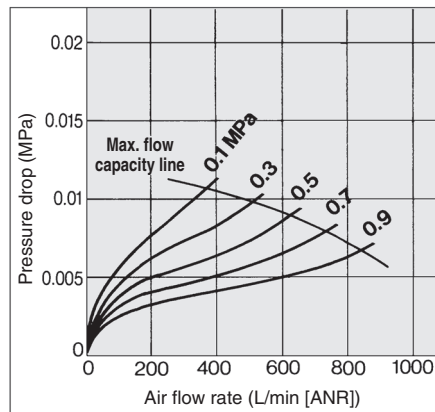
10-AFF11C



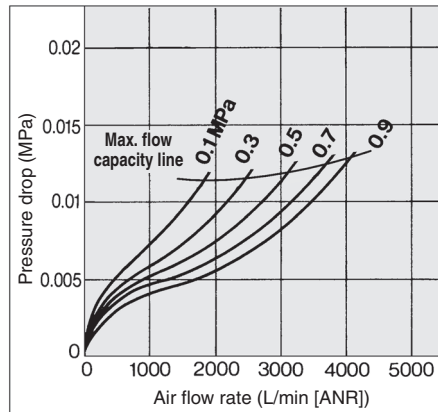
10-AFF75B



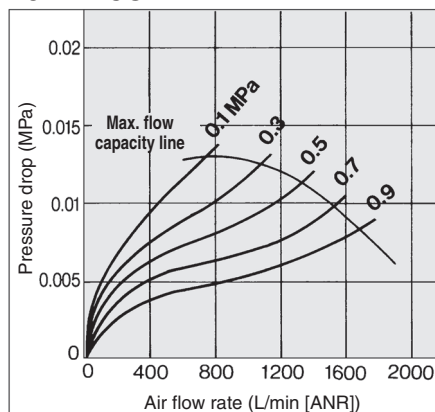
10-AFF4C



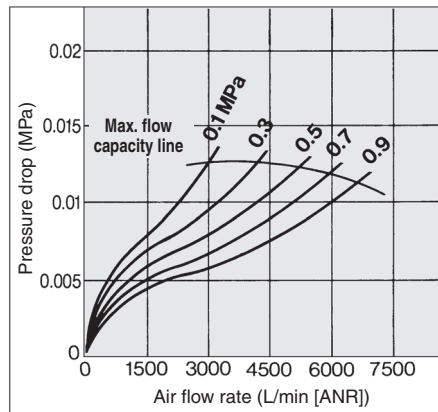
10-AFF22C



10-AFF8C



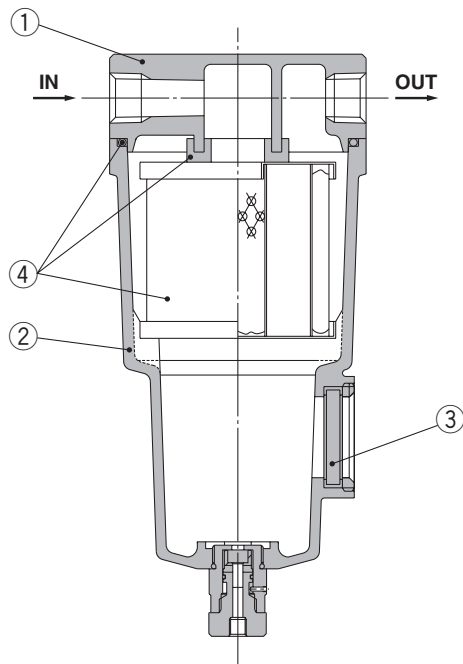
10-AFF37B



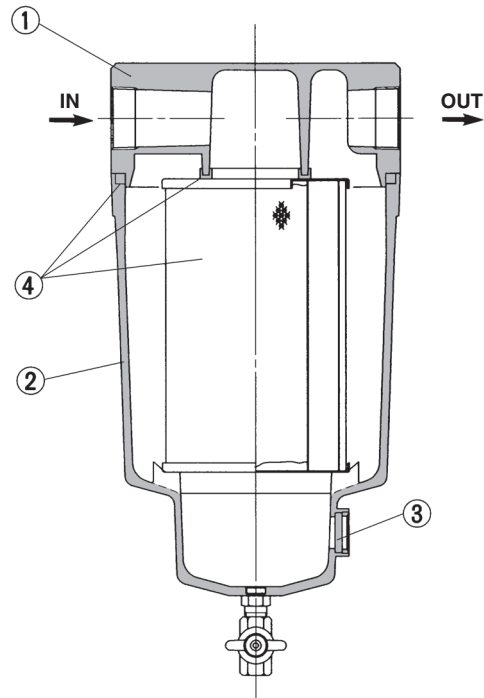
Series 10-AFF

Construction

10-AFF2C to 22C, 10-AFF37B



10-AFF75B



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 10-AFF75B is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 45.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Please refer to pages 7 to 8 for details.

Replacement Parts

No.	Description	Material	Applicable model	Model						
				10-AFF2C	10-AFF4C	10-AFF8C	10-AFF11C	10-AFF22C	10-AFF37B	10-AFF75B
4	Element assembly	Cotton paper, others	Except option F	10-AFF-EL2B	10-AFF-EL4B	10-AFF-EL8B	10-AFF-EL11B	10-AFF-EL22B	10-AFF-EL37B	10-AFF-EL75B
			For option F	10-AFF-EL2B-F	10-AFF-EL4B-F	10-AFF-EL8B-F	10-AFF-EL11B-F	10-AFF-EL22B-F	—	—

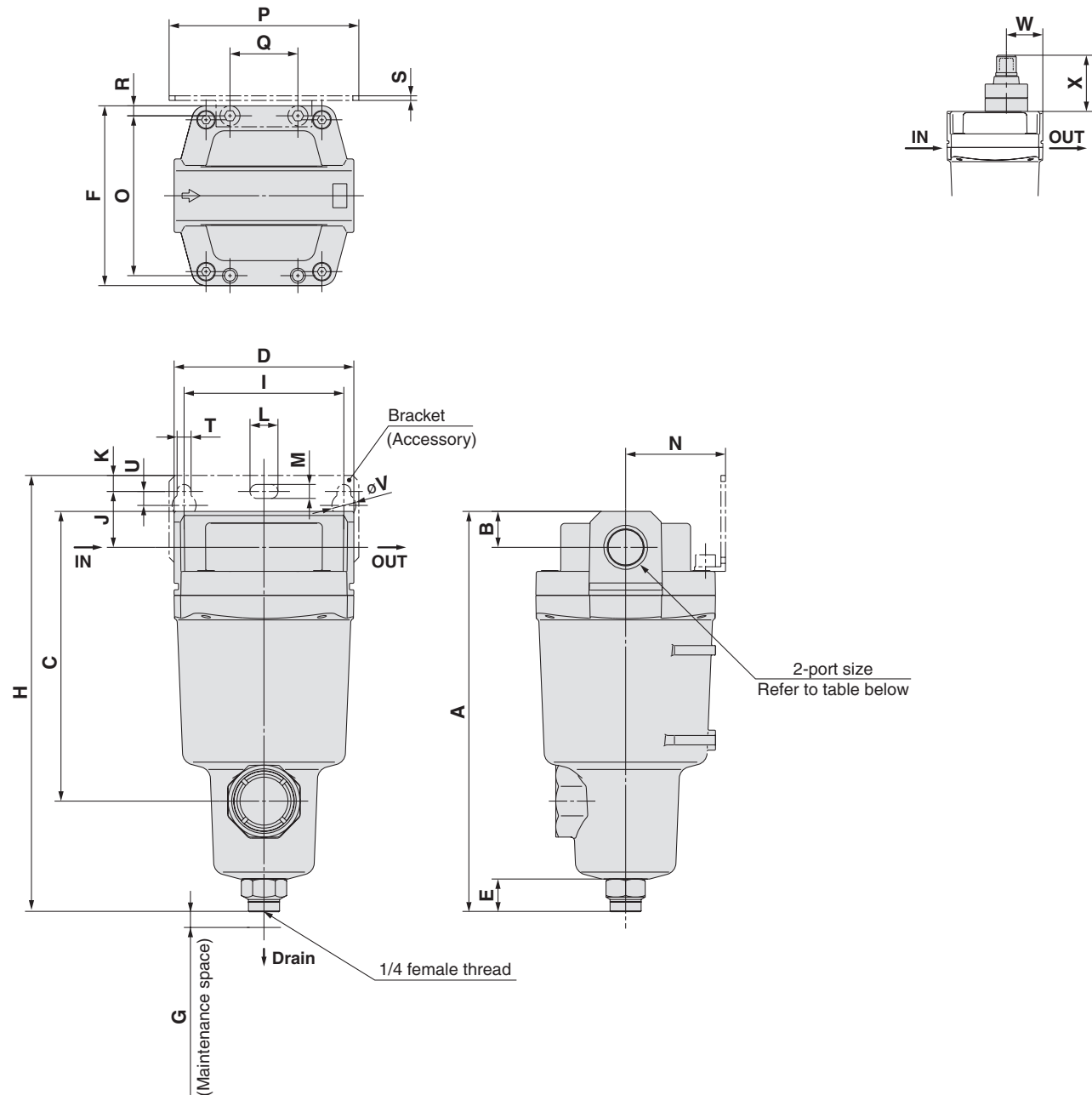
* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

Dimensions

10-AFF2C to 22C

Option

T: With element service indicator

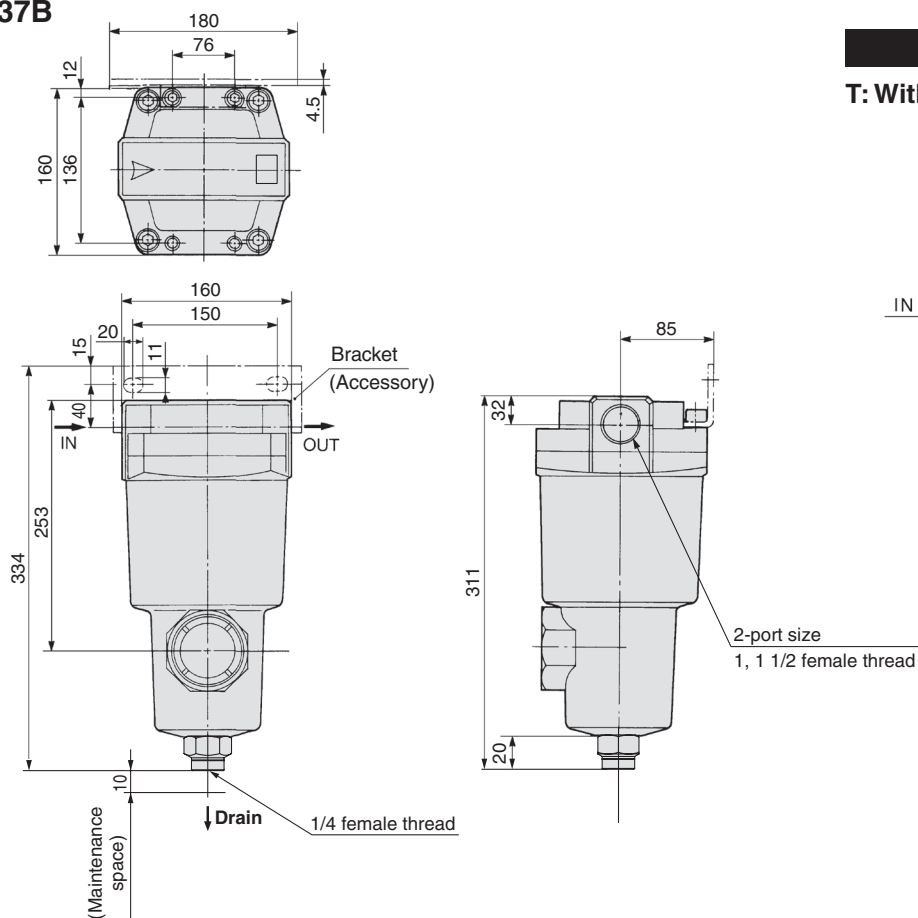


Model	Port size	A	B	C	D	E	F	G	Bracket related dimensions															Element service indicator related dimensions	
									H	I	J	K	T	U	L	M	V	N	O	P	Q	R	S	W	X
10-AFF2C	1/8, 1/4	158	10	99	63	20	63	10	173	56	20	5	6	6	12	6	10	35	54	70	26	4.5	1.6	24	37
10-AFF4C	1/4, 3/8	172	14	113	76	20	76	10	190	66	24	8	6	6	12	6	10	40	66	80	28	5	2	27	37
10-AFF8C	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
10-AFF11C	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
10-AFF22C	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

Series 10-AFF

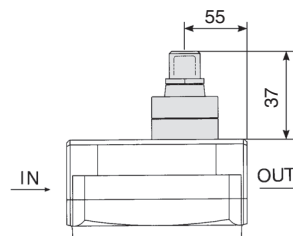
Dimensions

10-AFF37B

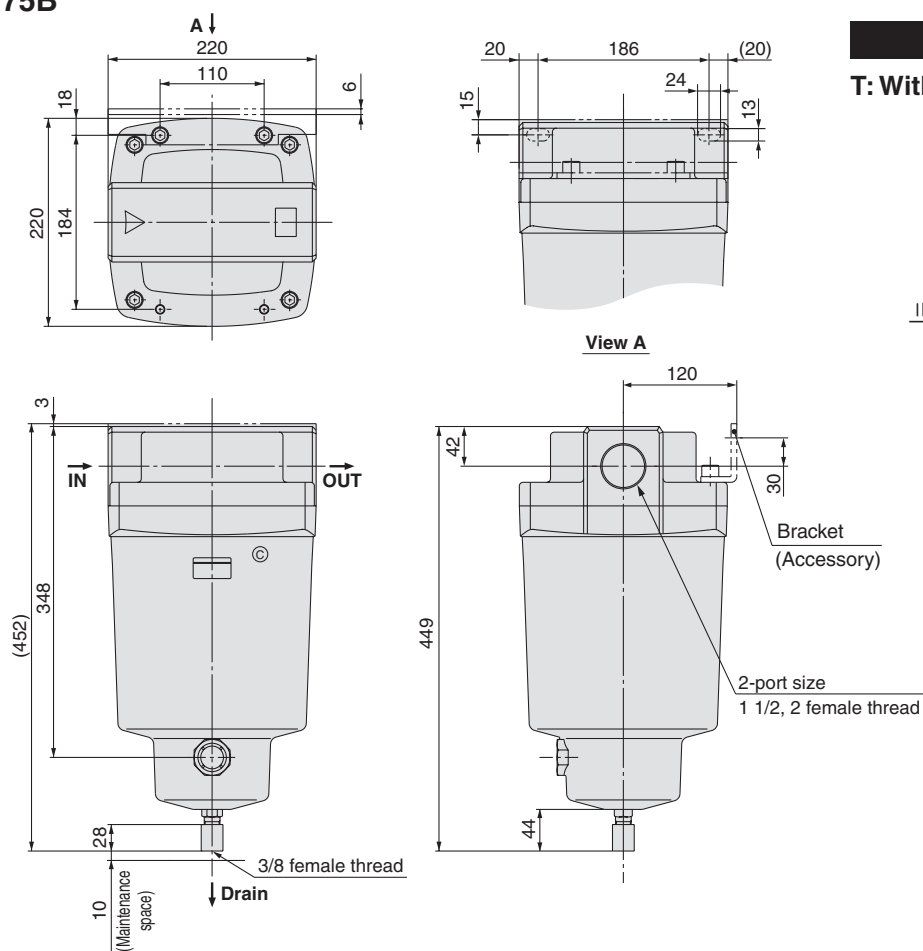


Option

T: With element service indicator

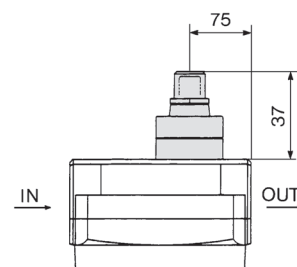


10-AFF75B



Option

T: With element service indicator



Mist Separator

Series 10-AM

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

Modular connection is possible with 10-AM150C to 550C.
(For details, refer to page 44.)



10-AM150C to 550C



10-AM650/850

Model

Model	10-AM150C	10-AM250C	10-AM350C	10-AM450C	10-AM550C	10-AM650	10-AM850
Rated flow (L/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
Weight (kg)	0.38	0.55	0.9	1.4	2.1	4.2	10.5



Note) Maximum flow capacity at 0.7 MPa.
Maximum flow capacity varies depending on the operating pressure.
Refer to "Flow Characteristics" (page 12) and "Max. Flow Capacity Line" (page 13).



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	0.3 μm (Filtration efficiency: 99.9%)
Oil mist density at outlet	Max. 1.0 mg/m ³ [ANR] ($\approx$ 0.8 ppm)*1
Element life	2 years or when pressure drop reached 0.1 MPa

*1 Oil mist density at 30 mg/m³ [ANR] blown out by compressor.

Accessory

Applicable model	10-AM150C	10-AM250C	10-AM350C	10-AM450C	10-AM550C	10-AM650	10-AM850
Bracket assembly (with 2 mounting screws)	10-AM-BM101	10-AM-BM102	10-AM-BM103	10-AM-BM104	10-AM-BM105	10-BM56	10-BM57

⚠ Caution

Be sure to read this before handling.
Refer to "Handling Precautions for SMC Products" (M-E03-3) for Safety Instructions and Air Preparation Equipment Precautions.

How to Order

10-AM150C to 550C



10-AM 550C - 10 - J

Clean series •

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.

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					●

Option

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
R	IN-OUT reversal direction
T	Element service indicator

Drain guide*3 1/4 female thread

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

Accessory

Symbol	Description
Nil	—
B	Bracket *2

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

Options

Symbol F: Rubber material: Fluororubber

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

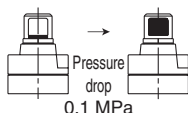
Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

Symbol 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

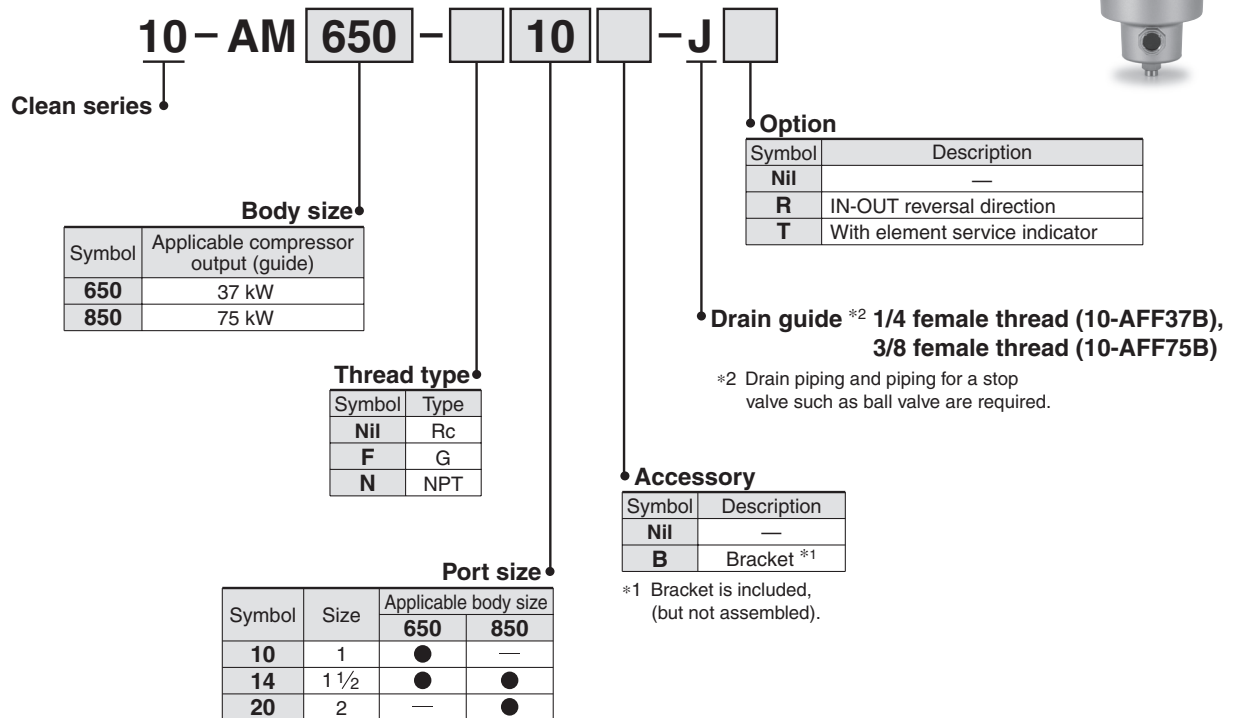


Saturation of the separator can be observed visually.
(Element life check)



How to Order

10-AM650/850



Note) Refer to "How to Order Bowl Assembly" on page 45.

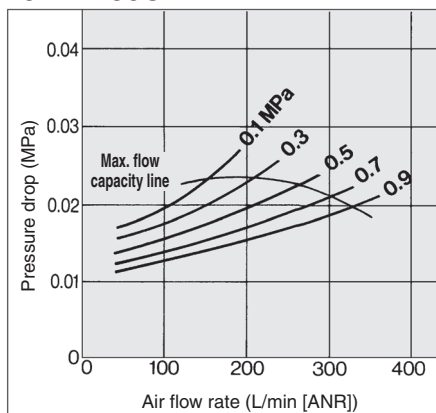
Series 10-AM

Flow Characteristics/Select the model under the max. flow capacity line. (Element oil saturation)

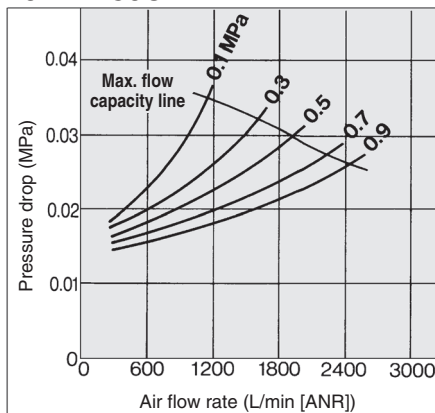


Note) Compressed air over max. flow capacity line in the table below may not meet the specifications of the product.

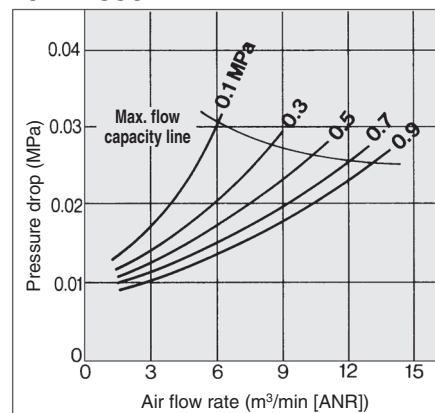
10-AM150C



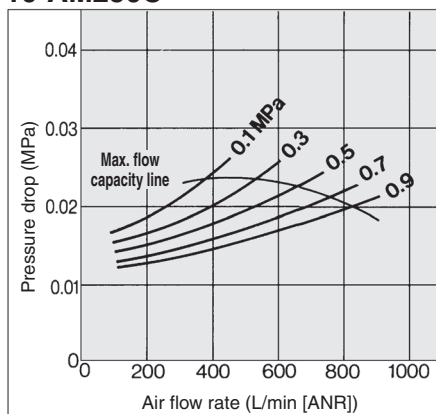
10-AM450C



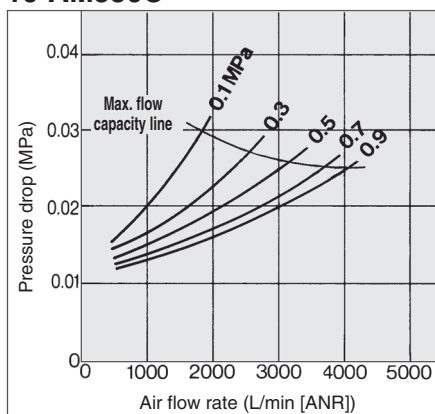
10-AM850



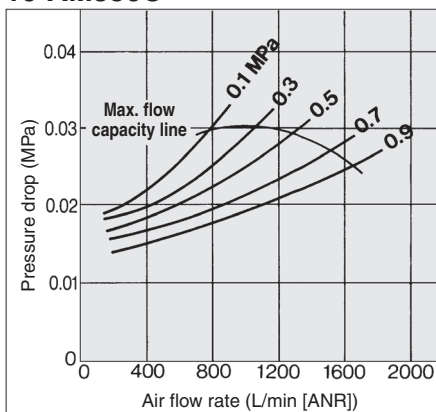
10-AM250C



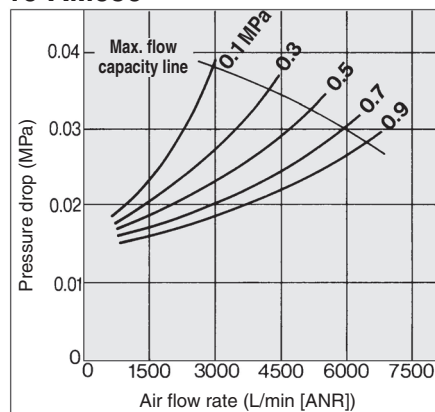
10-AM550C



10-AM350C

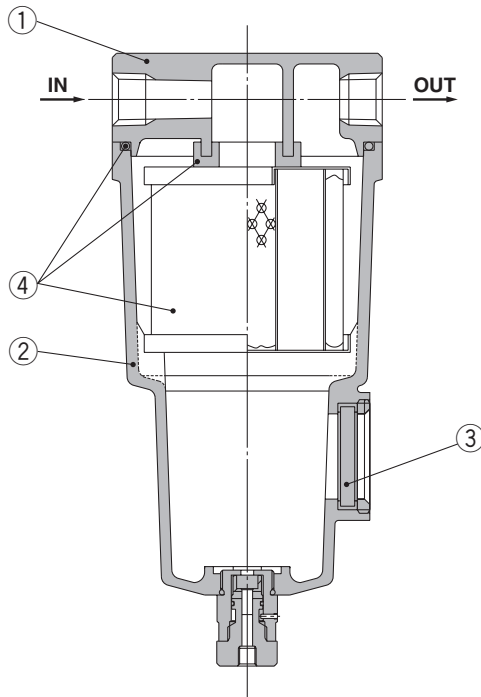


10-AM650

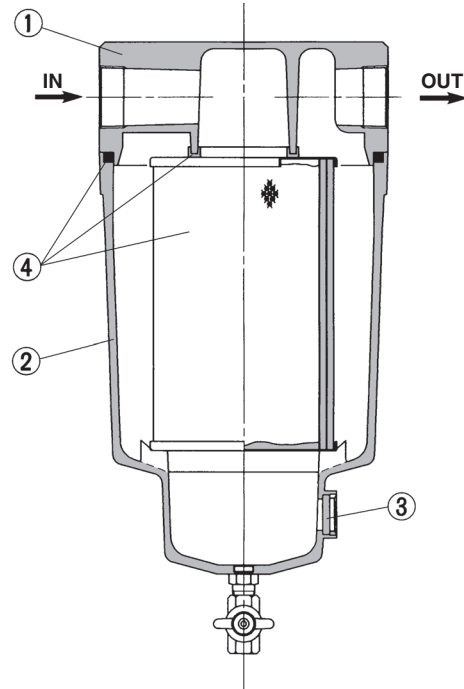


Construction

10-AM150C to 550C, 10-AM650



10-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 10-AM850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 45.



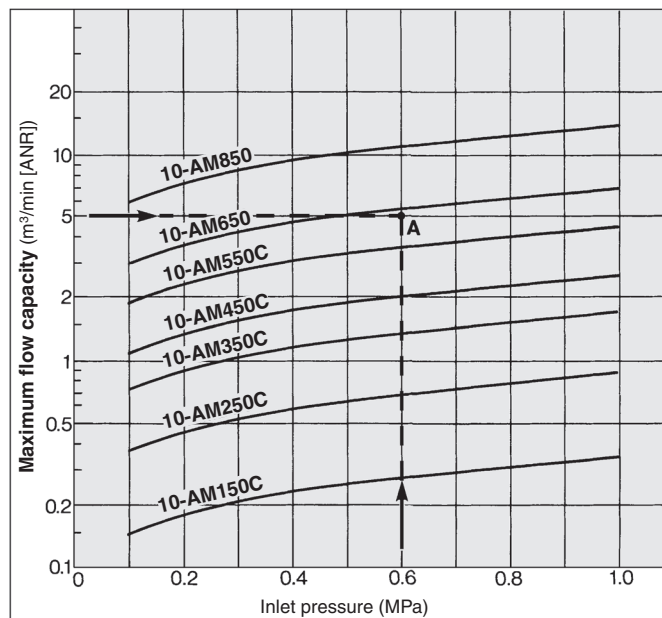
Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to "Dimensions" on pages 14 to 15 for details.

Replacement Parts

No.	Description	Material	Applicable model	Model						
				10-AM150C	10-AM250C	10-AM350C	10-AM450C	10-AM550C	10-AM650	10-AM850
4	Element assembly	Glass fiber, others	Except option F	10-AM-EL150	10-AM-EL250	10-AM-EL350	10-AM-EL450	10-AM-EL550	10-AM-EL650	10-AM-EL850
			For option F	10-AM-EL150-F	10-AM-EL250-F	10-AM-EL350-F	10-AM-EL450-F	10-AM-EL550-F	—	—

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

Max. Flow Capacity Line



Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the maximum flow capacity into consideration.

(Example) Inlet pressure: 0.6 MPa

Maximum flow capacity: 5 m³/min [ANR]

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



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

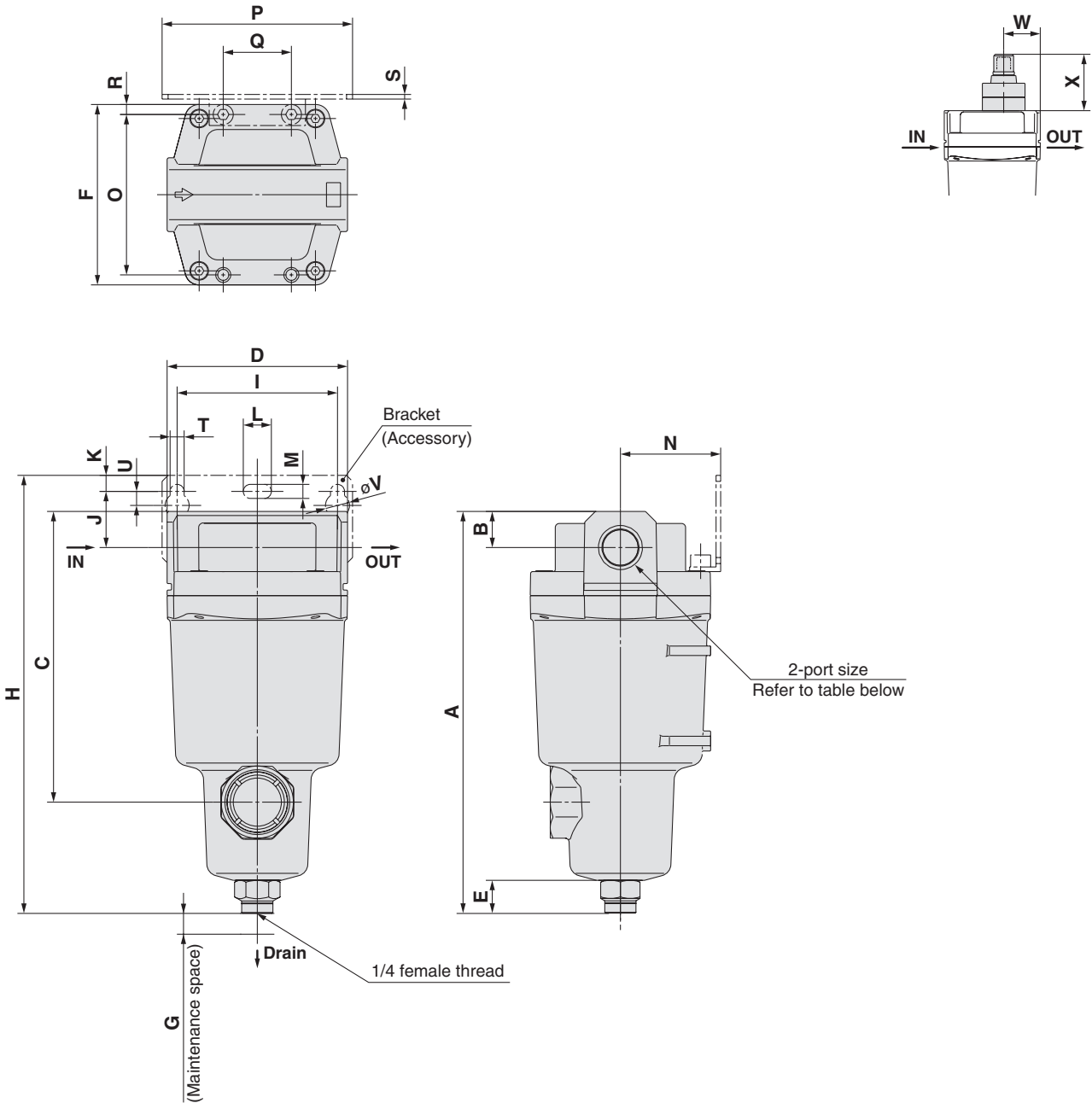
Series 10-AM

Dimensions

10-AM150C to 550C

Option

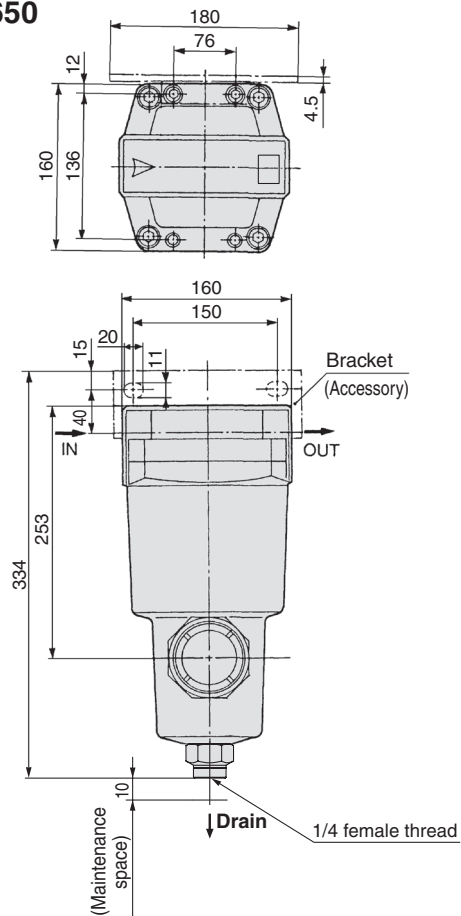
T: With element service indicator



Model	Port size	A	B	C	D	E	F	G	Bracket related dimensions															Element service indicator related dimensions	
									H	I	J	K	T	U	L	M	V	N	O	P	Q	R	S	W	X
10-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
10-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
10-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
10-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
10-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

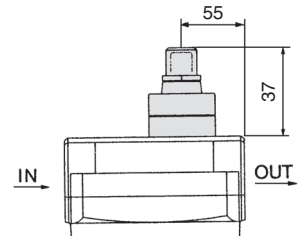
Dimensions

10-AM650

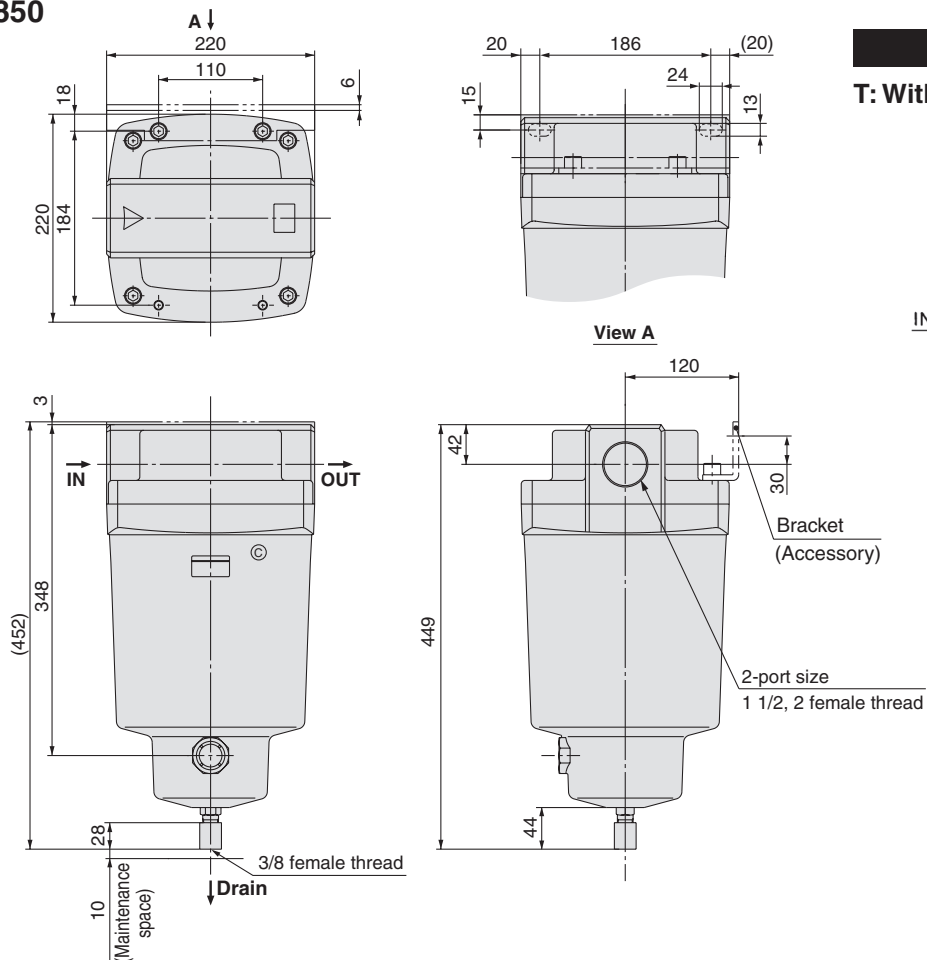


Option

T: With element service indicator

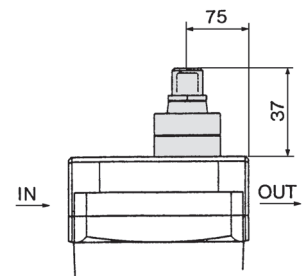


10-AM850



Option

T: With element service indicator



Micro Mist Separator

Series 10-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 10-AMD150C to 550C.
(For details, refer to page 44.)



10-AMD150C to 550C 10-AMD650/850

Model

Model	10-AMD150C	10-AMD250C	10-AMD350C	10-AMD450C	10-AMD550C	10-AMD650	10-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
Weight (kg)	0.38	0.55	0.9	1.4	2.1	4.2	10.5



Note) Maximum flow capacity at 0.7 MPa.

Maximum flow capacity varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 19) and "Max. Flow Capacity Line" (page 18).

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] ^{*1} (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

* Oil mist density at 30 mg/m³ [ANR] blown out by compressor.

Accessory

Applicable model	10-AMD150C	10-AMD250C	10-AMD350C	10-AMD450C	10-AMD550C	10-AMD650	10-AMD850
Bracket assembly (with 2 mounting screws)	10-AM-BM101	10-AM-BM102	10-AM-BM103	10-AM-BM104	10-AM-BM105	10-BM56	10-BM57

⚠ Caution

Be sure to read this before handling.
Refer to "Handling Precautions for SMC Products" (M-E03-3) for Safety Instructions and Air Preparation Equipment Precautions.



How to Order

10-AMD150C to 550C

10-AMD 550C - 10 - J

Clean series

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).

Option

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
R	IN-OUT reversal direction
T	With element service indicator

Drain guide*3 1/4 female thread

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

Options

Symbol F: Rubber material: Fluororubber

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

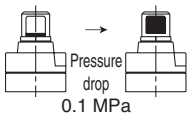
Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

Symbol 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)

How to Order

10-AMD650/850



10-AMD 650 - 10 - J

Clean series

Body size

650
850

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	—	●

Option

Symbol	Description
Nil	—
R	IN-OUT reversal direction
T	With element service indicator

Drain guide *2 1/4 female thread (10-AFF37B),
3/8 female thread (10-AFF75B)

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

Accessory

Symbol	Description
Nil	—
B	Bracket *1

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



Note) Refer to "How to Order Bowl Assembly" on page 45.

Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the maximum flow capacity into consideration.

(Example) Inlet pressure: 0.6 MPa

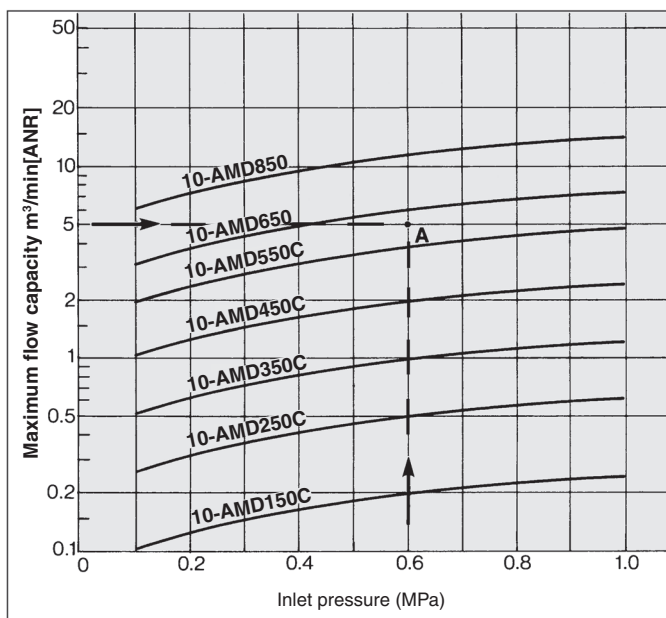
Maximum flow capacity: 5 m³/min [ANR]

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



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

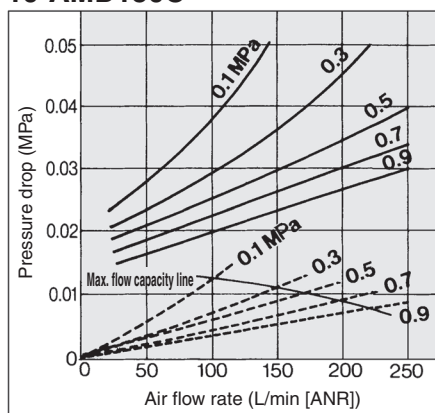


Flow Characteristics/Select the model under the max. flow capacity line. (— Element oil saturation ----- Initial condition)

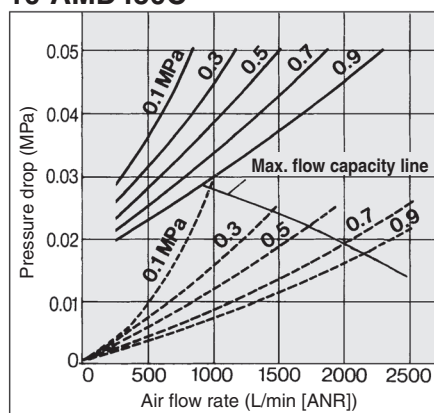


Note) Compressed air over max. flow capacity line in the table below may not meet the specifications of the product.

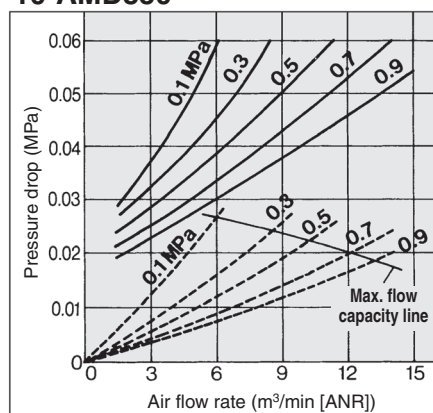
10-AMD150C



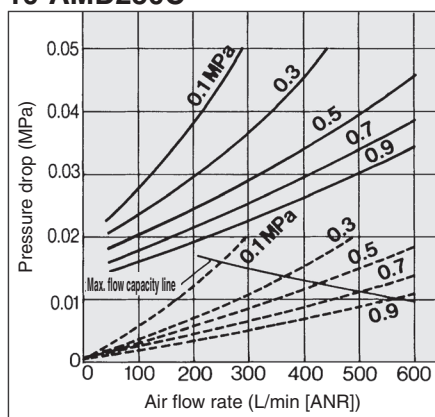
10-AMD450C



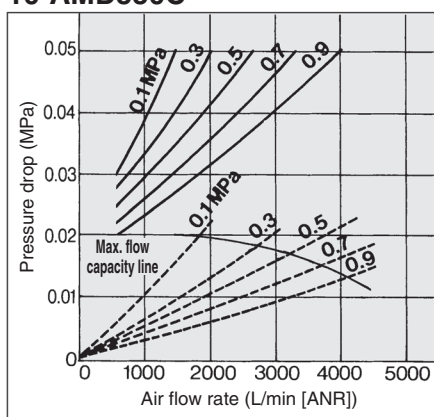
10-AMD850



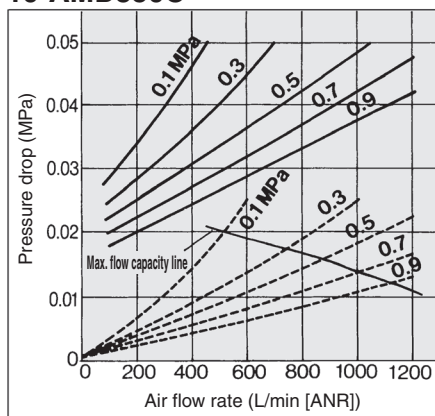
10-AMD250C



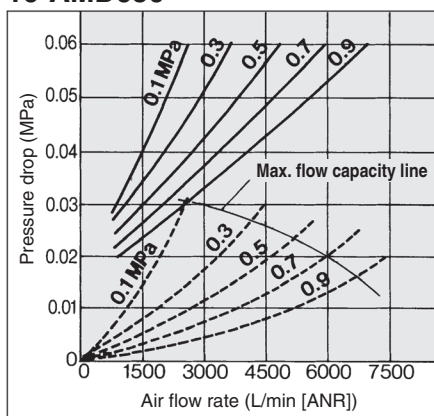
10-AMD550C



10-AMD350C



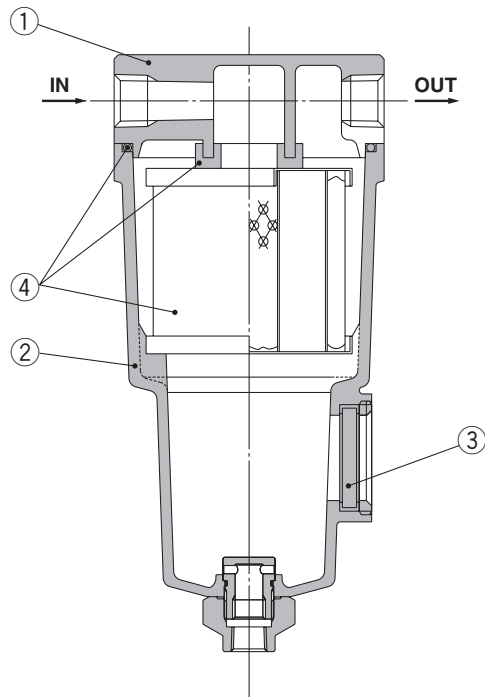
10-AMD650



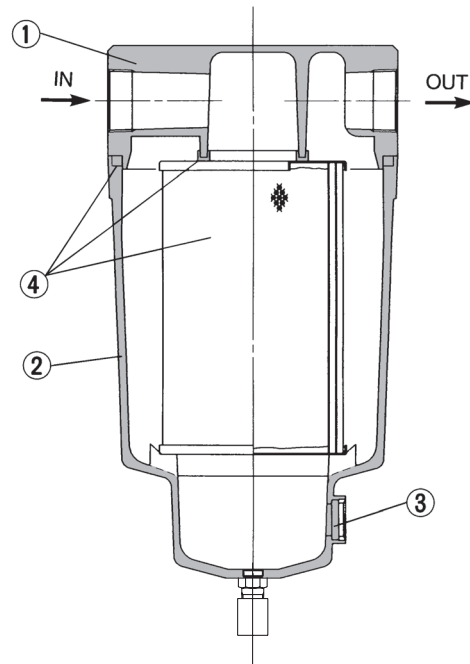
Series 10-AMD

Construction

10-AMD150C to 550C, 10-AMD650



10-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 10-AMD850 is aluminum casted.



Note) Refer to “How to Order Bowl Assembly” on page 45.



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 21 to 22 for details.

Replacement Parts

No.	Description	Material	Applicable model	Model						
				10-AMD150C	10-AMD250C	10-AMD350C	10-AMD450C	10-AMD550C	10-AMD650	10-AMD850
4	Element assembly	Glass fiber, others	Except option F	10-AMD-EL150	10-AMD-EL250	10-AMD-EL350	10-AMD-EL450	10-AMD-EL550	10-AMD-EL650	10-AMD-EL850
			For option F	10-AMD-EL150-F	10-AMD-EL250-F	10-AMD-EL350-F	10-AMD-EL450-F	10-AMD-EL550-F	—	—

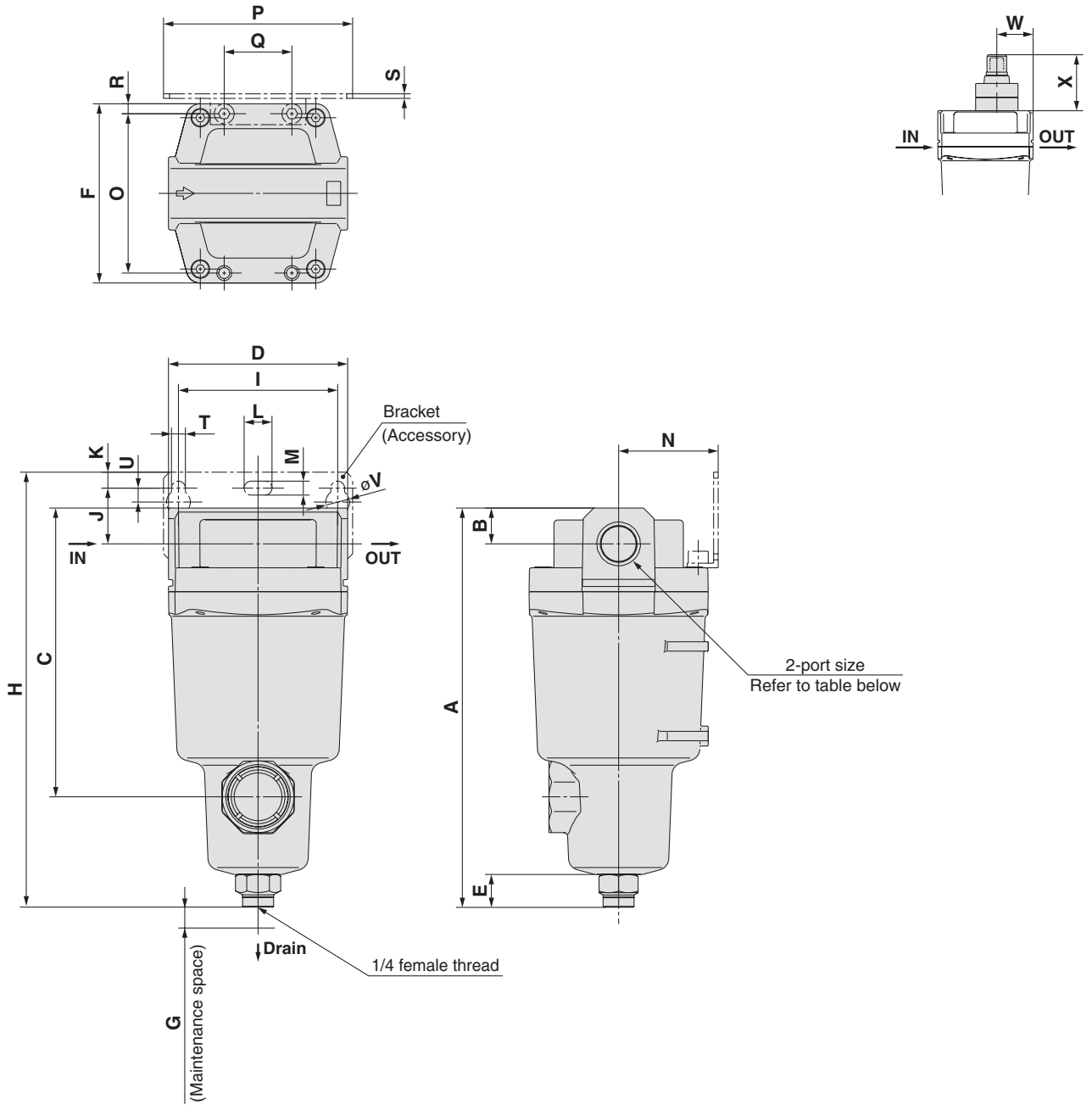
* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

Dimensions

10-AMD150C to 550C

Option

T: With element service indicator

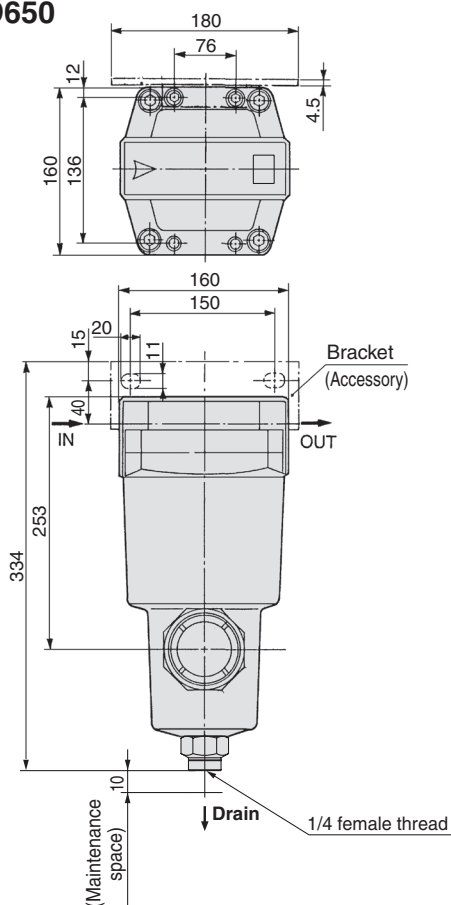


Model	Port size	A	B	C	D	E	F	G	Bracket related dimensions															Element service indicator related dimensions	
									H	I	J	K	T	U	L	M	V	N	O	P	Q	R	S	W	X
10-AMD150C	1/8, 1/4	158	10	99	63	20	63	10	173	56	20	5	6	6	12	6	10	35	54	70	26	4.5	1.6	24	37
10-AMD250C	1/4, 3/8	172	14	113	76	20	76	10	190	66	24	8	6	6	12	6	10	40	66	80	28	5	2	27	37
10-AMD350C	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
10-AMD450C	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
10-AMD550C	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

Series 10-AMD

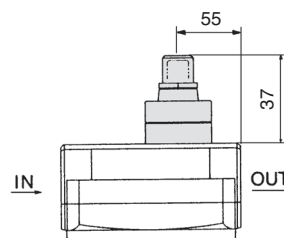
Dimensions

10-AMD650

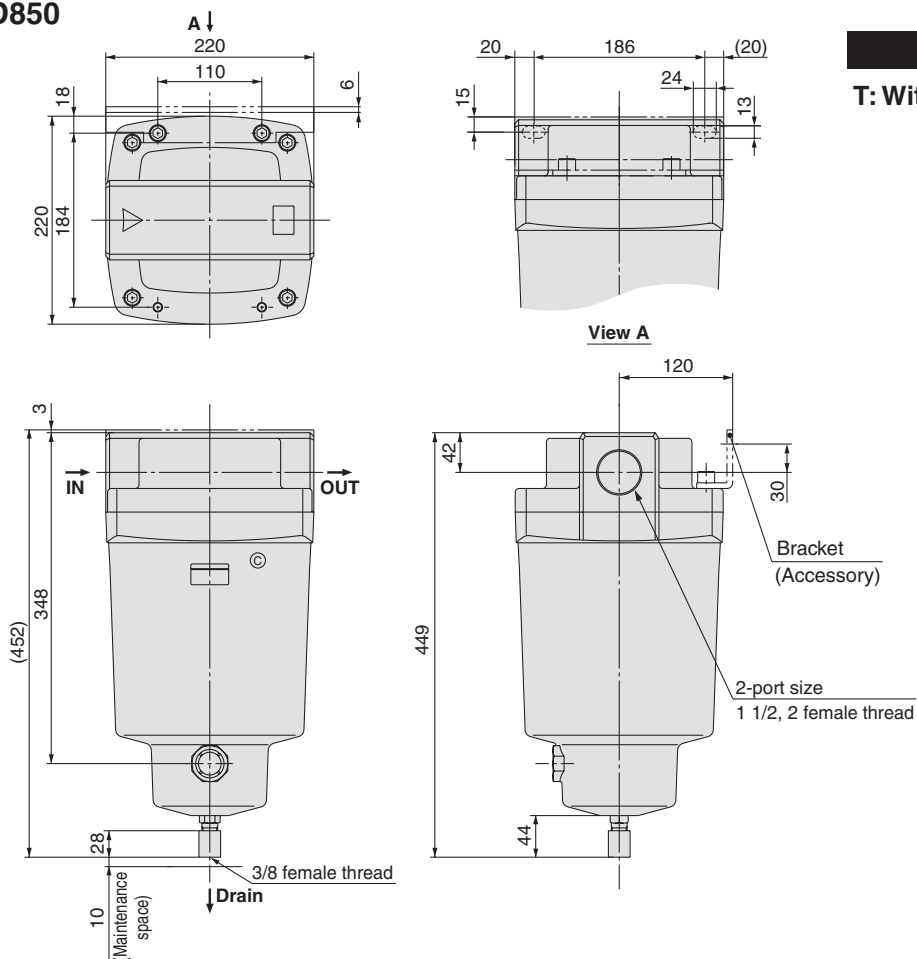


Option

T: With element service indicator

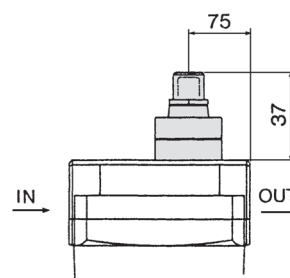


10-AMD850



Option

T: With element service indicator



Micro Mist Separator with Pre-filter Series 10-AMH

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.

The conventional pneumatic pressure line, 10-AM series + 10-AMD series have been integrated to achieve a reduction in installation space and in piping labor.

Modular connection is possible with 10-AMH150C to 550C.
(For details, refer to page 44.)



10-AMH150C to 550C



10-AMH650/850

Model

Model	10-AMH150C	10-AMH250C	10-AMH350C	10-AMH450C	10-AMH550C	10-AMH650	10-AMH850
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
Weight (kg)	0.38	0.55	0.9	1.4	2.1	4.2	10.5



Note) Maximum flow capacity at 0.7 MPa.

Maximum flow capacity varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 26) and "Max. Flow Capacity Line" below.

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 density	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 or when pressure drop reached 0.1 MPa

* Oil mist density at 30 mg/m³ [ANR] blown out by compressor.

Accessory

Applicable model	10-AMH150C	10-AMH250C	10-AMH350C	10-AMH450C	10-AMH550C	10-AMH650	10-AMH850
Bracket assembly (with 2 mounting screws)	10-AM-BM101	10-AM-BM102	10-AM-BM103	10-AM-BM104	10-AM-BM105	10-BM56	10-BM57

Model Selection

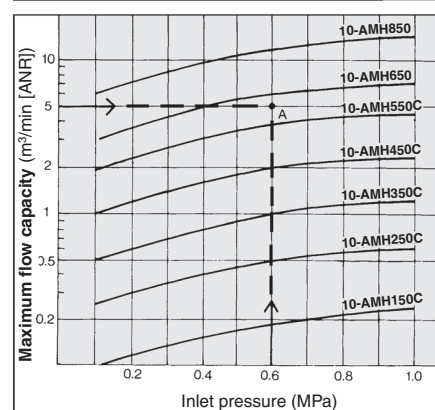
Select a model in accordance with the following procedure taking the inlet pressure and the maximum flow capacity into consideration.
(Example) Inlet pressure: 0.6 MPa
Maximum flow capacity: 5 m³/min [ANR]

1. Obtain the intersecting point A of inlet pressure and maximum flow capacity in the graph.
2. The AMH650 is obtained when the max. flow capacity line is above the intersecting point A in the graph.



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



Caution

Be sure to read this before handling.
Refer to "Handling Precautions for SMC Products" (M-E03-3) for Safety Instructions and Air Preparation Equipment Precautions.

How to Order



10-AMH150C to 550C

10 – AMH 550C – 10 – J

Clean series

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					●

Option

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
R	IN-OUT reversal direction
T	With element service indicator

Drain guide*3 1/4 female threaded

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

Accessory

Symbol	Description
Nil	—
B	Bracket *2

*2 Bracket is included

Options

Symbol F: Rubber material: Fluororubber

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

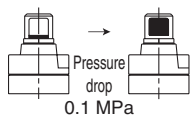
Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

Symbol 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)



How to Order

10-AMH650/850

10-AMH **650** - **10** - **J**

Clean series •

Body size •

650
850

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).

Option •

Symbol	Description
Nil	—
R	IN-OUT reversal direction
T	With element service indicator

• Drain guide *2 1/4 female thread (10-AFF37B), 3/8 female thread (10-AFF75B)

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



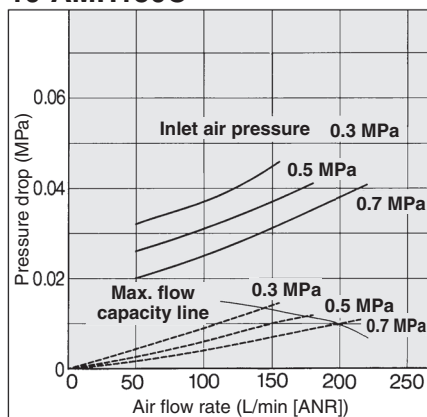
Note) Refer to "How to Order Bowl Assembly" on page 45.

Series 10-AMH

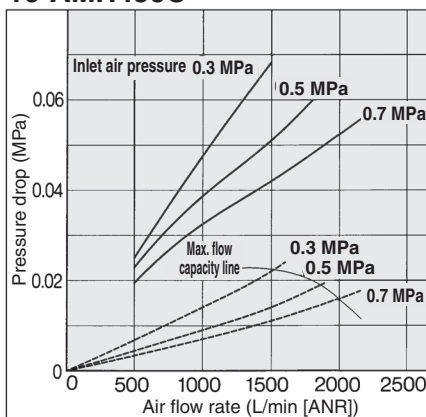
Flow Characteristics/Select the model under the max. flow capacity line. (— Element oil saturation ---- Initial condition)

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

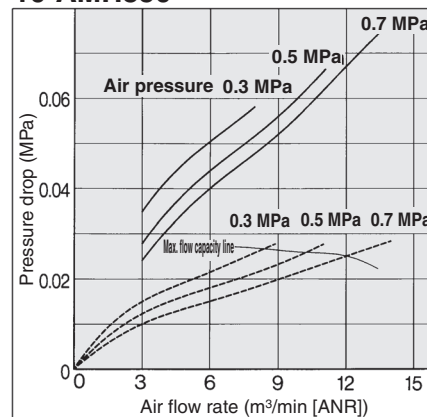
10-AMH150C



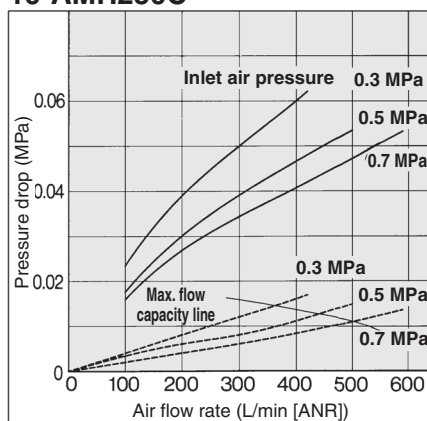
10-AMH450C



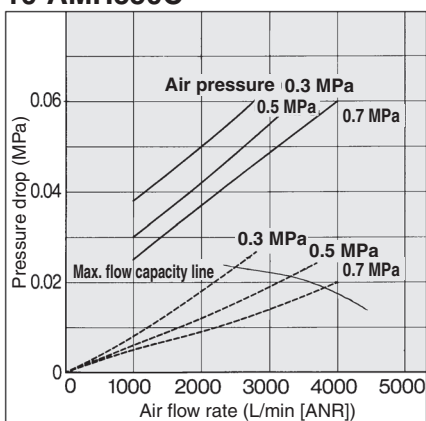
10-AMH850



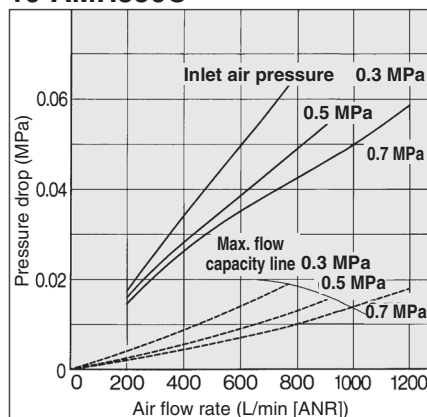
10-AMH250C



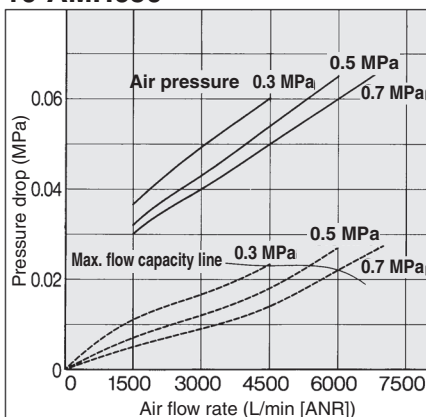
10-AMH550C



10-AMH350C

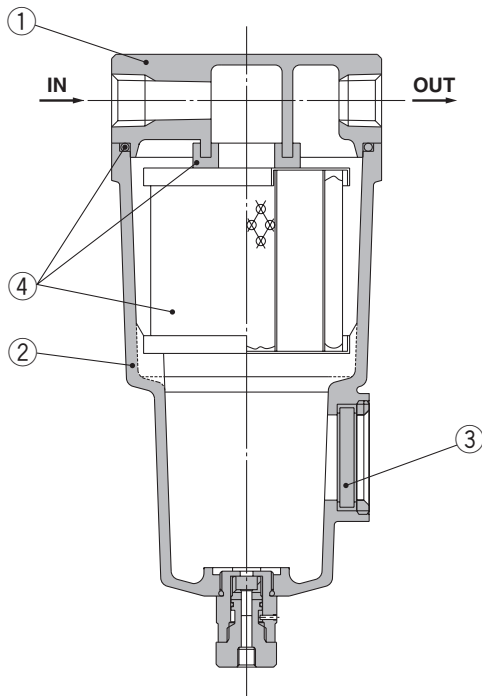


10-AMH650

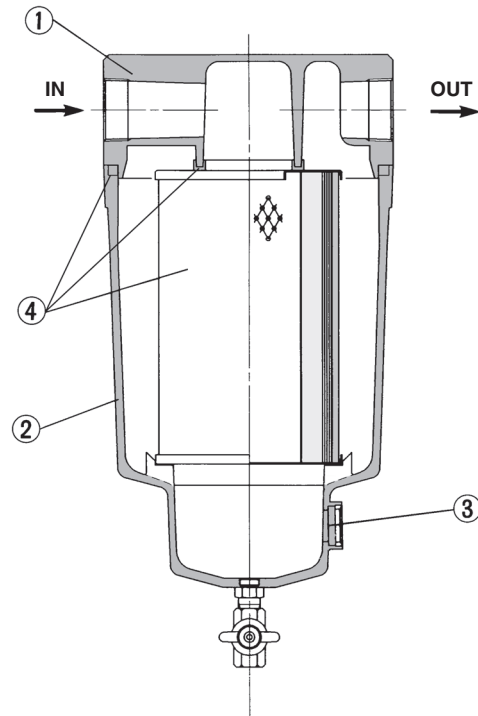


Construction

10-AMH150C to 550C, 10-AMH650



10-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	—

* The 10-AMH850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 45.



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 28 to 29 for details.

Replacement Parts

No.	Description	Material	Applicable model	Model						
				10-AMH150C	10-AMH250C	10-AMH350C	10-AMH450C	10-AMH550C	10-AMH650	10-AMH850
4	Element assembly	Glass fiber, others	Except option F	10-AMH-EL150	10-AMH-EL250	10-AMH-EL350	10-AMH-EL450	10-AMH-EL550	10-AMH-EL650	10-AMH-EL850
			For option F	10-AMH-EL150-F	10-AMH-EL250-F	10-AMH-EL350-F	10-AMH-EL450-F	10-AMH-EL550-F	—	—

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

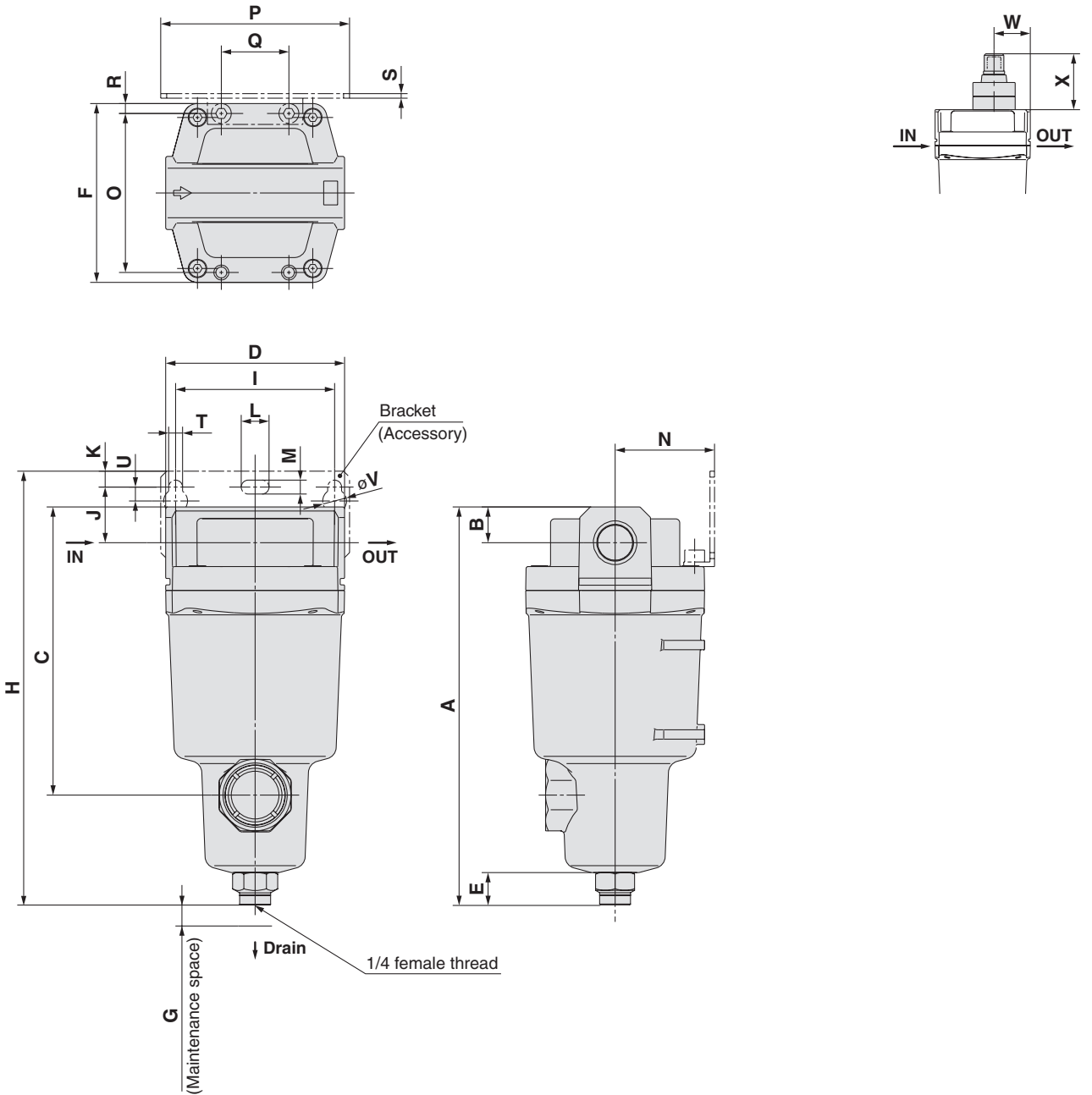
Series 10-AMH

Dimensions

10-AMH150C to 550C

Option

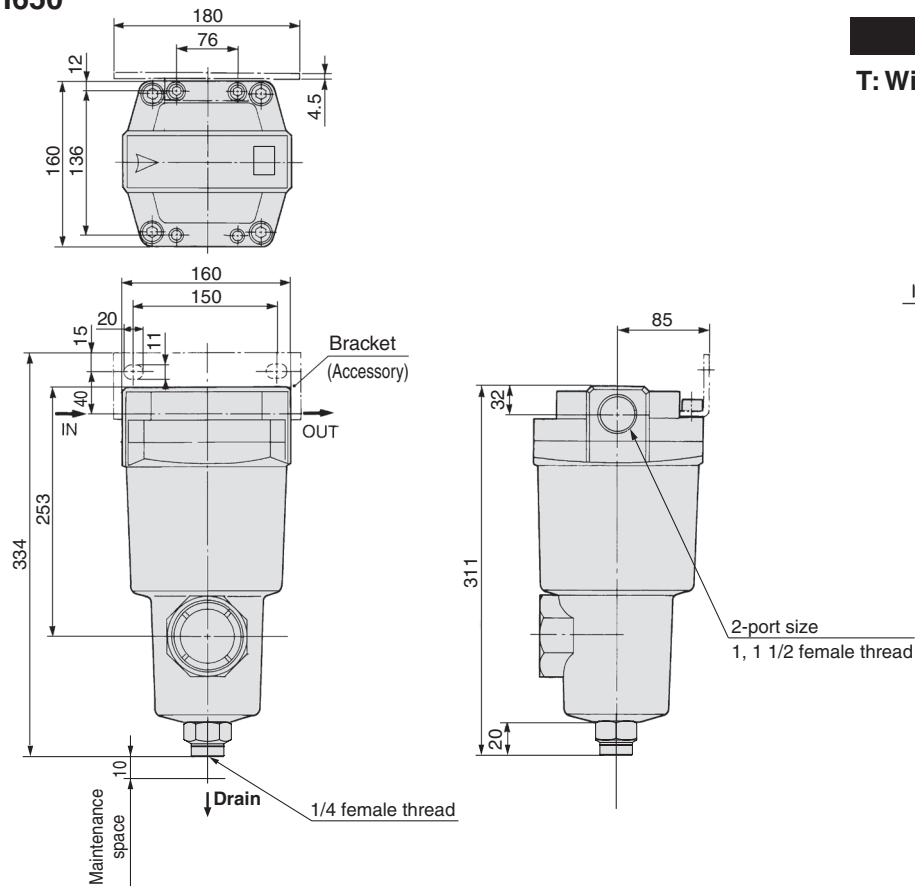
T: With element service indicator



Model	Port size	A	B	C	D	E	F	G	Bracket related dimensions															Element service indicator related dimensions	
									H	I	J	K	T	U	L	M	V	N	O	P	Q	R	S	W	X
10-AMH150C	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
10-AMH250C	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
10-AMH350C	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
10-AMH450C	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
10-AMH550C	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

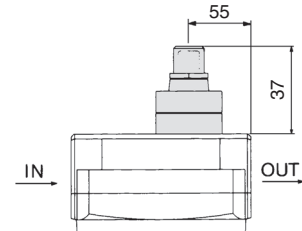
Dimensions

10-AMH650

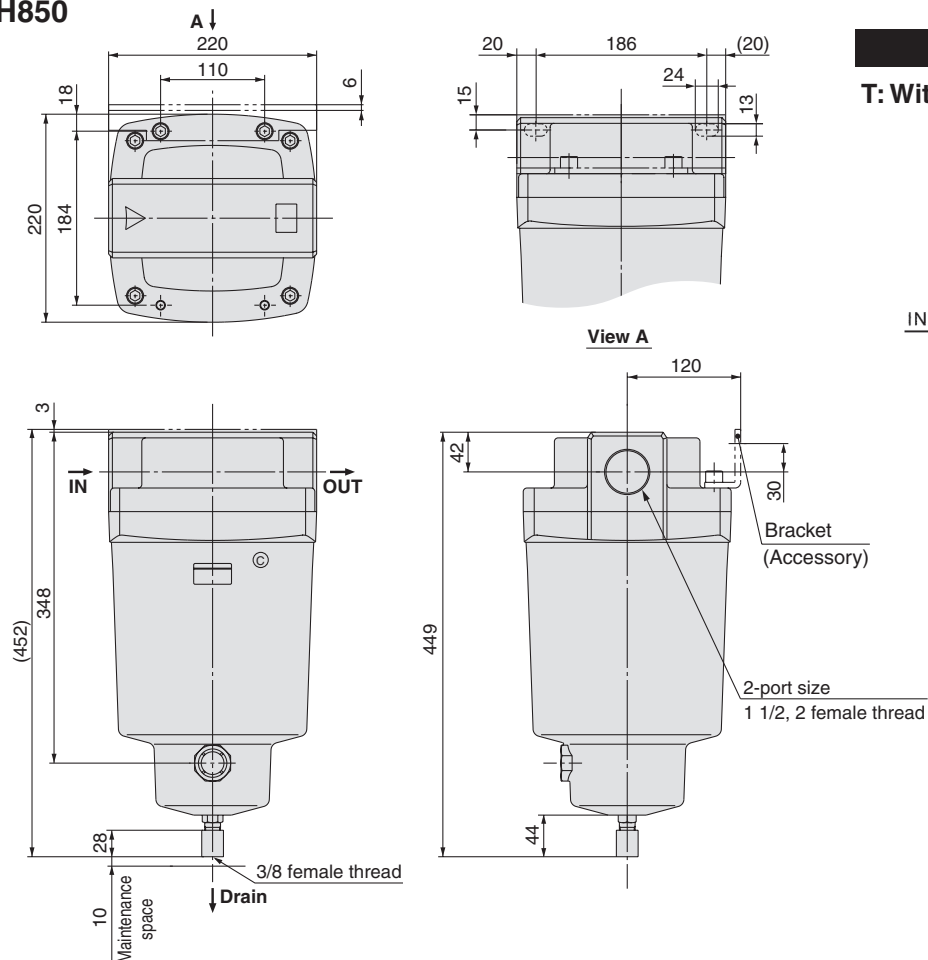


Option

T: With element service indicator

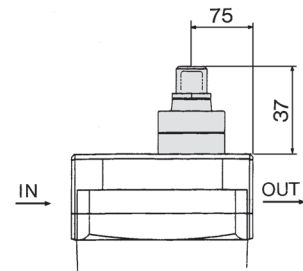


10-AMH850



Option

T: With element service indicator



Super Mist Separator

Series 10-AME

Can separate and adsorb aerosol state fine oil particles in compressed air and change the oil lubricating compressed air to oilless air or equivalent.

Use this product for filtration of compressed air requiring higher clean air for painting lines, compressed air for clean rooms and/or equipment where oils must be avoided.

Indicates the filter element life by a color change. Accordingly, the replacement time can be judged visually. (A red color spot indicates the replacement time.)

⚠ Caution

By all means the "AM" series should be used as a pre-filter.

Modular connection is possible with 10-AME150C to 550C.
(For details, refer to page 44.)



10-AME150C to 350C 10-AME450C/550C



10-AME650/850

Model

Model	10-AME150C	10-AME250C	10-AME350C	10-AME450C	10-AME550C	10-AME650	10-AME850
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
Weight (kg)	0.3	0.48	0.8	1.3	2.0	4.2	10.5



Note) Maximum flow capacity at 0.7 MPa.

Maximum flow capacity varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 33) and "Max. Flow Capacity Line" (page 33).

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%)
Cleanliness at outlet	Less than 100 particles of 0.3 μm or larger per cubic foot [Less than 35 particles per 10 liters [ANR]]
Oil mist density at outlet	Max. 0.01 mg/m ³ [ANR] (≈0.008 ppm)
Element life	① Element color indicator (Replace the element when a red color spot occurred on the surface.) ② Even if a red color spot does not appear on the surface, the replacement interval for the element is when the pressure drop reaches 0.1 MPa or after two years of operation, whichever comes first.

Accessory

Applicable model	10-AME150C	10-AME250C	10-AME350C	10-AME450C	10-AME550C	10-AME650	10-AME850
Bracket assembly (with 2 mounting screws)	10-AM-BM101	10-AM-BM102	10-AM-BM103	10-AM-BM104	10-AM-BM105	10-BM56	10-BM57

⚠ Caution

Be sure to read this before handling.
Refer to "Handling Precautions for SMC Products" (M-E03-3) for Safety Instructions and Air Preparation Equipment Precautions.

How to Order



10-AME150C to 550C

10-AME 550C - [] **10** [] - []

• Clean series

• Body size

150C
250C
350C
450C
550C

• Thread type

Symbol	Type
Nil	Rc
F	G*1
N	NPT

*1 Conforms to ISO1179-1.

• Option

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
R	IN-OUT reversal direction

• Accessory

Symbol	Description
Nil	—
B	Bracket *2

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

• 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					●

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 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.)

How to Order



10-AME650/850

10-AME

650

-

10

-

Clean series

Body size

Thread type

Port size

Option

Accessory

650	850
-----	-----

Symbol	Type
Nil	Rc
F	G
N	NPT

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

Symbol	Description
Nil	—
R	IN-OUT reversal direction

Symbol	Description
Nil	—
B	Bracket*

* Bracket is included, (but not assembled).



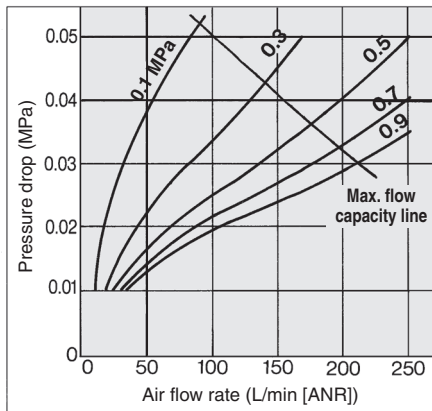
Note) Refer to “How to Order Bowl Assembly” on page 45.

Flow Characteristics/Select the model under the max. flow capacity line. (Element initial condition)

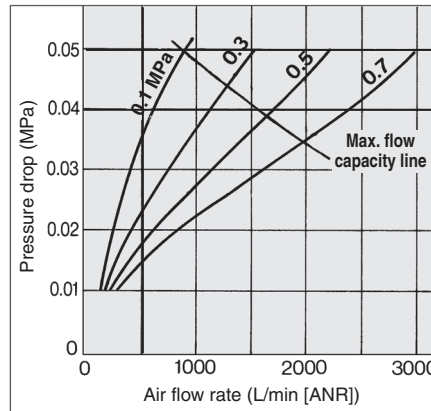


Note) Compressed air over max. flow capacity line in the table below may not meet the specifications of the product.

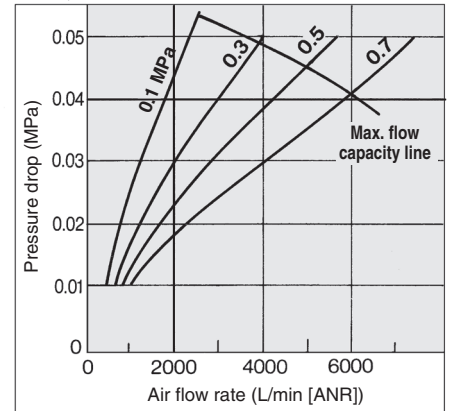
10-AME150C



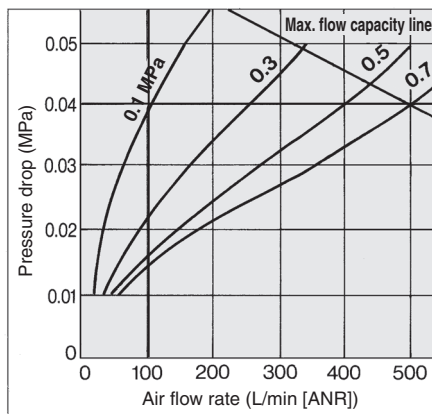
10-AME450C



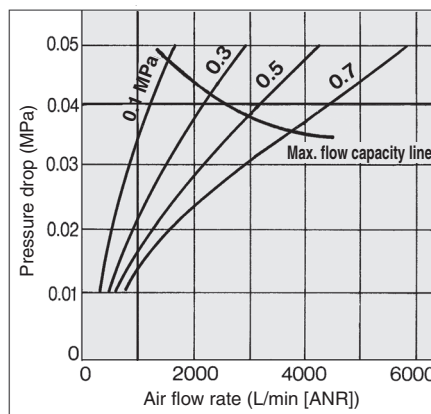
10-AME650



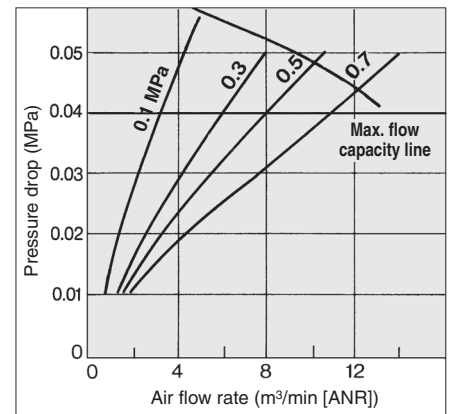
10-AME250C



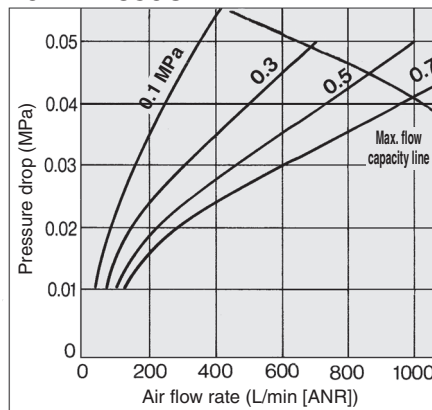
10-AME550C



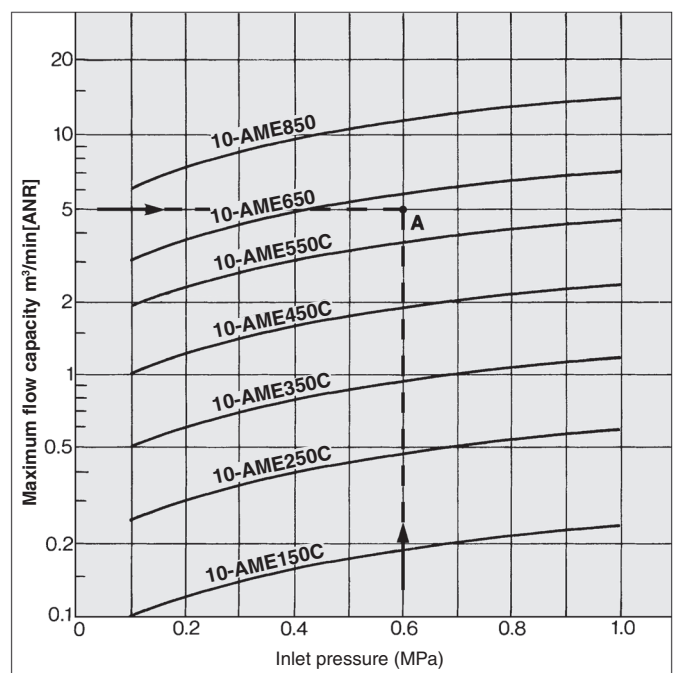
10-AME850



10-AME350C



Max. Flow Capacity Line



Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the maximum flow capacity into consideration.

(Example) Inlet pressure: 0.6 MPa

Maximum flow capacity: 5 m³/min [ANR]

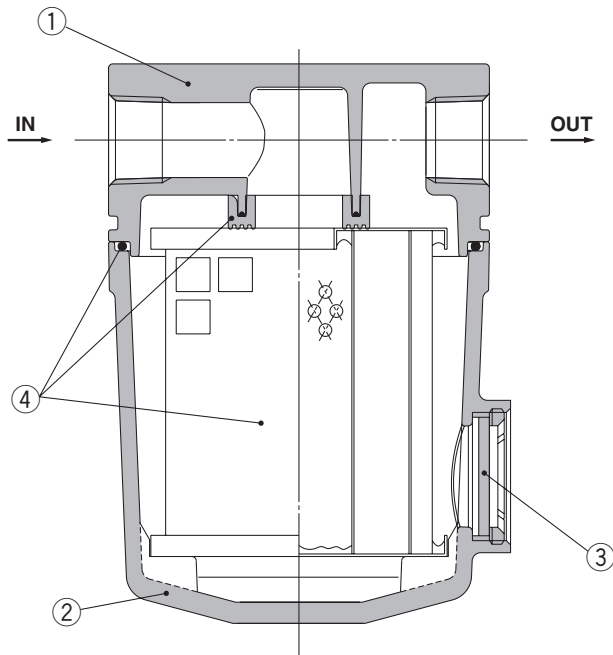
1. Obtain the intersecting point A of inlet pressure and maximum flow capacity in the graph.
2. The AME650 is obtained when the max. flow capacity line is above the intersecting point A in the graph.



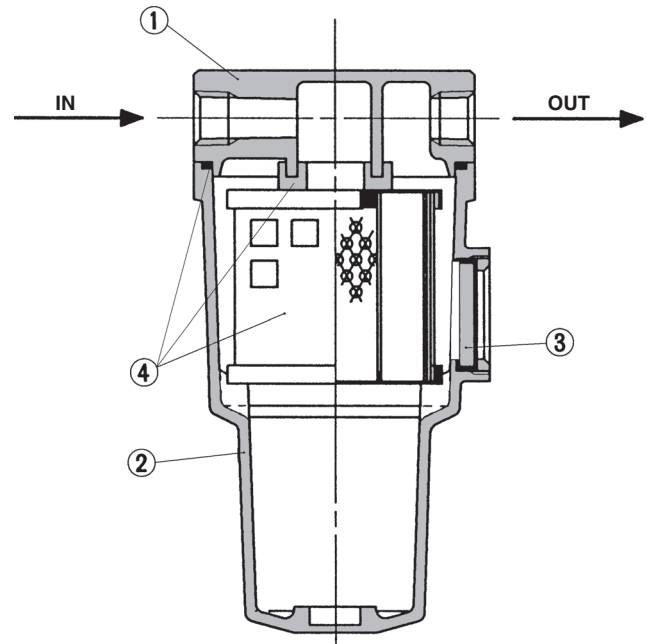
Note) Make sure to select a model that has the max. flow capacity line above the obtained intersecting point. With a model that has the max. flow capacity line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

Construction

10-AME150C to 550C



10-AME650/850



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 10-AME850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 45.



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 35 to 36 for details.

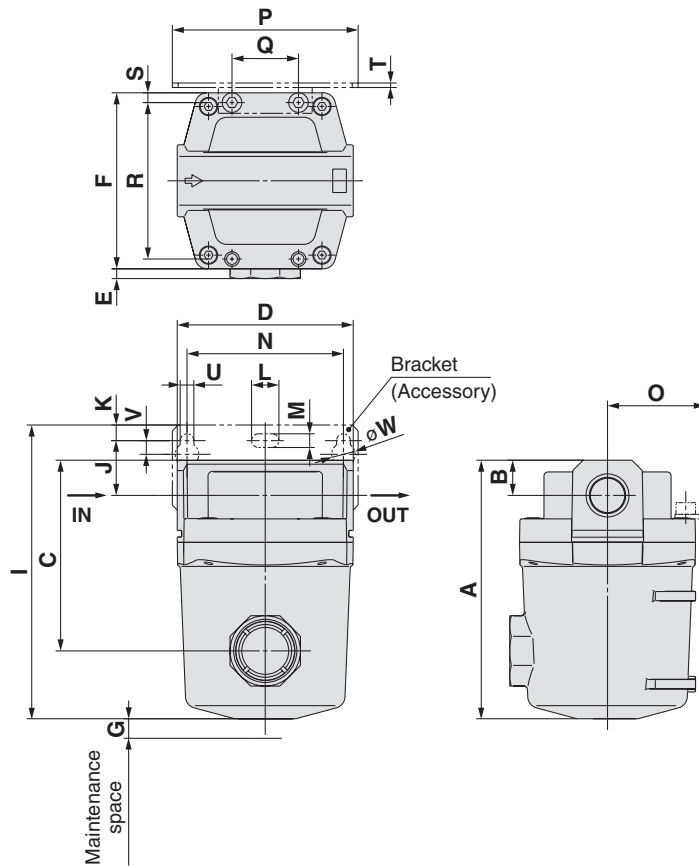
Replacement Parts

No.	Description	Material	Applicable model	Model						
				10-AME150C	10-AME250C	10-AME350C	10-AME450C	10-AME550C	10-AME650	10-AME850
4	Element assembly	Glass fiber, others	Except option F	10-AME-EL150	10-AME-EL250	10-AME-EL350	10-AME-EL450	10-AME-EL550	10-AME-EL650	10-AME-EL850
			For option F	10-AME-EL150-F	10-AME-EL250-F	10-AME-EL350-F	10-AME-EL450-F	10-AME-EL550-F	—	—

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

Dimensions

10-AME150C to 350C

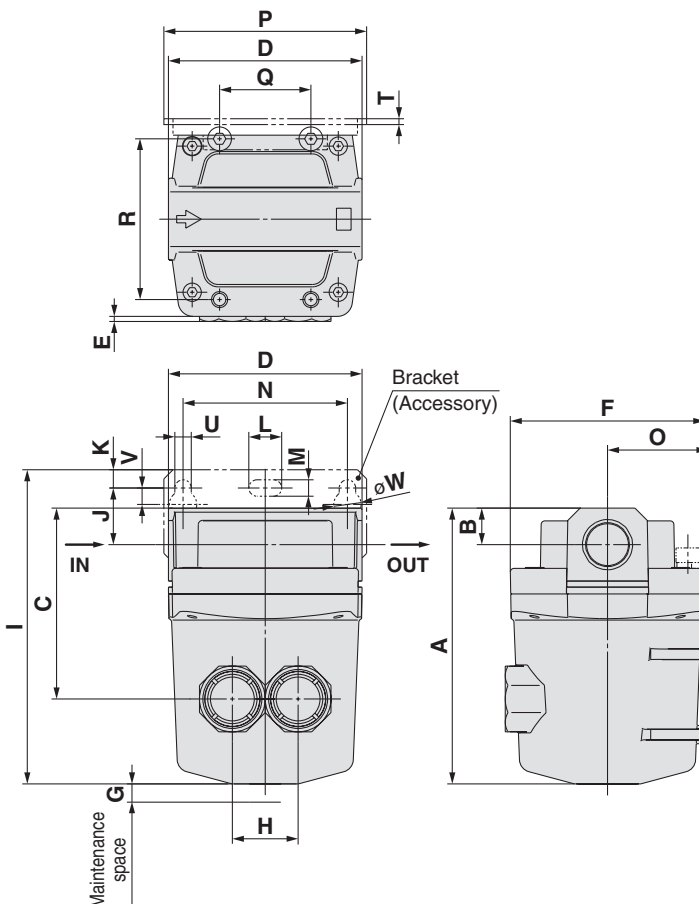


Model	Port size	A	B	C	D	E	F	G
10-AME150C	1/8, 1/4	83	10	54	63	7.5	63	10
10-AME250C	1/4, 3/8	103	14	73	76	5	76	10
10-AME350C	3/8, 1/2	132	18	98	90	5	90	10

Model	Port size	Bracket related dimensions							
		I	N	J	K	U	V	L	M
10-AME150C	1/8, 1/4	98.5	56	20	5	6	6	12	6
10-AME250C	1/4, 3/8	121	66	24	8	6	6	12	6
10-AME350C	3/8, 1/2	150	80	28	8	7	7	14	7

Model	Port size	Bracket related dimensions						
		W	O	P	Q	R	S	T
10-AME150C	1/8, 1/4	10	35	70	26	54	4.5	1.6
10-AME250C	1/4, 3/8	10	40	80	28	66	5	2
10-AME350C	3/8, 1/2	12	50	95	34	80	5	2.3

10-AME450C/550C



Model	Port size	A	B	C	D	E	F	G	H
10-AME450C	1/2, 3/4	151	20	105	106	3	106	10	36
10-AME550C	3/4, 1	187	24	130	122	3	122	15	44

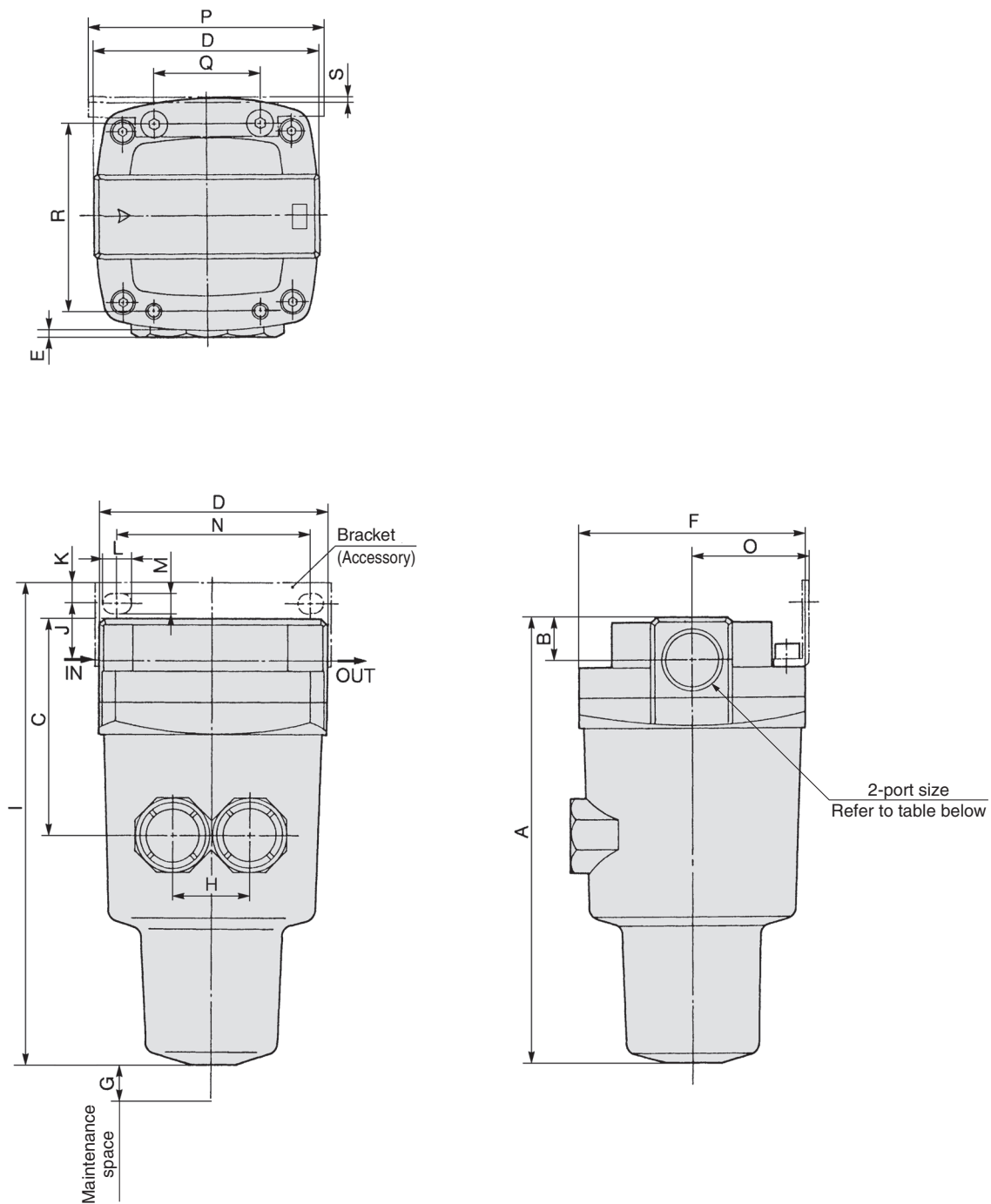
Model	Port size	Bracket related dimensions							
		I	N	J	K	U	V	L	M
10-AME450C	1/2, 3/4	172	90	31	10	9	9	18	9
10-AME550C	3/4, 1	206	100	33	10	9	9	18	9

Model	Port size	Bracket related dimensions					
		W	O	P	Q	R	T
10-AME450C	1/2, 3/4	15	55	111	50	88	3.2
10-AME550C	3/4, 1	15	65	126	60	102	3.2

Series 10-AME

Dimensions

10-AME650/10-AME850



(mm)																				
Model	Port size	A	B	C	D	E	F	G	H	Bracket related dimensions										
										I	J	K	L	M	N	O	P	Q	R	S
10-AME650	1 · 1½	291	32	167	160	—	160	10	66	314	40	15	20	11	150	85	180	76	136	4.5
10-AME850	1½ · 2	403	42	235	220	—	220	10	96	406	30	15	24	13	180	120	220	110	184	6

(mm)

Odor Removal Filter

Series 10-AMF

Efficiently can remove odor in compressed air with an activated carbon element. The unit is designed for use in the area such as a clean room where odors must be avoided.

Can remove odor and gas ingredients in compressed air.
Activated carbon element with large filtration area.
Easy replacement of elements.

Modular connection is possible with AMF150C to 550C.
(For details, refer to page 44.)



10-AMF150C to 350C 10-AMF450C, 550C



10-AMF650, 850

Model

Model	10-AMF150C	10-AMF250C	10-AMF350C	10-AMF450C	10-AMF550C	10-AMF650	10-AMF850
Note) Rated flow (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
Weight (kg)	0.3	0.48	0.8	1.3	2.0	4.2	10.5



Note) Maximum flow capacity at 0.7 MPa.

Maximum flow capacity varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 40) and "Max. Flow Capacity Line" (page 39).

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%)
Cleanliness at outlet	Less than 100 particles of 0.3 μm or larger per cubic foot [Less than 35 particles per 10 liters [ANR]] (The "AME" series is required on the inlet side.)
Oil mist density at outlet	Max. 0.004 mg/m ³ [ANR] (≈0.0032 ppm) (The "AME" series is required on the inlet side.)
Element life	1. Replace the element when you smell oil on the outlet side. 2. Even if the deodorization performance is normal, the replacement interval for the element is when the pressure drop reaches 0.1 MPa or after two years of operation, whichever comes first.

Accessory (Option)

Applicable model	10-AMF150C	10-AMF250C	10-AMF350C	10-AMF450C	10-AMF550C	10-AMF650	10-AMF850
Bracket assembly (with 2 mounting screws)	10-AM-BM101	10-AM-BM102	10-AM-BM103	10-AM-BM104	10-AM-BM105	10-BM56	10-BM57

⚠ Caution

Be sure to read this before handling.
Refer to "Handling Precautions for SMC Products" (M-E03-3) for
Safety Instructions and Air Preparation Equipment Precautions.

How to Order

10-AMF150C to 550C



10-AMF 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.

Option

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
R	IN-OUT reversal direction

Accessory

Symbol	Description
Nil	—
B	Bracket *2

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

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					●

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 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.)



How to Order

10-AMF650 to 850

10-AMF 650 - [] 10 [] - []

Clean series

Body size

650
850

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Option

Symbol	Description
Nil	—
R	IN-OUT reversal direction

Accessory

Symbol	Description
Nil	—
B	Bracket*

* Bracket is included, (but not assembled).

Port size

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



Note) Refer to "How to Order Bowl Assembly" on page 45.

Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the maximum flow capacity rate into consideration.
(Example) Inlet pressure: 0.6 MPa

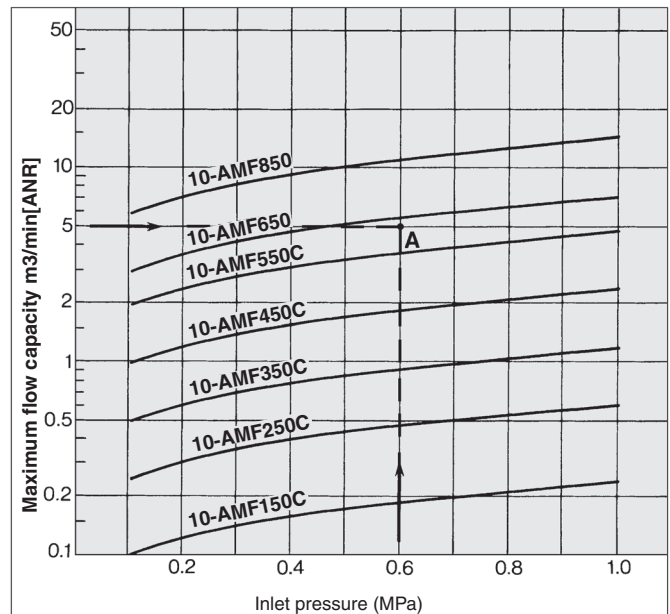
Maximum flow capacity: 5 m³/min [ANR]

1. Obtain the intersecting point A of inlet pressure and maximum flow capacity in the graph.
2. The 10-AMF650 is obtained when the max. flow capacity line is above the intersecting point A in the graph.



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



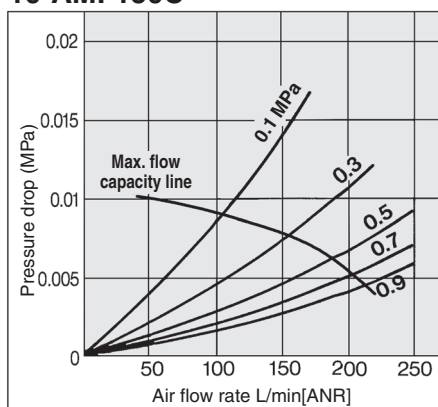
Series 10-AMF

Flow Characteristics/Select the model under the max. flow capacity line. (Element oil saturation)

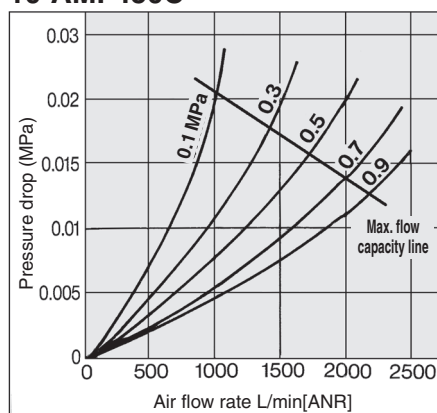


Note) Compressed air over max. flow capacity line in the table below may not meet the specifications of the product.

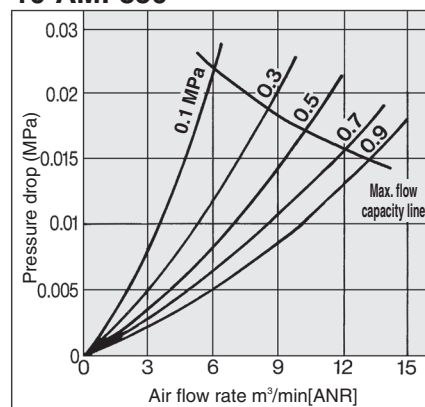
10-AMF150C



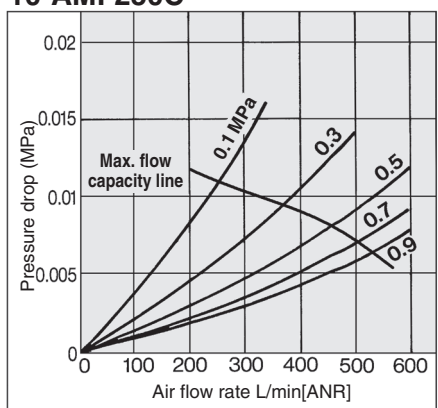
10-AMF450C



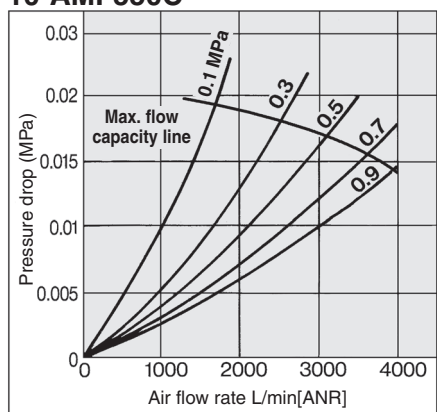
10-AMF850



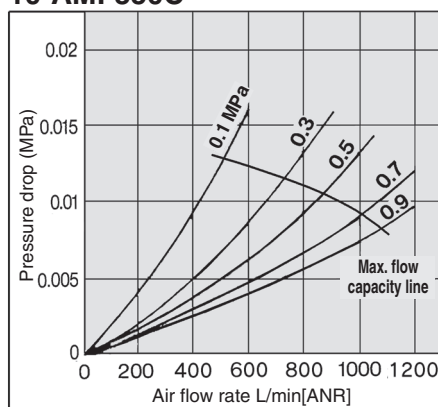
10-AMF250C



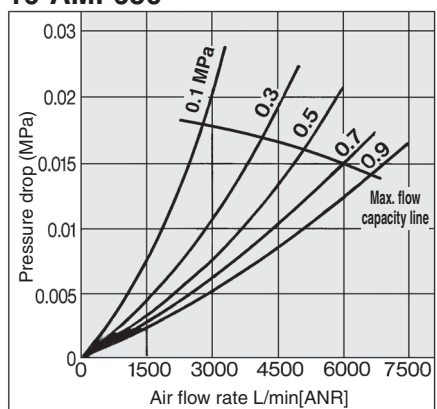
10-AMF550C



10-AMF350C

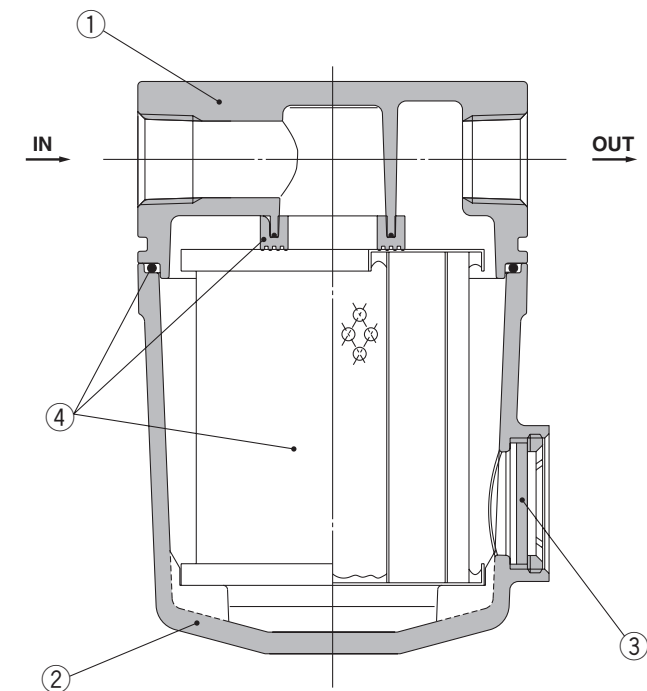


10-AMF650

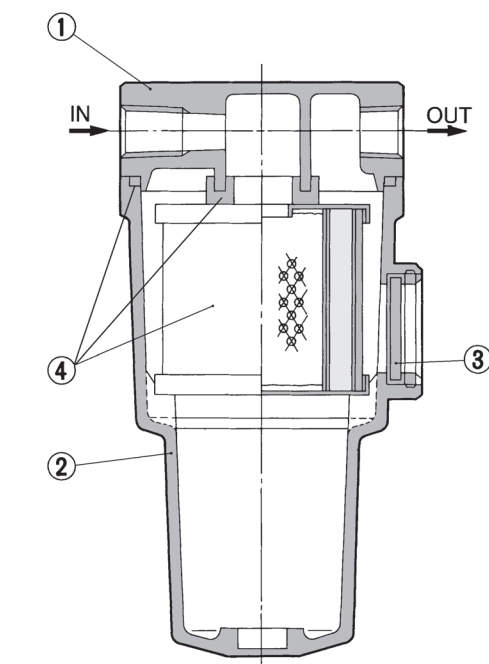


Construction

10-AMF150C to 550C



10-AMF650, 10-AMF850



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 10-AMF850 is aluminum casted.



Note) Refer to “How to Order Bowl Assembly” on page 45.



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 42 to 43 for details.

Replacement Parts

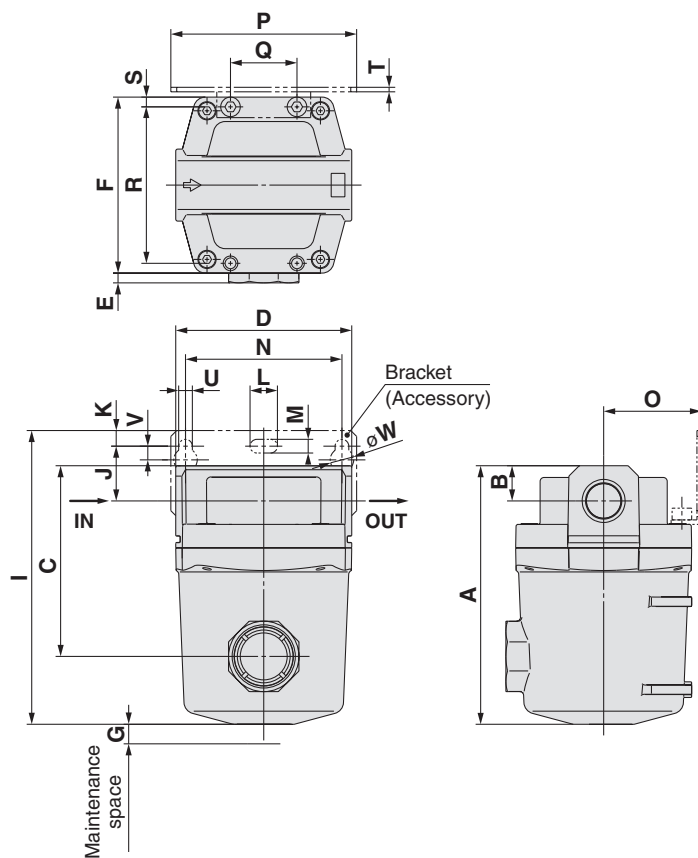
No.	Description	Material	Applicable model	Model						
				10-AMF150C	10-AMF250C	10-AMF350C	10-AMF450C	10-AMF550C	10-AMF650	10-AMF850
4	Element assembly	Glass fiber, others	Except option F	10-AMF-EL150	10-AMF-EL250	10-AMF-EL350	10-AMF-EL450	10-AMF-EL550	10-AMF-EL650	10-AMF-EL850
			For option F	10-AMF-EL150-F	10-AMF-EL250-F	10-AMF-EL350-F	10-AMF-EL450-F	10-AMF-EL550-F	—	—

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

Series 10-AMF

Dimensions

10-AMF150 to 350C

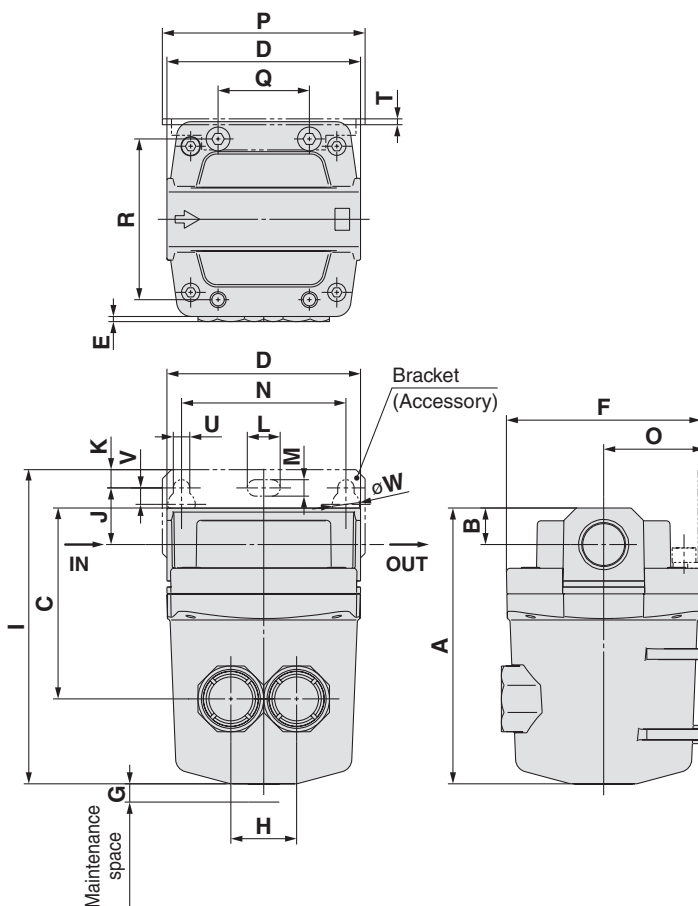


Model	Port size	A	B	C	D	E	F	G
10-AMF150C	1/8, 1/4	83	10	54	63	7.5	63	10
10-AMF250C	1/4, 3/8	103	14	73	76	5	76	10
10-AMF350C	3/8, 1/2	132	18	98	90	5	90	10

Model	Port size	Bracket related dimensions							
		I	N	J	K	U	V	L	M
10-AMF150C	1/8, 1/4	98.5	56	20	5	6	6	12	6
10-AMF250C	1/4, 3/8	121	66	24	8	6	6	12	6
10-AMF350C	3/8, 1/2	150	80	28	8	7	7	14	7

Model	Port size	Bracket related dimensions						
		W	O	P	Q	R	S	T
10-AMF150C	1/8, 1/4	10	35	70	26	54	4.5	1.6
10-AMF250C	1/4, 3/8	10	40	80	28	66	5	2
10-AMF350C	3/8, 1/2	12	50	95	34	80	5	2.3

10-AMF450C/550C



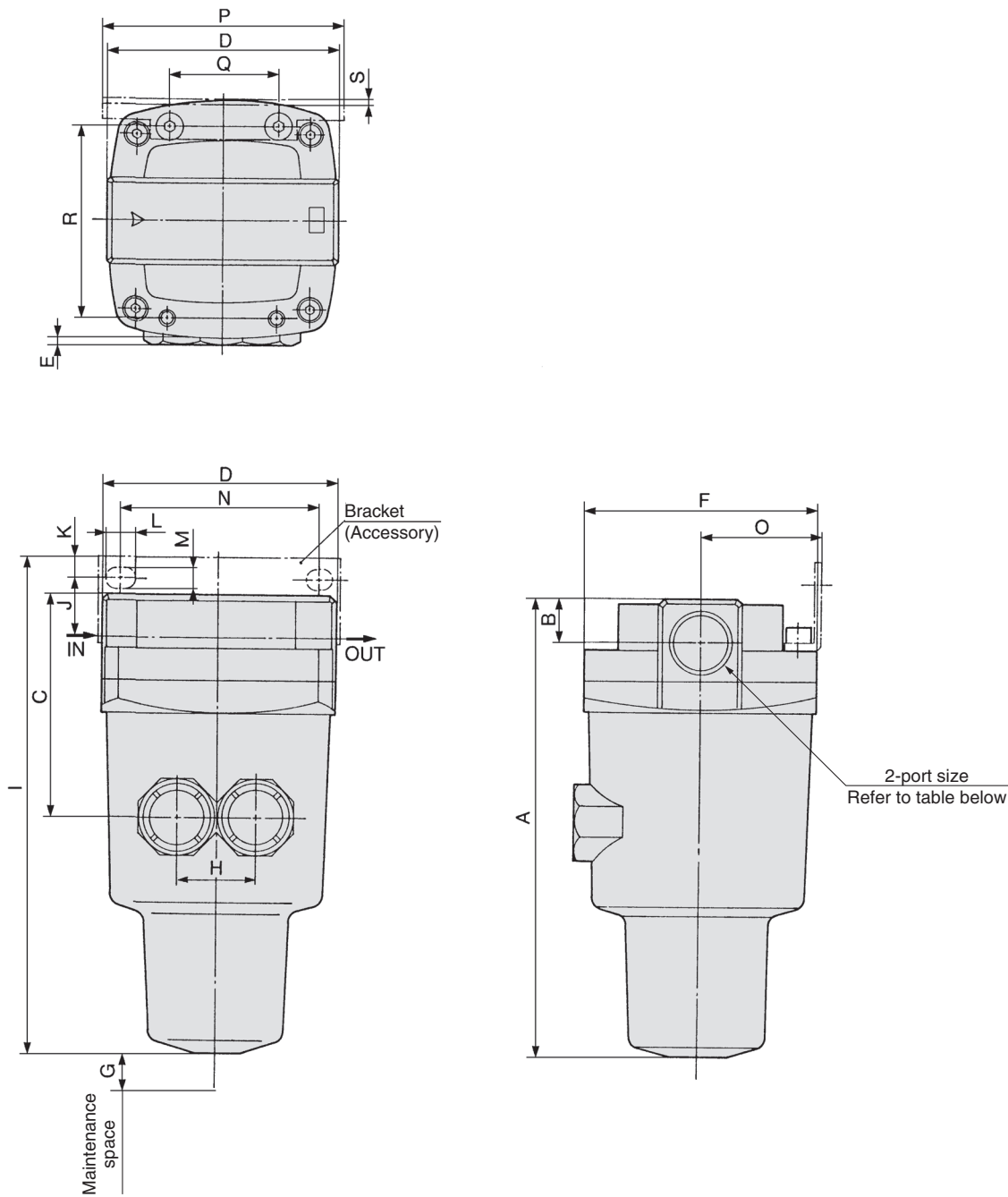
Model	Port size	A	B	C	D	E	F	G	H
10-AMF450C	1/2, 3/4	151	20	105	106	3	106	10	36
10-AMF550C	3/4, 1	187	24	130	122	3	122	15	44

Model	Port size	Bracket related dimensions							
		I	N	J	K	U	V	L	M
10-AMF450C	1/2, 3/4	172	90	31	10	9	9	18	9
10-AMF550C	3/4, 1	206	100	33	10	9	9	18	9

Model	Port size	Bracket related dimensions					
		W	O	P	Q	R	T
10-AMF450C	1/2, 3/4	15	55	111	50	88	3.2
10-AMF550C	3/4, 1	15	65	126	60	102	3.2

Dimensions

10-AMF650/850



[mm]																				
Model	Port size	A	B	C	D	E	F	G	H	Bracket related dimensions										
										I	J	K	L	M	N	O	P	Q	R	S
10-AMF650	1, 1½	291	32	167	160	—	160	10	66	314	40	15	20	11	150	85	180	76	136	4.5
10-AMF850	1½, 2	403	42	235	220	—	220	10	96	406	30	15	24	13	180	120	220	110	184	6

Series 10-AM□/10-AFF□

Spacer for Modular Connection

Select a spacer from those listed below when combining modular type 10-AFF2C to 22C, 10-AM□150C to 550C. The spacer must be ordered separately.

(Note: Spacer with bracket (10-Y200T to Y600T) cannot be used.)

⚠ Caution

Modular connection

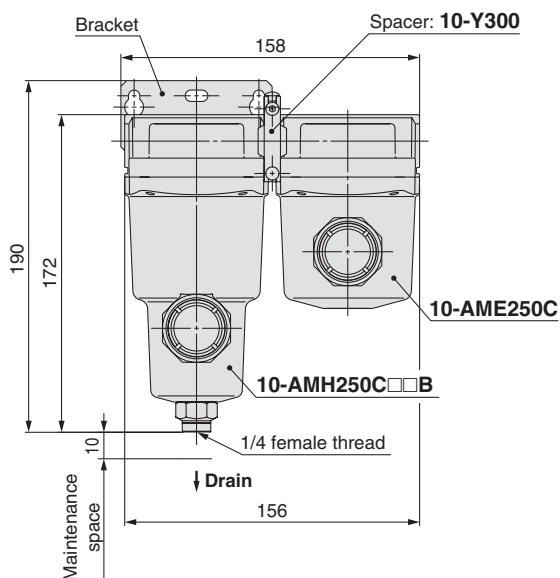
- Mount the attached bracket on one side when connecting 2 sets.
- Mount the attached brackets on both sides when connecting 3 sets or more.
- As a guideline for the number of brackets, one bracket should be mounted for every 2 products.



Combination examples of modular applicable products

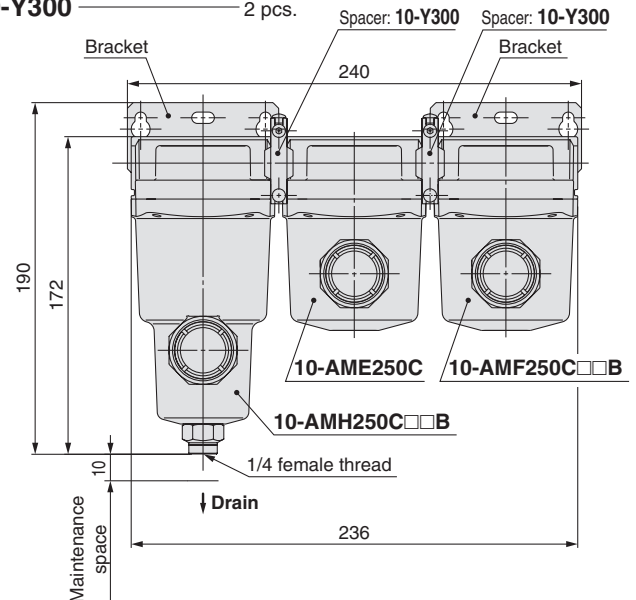
Arrangement example

10-AMH250C-□□B — 1 pc.
10-AME250C — 1 pc.
10-Y300 — 1 pc.

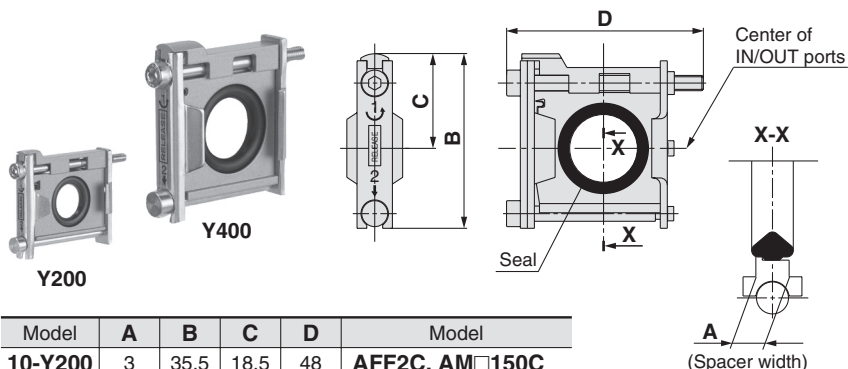


Arrangement example

10-AMH250C-□□B — 1 pc.
10-AME250C — 1 pc.
10-AMF250C-□□B — 1 pc.
10-Y300 — 2 pcs.



Spacer



Model	A	B	C	D	Model
10-Y200	3	35.5	18.5	48	AFF2C, AM□150C
10-Y300	4	47	26	59	AFF4C, AM□250C
10-Y400	5	57	31	65	AFF8C, AM□350C
10-Y500	5	61	33	75	AFF11C, AM□450C
10-Y600	6	75.5	41	86	AFF22C, AM□550C

Replacement Parts

Description	Material	Part no.				
		10-Y200	10-Y300	10-Y400	10-Y500	10-Y600
Seal	HNBR	Y200P-061S	Y300P-060S	Y400P-060S	Y500P-060S	Y600P-060S

Bowl Assembly

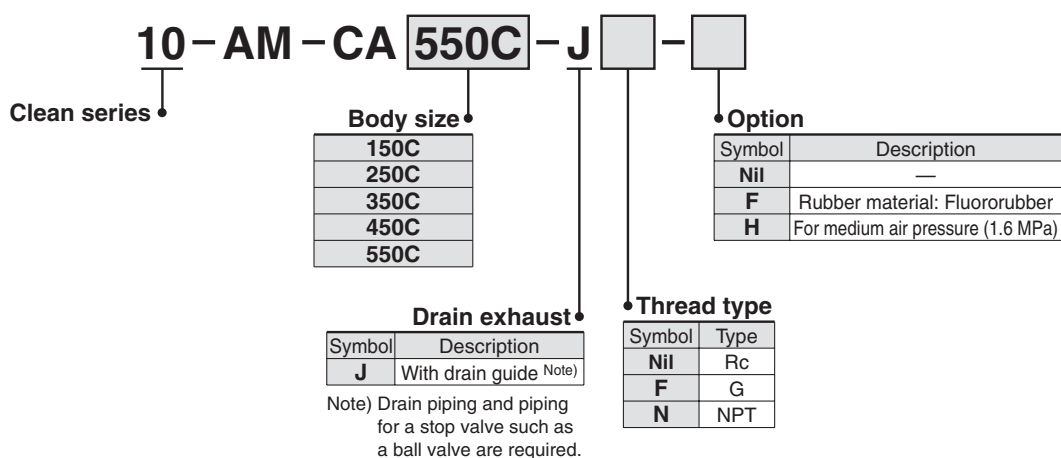
10-AFF-CA□/10-AM□-CA□

Bowl Assembly

Bowl assembly for the AFF and AM □ series can be replaced without removing the main body from piping if the bowl has been damaged.

How to Order Bowl Assembly

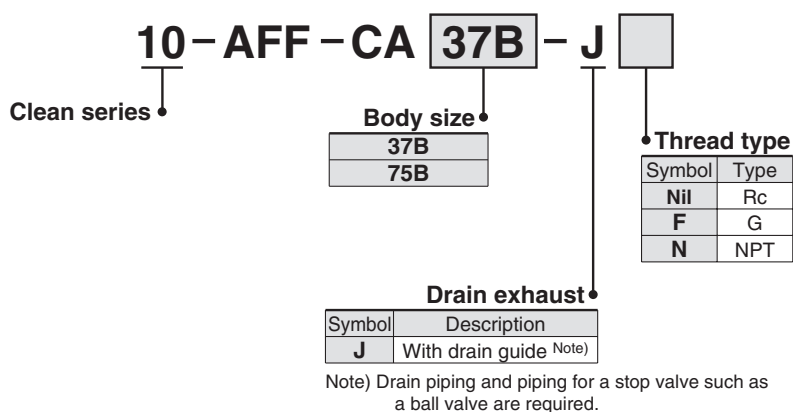
■ 10-AFF2C to 22C, 10-AM, 10-AMD, 10-AMH



Applicable Model

Bowl assembly model	Applicable model
10-AM-CA150C-J	10-AFF2C, 10-AM150C, 10-AMD150C, 10-AMH150C
10-AM-CA250C-J	10-AFF4C, 10-AM250C, 10-AMD250C, 10-AMH250C
10-AM-CA350C-J	10-AFF8C, 10-AM350C, 10-AMD350C, 10-AMH350C
10-AM-CA450C-J	10-AFF11C, 10-AM450C, 10-AMD450C, 10-AMH450C
10-AM-CA550C-J	10-AFF22C, 10-AM550C, 10-AMD550C, 10-AMH550C

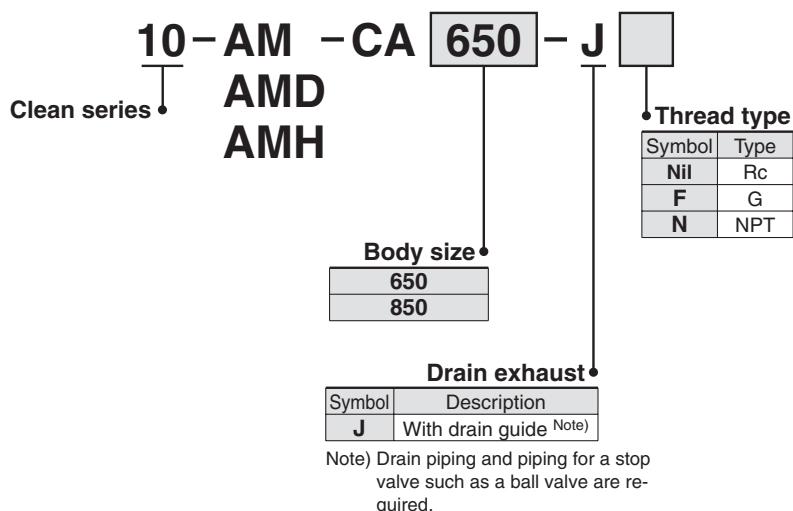
■ 10-AFF37B/75B



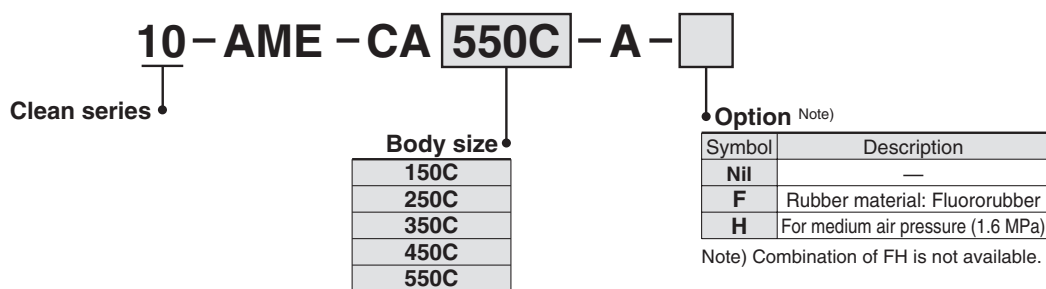
10-AFF-CA□/10-AM□-CA□

How to Order Bowl Assembly

■ 10-AM, 10-AMD, 10-AMH



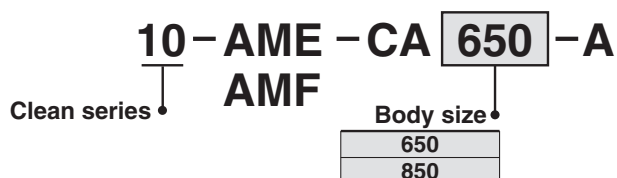
■ 10-AME, 10-AMF150C to 550C



Applicable Model

Bowl assembly model	Applicable model
10-AME-CA150C-A	10-AME150C, 10-AMF150C
10-AME-CA250C-A	10-AME250C, 10-AMF250C
10-AME-CA350C-A	10-AME350C, 10-AMF350C
10-AME-CA450C-A	10-AME450C, 10-AMF450C
10-AME-CA550C-A	10-AME550C, 10-AMF550C

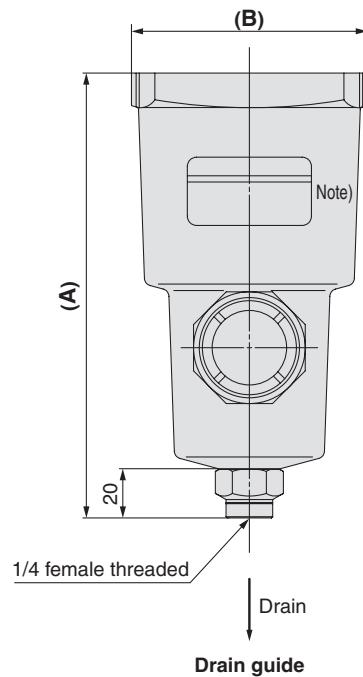
■ 10-AME, 10-AMF650, 850



Bowl Assembly **10-AFF-CA□/10-AM□-CA□**

Dimensions/Series 10-AFF, 10-AM, 10-AMD, 10-AMH

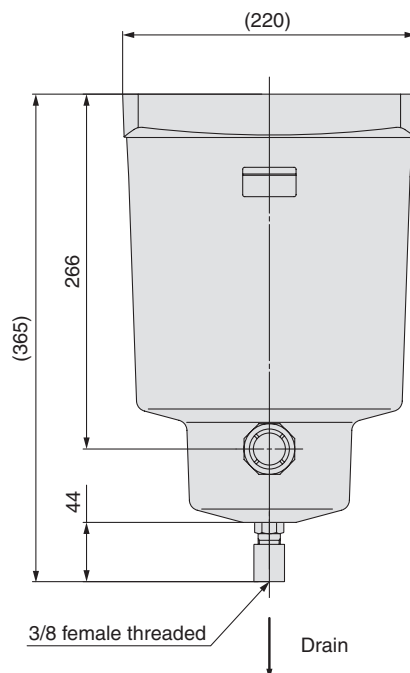
Size: 10-AFF2C to 22C, 10-AFF37B, 10-AM□150C to 550C, 10-AM□650



		(mm)	
Series AFF	Series AM, AMD, AMH	A	B
Size	Size		
2C	150C	137	63
4C	250C	142	76
8C	350C	165	90
11C	450C	181	106
22C	550C	205	122
37B	650	248	160

Note) Model no. labels are not affixed to the AM-CA150C to 550C.

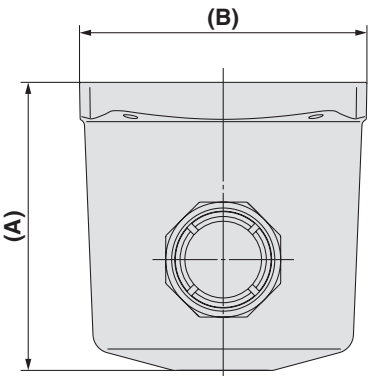
Size: 10-AFF75B, 10-AM□850



10-AFF-CA□/10-AM□ - CA□

Dimensions: Series 10-AME, 10-AMF

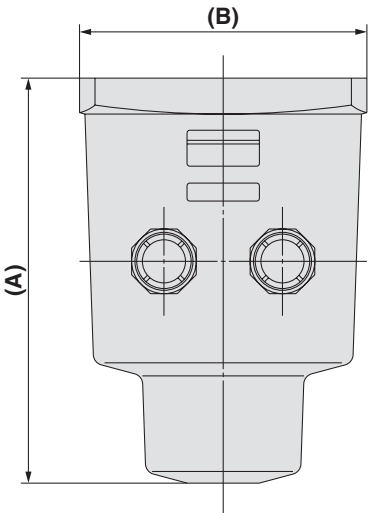
■ 10-AME150C to 550C, 10-AMF150C to 550C



(mm)

Series 10-AME, 10-AMF Size	A	B
150	60	63
250	70	76
350	90	90
450	104	106
550	130	122

■ 10-AME650/850, 10-AMF650/850



(mm)

Series 10-AME, 10-AMF Size	A	B
650	225	160
850	319	120



Series 10-AM□/10-AFF/Specific Product Precautions 1

Be sure to read this before handling.

Refer to “Handling Precautions for SMC Products” (M-E03-3) for Safety Instructions and Air Preparation Equipment Precautions.

Design

⚠ Caution

1. Design the layout so that the mist separator should be installed in an area that is less susceptible to pulsations.

The element could be damaged if a difference between the inlet pressure and the outlet pressure exceeds 0.1 MPa.

2. Be careful of dust generation by the pneumatic equipment mounted on the outlet side.

When installing pneumatic equipment on the outlet side of the 10-AFF series, 10-AM□ series, dust particles may come off from outlet equipment, which will lower the cleanliness of compressed air. Consider this impact upon the cleanliness of compressed air when installing pneumatic equipment on the outlet side.

3. Use the 10-AFF and 10-AM as a pre-filter for the 10-AME and 10-AMF.

(Do not use outlet air of the 10-AFF and 10-AM in a clean room.)

4. Provide a design that prevents back pressure and back flow.

Back pressure or back flow may damage an element.

⚠ Warning

1. Hold the female thread side and tighten to the recommended torque when screwing in the piping material.

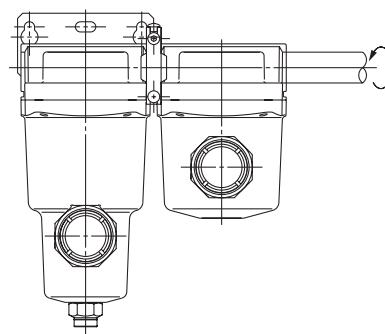
Insufficient tightening torque may cause loosening or defective sealing. Over-tightening torque may damage the thread etc. If it is tightened without holding the female thread side, excessive force will be directly applied to the piping bracket resulting in a product failure.

Recommended Torque

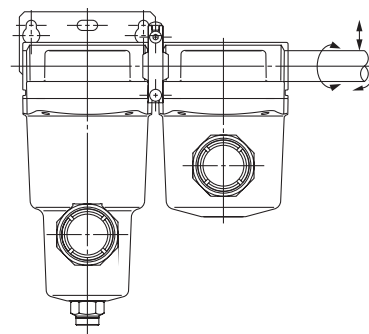
Unit: N·m

Connection thread	1/8	1/4	3/8	1/2	3/4	1	1 1/2	2
Torque	7 to 9	12 to 14	22 to 24	28 to 30	28 to 30	36 to 38	48 to 50	48 to 50

* After tightening manually, tighten additionally by about 1/6 turn with a tightening tool.



2. Do not apply torsional moment or bending moment (except the product's own weight) to the bracket. It may damage the bracket. Support external piping separately.



3. Inflexible piping such as steel piping tends to be affected by spread of excessive moment load or vibration from the piping side. Lay flexible tubing between the steel pipe and the product to prevent such effects.



Series 10-AM□/10-AFF/Specific Product Precautions 2

Be sure to read this before handling.

Refer to “Handling Precautions for SMC Products” (M-E03-3) for Safety Instructions and Air Preparation Equipment Precautions.

Selection

⚠ Caution

1. About the system composition of purifying compressed air

Compressed air generally contains particulate contaminants as listed below, though there are some variations due to the compressor type and specifications. Determine the system configuration according to the desired cleanliness of compressed air and application, while referring to the “Air Preparation Equipment Selection Guide” for the 10-AM□ series (Best Pneumatics No.⑤ P.2, 3).

[Particulate contaminants in compressed air]

- Water (drainage)
- Dust sucked from ambient air
- Degenerated oil from compressor
- Solid foreign matter such as rust inside piping and oil

2. Select according to the maximum flow capacity.

When compressed air is used for air blow, etc., find the maximum air consumption before selecting the size of the 10-AM□ series. (If compressed air exceeding the maximum flow capacity is supplied, it can result in decline of the cleanliness of compressed air or discharge of oil mist to outlet side.)

Mounting

⚠ Caution

1. About the mounting orientation of the products

Make sure to install this product on horizontal piping. If it is installed diagonally, laterally, or upside down, the drain separated by the element will splash to the outlet side.

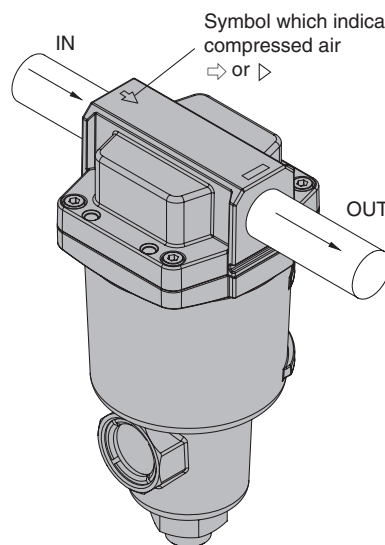
Piping

⚠ Caution

1. Connect it with IN and OUT ports in proper location. It does not work with the connection reversed.

In the case of the 10-AFF2C to 22C, 37B, 75B, 10-AM□150C to 550C, 650, 850

Verify the direction of the flow of the compressed air and the “⇨” or “▷” mark that indicates the inlet of the product before connecting. It cannot be used if connected in the opposite direction.



2. Use an air blower to flush the piping before connecting the piping.

Use an air blower to thoroughly flush the piping, or wash the piping to remove any cutting chips, cutting oil, or debris from inside the piping before connecting them.

3. Wrapping of sealant tape

When screwing in the pipes or fittings, make sure to prevent cutting chips or the sealant material on the threaded portion of the pipe from entering the piping. If sealant tape is to be used, leave about 1.5 to 2 ridges of threads uncovered.

4. Modular connection

Mount the attached bracket on one side when connecting 2 sets. Mount the attached brackets on both sides when connecting 3 sets or more. As a guideline for the number of brackets, one bracket should be mounted for every 2 products.



Series 10-AM□/10-AFF/Specific Product Precautions 3

Be sure to read this before handling.

Refer to “Handling Precautions for SMC Products” (M-E03-3) for Safety Instructions and Air Preparation Equipment Precautions.

Air Supply

⚠ Caution

1. **The mist separator is not applicable to gases other than compressed air.**

The mist separator is not applicable to gases other than compressed air (example: oxygen, hydrogen, flammable gas, mixed gas).

2. **Do not use compressed air that contains chemicals, organic solvents, salt, or corrosive gases.**

Do not use compressed gas containing chemicals, organic solvents, salt or corrosive gas. This can cause rust, damage to rubber and resin parts, or malfunction.

3. **Operate within the specified operating pressure range.**

Damage, failure, or malfunction may occur if the mist separator is operated above the maximum operating pressure.

If the mist separator is used below the minimum operating pressure, increase in the air-flow resistance due to clogging will have such influence that the desired flow rate cannot be obtained.

If the mist separator is used under a low pressure such as for a blower, conduct sufficient tests by users to confirm the specifications and performances.

Operating Environment

⚠ Caution

1. **Do not use in the following environments, as this can cause failure.**

- 1) In locations having corrosive gases, organic solvents, and chemical solutions, or in locations where these elements are likely to adhere to the equipment.
- 2) In locations where salt water, water, or water vapor could come in contact with the equipment.
- 3) In locations that is exposed to shocks and vibrations.

2. **Be careful about the contamination of the workpieces due to entrainment of the ambient air.**

If compressed air is used for air blow, compressed air blowing out from the blow nozzle may entrain foreign matter (solid particles and liquid particles) floating in the ambient air, blowing it against the workpieces and causing adhesion. Therefore, sufficient precautions must be taken about the ambient environment.

Maintenance

⚠ Caution

1. **Replace the element immediately when the time for its replacement has arrived.**

To replace the element, replace the O-ring and the gasket, too. For the replacement procedure, refer to the operating manual.

<Element replacement>

- a. In the case of the 10-AFF2C to 22C, 37B, 75B, 10-AM□150C to 550C, 650, 850

The replacement interval for the element is when the pressure drop reaches 0.1 MPa or after two years of operation, whichever comes first. [A pressure drop can be verified with the element service indicator (-T)]

- b. In the case of the 10-AME

Regardless of the time for its replacement indicated in “a” above, replace the element when a red color spot occurred on the surface.

- c. In the case of the 10-AMF

Regardless of the time for its replacement indicated in “a” or “b”, replace the element when you smell oil on the outlet side.

2. **Be sure to exhaust the drain accumulated in the filter container.**

Failure to discharge the drain will allow the accumulated drain to flow over to the outlet side.

Drain guide or ball valve, discharge the drain before the drainage level reaches the center of the sight glass. If the drain is not discharged properly, it will flow over to the outlet side.

