



Main Line Filter

Series AFF

Series AFF is mounted to main piping to remove impurities like oil, water and foreign matter in compressed air. It improves the function of downward dryer, extends the life of precision filter, and prevents trouble with the equipment.



AFF□B

AFF□A

JIS Symbol



P. 14-20-55

Caution

Be sure to read before handling. Refer to pages 14-21-3 to 4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, pages 14-14-6 to 8 for Precautions on every series, and pages 14-20-62 to 64 for more detailed precautions on every series.

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
Filtration degree	3 μm (95% particle size collection)
Element life	2 years (1 year for A type) or when pressure drop reaches 0.1 MPa

* 0.1 MPa (N.O. type) or 0.15 MPa (N.C. type) in the case of types with auto-drain.



Refer to "Made to Order Specifications" on pages 14-20-55 to 14-20-57.

Accessory (Option)/For AFF2B to AFF75B

Applicable model	AFF2B	AFF4B	AFF8B	AFF11B	AFF22B	AFF37B	AFF75B
Bracket assembly (With cap bolt and spring washer)	BM51	BM52	BM53	BM54	BM55	BM56	BM57

Accessory (Option)/For AFF75A to AFF220A

Applicable model	AFF75A	AFF125A	AFF150A	AFF220A
Auto drain (2 pcs. each)	AD402-03-2			
Pressure gauge (2 pcs. each)	G46-15-02			
Companion flange (2 pcs. each)	2 ^B JIS 10 ^K FF	3 ^B JIS 10 ^K FF	4 ^B JIS 10 ^K FF	
Anchor bolt (3 pcs. each)	AI-2S			

Model

Model	AFF2B	AFF4B	AFF8B	AFF11B	AFF22B	AFF37B	AFF75B	AFF75A	AFF125A	AFF150A	AFF220A
Rated flow ^{Note)} (l/min (ANR))	300	750	1500	2200	3500	6000	12000	12000	22000	28000	42000
Port size (Nominal size B)	1/8, 1/4, 3/8	1/4, 3/8, 1/2	3/8, 1/2, 3/4	1/2, 3/4, 1	3/4, 1	1, 1 1/2	1 1/2, 2	2 ^B flange	3 ^B flange	4 ^B flange	4 ^B flange
Weight (kg)	0.38	0.55	0.9	1.4	2.1	4.2	10.5	50	52	72	87



Note) Max. flow is at 0.7 MPa. Max. flow varies depending on operating pressure. Refer to page 14-20-11 for flow characteristics and the graph below for max. air flow.

Model Selection

Select the model in accordance with the following procedure taking the inlet pressure and max. air flow into consideration.

(Example) Inlet pressure: 0.6 MPa

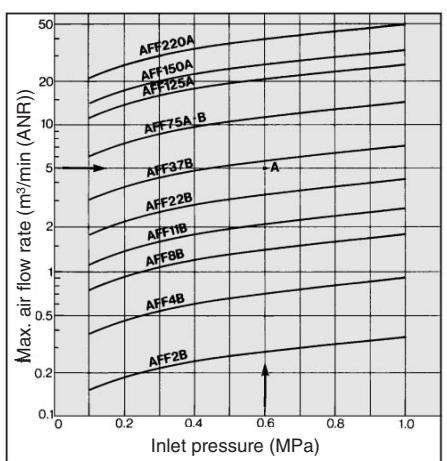
Max. air flow capacity: 5 m³/min (ANR)

- Select the point of contact A of inlet pressure and max. air capacity in the graph.
- To select one with the maximum air flow rate line that is located above the obtained intersecting point A, the model will be AFF37B.



Note) Make sure to select a model that has the maximum flow rate line above the obtained intersecting point. With a model that has the maximum flow rate 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. Air Flow



HA□

AT

ID□

AMG

AFF

AM□

Misc.

Series AFF

How to Order

AFF2B to AFF75B

AFF 8B — **03** **B** — **J**

Body size

2B	1/8 Standard
4B	1/4 Standard
8B	3/8 Standard
11B	1/2 Standard
22B	3/4 Standard
37B	1 Standard
75B	1 1/2 Standard

Thread type

Nil	Rc
F	G
N	NPT

Port size

01	1/8 ^B	06	3/4 ^B
02	1/4 ^B	10	1 ^B
03	3/8 ^B	14	1 1/2 ^B
04	1/2 ^B	20	2 ^B

Accessory (Option) *

Symbol	Description
Nil	—
B	Bracket
C	N.C. auto-drain
D	N.O. auto-drain

Option *

J	Drain guide 1/4 ^B female thread
R	IN-OUT reversal direction
T	Element service indicator

* Refer to the table below for accessory/option combinations.

Note) Refer to page 14-20-59 for "How to Order Bowl Assembly".

Accessory/Option Combinations ○ Available ■ Not available ○ Depends on model

Accessory (Option)	Accessory	Optional specification			Applicable model									
		C	D	J	R	T	AFF2B	AFF4B	AFF8B	AFF11B	AFF22B	AFF37B	AFF75B	
Accessory	N.C. auto-drain	C	■	■	○	○	○	○	○	○	○	○	○	○
	N.O. auto-drain	D	■	■	○	○	○	○	○	○	○	○	○	○
Option	Drain guide 1/4 B	-J	○	○	○	○	○	○	○	○	○	○	○	○
	IN-OUT reversal direction	-R	○	○	○	○	○	○	○	○	○	○	○	○
Element service indicator	-T	○	○	○	○	○	○	○	○	○	○	○	○	○

AFF75A to AFF220A

AFF 75A — **20** **D**

Basic size
(Applicable compressor rating)

75A	75 kW
125A	110 to 125 kW
150A	150 kW
220A	180 to 220 kW

Accessory (Option)

D	Auto-drain
G	Pressure gauge
F	Companion flange
L	Anchor bolt

Port size

20	2 ^B JIS 10k flange
30	3 ^B JIS 10k flange
40	4 ^B JIS 10k flange

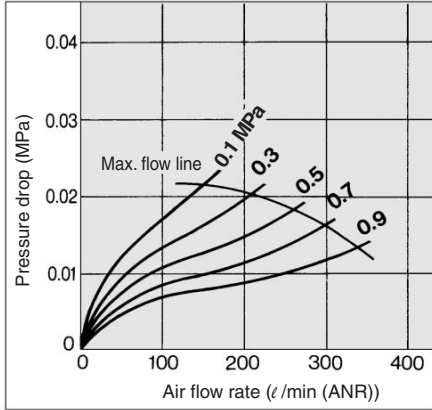
Main Line Filter Series AFF

Flow Characteristics/Select the model taking the max. flow capacity into consideration. _____ **Element oil saturation**

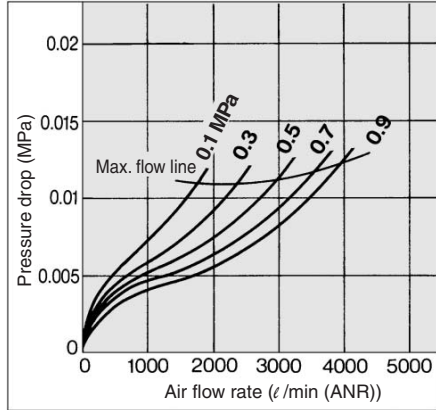


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product. It may cause damage to the element.

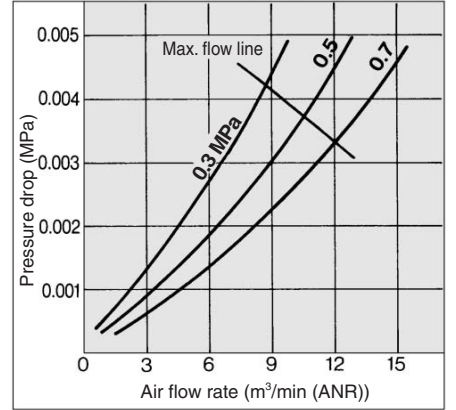
AFF2B 1/8B



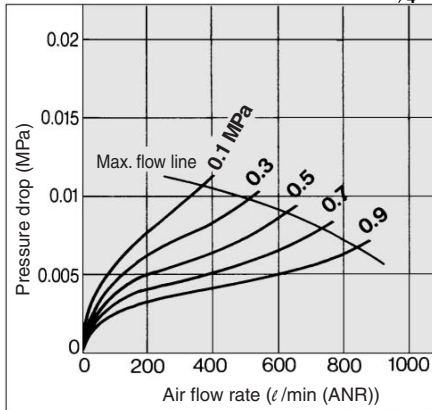
AFF22B 3/4B



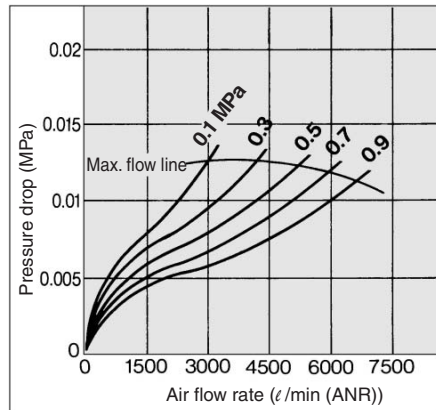
AFF75A 2B



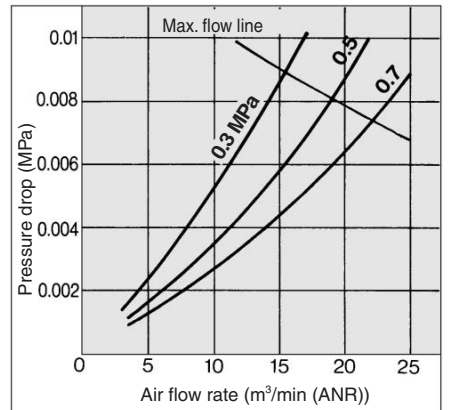
AFF4B 1/4B



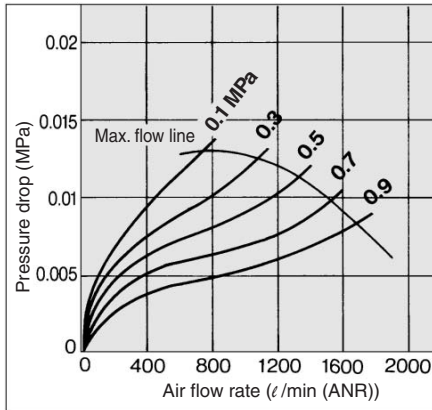
AFF37B 1B



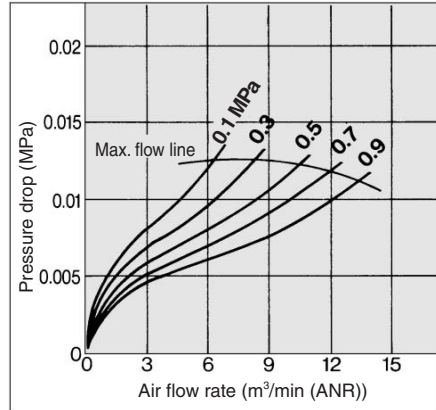
AFF125A 3B



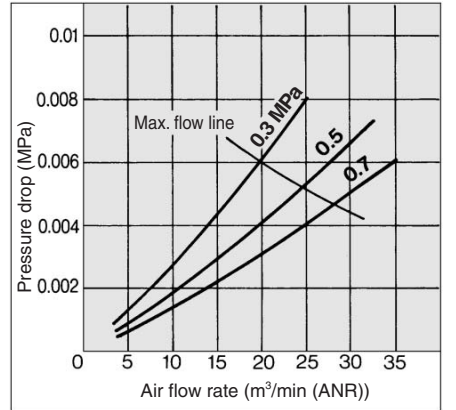
AFF8B 3/8B



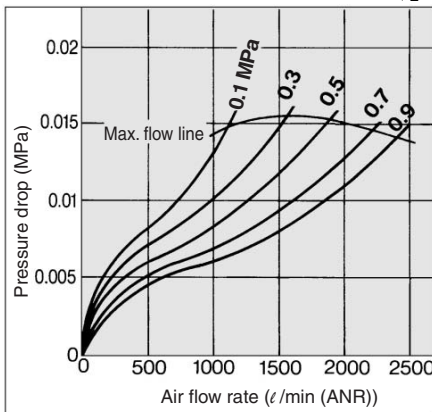
AFF75B 1 1/2B



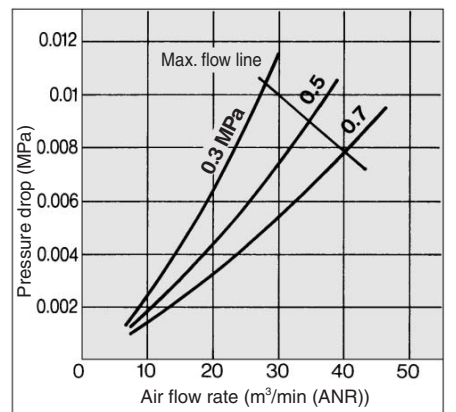
AFF150A 4B



AFF11B 1/2B



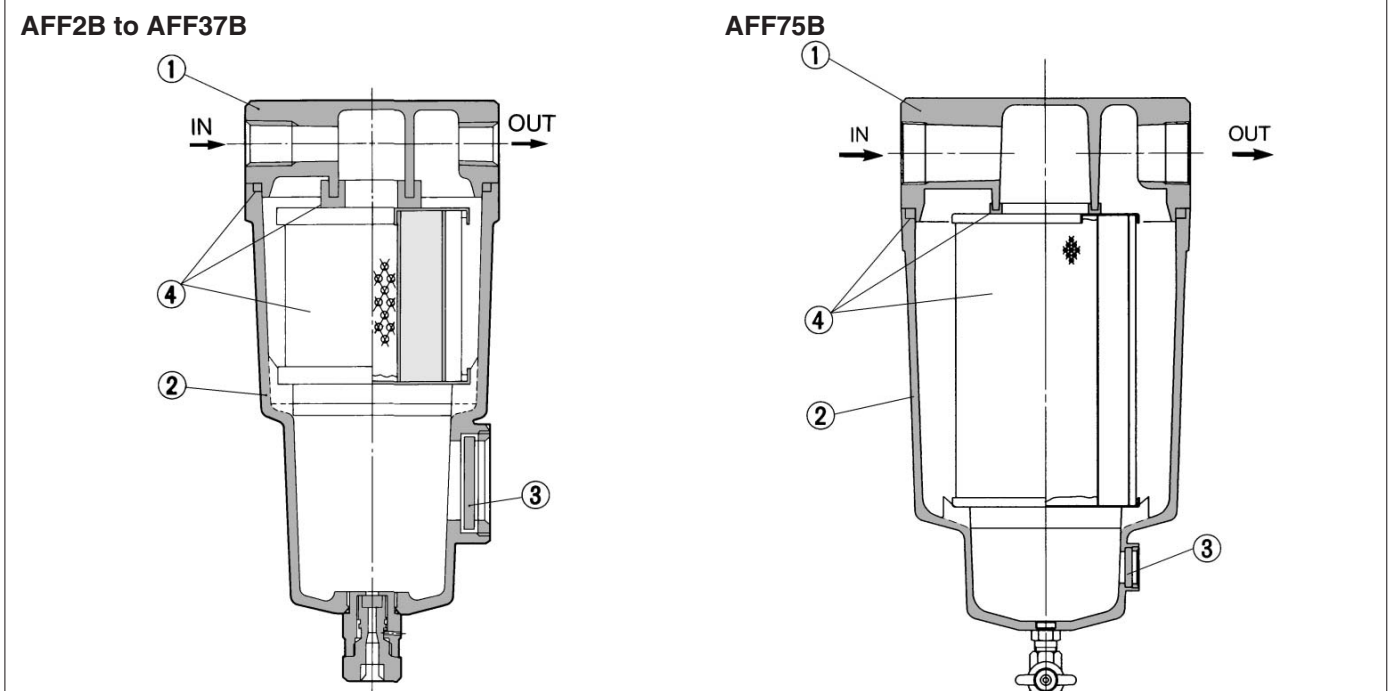
AFF220A 4B



- HA
- AT
- ID
- AMG
- AFF**
- AM
- Misc.

Series AFF

Construction



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	

* AFF75B is aluminum casted.



Note) Refer to page 14-20-59 for "How to Order Bowl Assembly".

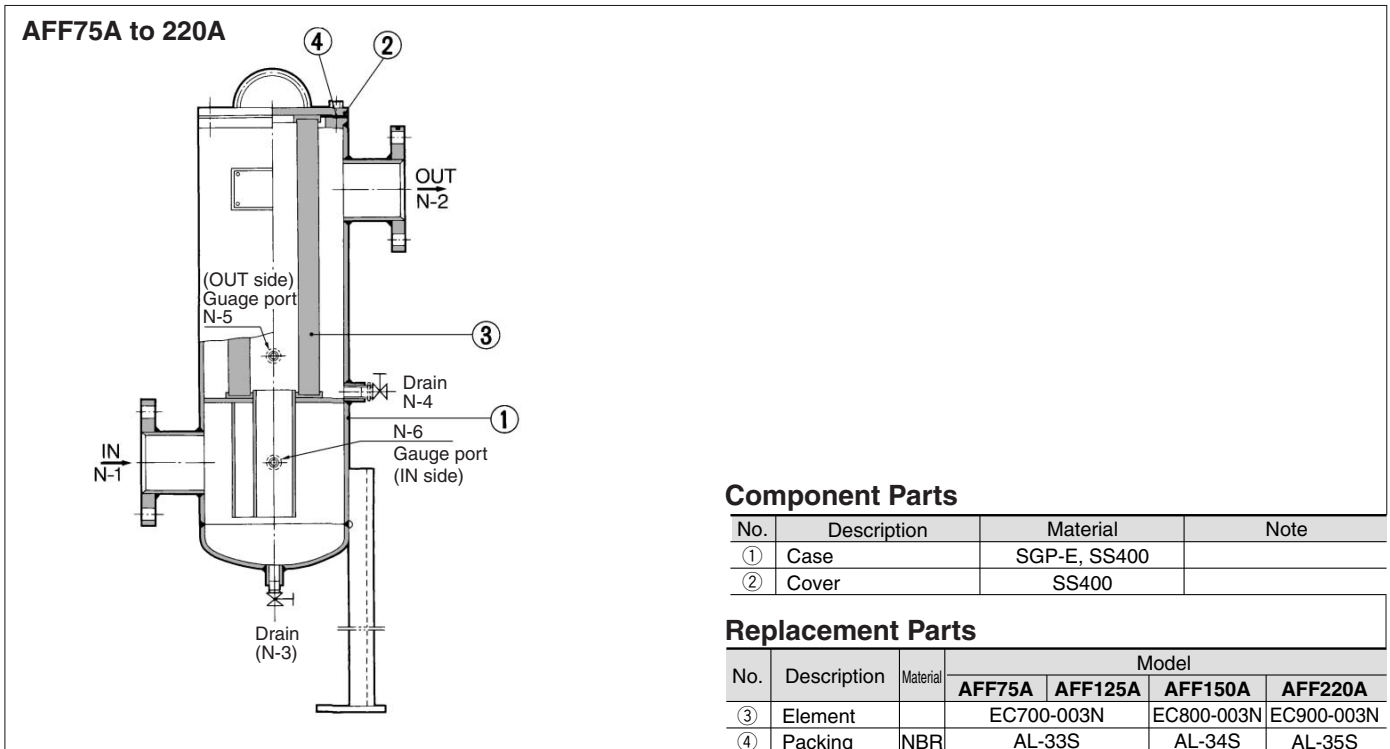


Note: Sight glass is indicated in the figure above for easy understanding of parts, however mounting position is different. Please refer to pages 14-20-13 to 14-20-14 for details.

Replacement Parts

No.	Description	Material	Model						
			AFF2B	AFF4B	AFF8B	AFF11B	AFF22B	AFF37B	AFF75B
④	Element assembly	Cotton paper, Others	AFF-EL2B	AFF-EL4B	AFF-EL8B	AFF-EL11B	AFF-EL22B	AFF-EL37B	AFF-EL75B

* Element assembly: With gasket and O-ring



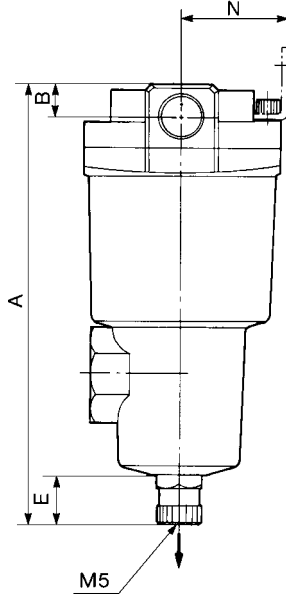
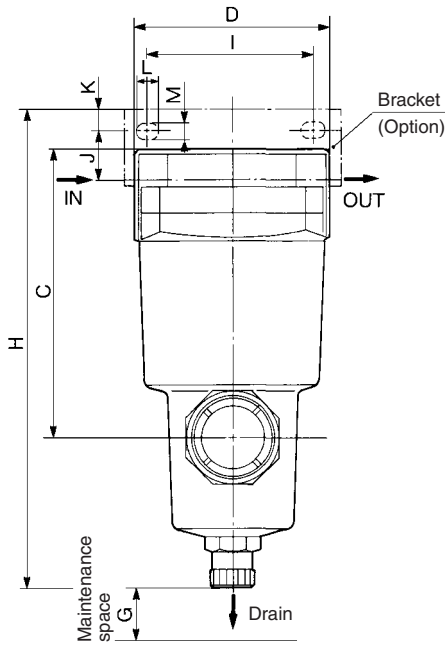
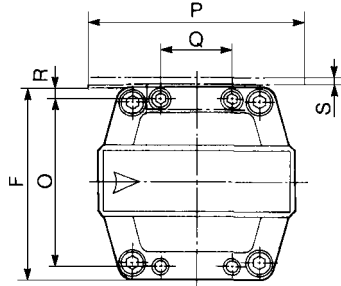
Component Parts

No.	Description	Material	Note
①	Case	SGP-E, SS400	
②	Cover	SS400	

Replacement Parts

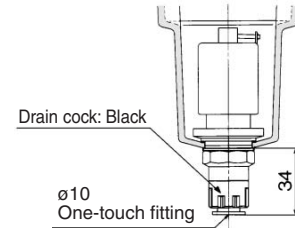
No.	Description	Material	Model		
			AFF75A	AFF125A	AFF150A
③	Element		EC700-003N	EC800-003N	EC900-003N
④	Packing	NBR	AL-33S	AL-34S	AL-35S

AFF2B to AFF37B Dimensions

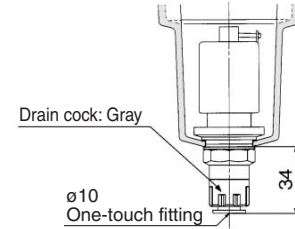


Accessory

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



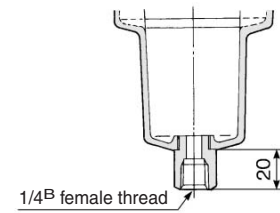
C: With auto-drain (N.C.)



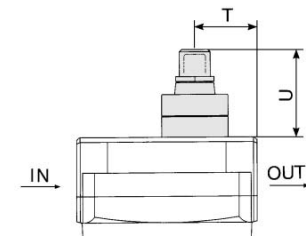
* N.C. auto-drain not available for AFF37B.

Option

J: With drain guide



T: With element service indicator

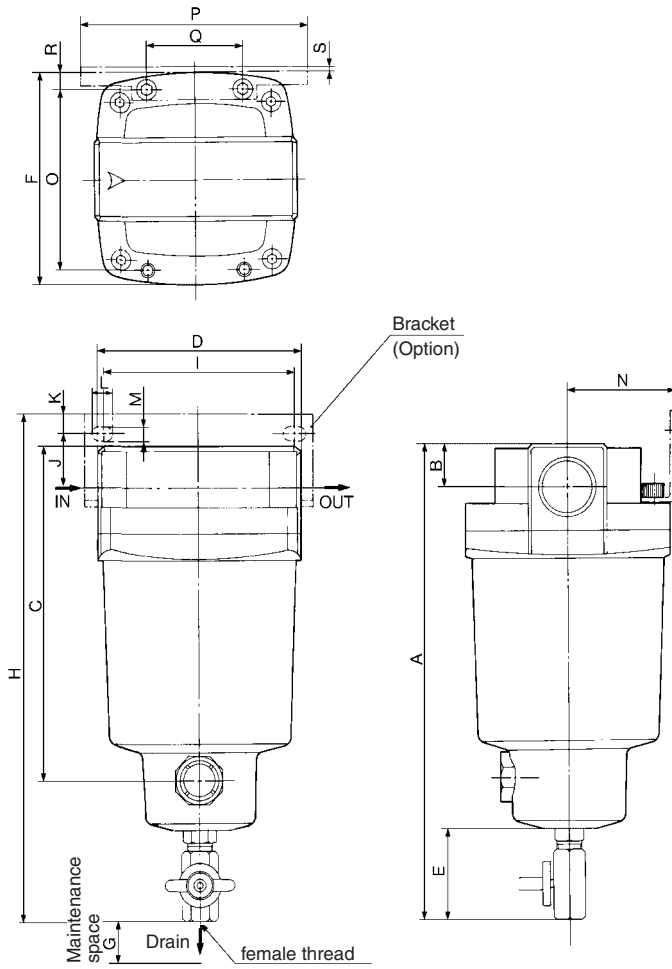


Model	Port size (Nominal size B)	A	B	C	D	E	F	G	Dimensions with mounting bracket											Element service indicator		
									H	I	J	K	L	M	N	O	P	Q	R	S	T	U
AFF2B	1/8, 1/4, 3/8	159	13	100	63	20	63	10	166	56	15	5	9	5.5	35	54	70	26	4.5	1.6	24	37
	1/4, 3/8	172	13	113	76	20	76	10	187	66	20	8	12	6	40	66	84	28	5	2.0	27	37
AFF4B	1/2	178	16	119	76	20	76	10	187	66	17	8	12	6	40	66	84	28	5	2.0	27	37
	3/8, 1/2	204	16	145	90	20	90	10	218	80	22	8	14	7	50	80	100	34	5	2.3	32	37
AFF8B	3/4	210	19	151	90	20	90	10	218	80	19	8	14	7	50	80	100	34	5	2.3	32	37
	1/2, 3/4	225	19	166	106	20	106	10	241	90	25	10	14	9	55	88	110	50	9	3.2	37	37
AFF11B	1	232	22	173	106	20	106	10	241	90	21	10	14	9	55	88	110	50	9	3.2	37	37
	3/4, 1	259	22	200	122	20	122	10	277	100	30	10	16	9	65	102	130	60	10	4.5	39	37
AFF22B	3/4, 1	259	22	200	122	20	122	10	277	100	30	10	16	9	65	102	130	60	10	4.5	39	37
AFF37B	1, 1 1/2	311	32	253	160	20	160	10	334	150	40	15	20	11	85	136	180	76	12	4.5	55	37

- HA
- AT
- ID
- AMG
- AFF
- AM
- Misc.

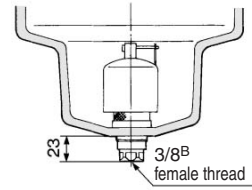
Series AFF

AFF75B Dimensions



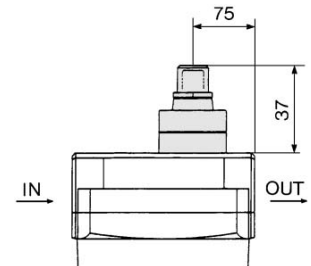
Accessory

D: With auto-drain (N.O.) for AFF75B



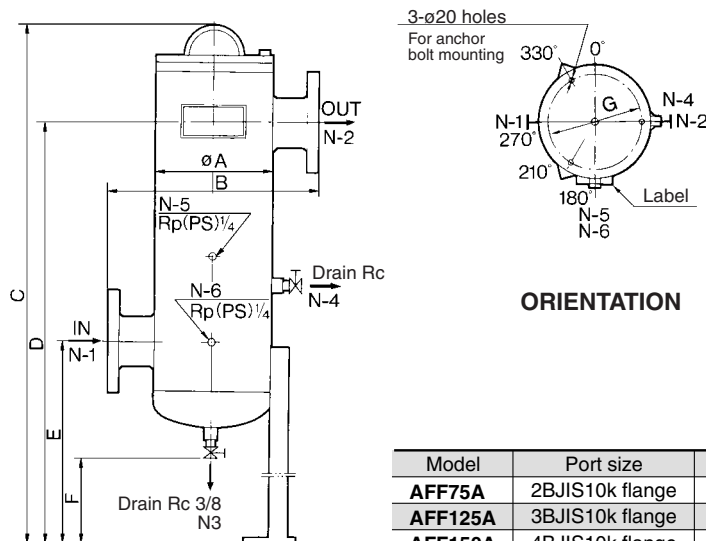
Option

T: With element service indicator



Model	Port size (Nominal size B)	A	B	C	D	E	F	G	Dimensions with mounting bracket											
									H	I	J	K	L	M	N	O	P	Q	R	S
AFF75B	1½, 2	460.5	42	348	220	57.5	220	10	463.5	180	30	15	24	13	120	184	220	110	18	6.0

AFF75A to AFF220A/Dimensions



Model	Port size	øA	B	C	D	E	F	G
AFF75A	2BJIS10k flange	8 ^B	380	1125	935	505	265	184
AFF125A	3BJIS10k flange	8 ^B	380	1125	935	505	265	184
AFF150A	4BJIS10k flange	10 ^B	450	1178	980	540	265	236
AFF220A	4BJIS10k flange	12 ^B	500	1291	1070	670	325	282