



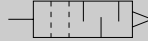
Exhaust cleaner

# FA Series

Reducing exhaust noise and removing oil mist.

Port size: Rc3/8 to Rc2

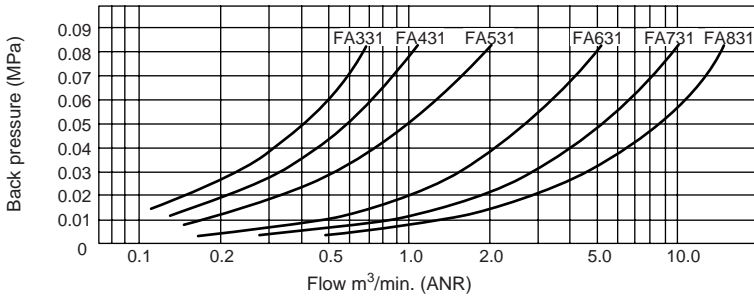
JIS symbol



## Specifications

Descriptions	FA331-10A	FA431-15A	FA531-20A	FA631-25A	FA731-40A	FA831-50A
Port size Rc	3/8	1/2	3/4	1	1 1/2	2
Effective sectional area mm <sup>2</sup>	16	33	55	165	330	550
Maximum flow rate m <sup>3</sup> /min. (ANR)	0.3	0.6	1	3	6	10
Fluid temperature	5 to 65°C (no freezing)					
Ambient temperature	0 to 65°C (no freezing)					
Damping effect	35dB and over (for maximum flow rate in oil saturated state)					
Oil mist collection ratio	99.9% and over					
Oil capacity cm <sup>3</sup>	80	130	150	250	350	550
Product weight kg	0.2	0.3	0.4	0.6	1.1	1.5
Bracket No. (option)	B351-10A	B451-15A	B551-20A	B651-25A	-	-

## Flow characteristics

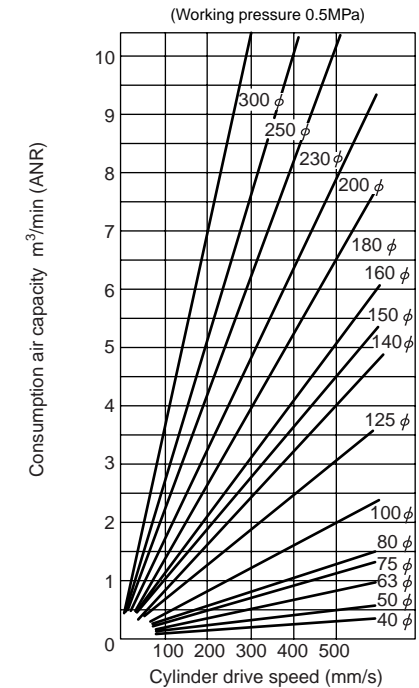


## Selection guide

For exhaust cleaner, select a model depending on air consumption in the used circuit.

- (1) Calculate air consumption of the used actuator.
- (2) Multiply the air consumption calculated by 1.4.
- (3) Select a model whose treating flow rate exceeds air consumption multiplied by 1.4.

The following diagram shows air consumption multiplied by 1.4 per air cylinder size. Use this diagram to select a model.



## How to order



**A** Series code

**B** Port size  
Note 1

**C** Option  
Note 2

Symbol	Descriptions
<b>A Series code</b>	
3	Compact
4	Standard
5	Large
6	Large
7	Large bore size
8	Large bore size
<b>B Port size</b>	
	Series 3 4 5 6 7 8
10A	Rc3/8 ●
15A	Rc1/2 ●
20A	Rc3/4 ●
25A	Rc1 ●
40A	Rc1 1/2 ●
50A	Rc2 ●
<b>C Option</b>	
Blank	Not attached ● ● ● ● ● ●
B	Bracket ● ● ● ● ● ●

### ⚠ Note on model no. selection

Note 1: If NPT port is required, do not indicate nominal size A. (example) FA431-15

Note 2: FA731, FA831 have no bracket option.

Refrigerating type dryer  
Desiccant type dryer  
High polymer membrane dryer  
Air filter  
Auto. drain / others  
F.R.L. (Module unit)  
F.R.L. (Separate)  
Compact F.R.  
Precise regulator  
F.R.L. (Related products)  
Clean F.R.  
Electro pneumatic regulator  
Air booster

Speed control valve

Silencer

Check valve / others

Joint / tube

Vacuum filter

Vacuum regulator

Suction plate

Magnetic spring buffer

Mechanical pressure SW

Electronic pressure SW

Contact / close contact cont. SW

Air sensor

Pressure SW for coolant

Small flow sensor

Small flow controller

Flow sensor for air

Flow sensor for water

Total air system

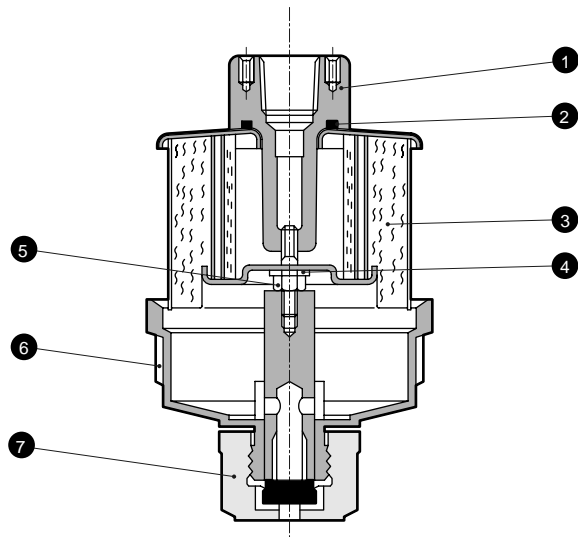
Total air system (Gamma)

Ending

Exhaust cleaner

Main line unit

## Internal structure and parts list



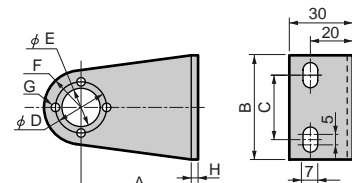
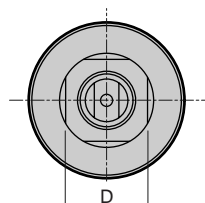
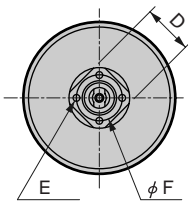
No.	Part name	Material					
		FA331	FA431	FA531	FA631	FA731	FA831
1	Adaptor assembly	Aluminum alloy die-casting, steel		Aluminum alloy casting, steel			
2	O ring	Nitrile rubber					
3	Element assembly	Aluminum alloy, steel, glass fiber					
4	Gasket	Polyacetal resin					
5	Nut	Steel					
6	Case assembly	Polycarbonate resin, aluminum alloy					
7	Drain cock assembly	Nitrile rubber, polyamide resin					

## Dimensions

● FA331 to FA631

● FA731 to FA831

● Bracket (option)



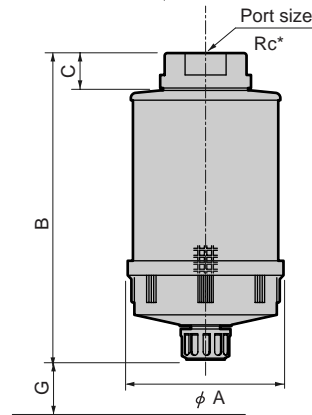
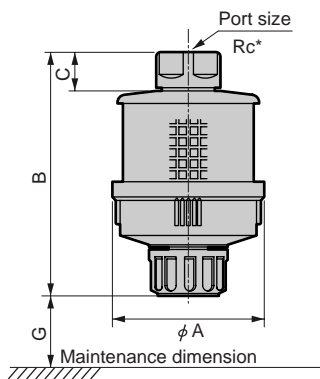
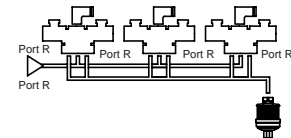
Note) 4 set screws for main body mounting are attached.

Model no.	A	B	C	D	E	F	G	H
B351-10A	55	50	30	24	φ18	R16.5	4-φ3.5	2.3t
B451-15A	60	60	40	32	φ23	R20	4-φ4.5	2.3t
B551-20A	70	70	40	40	φ29	R25.4	4-φ4.5	3.2t
B651-25A	80	70	40	48	φ37	R27.5	4-φ4.5	3.2t

### Set piping method

When many valves used in a place, common piping method is recommended.

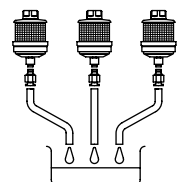
- Easy maintenance control
- Low cost



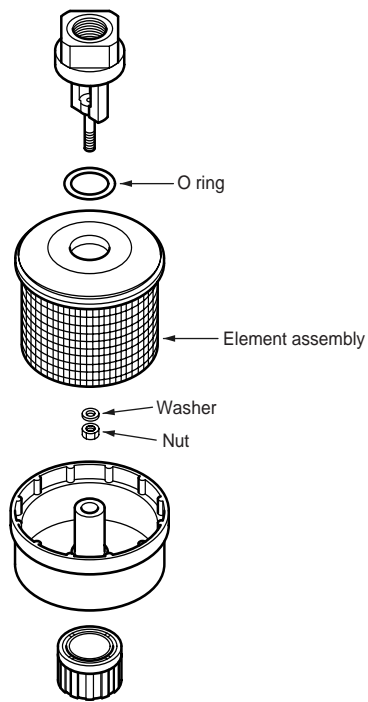
Model no.	FA331	FA431	FA531	FA631	FA731	FA831
A	80	90	100	112	132	150
B	129	147	171	195	259	312
C	20	23	25	28	32	36
D	27	32	41	46	70	80
E	4-M3 (depth 7)	4-M4 (depth 8)	4-M4 (depth 8)	4-M4 (depth 10)	-	-
F	24	32	40	48	-	-
G	80	100	100	100	200	250
Port size	Rc3/8	Rc1/2	Rc3/4	Rc1	Rc1 1/2	Rc2

## Precautions

- Oil remaining in the case must be discharged with opening the drain cock before the oil reaching the element.
- To connect a drain tube to the case, follow the following steps.
  - Remove the drain cock.
  - Screw half unions with R1/8 male screw into the resin tube to connect.
  - When piping, hold the adaptor assembly and screw in so that a load is not applied on the case.
  - If back pressure raises 0.1MPa and over, replace the element assembly.



### Exhaust cleaner optional parts drawing



#### Element kit

(Set of element assembly, O ring, washer, nut)

Model	Element kit model no.
FA331-10A	FA331-ELEMENT
FA431-15A	FA431-ELEMENT
FA531-20A	FA531-ELEMENT
FA631-25A	FA631-ELEMENT
FA731-40A	FA731-ELEMENT
FA831-50A	FA831-ELEMENT

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact conf. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)

Ending

Exhaust cleaner  
Main line unit