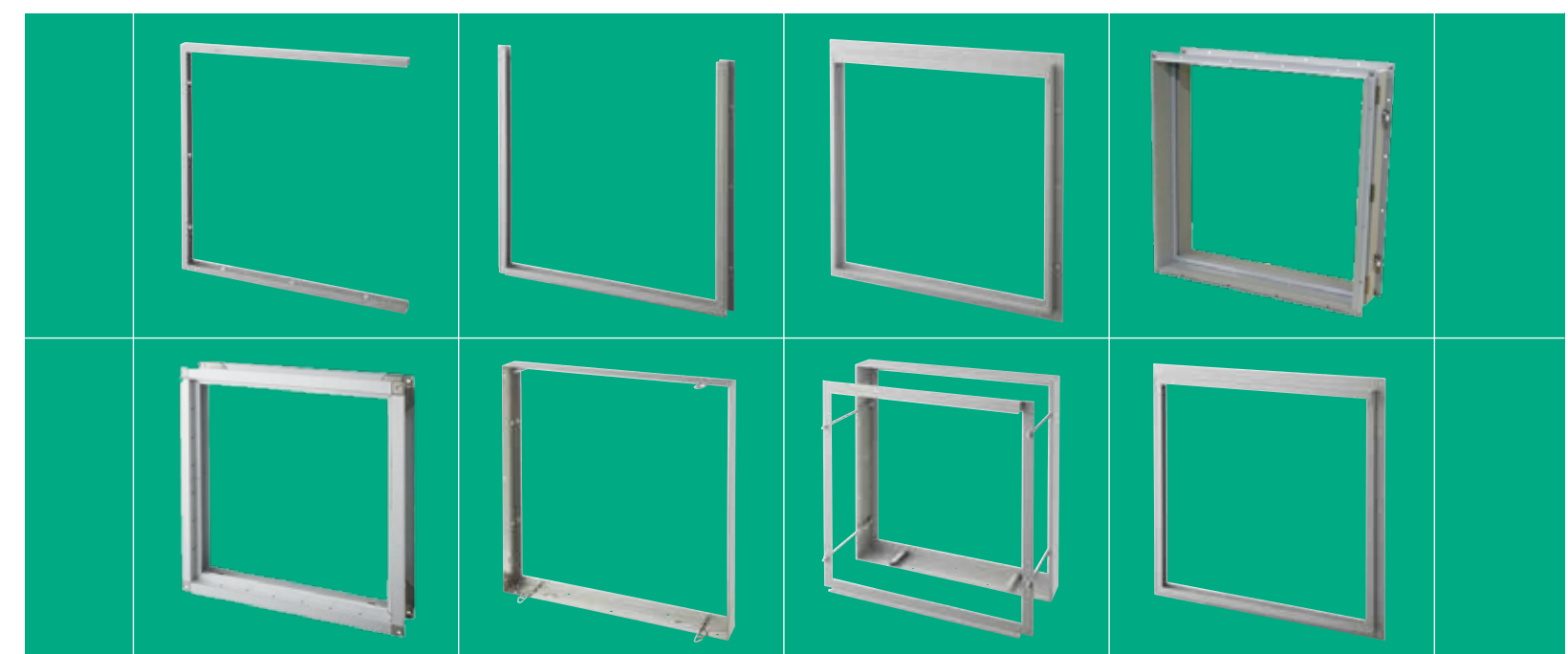


Casings



Lineup of casings to maximize filter performance



Single unit orders available
No special site or installation
requirements apply.



Head office 1-2-29, Nankokita, Suminoe-ku, Osaka,
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<http://www.aqcnet.com>



Contact

Specifications for all products herein are subject to change without notice. CASC17-02 (08-12)



Mounting frames and casings made to order for installation anywhere

Filter components are critical elements in determining the quality of an air conditioning ventilation system. Typically, filter components consist of an air filter and a frame or casing. The key factor in choosing filter components is suitability for the installation site environment. AQC's mounting frames and casings are made to order to allow installation at virtually any site and by any method. They can be made to suit specific environments to maximize air filter performance. Frames and casings contribute to optimal air environments.

Four features of AQC's mounting frames and casings:

Installation anywhere

Optimal shapes and structures for specific environments

Single unit orders available

Maximizes air filter performance



1. Prefilter rail frame P2
- 2-1. Prefilter drop in mounting frame P3
- 2-2. Prefilter sliding mounting frame P4
3. Prefilter casing P5
4. ZEG casing (Prefilter) P6
5. EG casing (Medium and high performance filters) P7
6. VEG casing (HEPA filter) P8
7. Cell frames (Prefilter/Medium and high performance filters) ... P9
8. Options P10

This catalog shows standard products. The standard (main) specifications and accessories are as follows:

(1) Materials

Bonderized plate
Stainless steel
Aluminum
Galvalume
Zinc-coated plate

(2) Coating

Installation site	Specifications	Coating material
Indoor	General	Lacquer (gray, antirust)
	General	Melamine
	Salt damage	Epoxy resin
Outdoor	General	Acrylic resin
	Salt damage	Urethane resin
	Salt damage	Fluorine resin

(3) Accessories

Base
Hanging fittings
Differential pressure gauge
Differential pressure gauge case
Louver
Weather cover
Damper

If you have any questions or requests, please contact our sales department.

1

Prefilter

Rail frame

The frame consists of three rails. A filter can be inserted into the frame horizontally or vertically.

Horizontal sliding

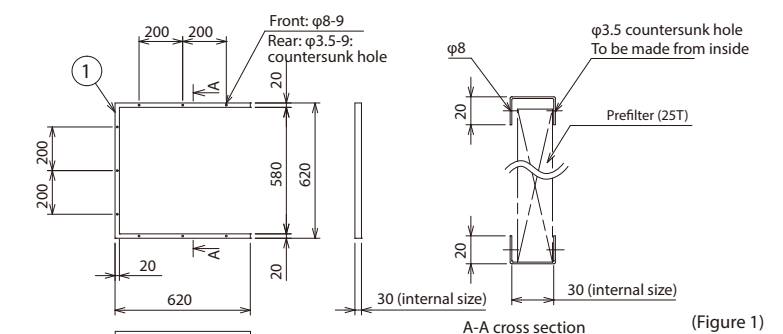


Attachment procedure



Slide the filter into the frame.

Product diagram



To install on a louver or similar location, drill round holes (8 mm in diameter) in the front and countersunk holes for screws (3.5 mm in diameter) in the back. Fasten the filter by tightening the screws with a screwdriver from the front.

Product specifications: With/without mounting holes

*Frames are available in various combinations of rows and columns and in varying depths.

Filter specifications

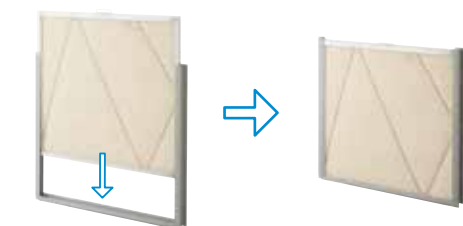
Description	Dimensions (mm)	Quantity
Prefilter	610W×610H×25T	1 filter

No.	Description	Material	Remarks
①	Rail frame	Bonderized plate	t=1.2

Top insertion with flange

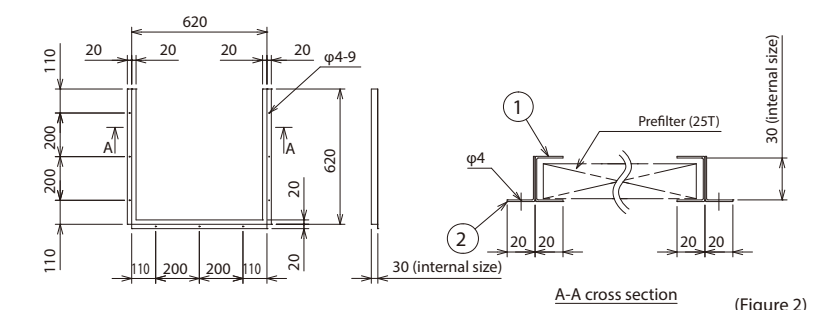


Attachment procedure



Slide the filter into the frame.

Product diagram



As flanges are added to the rail frame, it's easy to install on site.

Product specifications: With flange

*Frames are available in various combinations of rows and columns and in varying depths.

Filter specifications

Description	Dimensions (mm)	Quantity
Prefilter	610W×610H×25T	1 filter

No.	Description	Material	Remarks
①	Rail frame	Bonderized plate	t=1.2
②	Flange	Bonderized plate	t=1.2

3

Prefilter

Casing

A casing is a mounting frame equipped with an access door. Unlike a mounting frame, a filter is enclosed in a box-like structure, which makes it possible to connect both the upstream and downstream sides to ducts or to connect to various systems, such as an air conditioner, mixing chamber or a total heat exchanger.

Pre-casing (1 column × 1 row)



This casing to be connected to ducts includes a prefilter.

Product specifications: Pre-casing (1 row × 1 column)

*Casings are available in various combinations of rows and columns and in varying depths.

Filter specifications

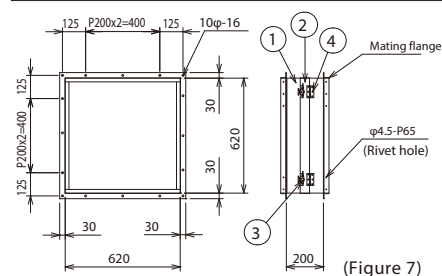
Description	Dimensions (mm)	Quantity
Prefilter	610W×610H×25T	1 filter

Attachment procedure



Open the door and insert a filter.

Product diagram



No.	Description	Material	Remarks
①	Casing body	Bonderized plate	t=1.6
②	Access door	Bonderized plate	t=1.6
③	Crescent lock	SUS304	
④	Hinge	SUS304	

Prefilter casing (2 columns × 2 rows)



This casing to be connected to ducts includes four prefilters.

Product specifications: Prefilter casing (2 rows × 2 columns)

*Casings are available in various combinations of rows and columns and in varying depths.

Filter specifications

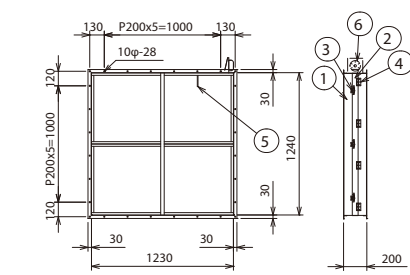
Description	Dimensions (mm)	Quantity
Prefilter	610W×610H×25T	4 filters

Attachment procedure



Join two filters with a coupler and insert them together into the casing.

Product diagram



No.	Description	Material	Remarks
①	Casing body	Bonderized plate	t=1.6
②	Access door	Bonderized plate	t=1.6
③	Crescent lock	SUS304	
④	Hinge	SUS304	
⑤	Pitot tube	Brass (nickel plated)	
⑥	Differential pressure gauge	Polycarbonate, polyamide	WO-70 (0-300 Pa)

Prefilter casing (large air flow rate)



This casing to be connected to ducts includes 12 prefilters set in a zigzag pattern.

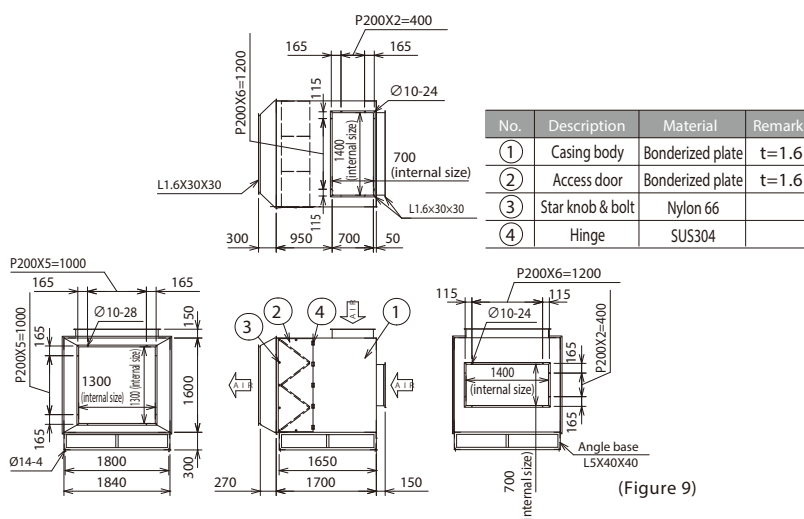
Product specifications: Zigzag form prefilter casing (3 rows × 4 columns)

*Casings are available in various combinations of rows and columns and in varying depths.

Filter specifications

Description	Dimensions (mm)	Quantity
Prefilter	610W×610H×25T	12 filters

Product diagram



No.	Description	Material	Remarks
①	Casing body	Bonderized plate	t=1.6
②	Access door	Bonderized plate	t=1.6
③	Star knob & bolt	Nylon 66	
④	Hinge	SUS304	

4

ZEG Casing

For Prefilter

(Insect control system)

The casing incorporates the ZEG lock to remove gaps between the prefilter and the casing, thereby preventing leaks.

ZEG Casing (1 column × 1 row)



The side removal casing is provided with a ZEG lock for prefilters.



<Patent no. 5855301>

ZEG lock

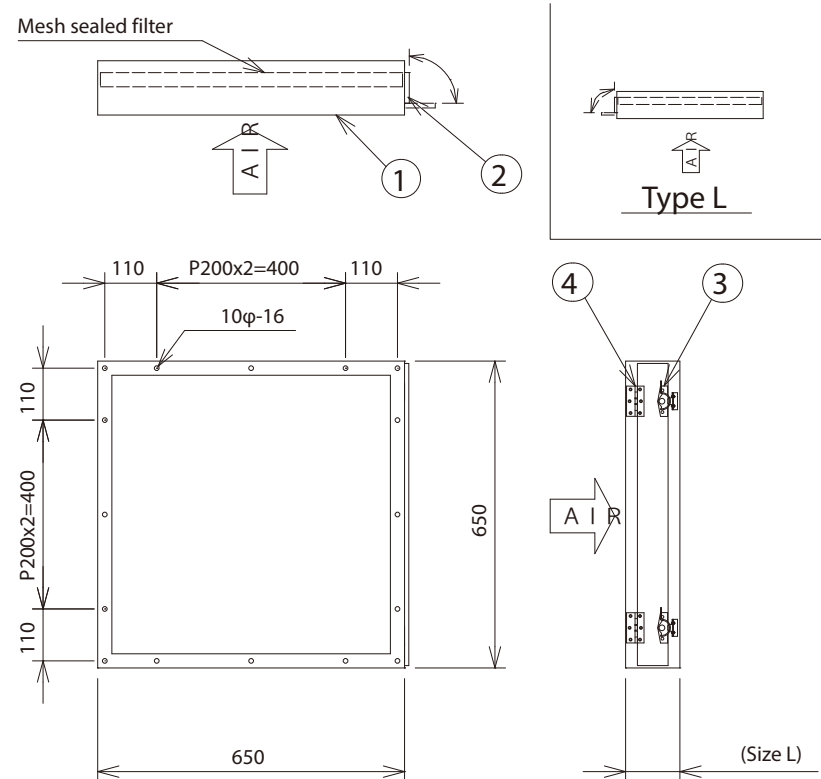
The ZEG lock is secure and easy to engage. When the access door is closed, the plate spring assumes a compressed form and presses the filter to the outflow side.

Opening the door releases the ZEG lock for easy filter removal.

Filter specifications

Description	Dimensions (mm)	Quantity
Mesh sealed filter	610W×610H×25T	1 filter

Product diagram



(Figure 10)

No.	Description	Material	Remarks
①	Casing body	Bonderized plate	t=1.6
②	Access door	Bonderized plate	t=1.6
③	Crescent lock	SUS304	
④	Hinge	SUS304	

- Type R*1 is shown in the diagram above.

Notes*

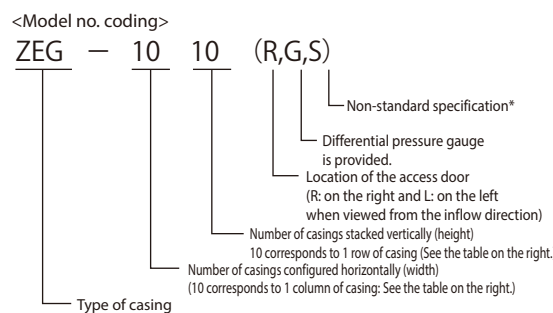
*1 Access door location:
(Type R: on the right and Type L: on the left when viewed from the inflow direction)

- Paint color (Standard: Munsell N-7)

Casing specifications

Mesh sealed filter	Casing length	Weight (including filter)
25 mm	150 mm	13 kg

Model no. of ZEG casing and information required for inquiry



*Non-standard specifications: Custom casings are available for a range of mesh sealed filter sizes.

Air flow rate and weight table of ZEG casing

		Width model				
Height model	Dimensions (mm)	Total width		Total height		Weight (kg)
		10	15	20	25	
model	10	650	958	1263	1571	1876
	15	995	1263	1571	1876	2181
	20	1300	1680	2024	2436	2848
	25	1645	2100	2536	3048	3560
	30	1950	2520	3048	3560	4072

Top left numbers: Air flow rate (m³/min)

Bottom right numbers: Weight (kg) including mesh sealed filters (T = 25) and casings

*The maximum number of casings in a set is three columns by three rows.

5

EG casing

For medium and high performance filters

The casing incorporates a special tightening mechanism to remove gaps between the medium/high performance filter and the casing, thereby preventing leaks.

EG casing (1 column × 1 row)



EG casing is a side removal casing for medium/high performance filters incorporating a tightening mechanism.

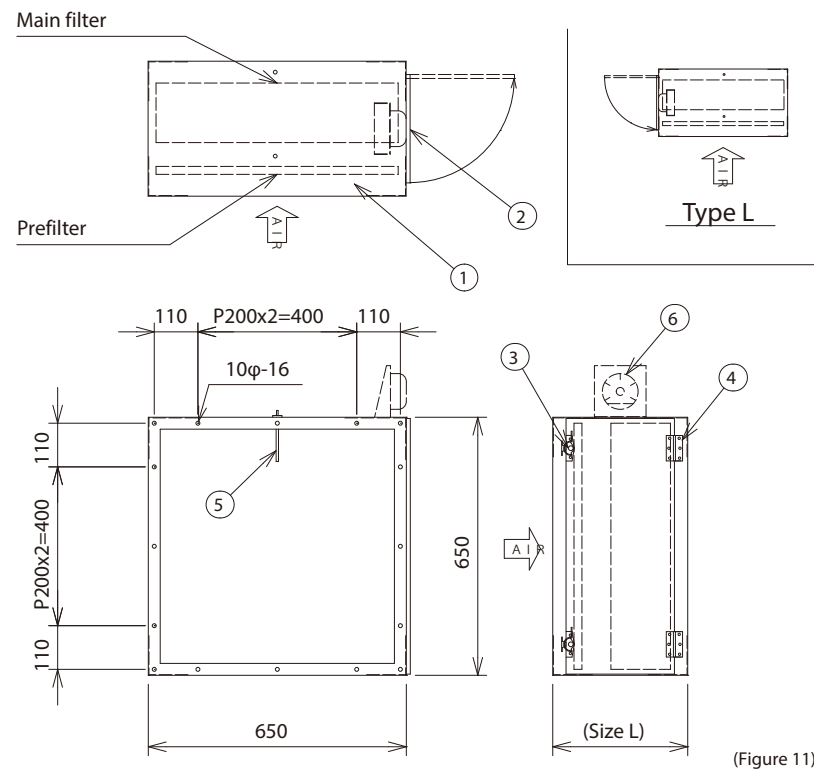


<Patent no. 4260287>

Tightening mechanism

The mechanism is secure and easily activated. Simply push down on the lever; the coil spring built into the bearing and the shaft roll will press the main filter to the side.

Product diagram



(Figure 11)

No.	Description	Material	Remarks
①	Casing body	Bonderized plate	t=1.6
②	Access door	Bonderized plate	t=1.6
③	Crescent lock	SUS304	
④	Hinge	SUS304	
⑤	Pitot tube	Brass (nickel plated)	
⑥	Differential pressure gauge	Polycarbonate, polyamide	WO70 (0~500 Pa)

- Type R*¹ is shown in the diagram above.

*¹ Access door location:
(Type R: on the right and Type L: on the left when viewed from the inflow direction)

- Paint color (Standard: Munsell N-7)

Filter specifications

Description	Dimensions (mm)	Quantity	Rated air flow rate (m³/min)	Collection efficiency
Main filter	610W×610H×290T	1 filter	56	JIS colorimetric method 90%
Prefilter	610W×610H×20T	1 filter	56	JIS weighing method 80%

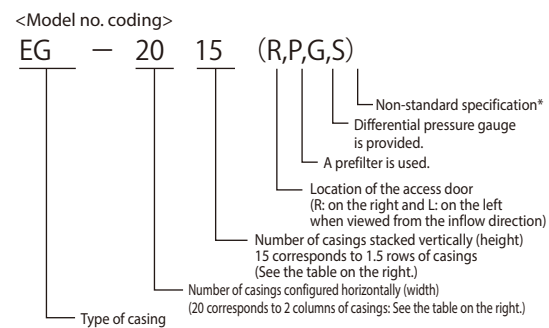
*The filter can be customized to a desired thickness.

Casing specifications

Main filter T	Casing length	Weight (including filter)
290 mm	480 mm	35 kg
150 mm	340 mm	30 kg
65 mm	255 mm	25 kg

*Use a main filter (150T, 290T) of general weight class (3.5 kg, 7 kg).

Model no. of EG casing and information required for inquiry



*Non-standard specifications: Custom casings are available for a range of mesh sealed filter sizes.

Air flow rate and weight table of EG casing

Width model			10	15	20	25	30
Height	Dimensions (mm)	Total width	650	958	1263	1571	1876
model	Total height	Column	1	1.5	2	2.5	3
		Row					
10	650	1	5635	8457	11269	14073	16892
15	995	1.5	8462	12680	16896	210113	252130
20	1300	2	11272	16895	224112	280135	336153
25	1645	2.5	14088	210109	280135	350159	420190
30	1950	3	168101	252130	336156	420190	504214

Top left numbers: Air flow rate (m³/min) Bottom right numbers: Weight (kg) including the main filter (T = 290) and casings

(Note) When the main filter is 150 mm in thickness, the weights are reduced to about 85% (× 0.85).

*The maximum number of casings in a set is four columns by three rows. (Certain restrictions apply for main filter specifications.)

6

VEG casing

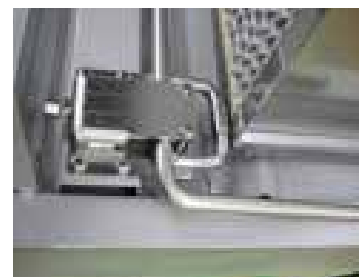
For HEPA filter

The casing incorporates a special tightening mechanism to remove gaps between the HEPA filter and the casing, thereby preventing leaks.

VEG casing (1 column × 1 row)



VEG casing is a side removal casing for HEPA filters incorporating a tightening mechanism.

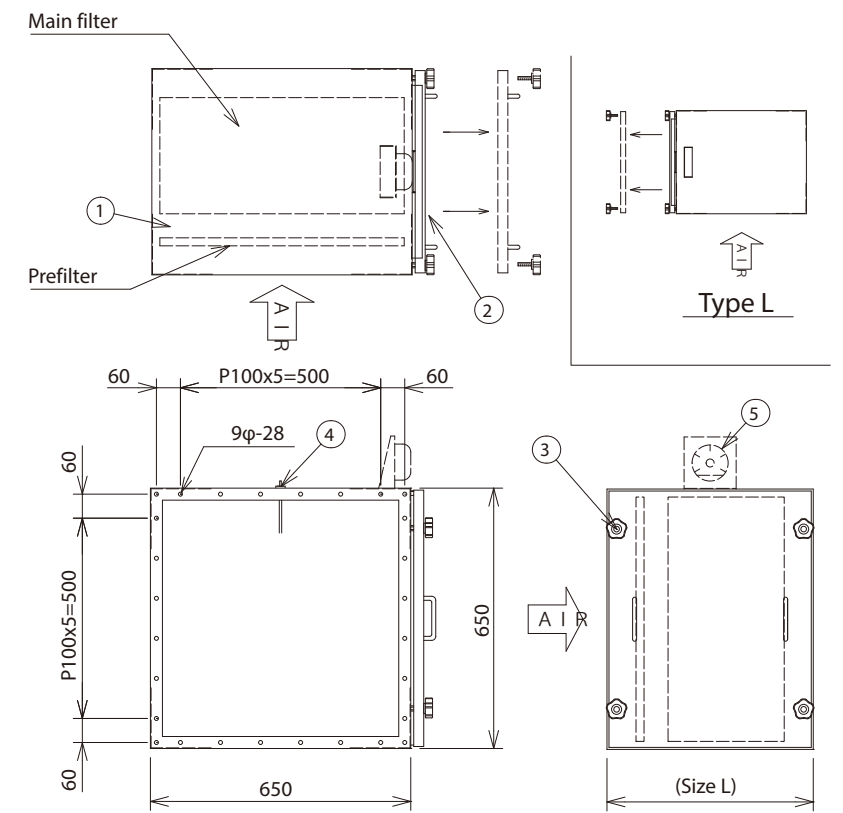


<Patent no. 4260287>

Special tightening mechanism

The mechanism is secure and easily activated. Simply push down on the lever; the coil spring built into the bearing and the shaft roll will press the main filter to the outflow side. The parts are strengthened for HEPA filters.

Product diagram



(Figure 12)

No.	Description	Material (type)	Remarks
①	Casing body	Bonderized plate	t=1.6
②	Access door	Bonderized plate	t=1.6
③	Knob bolt	Nylon 66	M10
④	Pitot tube	Brass (nickel plated)	
⑤	Differential pressure gauge	Polycarbonate, polyamide	WO70 (0~500 Pa)

- Type R*¹ is shown in the diagram above.

*¹ Access door location:
(Type R: on the right and Type L: on the left when viewed from the inflow direction)

- Paint color (Standard: Munsell N-7)

Filter specifications

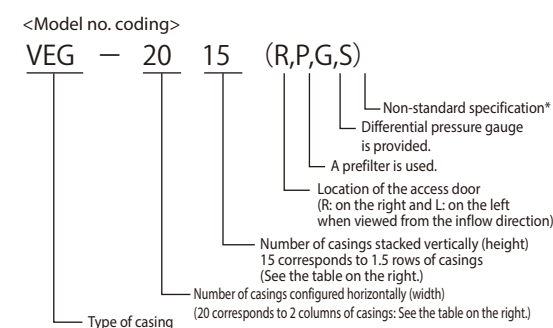
Description	Dimensions (mm)	Quantity	Rated air flow rate (m³/min)	Collection efficiency
Main filter	610W×610H×290T	1 filter	31	JIS counting method 99.97%
Prefilter	610W×610H×20T	1 filter	31	JIS weighing method 80%

*The filter can be customized to a desired thickness.

Casing specifications

Main filter T	Casing length	Weight (including filter)
290 mm	515 mm	46 kg
150 mm	375 mm	40 kg
65 mm	290 mm	36 kg

Model no. of VEG casing and information required for inquiry



*Non-standard specifications: Custom casings are available for a range of mesh sealed filter sizes.

Air flow rate and weight table of VEG casing

Width model			10	15	20	
Height	Dimensions (mm)	Total width	650	958	1263	
model	Total height	Column Row	1	1.5	2	
a*)	10	650	1	31 (17) 46 (39)	46 (25) 75 (64)	62 (34) 90 (77)
	15	995	1.5	46 (25) 81 (69)	69 (37) 104 (88)	93 (50) 125 (106)
	20	1300	2	62 (34) 94 (80)	93 (50) 124 (105)	124 (68) 146 (124)
n)						

Top left numbers: Rated air flow rate (m³/min) when the main filter (T = 290) is attached

The number in () represents the rated air flow rate (m³/min) when the main filter (T = 150) is attached.

Bottom right numbers: Weight (kg) including the main filter (T = 290), prefilter, and casing

The number in () is the weight including the main filter (T = 150), prefilter, and casing

*The maximum number of casings in a set is two columns by two rows.

7

Cell frames

Prefilter/Medium and high performance filters

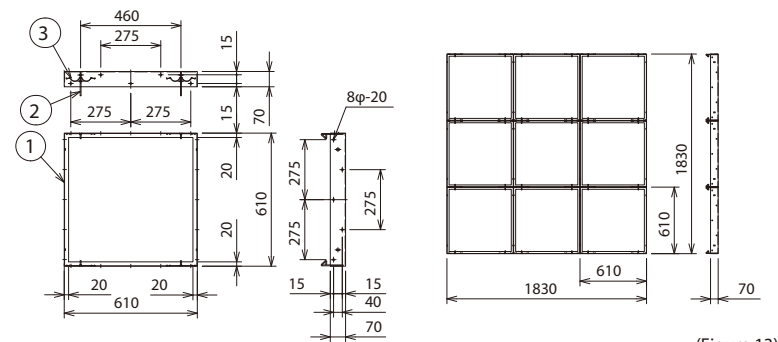
A cell frame is a mounting frame that holds a single filter, and consists of components into which a filter is inserted and components connected to another frame. This frame is convenient where carrying large components to the installation site may be difficult. For high air flow rate speeds and pressure, we recommend appropriate reinforcement.

EC frame

Filter attachment procedure



Product diagram



(Figure 13)

The filter is removed and replaced from the front of the frame. A prefilter and Long Life filter are easily fastened using spring fittings. Use the EC frame for lightweight filters. As a rough guide, a frame with dimensions of 610 mm W × 610 mm H × 95 mm T is suitable for filters weighing about 3.5 kg.

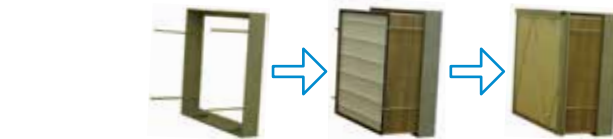
EC frame product no.

Product no.	Frame dimensions (mm)	Long Life filter dimensions (mm)
EC45-510	510W × 510H × 70T	492W × 492H × 45T
EC45-610	610W × 610H × 70T	594W × 594H × 45T
EC45-305	305W × 610H × 70T	289W × 594H × 45T
EC95-510	510W × 510H × 70T	492W × 492H × 95T
EC95-610	610W × 610H × 70T	594W × 594H × 95T
EC95-305	305W × 610H × 70T	289W × 594H × 95T

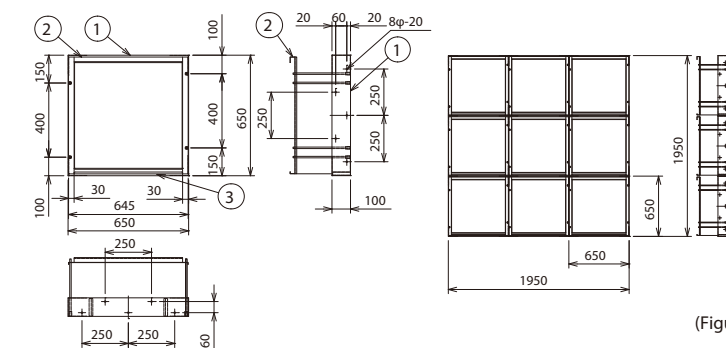
No.	Description	Material	Remarks
①	EC frame body	Zinc-coated plate	t=1.6
②	Mounting fittings	SUS304	φ 4.0
③	Spring	Spring steel	φ 1.0

Integrated frame

Filter attachment procedure



Product diagram



(Figure 14)

Integrated frames are the easiest frames to install medium or high performance filters and prefilters together. A series of integrated frames is available, to match the standard sizes of medium and high performance filters.

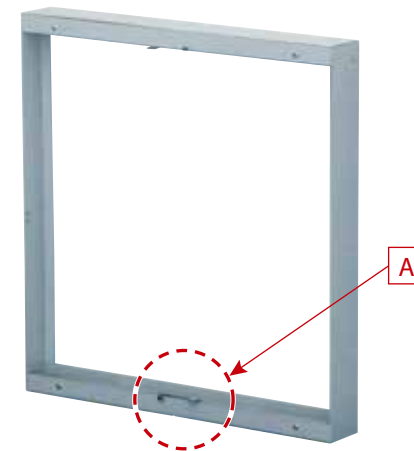
Integrated frame product no.

Product no.	Frame dimensions (mm)	Prefilter dimensions (mm)	medium/high performance filter dimensions (mm)
Integrated F SF18F	540W × 540H × 100T	500W × 500H × 20T	500W × 500H × 150T
Integrated F SF28F	650W × 650H × 100T	610W × 610H × 20T	610W × 610H × 150T
Integrated F SF28H	650W × 345H × 100T	610W × 305H × 20T	610W × 305H × 290T
Integrated F SF28V	345W × 650H × 100T	305W × 610H × 20T	305W × 610H × 290T
Integrated F SF36F	540W × 540H × 100T	500W × 500H × 20T	500W × 500H × 290T
Integrated F SF56F	650W × 650H × 100T	610W × 610H × 20T	610W × 610H × 290T

No.	Description	Material	Remarks
①	Integrated frame body	Bonderized plate	t=1.2
②	Unit holder	Bonderized plate	t=1.2
③	Filter base	Bonderized plate	t=1.6

ZEG frame

(Insect control system)



The ZEG lock (simplified mounting mechanism) eliminates gaps between the mounting frame and the filter and enhances sealing. We also recommend the ZEG lock for high-efficiency prefilters.

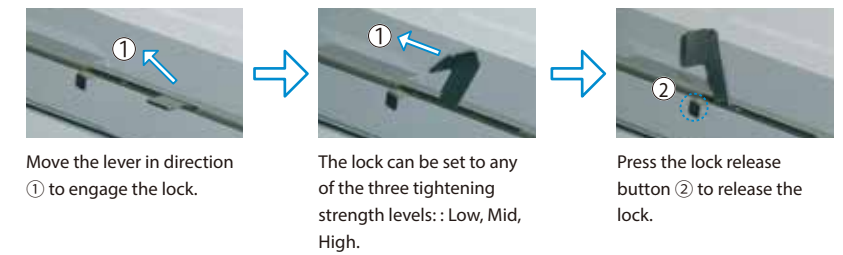
Product specifications: Drop in (ZEG lock) cell frame

Filter specifications

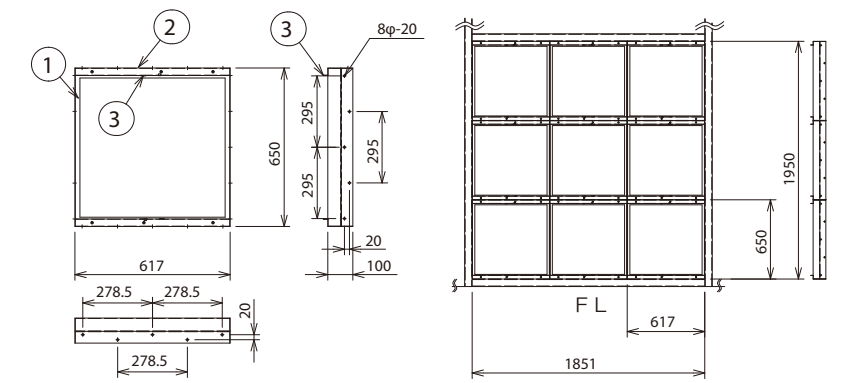
Description	Dimensions (mm)	Quantity
Mesh sealed filter	610W×610H×25T	9 filters

ZEG lock operation (Detail of the part [A])

<Patent no. 5855301>



Product diagram



(Figure 15)

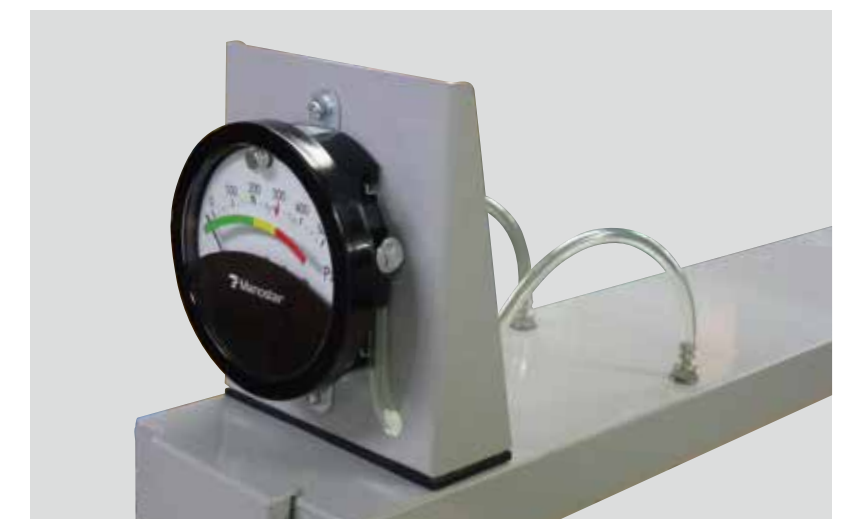
No.	Description	Material	Remarks
①	Mounting frame	Bonderized plate	t=1.6
②	Outer plate	Bonderized plate	t=1.6
③	Lock lever	SUS304	

8

Options

Casings can incorporate a differential pressure gauge (shown below). The differential pressure gauge makes it possible to measure differences in static pressure (differential pressure) when air passes through the filter, based on which the service life of the filter can be estimated.

Differential pressure gauge (WO type)

Differential pressure gauge case
(Installed on casing)Differential pressure gauge mount
(Installed on casing)

The above case and mount are available to install the gauge.

The WO-type differential pressure gauge offers an easy to read panel with a wide viewing angle.