

**Mini Line Filter  
ER-AF10/20**

MJE-ERAF10 No.0031-48V

**1 OUTLINE**

- This product is used in combination with the spot type ionizer (ER-SP□, ER-VS01) to remove solid particles such as, dust, etc., in the supplied air.

**2 SPECIFICATIONS**

Item	Mini line filter	
	ER-AF10	ER-AF20
Designation Model No.	ER-SP□, ER-VS01	
Applicable ionizer (Note 1)	Air	
Applicable fluid	Air	
Pipe connection port	R <sup>1</sup> / <sub>8</sub> , Rc <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub> , Rc <sup>1</sup> / <sub>4</sub>
Collected particle dia.	0.1 μm	
Collection efficiency	99.9%	
Processed air volume (Note 2)	40g/min (ANR)	80g/min (ANR)
Membrane area	29.9cm <sup>2</sup>	68.7cm <sup>2</sup>
Max. operating pressure	0.97MPa	
Warranted with-stand pressure	1.47MPa	
Ambient temperature	+5 to +45°C	
Material	Main body: Aluminum alloy (Almite processed) Element: Porous, hollow fiber membrane	
Weight	11g approx.	18g approx.

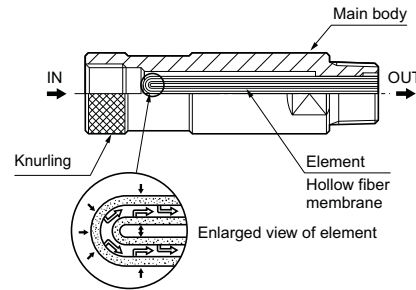
Notes: 1) Refer to **5 PIPING** for details.  
2) Maximum processed air volume that the filter performance can be maintained.  
Approximately 0.1MPa of pressure drop occurs with the max. processed air volume.

Thank you very much for using Panasonic products. Please read this Instruction Manual carefully and thoroughly for the correct and optimum use of this product. Kindly keep this manual in a convenient place for quick reference.

**3 CAUTIONS**

- Before the piping, make sure to sufficiently carry out internal flashing (blowing of compressed air) of the pipe. If scrap or sealing tape, generated during work, or rust, etc., gets inserted, it will cause clogging.
- Use air which does not contain water, oil, etc. Water or oil will cause clogging or reduction in performance.
- Do not use with a fluid or in an environment containing the following substances:
  - Organic solvents
  - Ester phosphate type hydraulic fluid
  - Sulfuric acid gas · Chlorine gas
  - Acids
- Do not use at a place where the temperature exceeds the rated ambient temperature range.
- Do not use at a pressure exceeding the rated maximum operating pressure.
- This product is for industrial use. Do not use it in equipment affecting human life.
- Make sure that excessive external force is not applied to this product.
- Never disassemble or modify this product.
- Do not expose this product to ultraviolet light, wind or rain.
- When disposing this product, dispose it as industrial waste.

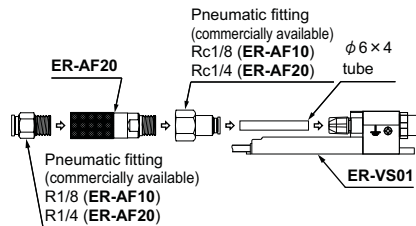
**4 INTERNAL STRUCTURE**



Note: The figure shown above is the internal structure of **ER-AF10**.  
The structure of **ER-AF20** is also the same.

**5 PIPING**

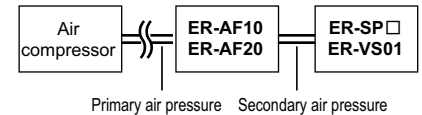
**Mounting example of ER-AF20+ER-VS01**



- Fit the pneumatic fittings on the both sides of this product to connect to the pneumatic tube, as the figure shown above. However, only when **ER-AF10** and **ER-SP□** are combined, they can be directly fitted each other. The tightening torque should be 2.9N·m or less.  
(Take care that if excessive tightening torque is applied, the **ER-SP□** side will get damaged.)

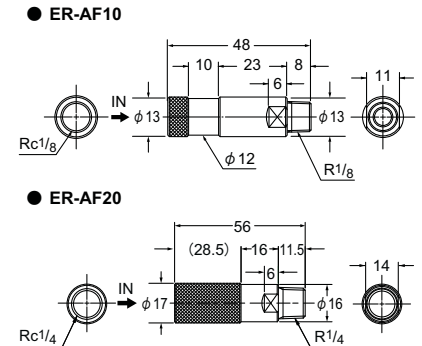
Notes: 1) Since this product is made by aluminum alloy, make sure that excessive force is not applied.  
2) This product is for removal of solid particles. Remove water, oil, etc., in the primary pressure side.

**6 PRESSURE DROP**



- When the mini line filter (**ER-AF□**) is fitted, a pressure drop occurs. Adjust the primary air pressure so that the secondary air pressure is within the air pressure range of the ionizer. (Take care that the air pressure range differs depending on the nozzle. Furthermore, in case the filter is used with the max. processed air volume, approximately 0.1MPa of pressure drop occurs.)
- Take care that if the air more than the specified processed air volume is applied, the efficiency will deteriorate.

**7 DIMENSIONS (Unit: mm)**



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