Main line filter Energy saving and long life

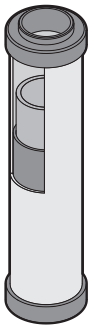
40 models in 4 series are available to cover all applications from 16 to 256 m^3/min (ANR).

P-Type
Main line filter

(Pre-filter)

For air dryer pre-filter

- Contaminants 3 µm and over are removed
- Water separation efficiency 95%



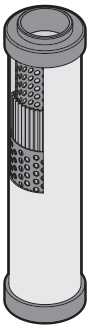
CKD's proprietary chemical fiber structure permanent element has been adopted for the 3 µm element. This structure reduces clogging and realizes long service life and low pressure loss.

S-Type
Oil mist filter

(Oil removing filter)

Protect expensive pneumatic components

- Contaminants 0.3 µm and over are removed
- Oil content up to a concentration of 0.5 mg/m^3 (at 21°C) is removed from the oil content on the secondary side



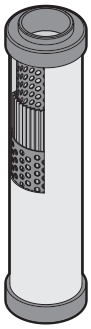
Polysilicate micro fibers quickly separate oil and limit pressure loss. The pleated structure creates a large filtration area, increasing the capacity for catching impurities. Prevents increased pressure loss.

M-Type
Oil mist filter

(High-performance oil removing filter)

For pneumatic circuits which prohibit passage of oil

- Contaminants 0.01 µm and over are removed
- Oil content up to a concentration of 0.01 mg/m^3 (at 21°C) is removed from the oil content on the secondary side

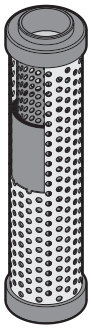


X-Type
Oil mist filter

(Activated carbon filter)

For pneumatic circuits which prohibit passage of odors

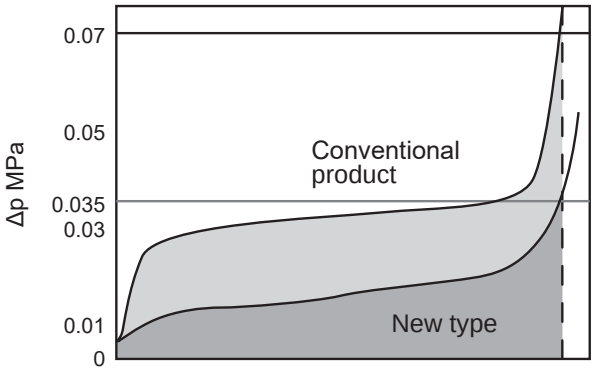
- Suction by activated carbon
- Vaporized oil content up to a concentration of 0.003 mg/m^3 (at 21°C) and odors are removed from the oil content on the secondary side



Cylindrically wound particle activated carbon adsorbs oil vapor molecules and odor molecules with low pressure loss. High density activated carbon extends element service life.

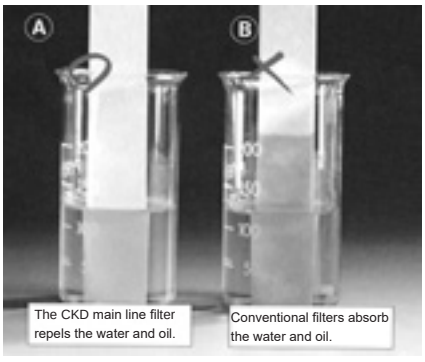
■ Long life/low pressure loss element

Element service life curve



Element replacement
One year in normal usage state

- The pressure loss is half that of conventional products.
- The element is replaced when the pressure drops to 0.035 MPa.
- The element service life is one year when used under normal conditions.

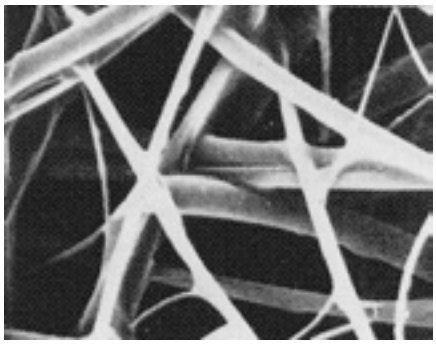


Ⓐ New filter

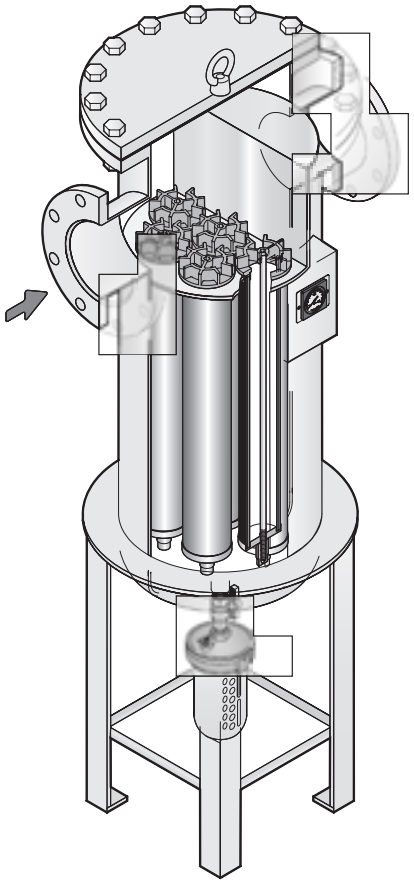
Borosilicate glass microfibers used in the filtration layer powerfully repel water and oil, allowing the pressure drop and operation costs to be minimized.

Ⓑ Conventional filter

Conventional glass microfibers absorb water and oil, so the pressure easily drops, filtration performance decreases, and operation costs increase.

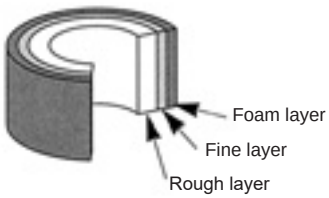


High 96% porosity inside the element fibers helps achieve low pressure loss and a long life



1. Lower operation costs.

CKD's original chemical fiber structure permanent element has been adopted for the 3 μm element. This structure does not clog easily, allowing less frequent element replacement. (P Series)



Permanent element

2. Contributes to energy saving.

The pressure loss has been reduced thanks to the permanent element. (P Series)

3. Easily replaceable element.

A screw method is adopted for element installation, so the element can now be replaced easily. Stainless steel is used for the screws, with no concerns for stiffness due to rust.

4. Easy daily inspection.

A differential pressure gauge is mounted on the front surface.
Improves visibility during daily inspection.
This differential pressure gauge is used as a reference for the element replacement interval.

5. Easy design of equipment.

The dimensions and bore sizes are the same within the same series, so if the flow rate is the same, the system is easily designed and installed.

6. Easy installation.

Installation legs have been prepared as standard. This eliminates the need for extra equipment for installation.
(Excluding AF3016)
The legs can be removed when not required.

7. Wide variation.

40 models in four series are available.
The ideal model can be selected based on the flow rate and quality of air.

AF3 016 P - 50
(A) (B) (C)

(A) Flow rate classification	
016	16 m³/min(ANR)
032	32 m³/min(ANR)
048	48 m³/min(ANR)
064	64 m³/min(ANR)
080	80 m³/min(ANR)
096	96 m³/min(ANR)
128	128 m³/min(ANR)
160	160 m³/min(ANR)
192	192 m³/min(ANR)
256	256 m³/min(ANR)

(B) Element	
P	P Series
S	S Series
M	M Series
X	X Series

(C) Bore size	
50	Flange 2B
80	Flange 3B
100	Flange 4B
150	Flange 6B
200	Flange 8B

Always read the safety precautions on pages 1878 to 1879 before use.