

[New Product] : Long-Life Filter for Oil Conditioning

# Long Life Filter

1. Number of SAB Sales of  
● AK\* series over the past 10 years
2. Features of Long Life Filter
3. Comparison with Other Filters
4. How to Install Long Life filter
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# SAB Sales of AK\* series over the past 10 years

Secret(秘)

Frame model	Filter model	Chiller model	Unit	Total
AKZ9-OP-FR05	AKZ9-OP-LF05A	AKJ189	3	200
		AKZ149	197	
AKZ9-OP-FR12	AKZ9-OP-LF12A	AKC359	8	391
		AKJ359	41	
		AKZ329	342	
AKZ9-OP-FR15	AKZ9-OP-LF15A	AKJ459	1	244
		AKZ439	238	
		AKZ431	5	
AKZA-OP-FR05	AKZA-OP-LF05A	AKZ14A	21	21
AKZA-OP-FR12	AKZA-OP-LF12A	AKZ32A	37	361
		AKZ321	324	
AKZA-OP-FR20	AKZA-OP-LF20A	AKZ569	148	160
		AKZ56A	12	
AKZA-OP-FR30	AKZA-OP-LF30A	AKJ909	3	41
		AKW929	2	
		AKZ909	11	
		AKZ90A	25	

## 1: Proprietary filter element molding

>> You only need to change the filter **once a year!** ※1

ZOOM!



Zig-zag foldig and our proprietary Micro- Fibers keeps space and increase surface area up to

# 45 times

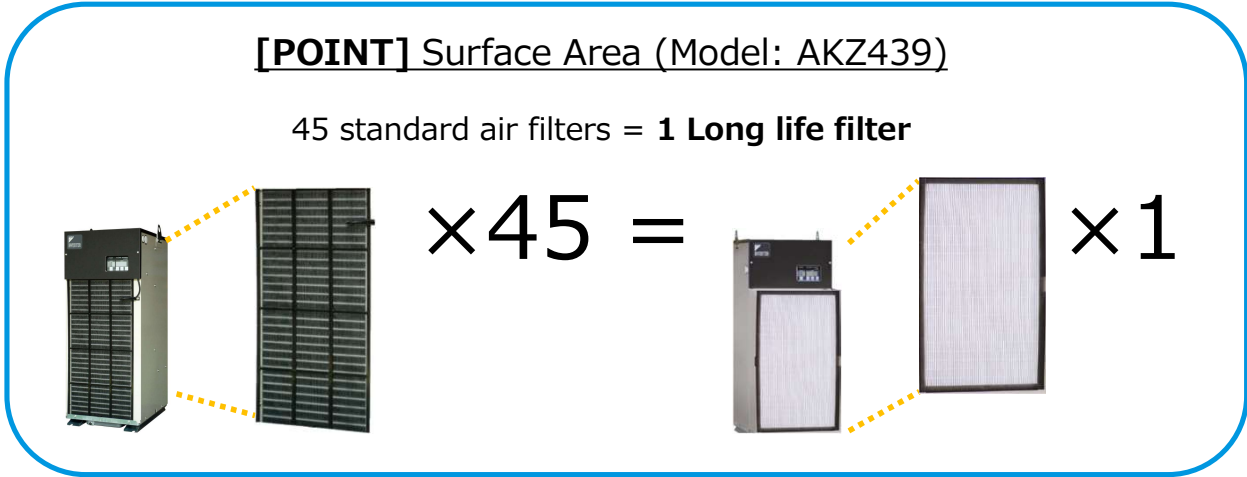
<sup>\*2</sup>

\*1 When mist concentration is 0.5 mg/m3

\*2 When compared with standard air filters

### [POINT] Surface Area (Model: AKZ439)

45 standard air filters = **1 Long life filter**



## 2: Unique Microfiber

-> **No need for cleaning cooling fins!** ※1

ZOOM!



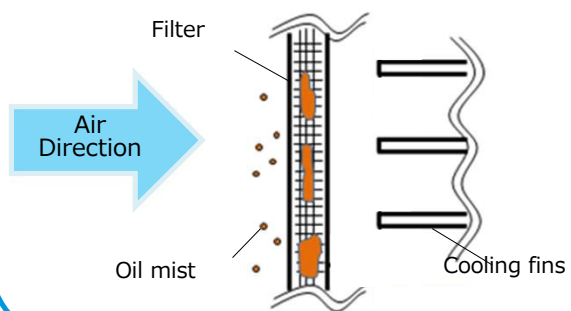
◆ It has excellent breathability, and at the same time, it catches fine oil mist and dust without letting them escape.

◆ Cooling fins do not get clogged, and so no cleaning is required \*1

\*1 When mist concentration is 0.5 mg/m<sup>3</sup> \*2

\*2 Mist concentration of 0.5 mg/m<sup>3</sup> environment: We assume a severe mist where visibility is greatly impaired.

### [POINT] The Secret of No need for Cooling Fins' Cleaning



Microfiber collects fine oil mist Before it gets inside of the chiller and reach the oil cooling fin

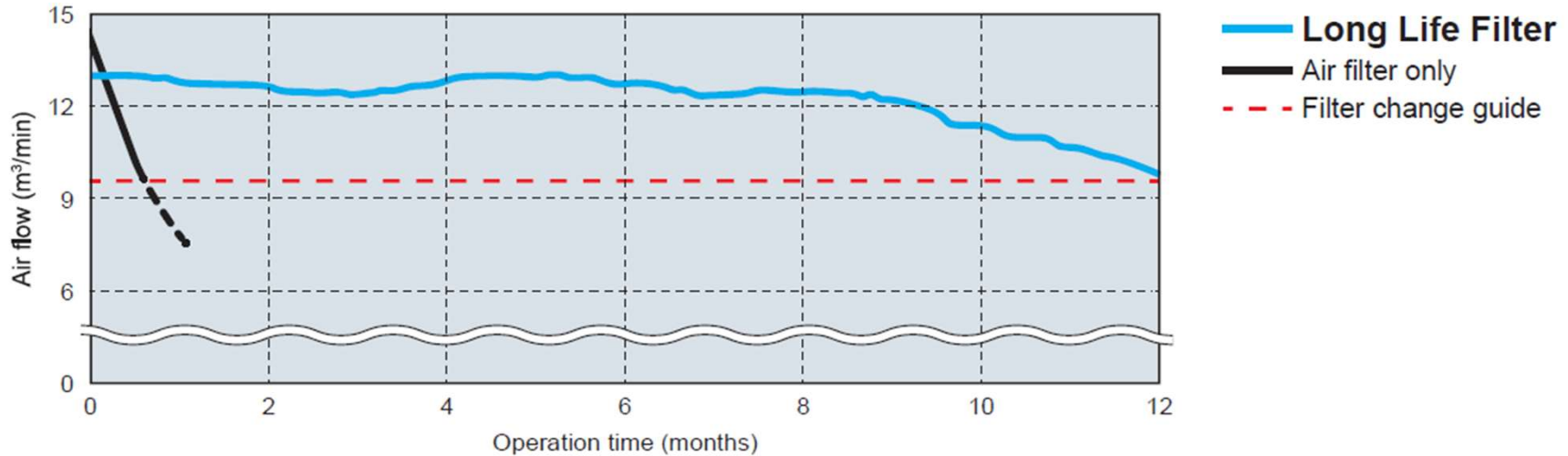
Therefore, oil cooling fin does not get dirt and there is no cleaning required.

It can be used comfortably. ※1

# Comparison with other filters

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Measurement at factory site with high oil mist concentration (model: AKZ439)



## [Result]

The cooling capacity of the chiller has maintained without falling under the filter change guideline line for 12 months, regardless it was the factory with a high concentration of mist.

Moreover, after 1 year, it can be easily replaced just by hands!

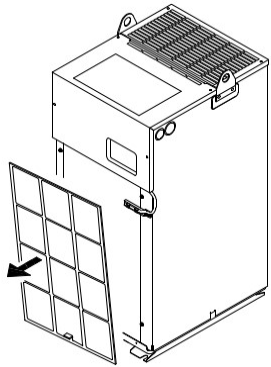
\*1 When the mist concentration is 0.5 mg/m<sup>3</sup>



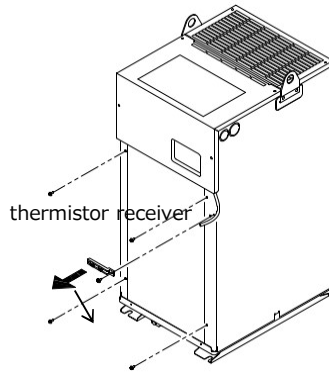
# How to Install Long Life Filter

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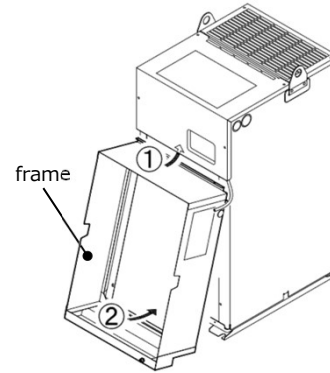
## [Procedure]



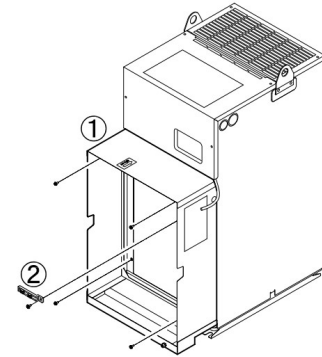
(1) Remove the standard filter.



(2) Remove the front screw and the thermistor receiver.



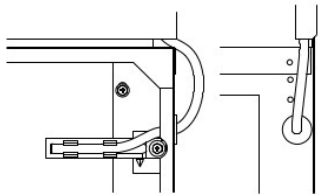
(3) Attach the frame.



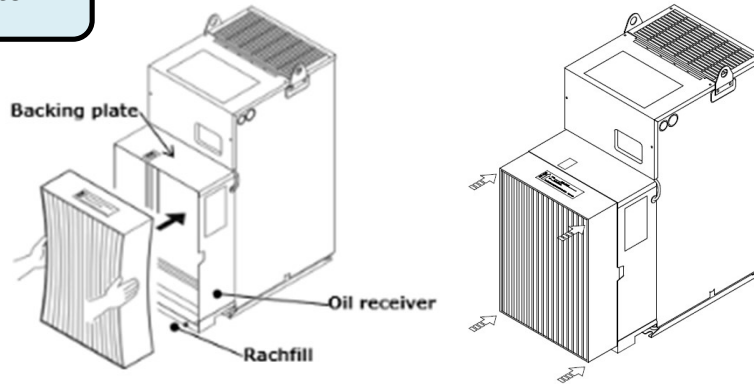
(4) Use the screws supplied with the unit to bond the frame, thermistor receiver to the chiller together.

If the cooling fin is dirty, clean it before installing the long life filter

Front view Right side view



(5) Insert the room temperature thermistor into the right-side inlet and install as above the drawing.



(6) Insert the filter into the frame until it hits the cover plate.

### Guideline for replacement frequency

- ◆ One year after installation
- ◆ When the oil does not cool down

### \*Cautions

- ◆ Even if a new long life filter is installed, its cooling capacity will decrease about 5%.
- ◆ Please check the oil receiver at the bottom of the frame, and remove it from the drain if it has accumulated.

# Specification of Long Life Filter

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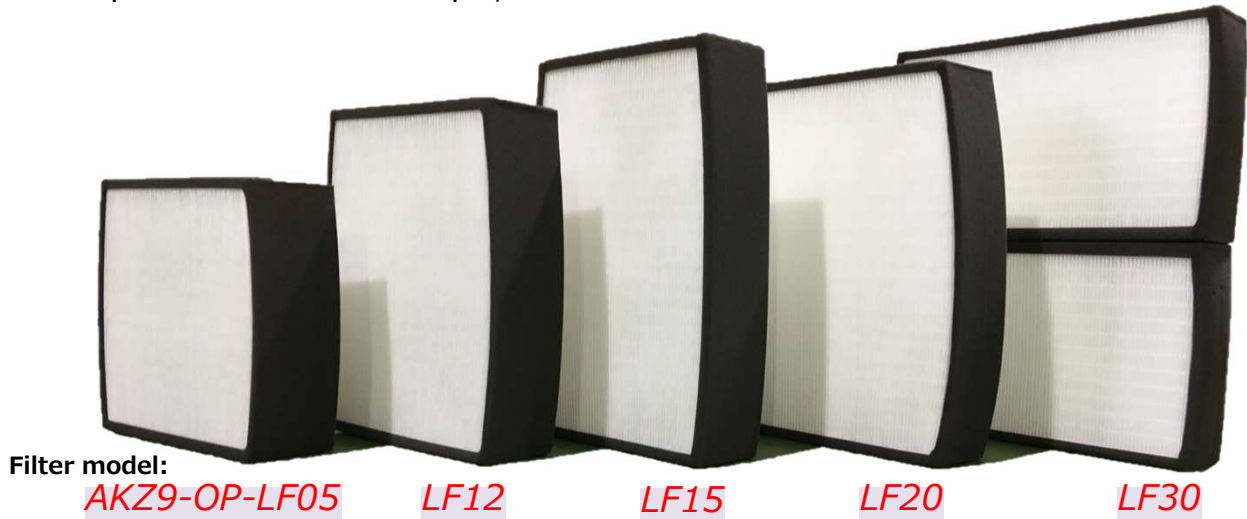
**[Specifications]** For the first order, both filter and frame are required.

Frame model	Filter model	Oil chiller horsepower (HP)	Model representative of targeted oil chillers		Frame outer dimensions
			For Series 9	For Series 10	
AKZ9-OP-FR05	AKZ9-OP-LF05A	0.5	AKZ149, AKJ189, AKW149/189	—	W365 × H410 × D165
AKZ9-OP-FR12	AKZ9-OP-LF12A	1.2	AKZ329, AKJ359, AKC359, AKW329/359	—	W365 × H535 × D165
AKZ9-OP-FR15	AKZ9-OP-LF15A	1.5	AKZ439, AKJ459, AKW439/459 <b>AKZ431</b>	—	W365 × H635 × D165
AKZA-OP-FR05	AKZA-OP-LF05A	0.5	—	AKZ14A, AKJ18A, AKW14A/18A	W365 × H395 × D165
AKZA-OP-FR12	AKZA-OP-LF12A	1.2	<b>AKZ321</b>	—	W365 × H520 × D165
AKZA-OP-FR15	AKZA-OP-LF15A	1.5	—	AKZ43A, AKJ45A, AKW43A/45A	W365 × H620 × D165
AKZA-OP-FR20	AKZA-OP-LF20A	2.0	AKZ569, AKJ569, AKC569, AKW569/589	AKZ56A, AKJ56A, AKW56A/58A	W470 × H620 × D165
AKZA-OP-FR30	AKZA-OP-LF30A <sup>*4</sup>	3.0	AKZ909, AKJ909, AKW909/929	AKZ90A, AKJ90A, AKW90A/92A	W540 × H710 × D165
AKZA-OP-FR50	AKZA-OP-LF50A <sup>*4</sup>	5.0	AKJ1509	—	W725 × H1180 × D165

**\*Note for models with tank:** The tank lubrication port cannot be opened or closed while the frame is installed.  
To open or close the tank lubrication port, remove the frame.

The 3.0HP chiller uses 2 filters.

We provide variety of product lineup for each horsepower!  
Please select it according to your chiller's specification.



Filter model:

AKZ9-OP-LF05

LF12

LF15

LF20

LF30

# Price and LT for each model (2024/11)

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Chiller model	Frame model	Price (JPY)	LT	Filter model	Price (JPY)	LT
AKJ189	AKZ9-OP-FR05	13,300	7 weeks	AKZ9-OP-LF05A	23,600	7 weeks
AKZ149						
AKC359	AKZ9-OP-FR12	14,000	7 weeks	AKZ9-OP-LF12A	26,700	7 weeks
AKJ359						
AKZ329						
AKJ459	AKZ9-OP-FR15	14,800	7 weeks	AKZ9-OP-LF15A	29,500	7 weeks
AKZ439						
AKZ431						
AKZ14A	AKZA-OP-FR05	13,300	7 weeks	AKZA-OP-LF05A	23,600	7 weeks
AKZ32A	AKZA-OP-FR12	14,000	7 weeks	AKZA-OP-LF12A	26,700	7 weeks
AKZ321						
AKZ569	AKZA-OP-FR20	16,200	7 weeks	AKZA-OP-LF20A	35,500	7 weeks
AKZ56A						
AKJ909	AKZA-OP-FR30	20,700	7 weeks	AKZA-OP-LF30A	53,100	7 weeks
AKW929						
AKZ909						
AKZ90A						



## Case 1: Company N, a Japanese automobile manufacturer

[Actual: approximately 300 units]



After using Long life filter for one year, the customer realized that there has been no fin contamination at all. Also, the occurrence of compressor overload anomalies has ceased, which led to stable operation.

## Case 2: Company K, a Japanese construction equipment manufacturer

[Actual: approximately 50 units]



Roll filter was used Previously, but switched to long life filter and which has led to a reduction in labor hours. Also, it is beneficial for energy saving and preventing the deterioration of the oil conditioner.

## Case 3: Other customers (Japanese automobile manufacturer T, etc.)



Thanks to long life filter, it also strengthening of maintenance activities for HYBRID equipment (wireless communication and hydraulic oil management) have been achieved. Looking forward to use long life filter not only domestically but also for overseas, such as for the overseas relocation of end user facilities and the export of machinery.