KOGANEI

Air Treatment

Sub-line Filters

INSTRUCTION MANUAL Ver.1.0

Sub-line Filters

Line filters	: Rc3/8～Rc3/4
Micro mist filters	: Rc3/8, 1/2
Activated charcoal filters	: Rc1/2～Rc3/4

Sub-line Filters

The series is configured according to the compressor and air dryer size, to protect the air dryer and air line ends.

Line filters: KLF series

- Eliminate solid particles larger than 3μm
- An auto drain is standard equipment
- Air for general pneumatic equipment and painting devices

Micro mist filters: KMF series

- Eliminate solid particles larger than 0.3μm
- Eliminate residual oil aerosols of over 0.5ppm$^{mg}/_{mg.}$
- Air for instrumentation, air measurement, and air pressure control

Activated charcoal filters: KKF series

- Eliminate odors through absorption by activated carbon
- Eliminate oil vapors
- For pharmaceutical and food products

Handling Instructions and Precautions

⚠ **Caution** : Before use, always read the Owner's Manual provided with the product.

Filter

1. Mount in a vertical position, with the piping connections on the top and the drain port on the bottom.
2. Preserve sufficient space around and under the filter to ease replacement of the element.
3. For improved maintenance when making piping connections, install a bypass circuit between the filter outlet and intake ports. In addition, mount a check valve on the outlet side when there is a possibility of air flowing backward inside the filter.

General precautions

1. Always thoroughly blow off (use compressed air) or air blowing the tubing before piping. Be careful to prevent shavings, sealing tape, or rust, etc., generated during plumbing from entering into the pipes.
2. The product cannot be used when the media or the ambient atmosphere contains any of the substances listed below. Organic solvents, phosphate ester type hydraulic oil, sulphur dioxide, chlorine gas, or acids, etc.

LINE FILTERS

KLF Series

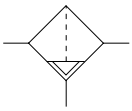
Eliminate solid particles larger than 3 μm. Uses a long-life, pleated pre-filter with virtually no pressure loss.

- Install in upstream or downstream of the air dryer, or in upstream of the micro mist filter, to extend the operating life of the air dryer and micro mist filter.

KLF-75
KLF-150

KLF-200

Symbol

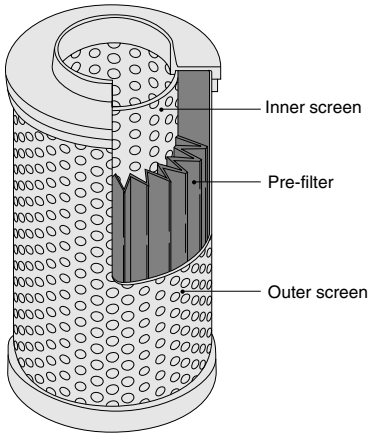


Specifications

Item		Model	KLF-75	KLF-150	KLF-200
Media			Air		
Operating pressure range		MPa [psi.]	0.2～0.97 [29～141]		
Operating temperature range		°C [°F]	5～60 [41～140]		
Intake air temperature range		°C [°F]	5～60 [41～140]		
Connection port	IN, OUT		Rc3/8	Rc1/2	Rc3/4
	Differential pressure gauge connection port		—	Rc1/8	Rc1/4
	Drain port		Rc1/4 (outer diameter ϕ 16 [0.63in.])		
Volume of processed air Note		m³/min [ft³/min.] (ANR)	0.33 [11.6]	1.0 [35.3]	1.65 [58.2]
Filtration rating		μm	3		
Pressure drop MPa [psi.]	Initial stage		0.005 [0.73]		
	Replace at		0.07 [10.2]		
Element operating life			Change at 3000 hours or one year whichever comes first		
External dimensions Dimension between flats × total length		mm [in.]	90×238 [3.54×9.37]		115×287 [4.53×11.30]
Mass		kg [lb.]	1.0 [2.2]		1.5 [3.3]
Painting		(Munsell No.)	Baked finish with acrylic resin (7.5GY5/2)		Baked finish with melamine resin (5GY8.5/0.5)
Filter element	Model		EL-75-A	EL-150-A	EL-200-C
	Quantity		1		

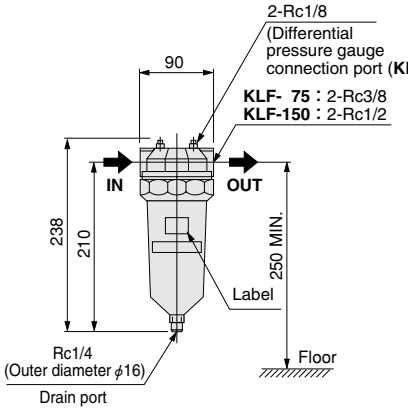
Remark: An auto drain is standard equipment for all models.
Note : Values show processed air volume at atmospheric pressure.
(Measuring conditions) Intake air pressure: 0.7MPa [102psi.], Intake air temperature: 30°C [86°F], Intake dew point: At atmospheric pressure –17°C [1.4°F], pressurized 10°C [50°F]

Inner Construction

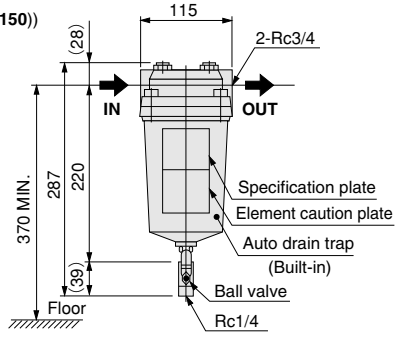


Dimensions (mm)

KLF-75 -150



KLF-200



MICRO MIST FILTERS

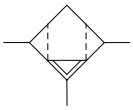
KMF Series

Eliminate solid particles larger than 0.3 μm.
Eliminate residual oil aerosols of over 0.5ppm$^{mg}/_{mg}$.

- Install at the inlet side of lines where oil intrusion cannot be allowed, or behind air dryers, to keep out oil and microscopic particles.

KMF-75
KMF-150

Symbol

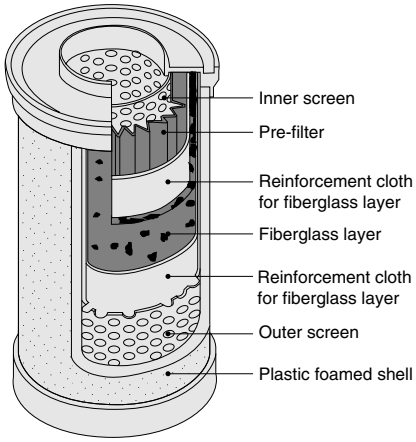


Specifications

Item \ Model		KMF-75	KMF-150
Media		Air	
Operating pressure range	MPa [psi.]	0.2～0.97 [29～141]	
Operating temperature range	°C [°F]	5～60 [41～140]	
Intake air temperature range	°C [°F]	5～60 [41～140]	
Connection port	IN, OUT	Rc3/8	Rc1/2
	Differential pressure gauge connection port	—	Rc1/8
	Drain port	Rc1/4 (outer diameter ϕ 16 [0.63in.])	
Volume of processed air[Note]	m^3/min [ft^3/min.] (ANR)	0.33 [11.6]	1.0 [35.3]
Filtration rating	μm	0.3	
Filtering efficiency	Solid particles %	99.9999	
	Residual oil ppm$^{mg}/_{mg}$	0.5	
Pressure drop MPa [psi.]	Initial stage	0.01 [1.5]	
	Normal	0.02～0.04 [2.9～5.8]	
	Replace at	0.07 [10.2]	
Element operating life		Change at 3000 hours or one year whichever comes first	
External dimensions Dimension between flats × total length	mm [in.]	90×238 [3.54×9.37]	
Mass	kg [lb.]	1.0 [2.2]	
Painting	(Munsell No.)	Baked finish with acrylic resin (7.5GY5/2)	
Filter element	Model	EM-75-A	EM-150-A
	Quantity	1	

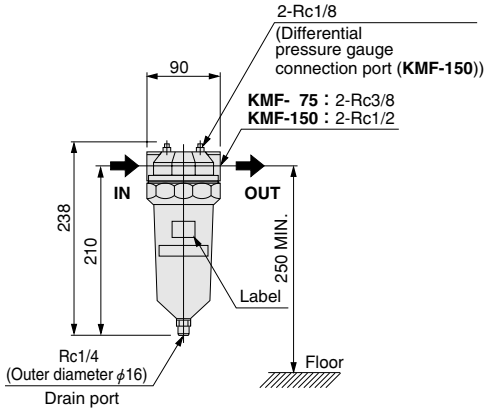
Remark: An auto drain is standard equipment for all models.
Note: Values show processed air volume at atmospheric pressure.
(Measuring conditions) Intake air pressure: 0.7MPa [102psi.], Intake air temperature: 30°C [86°F], Intake dew point: At atmospheric pressure –17°C [1.4°F], pressurized 10°C [50°F], Intake oil aerosols density: 18ppm$^{mg}/_{mg}$

Inner Construction



Dimensions (mm)

KMF-75
-150



ACTIVATED CHARCOAL FILTERS

KKF Series

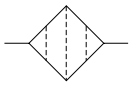
Eliminate odors through absorption by activated charcoal.
Activated charcoal layer with large absorption surface area (1000cm²/g) maintains a high absorption effectiveness over long periods.

- Install in upstream or downstream of micro mist filters, to remove oil vapors and other odors and create clean air.

KKF-150

KKF-200

Symbol

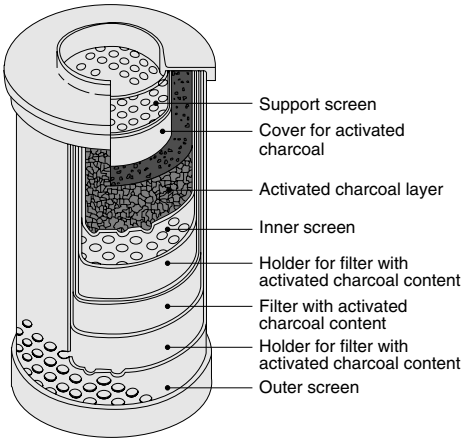


Specifications

Item		Model	KKF-150	KKF-200
Media			Air	
Operating pressure range		MPa [psi.]	0.05～0.97 [7～141]	
Operating temperature range		°C [°F]	5～60 [41～140]	
Intake air temperature range		°C [°F]	5～60 [41～140]	
Connection port			Rc1/2	Rc3/4
Volume of processed air[Note]		m³/min [ft³/min.] (ANR)	1.0 [35.3]	1.65 [58.2]
Filtering method			Absorption by activated charcoal	
Filtering efficiency (residual oil) ppm mg/mg	Initial stage		0.05	
	Normal		0.1	
Pressure loss		MPa [psi.]	0.05 [7]	
Element operating life			Change at 1500 hours or six months whichever comes first	
External dimensions Dimension between flats × total length		mm [in.]	90×218 [3.54×8.58]	115×231 [4.53×9.09]
Mass		kg [lb.]	1.0 [2.2]	1.7 [3.7]
Painting		(Munsell No.)	Baked finish with acrylic resin(7.5GY5/2)	Baked finish with melamine resin (5GY8.5/0.5)
Filter element	Model		**EK-150-A**	**EK-200-C**
	Quantity		1	

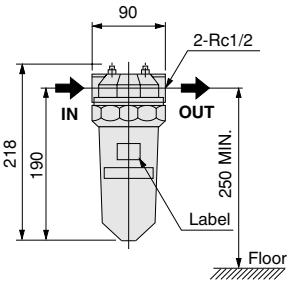
Note: Values show processed air volume at atmospheric pressure.
(Measuring conditions) Intake air pressure: 0.7MPa [102psi.], Intake air temperature: 30°C [86°F], Intake dew point: At atmospheric pressure –17°C [1.4°F], pressurized 10°C [50°F], Intake oil aerosols density: 0.5ppm mg/mg

Inner Construction



Dimensions (mm)

KKF-150



KKF-200