



Pneumatic, Vacuum and Auxiliary Components
Catalog No. CB-024SA

Oil mist filter

M1000/M2000/M3000 M4000/M6000/M8000-W-FP1 Series







Ideal for circuits which prohibit passage of oil

● Port size: Rc1/8 to Rc1

JISCode



Specifications

Item	M1000-W	M2000-W	M3000-W	M4000-W	M6000-W	M8000-W
Appearance						
Working fluid	Compressed air					
Working pressure MPa	0.1 to 1.0 *2, *3					
Proof pressure MPa	1.5 *2					
Drain capacity cm ³	3	25	45	80	80	80
Port size Rc *8	1/8, 1/4 (3/8 uses an adaptor)	1/4, 3/8 (1/2 uses an adaptor)		1/4, 3/8, 1/2 (3/4 uses an adaptor)	3/4, 1 (1 1/4 uses an adaptor)	3/4, 1 (1 1/4 uses an adaptor)
Weight kg	0.096	0.25	0.28	0.52	0.95	1.35
Standard accessories	Bowl guard					

Mantle option name	Blank (M type)	S (S type)	X (X type)
Max. processing flow rate	M1000-□-W 150 *2	S 150 *2	X 150
*1	M2000-□-W 250	S 310	X 310
L/min (ANR)	M3000-□-W 360	S 450	X 450
Primary pressure 0.7 MPaHour	M4000-□-W 825	S 1000	X 1000
	M6000-□-W 1270	S 1400	X 1400
	M8000-□-W 2600	S 2900	X 2900
Ambient/fluid temperatures °C	5 to 60		5 to 30
Filtration rating μm	0.01 (nominal)		0.3
Secondary side oil concentration mg/m ³	0.01 or less (0.1 or less after oil saturation) *4,*5		0.5 or less *4
Mantle (element) change	1 year (6000 hours) or pressure drop 0.1 MPa		0.003 or less *6
			- *7

*1: Use within the max. processing flow rate. If the max. processing flow rate is exceeded temporarily, or if the filter is installed at a location with high levels of pulsation, the mantle could be damaged or oil or drainage, etc., could splatter to the secondary side and result in a terminal malfunction.

*2: With M1000-W-F1 auto-drain, the min. working pressure is 0.2MPa, the max. working pressure is 0.7MPa and the proof pressure is 1.05MPa. For the max. processing flow rate, refer to the max. processing flow rate graph (Pneumatic, Vacuum, and Auxiliary Components (CB-024SA)).

*3: In the case of "F1" with auto-drain, the min. working pressure is 0.15MPa.

*4: The secondary oil concentration is the value when the primary oil concentration is 30mg/m³ and inlet air temperature is 21°C.

*5: Install an oil mist filter (S type) as a pre-filter on the primary side to prevent early clogging.

*6: When an oil mist filter (M Series M type) is installed on the primary side.

*7: The mantle (element) replacement period differs depending on the odor density in compressed air, and thus cannot be clearly indicated. Consider the total period from initial installation to when the smell of oil is confirmed as the effective deodorizing period, and replace at the same time as the M type or control with usage time. (When the inlet temperature is 21°C, replace at the control time or 1,000 hours, whichever comes first) Keep the primary air temperature at 30°C or less. The deodorizing effect will drop if temperature is high, so provide heat dissipation measures.

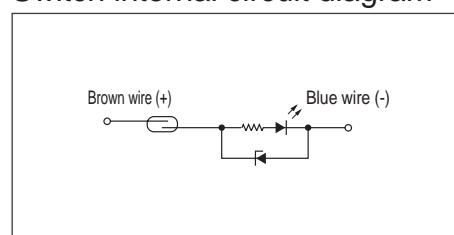
*8: NPT and G threads can be manufactured with CKD Sales.

Differential pressure switch/switch specifications

Differential pressure switch	Differential pressure switch option Q3/Q4	
Option name	Reed 2-wire	
Load voltage	12/24 VDC	110 VAC
Load current *1	5 to 50mA	7 to 20mA
Internal voltage drop	3 V or less	
Display lamp	Red LED (Lit when ON)	
Lead wire length	3 m (oil resistant vinyl cabtyre cable 2-conductor 0.2mm ²)	
Shock resistance	294m/s ²	
Insulation resistance	500 MΩ and over with 20 VDC megger	
Withstand voltage	No failure after 1 minute of 1000 VAC application.	
Degree of protection	IEC Standard IP67, JIS C0920 (water-tight), oil resistance	
Contact protection circuit	None	

*1: Install the load resistance before use.

Switch internal circuit diagram



CE marking specifications

Compatible as standard.

Oil Mist Filter Series

How to order

How to order

M1000 - **6** - **W** - **S** - **FP1** - **A6W**

A Model No.

B Port size

C Option

D Pipe adaptor set (attachments)

E Bracket (included)

* For the explanation of the option, Pneumatic/Refer to Vacuum and Auxiliary Components (CB-024SA).

A Model No.					
M1000	M2000	M3000	M4000	M6000	M8000

Code	Description					
B Port size						
6	Rc1/8	●				
8	Rc1/4	●	●	●	●	
10	Rc3/8		●	●	●	
15	Rc1/2			●		
20	Rc3/4				●	●
25	Rc1				●	●

C Option							*1
Drain discharge *2, *3	Blank	With manual drain cock	●	●	●	●	●
	F1	Auto-drain with manual override (NC: No exhaust when not pressurized)	●	●	●	●	●
Bowl Material	Blank	Polycarbonate bowl	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●
	M	Metal bowl			●	●	●
	M1	Metal bowl with manual drain cock		●	●	●	●
Mantle (Element)	Blank	M type (nominal 0.01 μm; remaining oil 0.01mg/m ³)	●	●	●	●	●
	S	S type (nominal 0.3 μm; remaining oil 0.5mg/m ³)	●	●	●	●	●
	X *6	X type (deodorization; Remaining oil 0.003mg/m ³)	●	●	●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)				●	●
Differential pressure indicator	Q2	With differential pressure indicator		●	●	●	●
Differential pressure Switch	Q3	Differential pressure indicator + switch 1-point (SW2)		●	●	●	●
	Q4	Differential pressure indicator + switch 2-point (SW1/SW 2)		●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●

D Pipe adaptor set (attachments)							*4, *5	Refer to CB-024SA
Blank	Not included	●	●	●	●	●	●	
A6W	Rc1/8 pipe adaptor set	●						
A8W	Rc1/4 pipe adaptor set	●	●	●	●			
A10W	Rc3/8 pipe adaptor set	●	●	●	●			
A15W	Rc1/2 pipe adaptor set		●	●	●			
A20W	Rc3/4 pipe adaptor set				●	●	●	
A25W	Rc1 pipe adaptor set					●	●	
A32W	Rc1 1/4 pipe adaptor set						●	●

E Bracket (included)							Refer to CB-024SA	
Blank	Not included	●	●	●	●	●	●	●
BW	C-bracket	●	●	●	●	●	●	●

Precautions for model No. selection

*1: Select options for drainage, bowl material and differential pressure detection. When selecting options for several items, list options in order from the top.

*2: NO (Normally Open) auto-drain cannot be selected.

*3: Refer to (Pneumatic, Vacuum, and Auxiliary Components (CB-024SA)) for the auto-drain use conditions.

*4: The pipe adaptor set and C type bracket cannot be used together.

*5: The joiner set is attached with the pipe adapter set.

*6: When the mantle is "X", combination with option F1 is not possible.

Option weight

* Add to the weight of the standard accessories.

Unit: kg

Code	Drain discharge	Bowl material			Differential pressure switch			Pipe adaptor set						Bracket
	F1	M	M1	Q2	Q3	Q4	A6W	A8W	A10W	A15W	A20W	A25W	A32W	
M1000	0.007						0.09	0.09	0.09					0.1
M2000	0.02		0.1	0.04	0.09	0.13		0.16	0.16	0.16				0.15
M3000	0.02	0.1	0.1	0.04	0.09	0.13		0.16	0.16	0.16				0.17
M4000	0.02	0.1	0.1	0.05	0.10	0.14		0.16	0.16	0.16	0.16			0.21
M6000	0.02	0.1	0.1	0.05	0.10	0.14					0.53	0.53	0.53	0.34
M8000	0.02	0.1	0.1								0.53	0.53	0.53	0.36

For dimensions, refer to the oil mist filter in "Pneumatic, Vacuum and Auxiliary Components (CB-024SA)".