

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

Main line filter

# AF3000P Series

Appropriate for large pre-filter.

● Processing air flow rate: 16 to 256m<sup>3</sup>/min (ANR)

JIS symbol



P4  
Series

Pneumatic  
cylinders  
Hand/  
Chuck  
Related  
products  
Cylinder  
Switch

Vacuum components  
Pneumatic valves

Clean air  
components

Pneumatic auxiliary components  
Speed  
controller  
Fitting  
Auxiliary  
valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor  
specification  
specifications

## Specifications

Item	AF3016 P-50	AF3032 P-80	AF3048 P-100	AF3064 P-100	AF3080 P-150	AF3096 P-150	AF3128 P-150	AF3160 P-200	AF3192 P-200	AF3256 P-200
Processing air flow rate m <sup>3</sup> /min (ANR)	16	32	48	64	80	96	128	160	192	256
Working fluid	Compressed air									
Working pressure MPa	0.07 to 1.0									
Proof pressure MPa	1.5									
Ambient temperature °C	5 to 60									
Degree of filtration μm	3									
Pressure drop	Initial MPa	Within 0.005								
	Normal MPa	0.005 to 0.02								
	Element replacement MPa	0.07								
Element quantity	1	2	3	4	5	6	8	10	12	16
Port size (*1) Flange	2B	3B	4B	4B	6B	6B	6B	8B	8B	8B
Weight kg	45	95	98	130	160	190	250	260	300	350
Differential pressure gauge	Contact CKD for details.									
Drain discharger	No									

\*1: Flange is 10K flange.

\*2: Processing air flow rate is the atmospheric pressure conversion value where the inlet pressure is 0.7MPa and initial pressure drop is 0.005MPa.

\*3: ANR indicates conditions of 20°C atmospheric pressure and relative humidity 65%.

## How to order

AF3 016 P - 50 - P4

A Flow rate classification

## Compatibility table by variation

AF3000	
Port size	Flange 2B, 3B, 4B, 6B, 8B
P4	▲

●: Applicable models ○: Semi-applicable models  
▲: Contact CKD for details. □: Not applicable

## Bore size/flow rate classification table

B Bore size		016	032	048	064	080	096	128	160	192	256
50	Flange 2B	●									
80	Flange 3B	●									
100	Flange 4B		●	●							
150	Flange 6B				●	●	●				
200	Flange 8B							●	●	●	

B Bore size

C Option \*3

Code	Item
<b>A Flow rate classification</b>	
016	16m <sup>3</sup> /min (ANR)
032	32m <sup>3</sup> /min (ANR)
048	48m <sup>3</sup> /min (ANR)
064	64m <sup>3</sup> /min (ANR)
080	80m <sup>3</sup> /min (ANR)
096	96m <sup>3</sup> /min (ANR)
128	128m <sup>3</sup> /min (ANR)
160	160m <sup>3</sup> /min (ANR)
192	192m <sup>3</sup> /min (ANR)
256	256m <sup>3</sup> /min (ANR)

B Bore size	
Refer to the bore size/flow rate classification table on the left.	

C Option	
Blank	No
H	English language specifications
K	Companion flange included
L	Foundation bolt/nut included (*2)
L1	Stainless steel foundation bolt/nut included (*2)
O	Outdoors
X1	IN/OUT reverse direction (*1)
Y2	Product photo

## Precautions for model No. selection

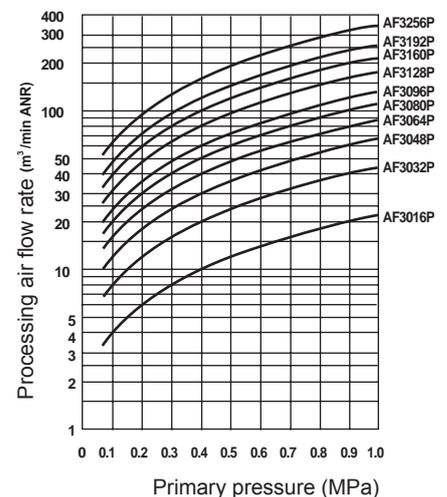
\*1: Viewed from the front, standard products have an air inlet on the left port and an air outlet on the right port. \*For "X1", an air inlet is provided on the right port, with an air outlet provided on the left port.

\*2: Available for AF3032P to AF3256P.

\*3: When ordering several options, indicate the required options in alphabetical order.

\*4: Made-to-order product. Contact CKD Sales for details.

## Flow characteristics



⚠ Note on selection

- Never use model numbers found to be below the point of intersection of the selection conditions.
- When the point of intersection found according to selecting conditions and flow characteristics curves are on the same line, the service life may be shortened, so select a model that is one size larger.
- Unit performance may not be attained if used at less than the selected pressure. Always select the model No. for the working pressure.



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

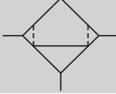
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# AF3000S Series

Protects expensive pneumatic components

● Flow rate range: 16 to 256m<sup>3</sup>/min (ANR)

JIS symbol



## Specifications

Item	AF3016 S-50	AF3032 S-80	AF3048 S-100	AF3064 S-100	AF3080 S-150	AF3096 S-150	AF3128 S-150	AF3160 S-200	AF3192 S-200	AF3256 S-200
Processing air flow rate m <sup>3</sup> /min(ANR)	16	32	48	64	80	96	128	160	192	256
Working fluid	Compressed air									
Working pressure MPa	0.07 to 1.0									
Proof pressure MPa	1.5									
Ambient temperature °C	5 to 60									
Degree of filtration μm	0.3									
Secondary oil content mg/m <sup>3</sup>	1.0 (inlet air 30°C)									
Pressure drop	Initial MPa									
	Normal MPa									
	Element replacement MPa									
Element quantity	1	2	3	4	5	6	8	10	12	16
Port size (*1) Flange	2 B	3 B	4 B	4 B	6 B	6 B	6 B	8 B	8 B	8 B
Weight kg	45	95	98	130	160	190	250	260	300	350
Differential pressure gauge	Contact CKD for details.									
Drain discharger	No									

\*1: Flange is 10K flange.

\*2: Processing air flow rate is the atmospheric pressure conversion value where the inlet pressure is 0.7MPa and initial pressure drop is 0.01MPa.

\*3: ANR indicates conditions of 20°C atmospheric pressure and relative humidity 65%.

## How to order

AF3 016 S - 50 - P4

A Flow rate classification

### Compatibility table by variation

AF3000	
Port size	Flange 2B, 3B, 4B, 6B, 8B
P4	▲

●: Applicable models ○: Semi-applicable models  
▲: Contact CKD for details. □: Not applicable

### Bore size/flow rate classification table

Flow rate classification	B Bore size									
	016	032	048	064	080	096	128	160	192	256
50 Flange 2B	●									
80 Flange 3B		●								
100 Flange 4B			●	●						
150 Flange 6B					●	●	●			
200 Flange 8B								●	●	●

### Precautions for model No. selection

\*1: Viewed from the front, standard products have an air inlet on the left port and an air outlet on the right port. For "X1", an air inlet is provided on the right port, with an air outlet provided on the left port.

\*2: Corresponds to AF3032S to AF3256S.

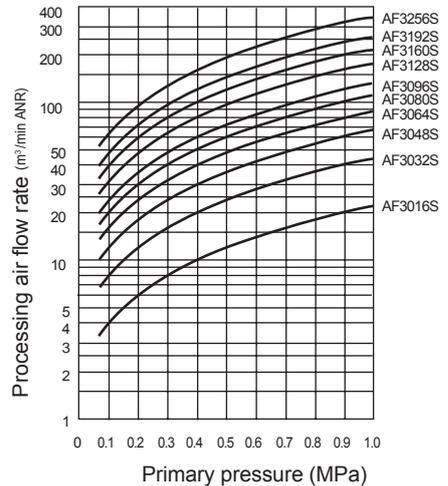
\*3: Made-to-order product. Contact CKD Sales for details.

Code	Item
<b>A Flow rate classification</b>	
016	16m <sup>3</sup> /min (ANR)
032	32m <sup>3</sup> /min (ANR)
048	48m <sup>3</sup> /min (ANR)
064	64m <sup>3</sup> /min (ANR)
080	80m <sup>3</sup> /min (ANR)
096	96m <sup>3</sup> /min (ANR)
128	128m <sup>3</sup> /min (ANR)
160	160m <sup>3</sup> /min (ANR)
192	192m <sup>3</sup> /min (ANR)
256	256m <sup>3</sup> /min (ANR)

<b>B Bore size</b>	
Refer to the bore size/flow rate classification table on the left.	

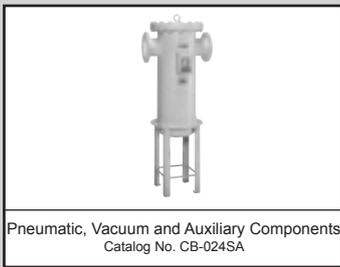
<b>C Option</b>	
Blank	No
H	English language specifications
K	Companion flange included
L	Foundation bolt/nut included (*2)
L1	Stainless steel foundation bolt/nut included (*2)
O	Outdoors
X1	IN/OUT reverse direction (*1)
Y2	Product photo

## Flow characteristics



### Note on selection

- Model numbers found to be below the point of intersection of the selection conditions be strictly prohibited.
- When the point of intersection found according to selecting conditions and the flow characteristics curve are on the same line, the service life may be shortened, so select one size larger model No.
- The oil removing ratio drops if the inlet air temperature is 30°C or more. Maintain the inlet air temperature at 30°C or less.
- Unit performance may not be attained if used at less than the selected pressure. Always select the model No. for the working pressure.



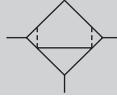
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# AF3000M Series

For pneumatic circuits which prohibit passage of oil

● Flow rate range: 16 to 256m<sup>3</sup>/min (ANR)

JIS symbol



P4  
Series

Pneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components  
Pneumatic valves

Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube

Gas generator  
Fluid control components

Electric actuator  
Motor specifications  
Motorless specifications

## Specifications

Item	AF3016 M-50	AF3032 M-80	AF3048 M-100	AF3064 M-100	AF3080 M-150	AF3096 M-150	AF3128 M-150	AF3160 M-200	AF3192 M-200	AF3256 M-200
Processing air flow rate m <sup>3</sup> /min(ANR)	16	32	48	64	80	96	128	160	192	256
Working fluid	Compressed air									
Working pressure MPa	0.07 to 1.0									
Proof pressure MPa	1.5									
Ambient temperature °C	5 to 60									
Degree of filtration μm	0.01									
Secondary oil content mg/m <sup>3</sup>	0.1 (inlet air 30°C)									
Pressure drop	Initial MPa	Within 0.01								
	Normal MPa	0.02 to 0.04								
	Element replacement MPa	0.07								
Element quantity	1	2	3	4	5	6	8	10	12	16
Port size (*1) Flange	2B	3B	4B	4B	6B	6B	6B	8B	8B	8B
Weight kg	45	95	98	130	160	190	250	260	300	350
Differential pressure gauge	Contact CKD for details.									
Drain discharger	No									

\*1: Flange is 10K flange.

\*2: Processing air flow rate is the atmospheric pressure conversion value where the inlet pressure is 0.7MPa and initial pressure drop is 0.01MPa.

\*3: ANR indicates conditions of 20°C atmospheric pressure and relative humidity 65%.

## How to order

AF3 016 M - 50 - P4

A Flow rate classification

## Compatibility table by variation

AF3000	
Port size	Flange 2B, 3B, 4B, 6B, 8B
P4	▲

●: Applicable models ○: Semi-applicable models  
▲: Contact CKD for details. □: Not applicable

## Bore size/flow rate classification table

B Bore size		016	032	048	064	080	096	128	160	192	256
50	Flange 2B	●									
80	Flange 3B		●								
100	Flange 4B			●	●						
150	Flange 6B					●	●	●			
200	Flange 8B								●	●	●

B Bore size

C Option \*3

## Precautions for model No. selection

\*1: Viewed from the front, standard products have an air inlet on the left port, An air outlet is on the right port. "X1" For, An air inlet is provided on the right port, while an air outlet is provided on the left port.

\*2: Available for AF3032M to AF3256M.

\*3: When ordering several options, indicate the required options in alphabetical order.

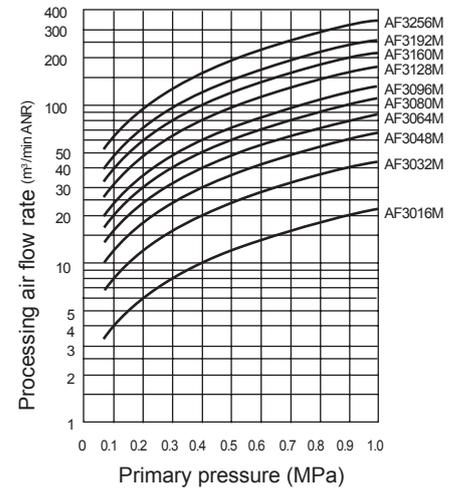
\*4: Made-to-order product. Contact CKD Sales for details.

Code	Item
<b>A Flow rate classification</b>	
016	16m <sup>3</sup> /min (ANR)
032	32m <sup>3</sup> /min (ANR)
048	48m <sup>3</sup> /min (ANR)
064	64m <sup>3</sup> /min (ANR)
080	80m <sup>3</sup> /min (ANR)
096	96m <sup>3</sup> /min (ANR)
128	128m <sup>3</sup> /min (ANR)
160	160m <sup>3</sup> /min (ANR)
192	192m <sup>3</sup> /min (ANR)
256	256m <sup>3</sup> /min (ANR)

B Bore size	
Refer to the bore size/flow rate classification table on the left.	

C Option	
Blank	No
H	English language specifications
K	Companion flange included
L	Foundation bolt/nut included (*2)
L1	Stainless steel foundation bolt/nut included (*2)
O	Outdoors
X1	IN/OUT reverse direction (*1)
Y2	Product photo

## Flow characteristics



### Note on selection

- Model numbers found to be below the point of intersection of the selection conditions be strictly prohibited.
- When the point of intersection found according to selecting conditions and the flow characteristics curve are on the same line, the service life may be shortened, so select one size larger model No.
- For inlet air temperature 30°C or more, This will reduce the oil removal ratio, Inlet air temperature of 30°C or less please.
- Unit performance may not be attained if used at less than the selected pressure. Always select the model No. for the working pressure.



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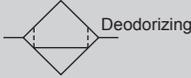
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# AF3000X Series

For pneumatic circuits which prohibit passage of odors

● Flow rate range: 16 to 256m<sup>3</sup>/min (ANR)

JIS symbol



## Specifications

Item	AF3016 X-50	AF3032 X-80	AF3048 X-100	AF3064 X-100	AF3080 X-150	AF3096 X-150	AF3128 X-150	AF3160 X-200	AF3192 X-200	AF3256 X-200
Processing air flow rate <sup>2</sup> /min(ANR)	16	32	48	64	80	96	128	160	192	256
Working fluid	Compressed air									
Working pressure MPa	0.07 to 1.0									
Proof pressure MPa	1.5									
Ambient temperature °C	5 to 30									
Filtration method	Suction by activated carbon									
Secondary oil content mg/m <sup>3</sup>	0.03 (inlet air 30°C)									
Pressure drop MPa	Within 0.01									
Element quantity	1	2	3	4	5	6	8	10	12	16
Port size (*1) Flange	2 B	3 B	4 B	4 B	6 B	6 B	6 B	8 B	8 B	8 B
Weight kg	45	95	98	130	160	190	250	260	300	350
Differential pressure gauge	Contact CKD for details.									
Drain discharger	No									

\*1: Flange is 10K flange.

\*2: Processing air flow rate is the atmospheric pressure conversion value where the inlet pressure is 0.7MPa and initial pressure drop is 0.01MPa.

\*3: ANR indicates conditions of 20°C atmospheric pressure and relative humidity 65%.

## How to order

AF3 016 X - 50 - P4

A Flow rate classification

B Bore size

C Option

Bore size/flow rate classification table

B Bore size		016	032	048	064	080	096	128	160	192	256
50	Flange 2B	●									
80	Flange 3B		●								
100	Flange 4B			●	●						
150	Flange 6B					●	●	●			
200	Flange 8B								●	●	●

Code	Item
<b>A Flow rate classification</b>	
016	16m <sup>3</sup> /min (ANR)
032	32m <sup>3</sup> /min (ANR)
048	48m <sup>3</sup> /min (ANR)
064	64m <sup>3</sup> /min (ANR)
080	80m <sup>3</sup> /min (ANR)
096	96m <sup>3</sup> /min (ANR)
128	128m <sup>3</sup> /min (ANR)
160	160m <sup>3</sup> /min (ANR)
192	192m <sup>3</sup> /min (ANR)
256	256m <sup>3</sup> /min (ANR)

<b>B Bore size</b>	
Refer to the bore size/flow rate classification table on the left.	

<b>C Option</b>	
Blank	No
H	English language specifications
K	Companion flange included
L	Foundation bolt/nut included (*2)
L1	Stainless steel foundation bolt/nut included (*2)
O	Outdoors
X1	IN/OUT reverse direction (*1)
Y2	Product photo

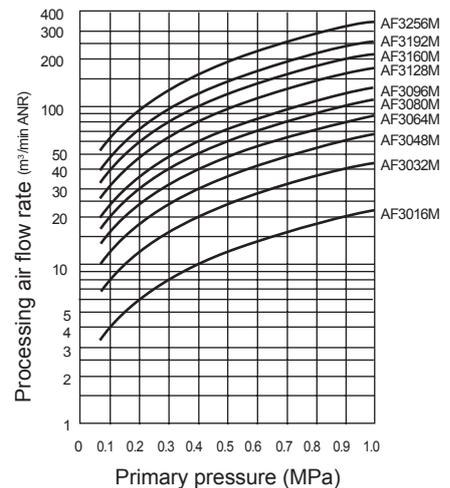
## Compatibility table by variation

AF3000	
Port size	Flange 2B, 3B, 4B, 6B, 8B
P4	▲

● Applicable models ○ Semi-applicable models  
▲ Contact CKD for details. □ Not applicable

## Flow characteristics

Flow characteristics are the same as the AF3000M type. Be sure to use the AF3000M type as a pre-filter.



## Precautions for model No. selection

- \*1: Viewed from the front, standard products have an air inlet on the left port and an air outlet on the right port. For "X 1", an air inlet is provided on the right port, with an air outlet provided on the left port.
- \*2: Corresponds to AF3032X to AF3256X.
- \*3: Unit performance may not be attained if used at less than the selected pressure. Always select the model No. for the working pressure.
- \*4: Made-to-order product. Contact CKD Sales for details.