

Air Filter

90-AF30 to 90-AF60



How to Order

90 - AF 30 - 03 B -

1 2 3 4 5

• Series compatible with secondary batteries

90 Material restriction

- Option/Semi-standard: Select one each for a to c.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) 90-AF30-N03B-RZ

		Symbol	Description	1					
				Body size					
				30	40	50	60		
2	Thread type	Nil	Rc	●	●	●	●		
		N	NPT	●	●	●	●		
		F	G	●	●	●	●		
+									
3	Port size	02	1/4	●	●	—	—		
		03	3/8	●	●	—	—		
		04	1/2	—	●	—	—		
		06	3/4	—	●	●	—		
		10	1	—	—	●	●		
+									
4	Option	a	Mounting	Nil	Without mounting option	●	●	●	●
				B Note 1)	With bracket	●	●	●	●
+									
5	Semi-standard	b	Flow direction	Nil	Flow direction: Left to right	●	●	●	●
				R	Flow direction: Right to left	●	●	●	●
		+							
		c	Pressure unit	Nil	Name plate and caution plate for bowl in imperial units: MPa	●	●	●	●
				Z Note 2)	Name plate and caution plate for bowl in imperial units: psi, °F	○ Note 2)	○ Note 2)	○ Note 2)	○ Note 2)

Note 1) A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

Note 2) ○: For thread type: NPT. This product is for overseas use only according to the new Measurement Law.
(The SI unit type is provided for use in Japan.)

*Specifications and dimensions for the 90-series are the same as standard products.

Bracket Part No.

Model				
90-AF30	90-AF40	90-AF40-06	90-AF50	90-AF60
90-AF30P-050AS	90-AF40P-050AS	90-AF40P-070AS	90-AF50P-050AS	90-AF50P-050AS

Note) Assembly of a bracket and 2 mounting screws.

90-AC Series Accessories: Spacer/Bracket

How to Order

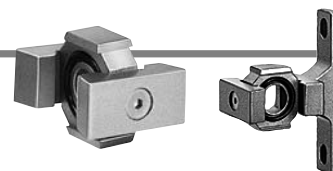
90 - Y 30 T

1 2

• Series compatible with secondary batteries

90 Material restriction

• Spacer



		Symbol	Description	①			
				Body size			
				30	40	50	60
②	Option	a	Mounting	Nil	Without mounting option	●	●
		T	With bracket	●	●	●	●

Note) Applicable to 90-AF40-06, 90-AFM40-06 and 90-AFD-40-06.

*Specifications and dimensions for the 90-series are the same as standard products.

Mist Separator

90-AFM30/90-AFM40

Micro Mist Separator

90-AFD30/90-AFD40

- 90-AFM Series Nominal filtration rating: 0.3 μm
- 90-AFD Series Nominal filtration rating: 0.01 μm



How to Order

90 - AFM 30 - 03 B -

90 - AFD 30 - 03 B -

Series compatible with secondary batteries

90 Material restriction

- Option/Semi-standard: Select one each for a to c.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) 90-AFM30-N03B-RZ

		Symbol	Description	1			
				Body size			
				30	40		
2	Thread type	Nil	Rc	●	●		
		N	NPT	●	●		
		F	G	●	●		
+							
3	Port size	02	1/4	●	●		
		03	3/8	●	●		
		04	1/2	—	●		
		06	3/4	—	●		
+							
4	Option	a	Mounting	Nil	Without mounting option	●	●
				B Note 1)	With bracket	●	●
+							
5	Semi-standard	b	Flow direction	Nil	Flow direction: Left to right	●	●
				R	Flow direction: Right to left	●	●
		+					
		c	Pressure unit	Nil	Name plate and caution plate for bowl in imperial units: MPa	●	●
Z Note 2)	Name plate and caution plate for bowl in imperial units: psi, °F			○ Note 2)	○ Note 2)		

Note 1) A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

Note 2) ○: For thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

Bracket Part No.

Model		
90-AFM30 90-AFD30	90-AFM40 90-AFD40	90-AFM40-06 90-AFD40-06
90-AF30P-050AS	90-AF40P-050AS	90-AF40P-070AS

Note) Assembly of a bracket and 2 mounting screws.

*Specifications and dimensions for the 90-series are the same as standard products.

90-AC Series Accessories: Spacer/Bracket

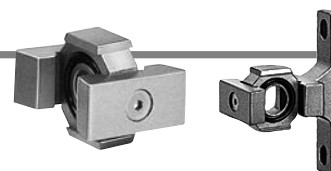
How to Order

90 - Y 30 T

Series compatible with secondary batteries

90 Material restriction

Spacer



	Symbol	Description	1			
			Body size			
			30	40	50 (Note)	60
2	a Mounting	Nil				
		T				

Note) Applicable to 90-AF40-06, 90-AFM40-06 and 90-AFD40-06.

*Specifications and dimensions for the 90-series are the same as standard products.

Directional Control Valves

Actuators

Air Grippers

Air Preparation Equipment

Air Filters/Pressure Control Equipment

Flow Control Related Products

Vacuum Equipment

Detection Switches

Auto Switches

Regulator

90-AR30/90-AR40

Regulator with Backflow Function

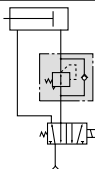
90-AR25K to 90-AR60K



- With the backflow function it incorporates a mechanism to exhaust the air pressure in the outlet side reliably and quickly.

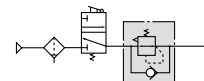
Example 1)

When the pressure in the rear and the front of the cylinder differs:



Example 2)

When the air supply is cut off and releasing the inlet pressure to the atmosphere, the residual pressure release of the outlet side can be ensured for a safety purpose.



How to Order

90-AR **30** **K** - **03** **B** -

Series compatible with secondary batteries

90 Material restriction

- Option/Semi-standard: Select one each for a to e.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) 90-AR30K-03B-1NR

		Symbol	Description	1						
				Body size						
				25	30	40	50	60		
2	With backflow function	Nil	Without backflow function	—	●	●	—	—		
		K	With backflow function	●	●	●	●	●		
+										
3	Thread type	Nil	Rc	●	●	●	●	●		
		N	NPT	●	●	●	●	●		
		F	G	●	●	●	●	●		
+										
4	Port size	02	1/4	●	●	●	—	—		
		03	3/8	●	●	●	—	—		
		04	1/2	—	—	●	—	—		
		06	3/4	—	—	—	●	—		
		10	1	—	—	—	●	●		
+										
5	Option 1) a	Mounting	Nil	Without mounting option	●	●	●	●	●	
		B	Note 2)	With bracket	●	●	●	●	●	
		H		With set nut (for panel fitting)	●	●	●	—	—	
+										
6	Semi-standard	b	Set pressure	Nil	0.05 to 0.85 MPa setting	●	●	●	●	●
				1	Note 3)	0.02 to 0.2 MPa setting	●	●	●	●
		+								
		c	Exhaust mechanism	Nil	Relieving type	●	●	●	●	●
				N	Non-relieving type	●	●	●	●	●
		+								
		d	Flow direction	Nil	Flow direction: Left to right	●	●	●	●	●
				R	Flow direction: Right to left	●	●	●	●	●
		+								
		e	Pressure unit	Nil	Name plate and pressure gauge in imperial units: MPa	●	●	●	●	●
				Z	Note 4)	Name plate and pressure gauge in imperial units: psi	○ Note 4)	○ Note 4)	○ Note 4)	○ Note 4)

Note 1) Option B, H are not assembled and supplied loose at the time of shipment.

Note 2) Assembly of a bracket and set nuts (90-AR30 and 90-AR40, 90-AR25(K) to 90-AR40(K)) Including 2 mounting screws for the 90-AR50(K) and 90-AR60(K).

Note 3) The only difference from the standard specifications is the adjusting spring for the regulator. It does not restrict the setting of 0.2 MPa or more.

Note 4) ○: For thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

*Specifications and dimensions for the 90-series are the same as standard products.

Bracket, Set Nut/Part No.

Option	Model	90-AR25K	90-AR30(K)	90-AR40(K)	90-AR50K	90-AR60K
Bracket assembly	Note 1)	90-AR25P-270AS	90-AR30P-270AS	90-AR40P-270AS	90-AR50P-270AS	
Set nut		AR25P-260S	AR30P-260S	AR40P-260S	—	—

Note 1) Assembly of a bracket and set nuts.

Note 2) Assembly of a bracket and 2 mounting screws.

Note 3) Please consult with SMC regarding the set nuts for the 90-AR50(K) and 90-AR60(K).

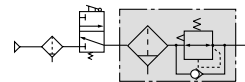
Filter Regulator with Backflow Function

90-AW30K to 90-AW60K

- Integrated filter and regulator units save space and require less piping.
- With the backflow function it incorporates a mechanism to exhaust the air pressure in the outlet side reliably and quickly.

Example)

When the air supply is cut off and releasing the inlet pressure to the atmosphere, the residual pressure release of the outlet side can be ensured for a safety purpose.



How to Order

90 - AW 30 K - 03 B -

1 2 3 4 5 6

• Series compatible with secondary batteries

90 Material restriction

- Option/Semi-standard: Select one each for a to e.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) 90-AW30K-03B-1N

		Symbol	Description	①				
				Body size				
				30	40	60		
②	With backflow function	K	With backflow function	●	●	●		
+								
③	Thread type	Nil	Rc	●	●	●		
		N	NPT	●	●	●		
		F	G	●	●	●		
+								
④	Port size	02	1/4	●	●	—		
		03	3/8	●	●	—		
		04	1/2	—	●	—		
		06	3/4	—	—	●		
		10	1	—	—	●		
+								
⑤	Option	a	Mounting	Nil	Without mounting option	●	●	●
				B	With bracket	●	●	●
				H	With set nut (for panel fitting)	●	●	—
+								
⑥	Semi-standard	b	Set pressure	Nil	0.05 to 0.85 MPa setting	●	●	●
				1	0.02 to 0.2 MPa setting	●	●	●
		+						
		c	Exhaust mechanism	Nil	Relieving type	●	●	●
				N	Non-relieving type	●	●	●
		+						
		d	Flow direction	Nil	Flow direction: Left to right	●	●	●
				R	Flow direction: Right to left	●	●	●
		+						
		e	Pressure unit	Nil	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa	●	●	●
				Z	Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, °F	○	○	○

Note 1) Option B, H are not assembled and supplied loose at the time of shipment.

Note 2) Assembly of a bracket and set nuts. (90-AW30(K) and 90-AW40(K)) Including 2 mounting screws for the 90-AW60(K).

Note 3) The only difference from the standard specifications is the adjusting spring for the regulator. It does not restrict the setting of 0.2 MPa or more.

Note 4) ○: For thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

*Specifications and dimensions for the 90-series are the same as standard products.

Bracket, Set Nut/Part No.

Optional specifications	Model		
	90-AW30K	90-AW40K	90-AW60K
Bracket assembly ^{Note 1)}	90-AR30P-270AS	90-AR40P-270AS	90-AW60P-270AS ^{Note 2)}
Set nut	AR30P-260S	AR40P-260S	— ^{Note 3)}

Note 1) Assembly of a bracket and set nuts.

Note 2) Assembly of a bracket and 2 mounting screws.

Note 3) Please consult with SMC regarding the set nuts for the 90-AW60(K).

Precision Regulator

90-IR1000/2000/3000 Series

How to Order

90-IR 2 0 0 0-02

Series compatible with secondary batteries

90	Material restriction
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Precision regulator

Body size

1	90-IR1000
2	90-IR2000
3	90-IR3000

Type of setting

0	Basic type (Handle)
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Accessory

Nil	None
B	With bracket

Port size

Symbo	size	Application		
		90-IR1000	90-IR2000	90-IR3000
01	1/8	●		
02	1/4		●	●
03	3/8			●
04	1/2			●

Regulating pressure range

For 90-IR1000/2000 series

0	0.005 to 0.2 MPa
1	0.01 to 0.4 MPa
2	0.01 to 0.8 MPa

For 90-IR3000 series

0	0.01 to 0.2 MPa
1	0.01 to 0.4 MPa
2	0.01 to 0.8 MPa



*Specifications and dimensions for the 90-series are the same as standard products.

Bracket Part No.

Part no.								
90-IR1000	90-IR1010	90-IR1020	90-IR2000	90-IR2010	90-IR2020	90-IR3000	90-IR3010	90-IR3020
INI-362-0-320			INI-362-0-321			INI-362-0-322		

Electro-Pneumatic Regulator

90-ITV2000 Series

How to Order

90 - ITV 2 0 1 0 - 0 1 2 N

Series compatible with secondary batteries

90	Material restriction
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Model

2	2000 type
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Pressure range

1	0.1 MPa
3	0.5 MPa
5	0.9 MPa

Power supply voltage

0	24 VDC
1	12 to 15 VDC

Input signal

0	Current 4 to 20 mA (Sink type)
1	Current 0 to 20 mA (Sink type)
2	Voltage 0 to 5 VDC
3	Voltage 0 to 10 VDC
4	Preset input

Monitor output

0	None (for preset input)
1	Analog output 1 to 5 VDC
2	Switch output/NPN output
3	Switch output/PNP output
4	Analog output 4 to 20 mA (Sink type)

Pressure display unit

Nil	MPa
2	kgf/cm ²
3	bar
4	psi
5	kPa

Cable connector type

N	Without cable connector
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Bracket

Nil	Without bracket
B	Flat bracket
C	L-bracket

Port size

2	1/4
3	3/8

Thread type

Nil	Rc
N	NPT
T	NPTF
F	G



*Specifications and dimensions for the 90-series are the same as standard products.

Bracket Part No.

Description	Part No.
	90-ITV20□□
Flat bracket	P39802043 (Mounting thread is not included.)
L-bracket	P39802044 (Mounting thread is not included.)