Compressed Air Preparation Filter RoHS

AFF/AM/AMD Series

How to Order

AFF **70D** – □ **10** – □ – □

Filter type

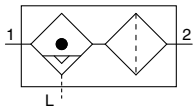
Symbol	Description	Specifications
AFF	Main line filter	Nominal filtration rating: 1 μm Water droplet removal ratio: 99% or more
AM	Mist separator	Nominal filtration rating: 0.1 μm Oil mist density at outlet: 1.0 mg/m³
AMD	Micro mist separator	Nominal filtration rating: 0.01 μm Oil mist density at outlet: 0.1 mg/m³

Body size

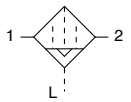
Symbol	Flow capacity
70D	7 m³/min (ANR)
80D	11 m³/min (ANR)
90D	14.5 m³/min (ANR)

Symbol

Main line filter



Mist separator
Micro mist separator



Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Port size	Applicable body size		
		70D	**80D**	**90D**
10	1	●	—	—
14	1 1/2	●	●	●
20	2	—	—	●

Accessory

Symbol	Description
Nil	None
B	Bracket*1, *2

*1 Included in the same package but not assembled (It is the customer's responsibility to assemble the product.)

*2 Even when the accessory is selected, the product label does not include the accessory (body only).

Option

Symbol	Description	Max. operating pressure [MPa]
Nil	Auto drain	1.0
H	Auto drain	1.6
J	Drain guide	1.6

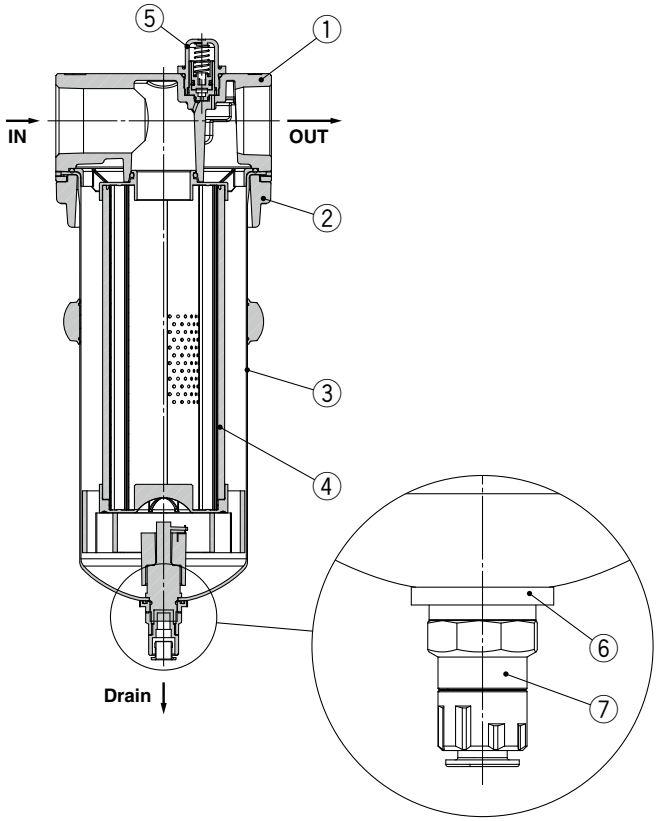
* Options H and J cannot be selected simultaneously.

Accessory Part Nos.

Description	Model		
	70D	**80D**	**90D**
Bracket	AM-BM70D	AM-BM90D	

* Includes mounting bolts (2 pcs.)

Construction: AFF, AM, AMD



Component Parts

No.	Description	Material
1	**Body**	Aluminum die-cast
2	**Flange**	Aluminum die-cast
3	**Bowl**	Stainless steel

Replacement Parts

No.	Description		Order no.		
			70D	**80D**	**90D**
4	**Element**	**For AFF**	AFF-EL70D	AFF-EL80D	AFF-EL90D
		For AM	AM-EL70D	AM-EL80D	AM-EL90D
		For AMD	AMD-EL70D	AMD-EL80D	AMD-EL90D
5	**Element service indicator**		AM-SA072		
6	**Drain port spacer**		AM-SA075		
7	**Auto drain***1	**For Rc, G thread**	AD43PA-D		
		For NPT thread	NAD43PA-D		

*1 The -H and -J specifications cannot be replaced.

Main Line Filter AFF Series

Standard Specifications

Model	AFF70D	AFF80D	AFF90D
Fluid	Compressed air		
Operating pressure range [MPa]	0.1 to 1.0		
Ambient and fluid temperatures [°C]	–5 to 60 (No freezing)		
Proof pressure [MPa]	1.5		
Maximum flow capacity∗1 **[m³/min (ANR)]**	7.0	11.0	14.5
Inlet pressure [MPa]	0.7		
Nominal filtration rating∗3 **[μm]**	1.0 (Filtration efficiency: 99%)		
Water droplet removal ratio∗4 **[%]**	99		
Compressed air purity class∗5	ISO 8573-1:2010 [4 : 7 : —]		
Float type auto drain	N.O. (Normally open), Drain port is open when pressure is not applied.		
Port size	1 or 1 1/2	1 1/2	1 1/2 or 2
Weight [kg]	3.4	4.7	5.0
Recommended element replacement interval (Guideline)	After 2 years of operation or when the element service indicator turns red, whichever comes first.		

Maximum Flow Capacity of the Compressor Intake Condition under Rated Conditions

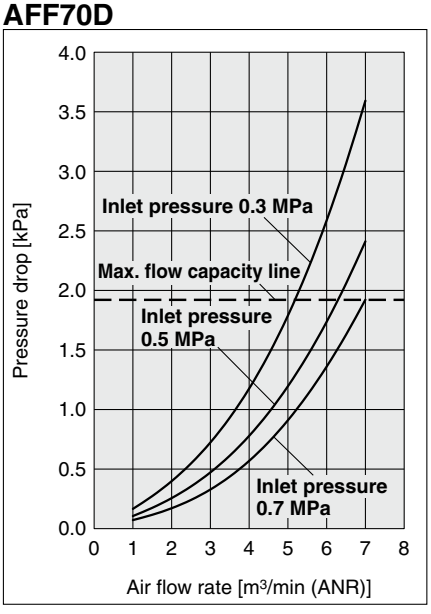
Model	AFF70D	AFF80D	AFF90D
Maximum flow capacity/Compressor intake condition∗2 **[m³/min]**	7.3	11.5	15.1

∗1 Flow at 20°C, atmospheric pressure, and 65% of relative humidity
∗2 32°C, flow rate when converted to atmospheric pressure
∗3 Filtration efficiency for the conditions below in addition to the rated conditions above [Test condition ISO 8573-4:2001, Test method ISO 12500-3:2009 compliant]
∗∗ Flow capacity, inlet pressure, and the amount of solid bodies at the filter inlet are stable.
∗∗ New element
∗4 Water droplet elimination rate for the conditions below in addition to the rated conditions above [Test method ISO 12500-4:2009 compliant]
∗∗ Water droplet at filter inlet = 33 g/m³
(Water droplet indicates condensed moisture. Water vapor which is not condensed is not included.)
∗∗ Inlet temperature = 25°C
∗∗ Flow capacity, inlet pressure, inlet temperature, and the amount of water droplets at the filter inlet are stable.
∗∗ New element
∗5 The compressed air purity class is indicated based on ISO 8573-1:2010 Compressed air – Part 1: Contaminants and purity classes. For details on this standard, refer to page 9.
∗ The surface finish of the outer surface of the container is equivalent to No. 2D∗∗1.
(There may be scratches, rubbing, stains, or discoloration which do not affect the function or performance of the product.)
∗∗1 A symbol for the surface finish of a cold rolled stainless steel sheet defined in JIS G 4305

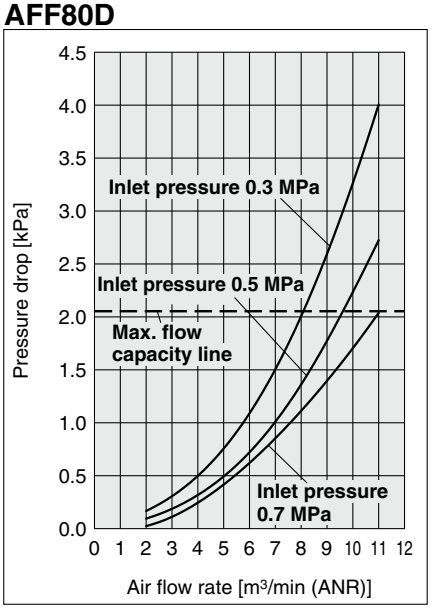
Flow Rate Characteristics/Select the model under the max. flow capacity line.

∗ Compressed air over max. flow capacity line in the table below may not meet the specifications of the product.

AFF70D



AFF80D



AFF90D