DRAIN FILTERS

Offer low-cost contaminants-free air in simple piping configurations!

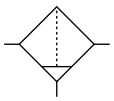
1 Use a high-performance condensation separation element to stabilize the separation efficiency (99%) even when the supply air changes flow speed or flow rate.

2 The compact and lightweight drain filter can be mounted anywhere along a piping system, and in many different combinations with F.R.L., etc.

3 A large array of diameter sizes are available, in response to air supply volume requirements.

4 Replacement of elements is rarely needed.

Symbol



Specifications

Item \ Model		DF300	DF600	DF900
Media		Air		
Port size	Rc	1/4, 3/8	3/8, 1/2	3/4, 1
Maximum operating pressure	MPa [psi.]	0.97 [141]		
Proof pressure	MPa [psi.]	1.47 [213]		
Operating temperature range (atmosphere and media)	°C [°F]	5～60 [41～140]		
Collected liquid separation rate	%	99 or higher		
Volume of processed air	ℓ/min [ft³/min.] (ANR)	300 [10.6]	750 [26.5]	1500 [53.0]
Element operating life	Hr	2000 (2 years)		
Materials	Body	Aluminum die-casting		
	Bowl	Polycarbonate		
	Element	Nylon non-woven fabric		
	Element model	E-30D	E-60D	E-90D
Options		Auto drain, bracket, nylon bowl		

Order Codes

DF □ – □ – □ – □ – □

Drain filters

Body model

Body model	Rc1/4	Rc3/8	Rc1/2	Rc3/4	Rc1
300	02	03			
600		03	04		
900				06	08

Port size

Bowl guard
Blank – Standard specification (polycarbonate)
N – Nylon bowl[Note2]

Drain cock specification
Blank – Screw type drain cock
F1 – Fitting type drain cock
A – Auto drain type drain cock[Note1]

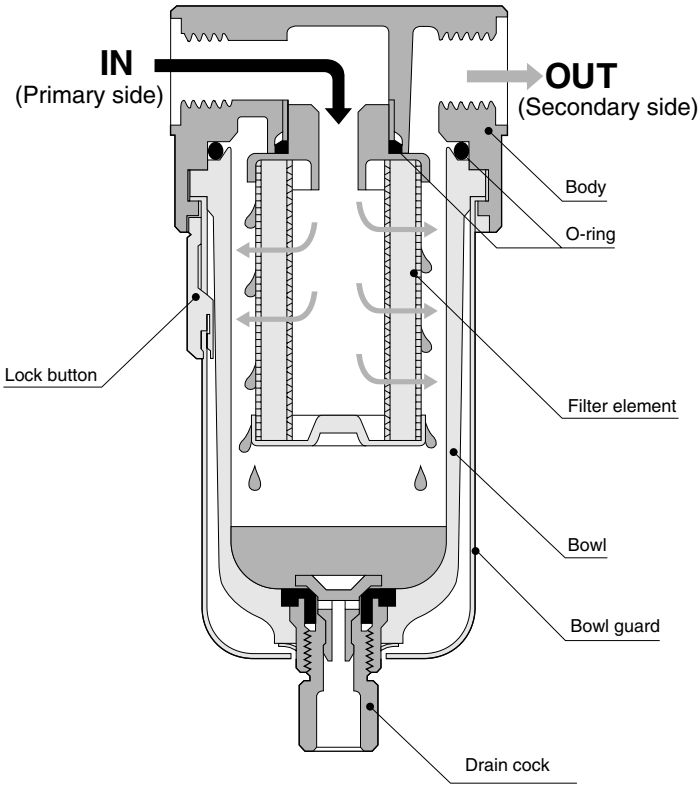
Bracket
Blank – No bracket
B – With bracket

● Order codes for brackets only

For DF300 – **8-30A**
For DF600 – **8-60B**[Note3]
For DF900 – **8-90A**

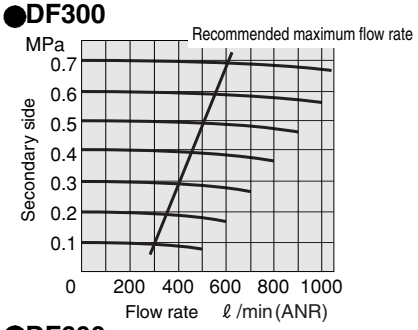
Notes: 1. Use at a pressure of 0.15MPa [22psi.] or more. It will not activate at less than 0.15MPa [22psi.].
For the auto drain type drain cock, see p.73.
2. If using the unit in bad atmosphere (in locations that may be subject to chips, oil, cutting oil, machine oil, etc.), use a nylon bowl.
3. Pipe supporting type brackets (8-60B) are sold in a set of two brackets.

Inner Construction and Major Parts

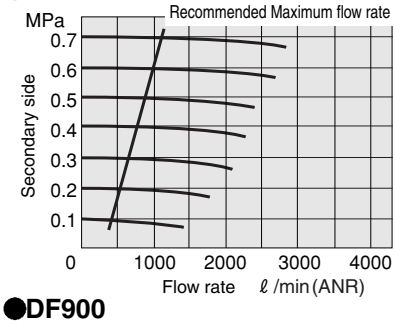


Flow Rate Characteristics

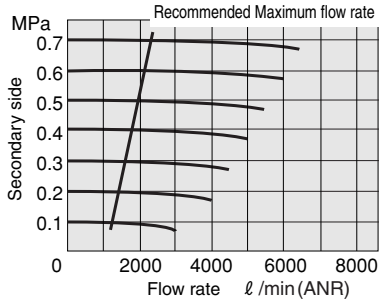
●DF300



●DF600

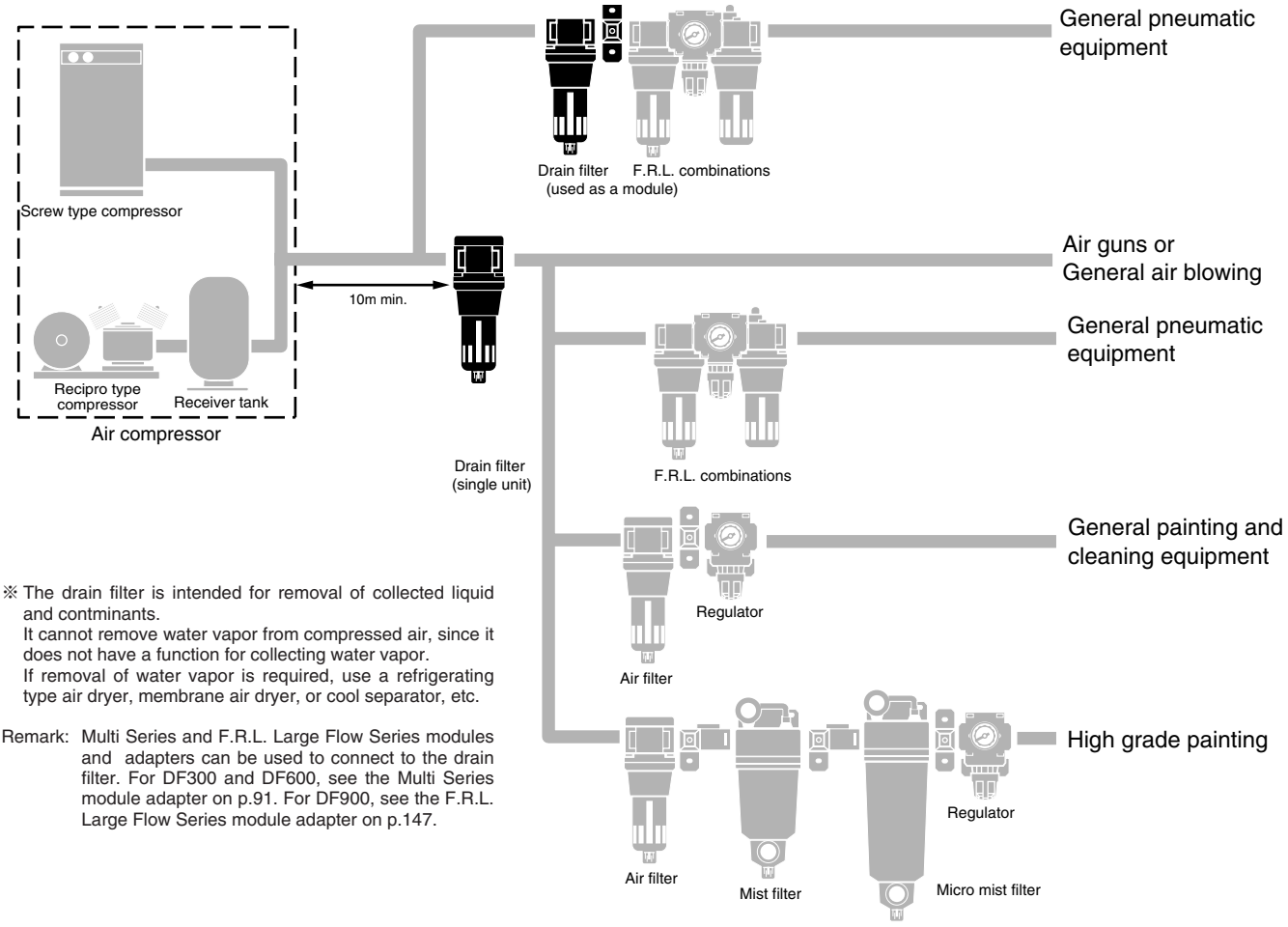


●DF900



1Mpa = 145psi. 1 ℓ/min = 0.0353ft³/min.

Application Example

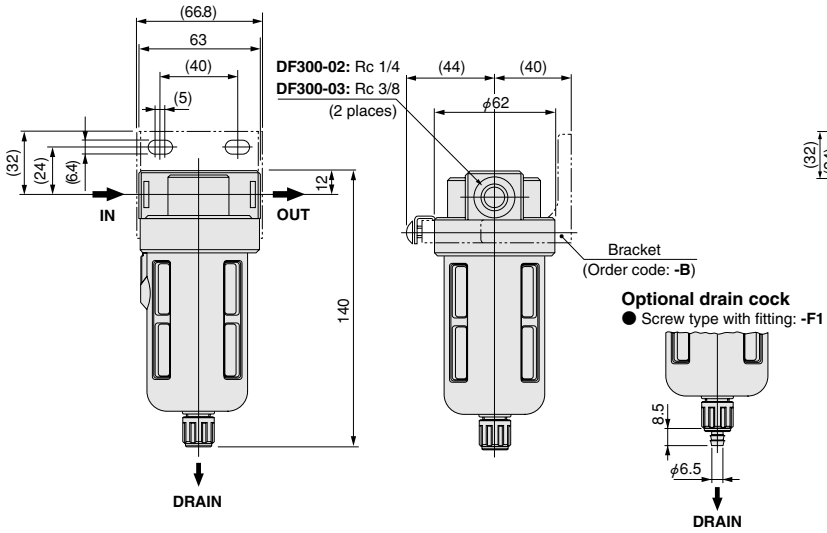


※ The drain filter is intended for removal of collected liquid and contminants.
It cannot remove water vapor from compressed air, since it does not have a function for collecting water vapor.
If removal of water vapor is required, use a refrigerating type air dryer, membrane air dryer, or cool separator, etc.

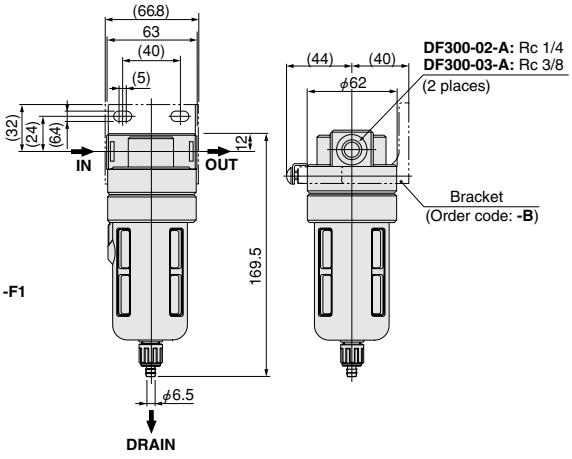
Remark: Multi Series and F.R.L. Large Flow Series modules and adapters can be used to connect to the drain filter. For DF300 and DF600, see the Multi Series module adapter on p.91. For DF900, see the F.R.L. Large Flow Series module adapter on p.147.

Dimensions (mm)

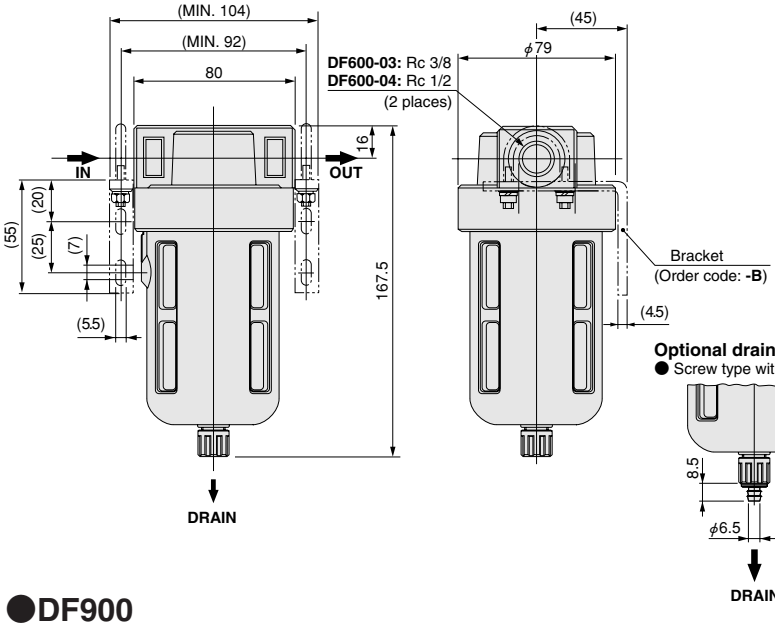
●DF300



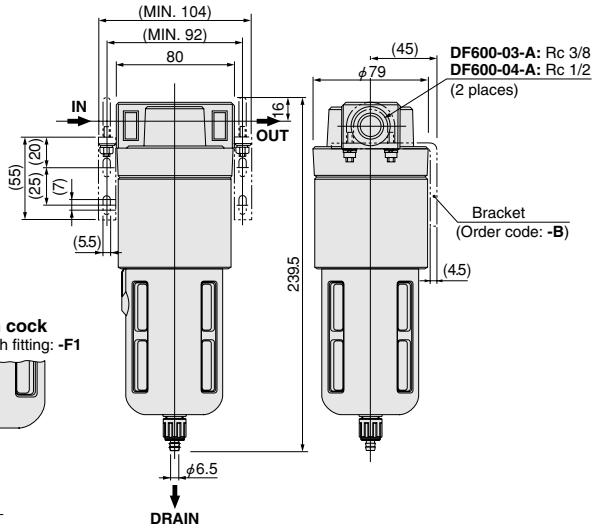
●DF300-A



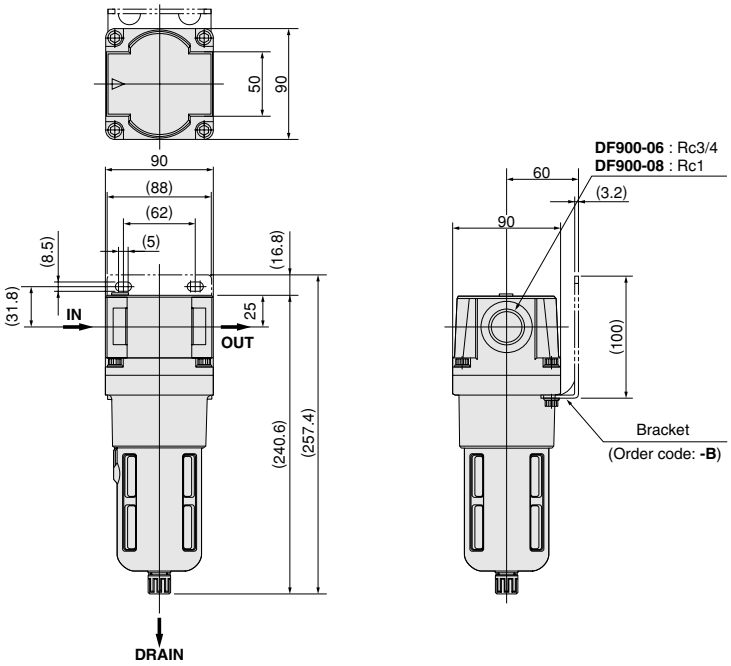
●DF600



●DF600-A

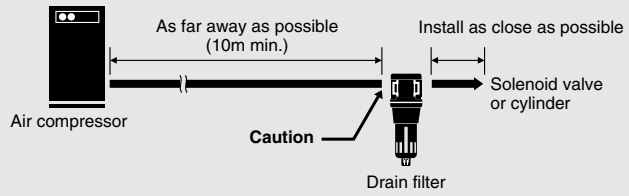


●DF900



Mounting and adjustment

1. Avoid locations that are subject to direct sunlight or that are near air compressors. To ensure that the intake air temperature is the same as the ambient temperature, mount as close to the pneumatic equipment as possible.



Caution: The drain filter is intended for removal of collected liquid or contaminants.
It cannot remove water vapor from compressed air, since it does not have a function for collecting water vapor. If removal of water vapor is required, use a refrigerating type air dryer or membrane air dryer, etc.

2. Use with intake air and ambient temperature in a range of 5°C to 60°C [41～140°F].
3. Mount the device vertically with the bowl on the bottom side.
In addition, leave a space to allow easy access for expelling collected liquid or contaminants, and replacement of the element.
(minimum of 100mm [3.94in.] from the floor)

General precautions

1. Always thoroughly blow off (use compressed air) the piping before plumbing.
Entering chips, sealing tape, rust, etc., generated during plumbing could result in air leaks or other defective operation.
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, chlorofluorocarbon, acids, or alkali, etc.
3. If using in locations subject to dripping water, dripping oil, etc., or to large amounts of dust, use something to cover and protect the unit.