

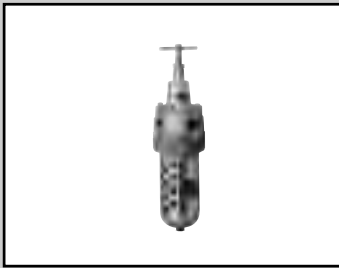
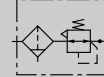
7170 Series

Precision F.R. unit



Precise pressure setting with 0.01 to 0.25 MPa range.

● Port size: Rc1/4, 3/8

JIS symbol



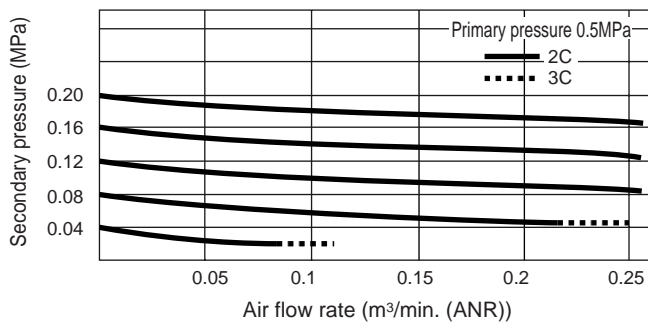
Specifications

Descriptions	Discontinued			
	7170-2C/3C-EL	7170-2C/3C-EJL	7170-2C/3C-FJL	
Appearance	 <p>● 7170-EL</p>		 <p>● 7170-EJL</p>	
Max. working pressure	MPa	1.0		
Withstanding pressure	MPa	1.5		
Fluid temperature (ambient temperature)	°C	5 to 65		
Set pressure range	MPa	0.01 to 0.25		
Relief starting	MPa	Setting pressure plus 0.0049		
Constant bleeding rate	ℓ /min.	2 or less (air consumption)		
Filtration rating	μm	5		
Drainage		Manual discharge	Automatic drain with manual cock (N.O. type)	
Port size	Rc	1/4, 3/8	1/4, 3/8	
Product weight	kg	1	1.1	1.2

Note: Minimum working pressure of NO automatic drain with manual cock is 0.1MPa.

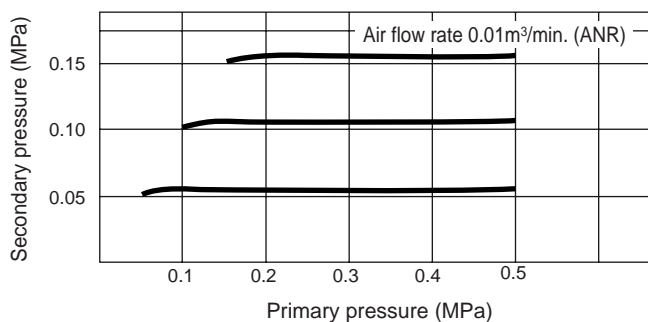
Flow characteristic

● 7170 Series



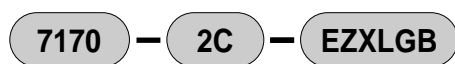
Pressure characteristic

● 7170 Series



- Refrigerating type dryer
- Desiccant type dryer
- High polymer membrane dryer
- Air filter
- Auto. drain / others
- F.R.L. (Module unit)
- F.R.L. (Separate)
- Compact F.R.
- Precise regulator
- F.R.L. (Related products)
- Clean F.R.
- Electro pneumatic regulator
- Air booster
- Speed control valve
- Silencer
- Check valve / others
- Joint / tube
- Vacuum filter
- Vacuum regulator
- Suction plate
- Magnetic spring buffer
- Mechanical pressure SW
- Electronic pressure SW
- Contact / close contact conf. SW
- Air sensor
- Pressure SW for coolant
- Small flow sensor
- Small flow controller
- Flow sensor for air
- Flow sensor for water
- Total air system
- Total air system (Gamma)
- Ending

How to order



A Model no.

B Port size
Note 1

C Option
Note 2
Note 3
Note 4
Note 5
Note 6
Note 7

A Model no.	
7170-L	7170-JL

Symbol	Descriptions		
B Port size			
2C	Rc1/4		●
3C	Rc3/8		●
C Option			
Drainage	Blank	Manual cock	●
	E	Flexible drain	●
	F	NO automatic drain with manual cock (exhaust without pressurized)	●
Bowl	J	Jumbo bowl	Provided as standard
Bowl material	Blank	Polycarbonate bowl	●
	Z	Nylon bowl	●
	M	Metal bowl	●
	MG	Metal bowl with gauge	●
Element	Blank	5 μm	●
	X	3 μm	●
	Y	0.3 μm	●
Regulator	K	Plastic knob	●
	L	Low pressure (0.01 to 0.25), metal knob	Provided as standard
Attachment	Blank	Not attached	●
	G	Pressure gauge (G59D-8-P02)	●
	B	Bracket	●



Note on model no. selection

- Note 1: If NPT thread is required, do not indicate nominal size C. (E.g.) 7170-2
If a pressure gauge is selected, the NPT thread pressure gauge is enclosed.
- Note 2: Two or more symbols can be selected each for "Regulator" and "Accessories."
- Note 3: Drainage "E" and bowl material "M" or "MG" can not be combined.
- Note 4: When selecting bowl material "M" or "MG" and attachment "G", indicate "M-G" or "MG-G".
- Note 5: Auto drain exhausts its drain automatically in no pressurized state during night time, etc. NO automatic drain with manual cock "F" is recommended, however, if flow rate is small in the circuit, NC automatic drain with manual cock "F1" can be selected.
- Note 6: Refer to page 608 and 609 for attachment "B" bracket. Refer to the specifications on page 691 for pressure gauge of attachment "G".
- Note 7: Refer to page 543 for the specifications of automatic drain.

<Example of model number>

7170-2C-EZXLGB

Model: Precision F.R. unit

- A** Model No.: 7170-L
- B** Port size: Rc 1/4
- C** Option: Flexible drain, nylon bowl, element 3 μm, pressure gauge attached, bracket attached

Ozone specifications (Ending 16)

7170- - P11

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)

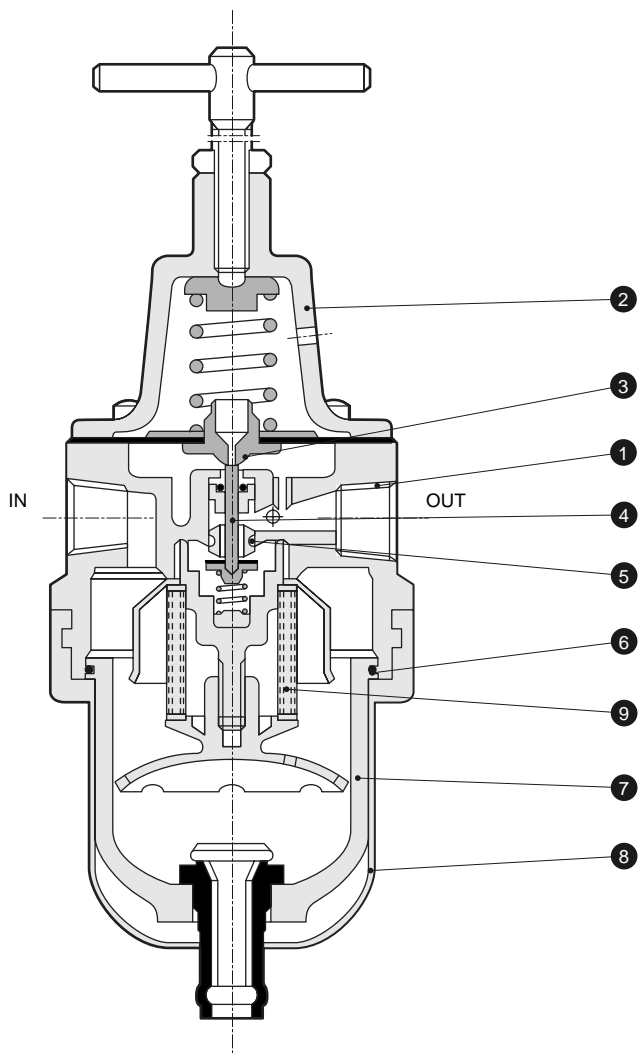
Ending

Precision F/R unit
F.R. L. unit

F.R Unit

Internal structure and parts list

● 7170-E

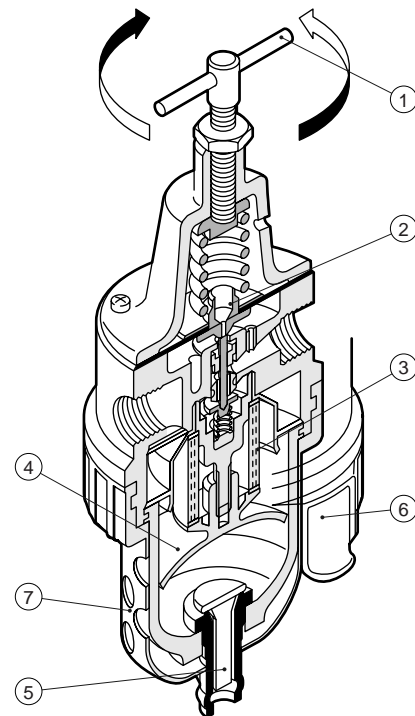


No.	Part name	Material
1	Body	Zinc alloy die-casting
2	Guard	Zinc alloy die-casting
3	Diaphragm assembly	Steel, brass, nitrile rubber
4	Valve assembly	Stainless steel, brass, hydrogen nitrile rubber
5	O ring	Nitrile rubber
6	O ring	Nitrile rubber
7	Bowl	Polycarbonate resin
8	Bowl guard	Steel
9	Element	5 μm
		3 μm
		0.3 μm

Repair parts list

No.	Part name	Model no.
3	Diaphragm assembly	7170-DIAPHRAGM-ASSY
4	Valve assembly	7170-VALVE-ASSY
9	Element	5 μm
		3 μm
		0.3 μm

Functional explanation

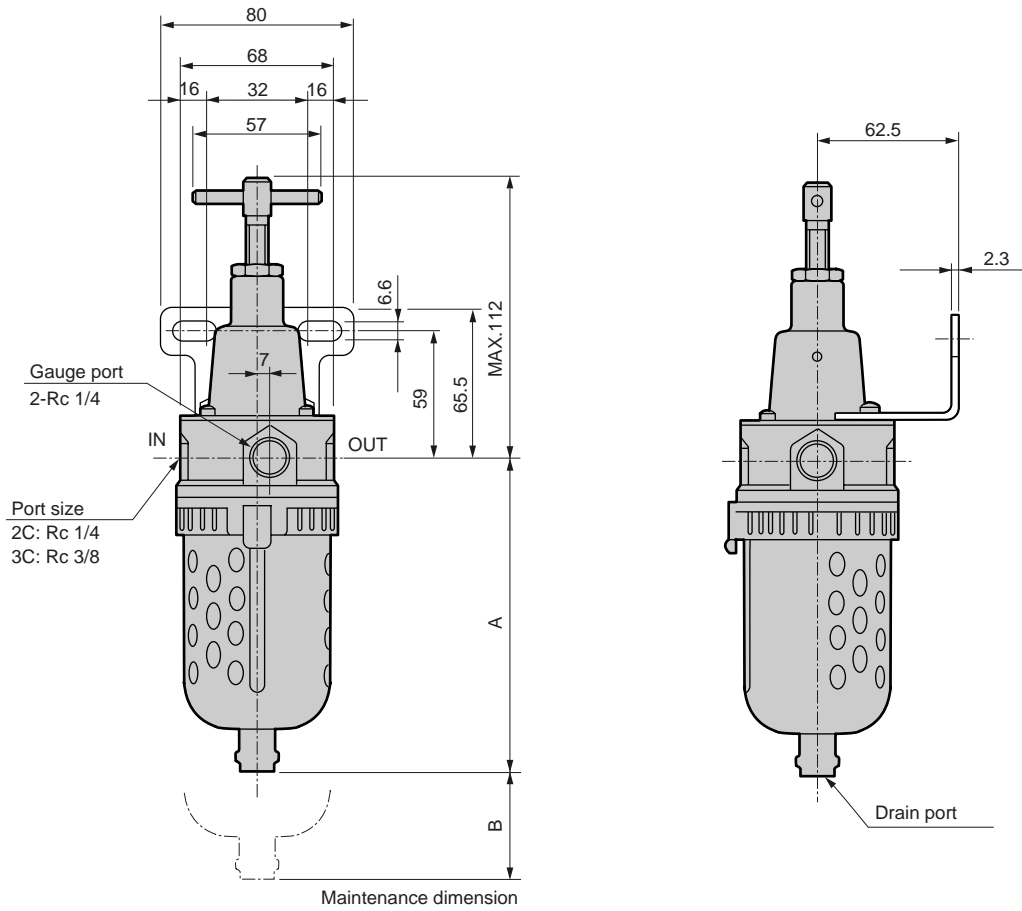


- (1) Adjusting screw
Adjusting screw to adjust secondary pressure is turned clockwise to increase pressure.
- (2) Relief valve
Metal seal relief valve is used to obtain excellent pressure characteristic.
- (3) Element
Cyclone effect giving oscillating motion to compressed air enables filtration more than 5 μm of dust never separated before.
- (4) Baffle
This prevents drain separated by cyclone effect from winding.
- (5) Flexible drain
Drain remaining in the bowl bottom can be exhausted easily only with pressing end of flexible drain. Automatic drain with manual override (F) is also available.
- (6) Clamp ring
Push-in ring is used to mount and dismount the bowl easily, and to achieve easy maintenance. If a pressure is applied in the bowl, the bowl is difficult to remove due to structure.
- (7) Bowl guard
If the bowl could be broken, safety of operators is protected.
Drain remaining or internal state can be checked through the oval hole.

Dimensions



● 7170-E



Model no.	A					B
	Blank	E	F	M	FM	All models
7170-2/3C-L	118	106	-	122	-	60
7170-2/3C-JL	171	159	171	156	182	60

Note 1: Nylon tube with ϕ 5.7 to 6.0 can be directly connected to the drain port of manual cock type.

For metal bowl with automatic drain, drain port size is Rc1/4.

Note 2: Refer to pages 608 to 609 for dimensions of bracket.

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- Total air system
- Total air system (Gamma)

Ending

Precision F/R unit
F.R.L. unit