

# Manual air dryer

## 4001/4002

■ Components for air preparation and pressure adjustment / main line unit / desiccant type air dryer

### Overview

Desiccant is used for this air dryer.

Self regeneration function of desiccant is available for low pressure below 0.1MPa.

However, capacity in moisture absorption is limited, so use this with small flow rate (280ℓ/min. or less).

### Features

- (1) Atmospheric dew point up to -72°C
- (2) Easy desiccant replacement
- (3) Installation without power source



## C O N T E N T S

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Refrigerating type dryer
<b>Desiccant type dryer</b>
High polymer membrane type 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
<b>Air booster</b>
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



Manual air dryer (desiccant type)

# 4001/4002 Series

Stably supplying ultra dry air with atmospheric dew point -72°C.  
Treating air flow rate: 280 ℓ/min. (ANR) or less



## Specifications

Descriptions	4001-2C	4002-2C
Max. working pressure MPa	1.0 Note 1	
Withstanding pressure MPa	1.5	
Inlet air temperature range °C	5 to 32	
Ambient temperature °C	5 to 65	
Atmospheric dew point °C	-43	
Maximum flow rate ℓ/min. (ANR)	280 (0.7MPa) Note 2, Note 3	
Desiccant	Silica gel	
Port size Rc	1/4	1/4
Product weight kg	4.6	10

Note 1: For the 4002-2C only, the working pressure range is 0.2MPa to 1.0MPa.  
Note 2: Maximum flow rate is the atmospheric pressure conversion value at inlet air pressure 0.7MPa.  
Note 3: For the 4002-2C only, a minimum flow rate of 30ℓ/min. (ANR) is required.

## How to order

4001

-

2C

-

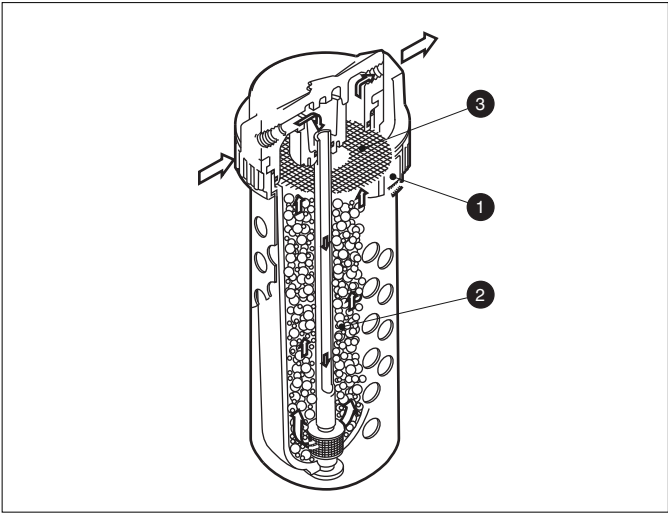
A Model no.

B Port size

C Accessory symbol

Symbol	Descriptions
<b>A Model no.</b>	
4001	1 station
4002	2 stations
<b>B Port size</b>	
2C	Rc1/4 (8A)
<b>C Accessory symbol</b>	
U	Low dew point
X	Oil removing

## Functional explanation



- Clamp ring**  
Push-in type clamp ring is used to easily replace desiccant.
- Desiccant**  
Molecular sheaves (atmospheric dew point -72°C) are also available as desiccant other than silica gel (atmospheric dew point -43°C). These desiccant allows to dry compressed air, during vapor in compressed air passing through, by absorbing vapor with fine hole in desiccant as capillary action.
- Screen**  
Prevent desiccant from entraining by air flow.

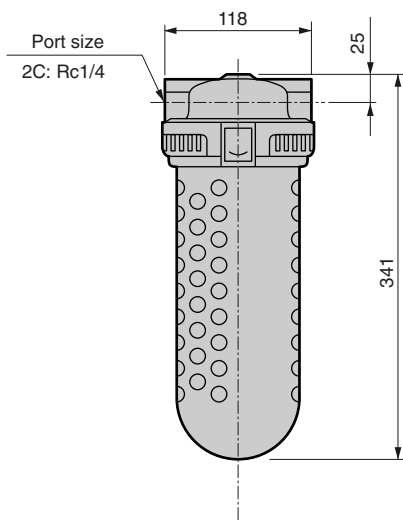
## Performance list

Model no.	Atmospheric dew point	Maximum inlet air temperature	Maximum flow rate	Desiccant	Desiccant number	Remarks
4001-2C 4002-2C	-43°C	32°C	280 ℓ/min. (ANR)	Silica gel	85-5108	No regeneration
4001-2C-U 4002-2C-U	-72°C	32°C	280 ℓ/min. (ANR)	4AM.S.	85-060	No regeneration
4001-2C-X 4002-2C-X	Oil removing 24PPM $\frac{w}{w}$	32°C	280 ℓ/min. (ANR)	13XM.S.	85-061	No regeneration

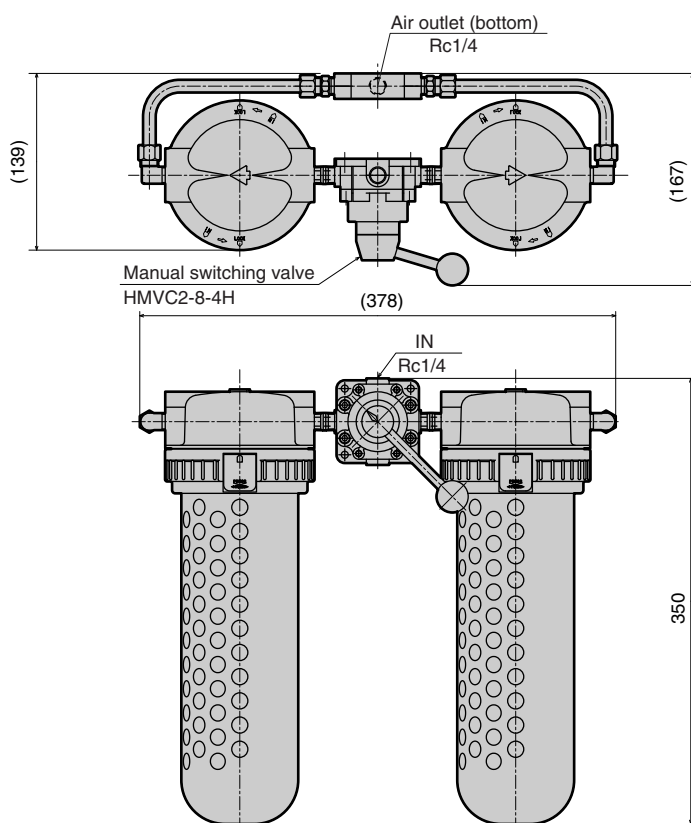
Note: M.S. represents molecular sheaves.

### Dimensions

#### ● 4001-2C



#### ● 4002-2C



### ⚠ Safety precautions

- Supply desiccant in the bowl until reaching the screen (approx. 0.8kg). In this case, note that desiccant must not be entered in the tube.
- Do not flow more than 280 ℓ/min. If desiccant (silica gel) is turned to pink from blue, replace the desiccant. The desiccant absorbs moisture approx. 100g (Desiccant weight 0.8kg.)
- Use 4001-2C-U if atmospheric dew point -72°C is required. Since the color does not change after moisture is absorbed, install a moisture indicator 6119-2C after 4001-2C-U or 4002-2C-U. So, service life of desiccant can be checked.
- Use 4001-2C-X or 4002-2C-X to remove oil in compressed air. If oil content is absorbed, the color turns to black brown from yellow brown. If the color is turned, replace the desiccant. 113g of oil content is absorbed before replacement.
- Avoid direct sun lay.
- Recommended to install an air filter to obtain more clean air.

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Main line unit