

High polymer membrane air dryer (Dryer)

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

Overview

This dryer is a high polymer membrane used high-tech dryer. Without using electricity, moisture is removed from humid air by using membrane to supply dry air. Realized convenience and high reliability never achieved before.

Features

- (1) Freon-free dryer
 Freon-free dryer without destroying ozone layer.
- (2) Electricity-free
 No electricity is used.
- (3) Noise-free
 Electricity is not used, so no noise occurs to influence.
- (4) No movable section
 No movable part enables supplying dry clean air over long time.
- (5) Space saving / simple installation
 Achieving downsizing, and easily installed into device.
- (6) Low dew point as equal as desiccant
 Ultra low dew point up to -60°C
- (7) Only one in the industry, available up to 75kW
 Compatible with large flow rate air compressor, 75kW grade.

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Series variation




High polymer membrane air dryer (Dryer)

High polymer membrane air dryer

Series variation

Refrigerating type dryer
Desiccant type dryer
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
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

Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
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Compact F.R.
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Electronic pressure SW
Contact / close contact conf. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
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Total air system
Total air system (Gamma)
Ending

Series	Standard dew point type		Low dew point type				Large flow rate, manifold type			
	SD300E/400E-W SU300E/400E-W	SD300D/400D-W SU300D/400D-W	SU3000-A-W SU4000-A-W	SU3000-B-W SU4000-B-W	SD3000-A/4000-A	SD3000-B/4000-B	SD3000-C/4000-C	SDM4000		
Features	Low purge type Purge ratio 10% Atmospheric dew point -15°C	Large flow rate type Purge ratio 20% Atmospheric dew point -20°C	Standard dew point unit type Atmospheric dew point -20°C	Low dew point unit type Atmospheric dew point -40°C	Discrete standard dew point type Atmospheric dew point -20°C	Low discrete dew point type Atmospheric dew point -40°C	Ultra low dew point type Atmospheric dew point -60°C	Atmospheric dew point -20°C	Atmospheric dew point -40°C	Atmospheric dew point -60°C
Applicable Air compressor kW										
0.2										
0.4	● (SD/SU301E)			● (SU3015-B)		● (SD3015-B)	● (SD3015-C)			
0.75	● (SD/SU302E)		● (SU3015-A)	● (SU3025-B)	● (SD3015-A)	● (SD3035-B)	● (SD3025-C)			
1.5		● (SD/SU302D)		● (SU3050-B)		● (SD3050-B)	● (SD3050-C)			
2.2	● (SD/SU401E)		● (SU3025-A)		● (SD3025-A)	● (SD3075/4050-B)	● (SD3075/4050-C)			
3.7	● (SD/SU402E)	● (SD/SU401D)	● (SU3035-A)		● (SD3035/4050-A)	● (SD4075-B)	● (SD4075-C)			● (SDM4050-2-C)
5.5		● (SD/SU402D)	● (SU3050-A)		● (SD3050-A)	● (SD4100-B)	● (SD4100-C)		● (SDM4050-2-B)	● (SDM4075-2-C)
7.5			● (SU3075-A)		● (SD3075/4075-A)			● (SDM4050-2-A)	● (SDM4075-2-B)	● (SDM4075-3-C)
11			● (SU4100-A)		● (SD4100-A)			● (SDM4075-2-A)	● (SDM4075-3-B)	● (SDM4100-3-C)
15								● (SDM4075-3-A)	● (SDM4100-3-B)	● (SDM4075-8-C)
22								● (SDM4050-6-A)	● (SDM4075-6-B)	● (SDM4075-10-C)
37								● (SDM4075-6-A)	● (SDM4075-10-B)	
55								● (SDM4100-6-A)		
75								● (SDM4100-8-A)		
95										
120										
150										
200										
250										
300										
400										
480										
710										
960										
1450										
With common exhaust port	● Option	● Option	● Option	● Option	● Option	● Option	● Option	▲ Custom order	▲ Custom order	▲ Custom order
Medium pressure	X	X	X	X	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment
CE	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment
Freon-free	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment
Power supply not required	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment
Drain treatment not required	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment	● Standard equipment
Appearance										
Page	134	138	142	142	145	145	145	148	148	148

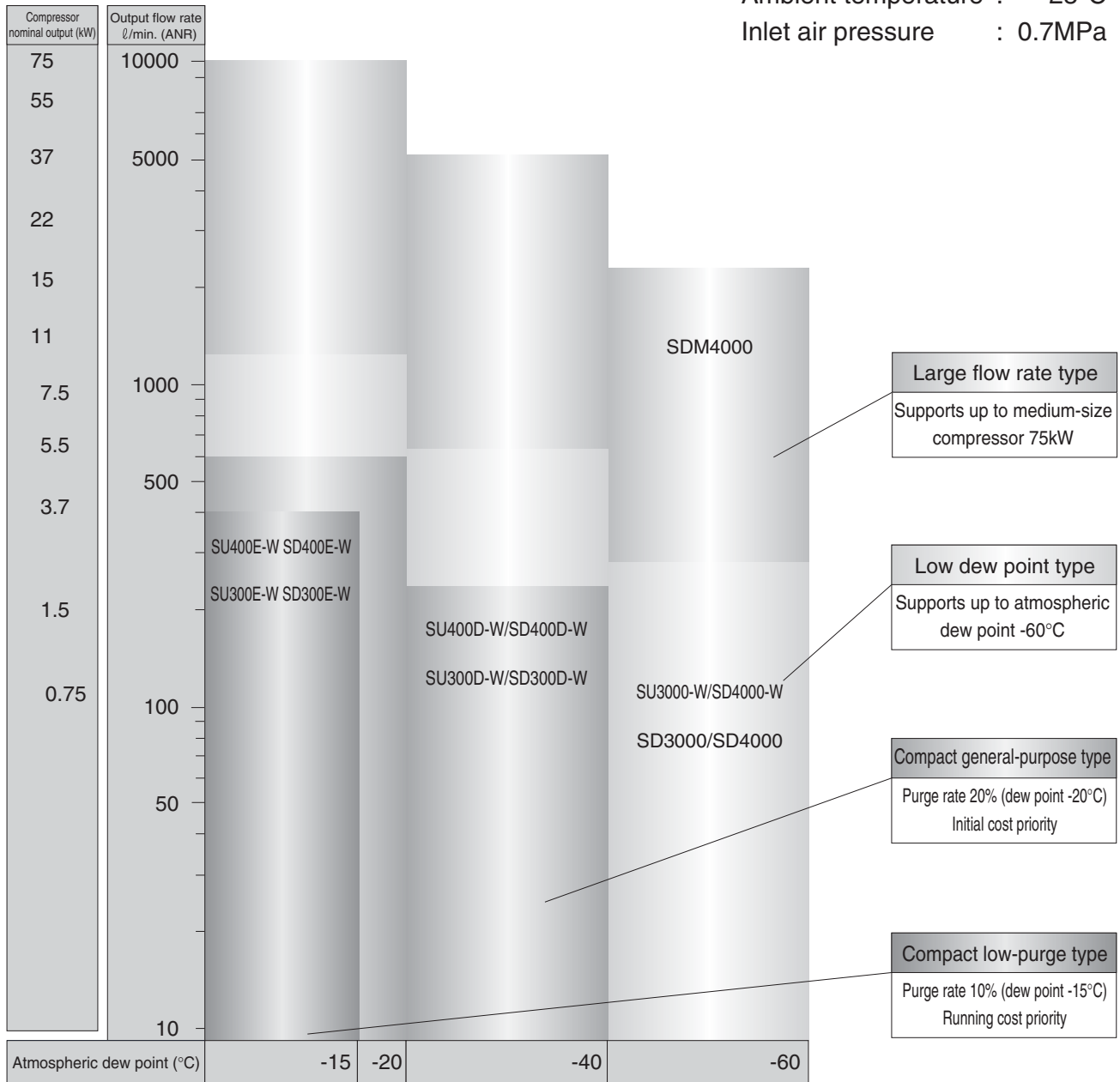
Note) This is list for selection guide. Refer to the page for selection, and select a model after checking installation and operating conditions.

7 Series and 65 Models

Select the perfect model for your application.

Model Selection Map

Inlet air temperature : 25°C
 Ambient temperature : 25°C
 Inlet air pressure : 0.7MPa



Large flow rate type
 Supports up to medium-size compressor 75kW

Low dew point type
 Supports up to atmospheric dew point -60°C

Compact general-purpose type
 Purge rate 20% (dew point -20°C)
 Initial cost priority

Compact low-purge type
 Purge rate 10% (dew point -15°C)
 Running cost priority

Compact low-purge type E Series (purge rate 10%)		Compact general-purpose type D Series (purge rate 20%)		Low dew point type		Large flow rate type
SU300E-W/SU400E-W	SD300E-W/SD400E-W	SU300D-W/SU400D-W	SD300D-W/SD400D-W	SU3000-W/SU4000-W	SD3000/SD4000	SDM4000

The innovative dryer series is a high-tech dryer that incorporates a high polymer membrane. Unprecedented ease of use, long life, and high reliability are realized.

Pursuing ease of use

Easy-to-use unit

A dryer with an integrated prefilter, etc., is available. Use is started by connecting the dryer to the air pressure source.

Modular design

Our original modular concept allows easy connections with CKD clean air units, reduces design and piping hours and enables systems to be upgraded easily

Amenity

Unpleasant factors of conventional air dryers, such as vibration, heat discharge power source noise impact noise, and dust generation, have been removed.

Powerless

Electricity is not required, so expertise in electricity is not required when installing the dryer. The dryer can be installed anywhere including explosive areas with different voltages.

No more problems

There are no mechanical moving parts, so there are no worries of problems occurring suddenly. Clean dry air is stably supplied for a long time.

Diverse series to match applications

Low purge Purge rate 10%

Running costs are reduced with energy saving dehumidification with an atmospheric dew point of -15°C and purge rate of 10%. (E Series)

Low dew point Atmospheric dew point -60°C

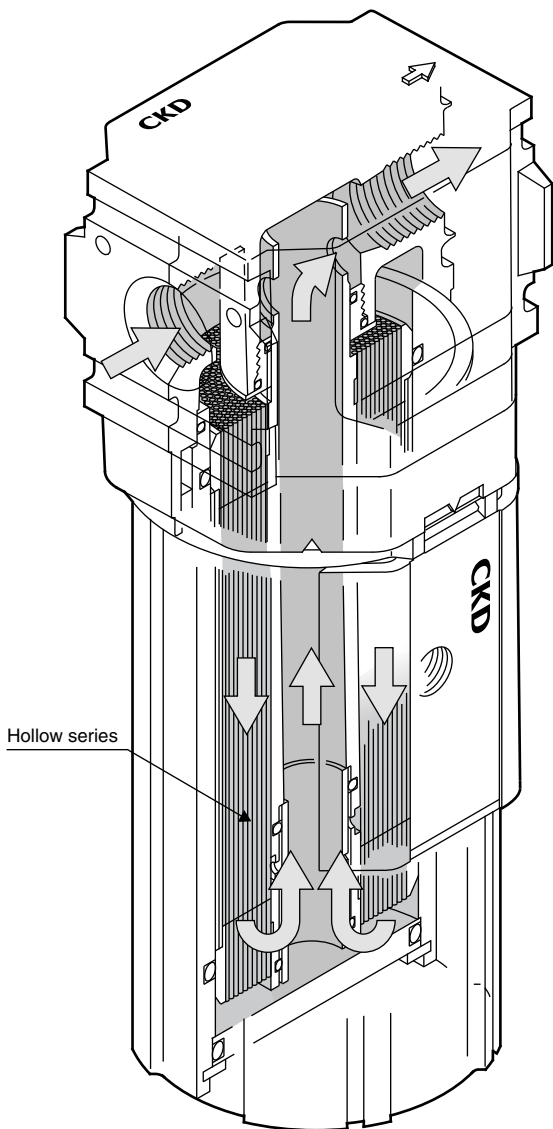
Clean ultra dry air can be supplied easily and stably. (3000/4000 Series)

Large flow rate Compatible with 75kW compressor

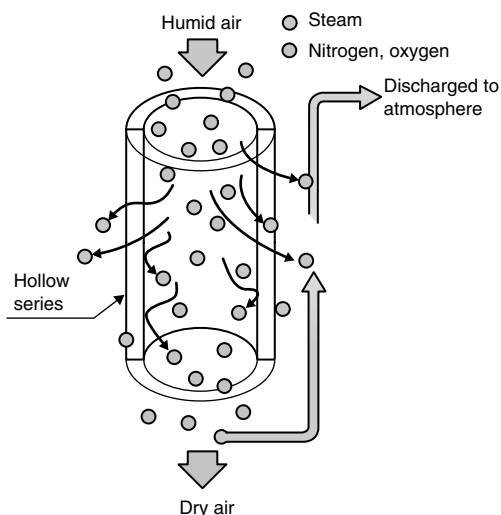
Large flow rate is achieved with high polymer membrane. The size is compact and slim with an installation area 1/3 and occupied volume 1/6 compared to the absorption type air dryer (CKD comparison). (SDM Series)

Medium pressure compatible Max. working pressure 1.5MPa

This dryer's maximum working pressure is 1.5MPa and can be used for a variety of applications. (SD3000/4000 Series, SDM Series)



Dehumidification principle



The gaseous molecules can freely pass through the high polymer material, but the ease of passage greatly differs according to the mutual properties of the gas and the high polymer material being used.

With this dryer, a high polymer material with which "nitrogen and oxygen cannot pass through easily but water vapors can pass through easily" is used so that only water vapor are removed. Since the concentration of each gas in the wet air is high inside the hollow fibers made of this material, when wet air is fed, gases try to move toward the outside of hollow fibers where concentration is lower.

Hollow fibers are made of material that allow on water vapor to pass through easily, so only water vapor moves toward the outside of hollow fibers. Wet air supplied from the inlet becomes dry and leaves the outlet.

By flowing part of the outlet's dry air toward the outside of hollow fibers as purge air, water vapor moved to the outer side is quickly discharged into the atmosphere. This keeps the concentration of water vapor on the outer side of hollow fibers low, enabling continuous dehumidification.

Read the precautions on pages 132 to 133 before starting use.

Refrigerating type dryer
Desiccant type dryer
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
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

Dryer
Main line unit



Pneumatic components (high polymer membrane air dryer)

Safety precautions

Always read this section before starting use.

Refer to Intro 67 for general precautions, and to "▲Safety Precautions" in this section for details on each series.

Dryer SD/SU Series

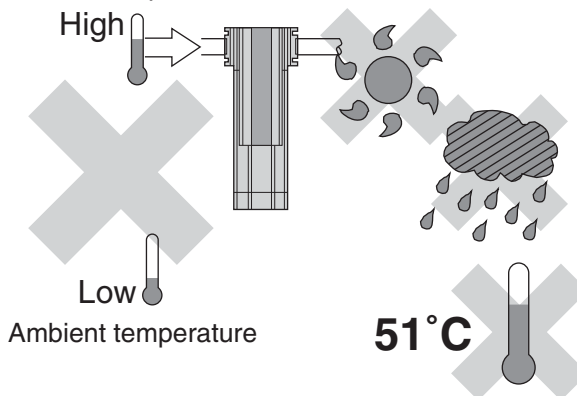
Design & Selection

CAUTION

Working environment

- Avoid using in a state where the inlet air temperature is higher than the ambient temperature. (Water drops may form and accumulate inside if the dryer cools)
- Avoid installing this product where it will be subject to direct sunlight or rain.
- The bowl is made of polycarbonate, so avoid using this product with the following chemicals or in an atmosphere containing these chemicals. (SU Series)
- Avoid using this product where ozone is generated.
- Avoid using this product where vibration and impact are present.

Inlet air temperature

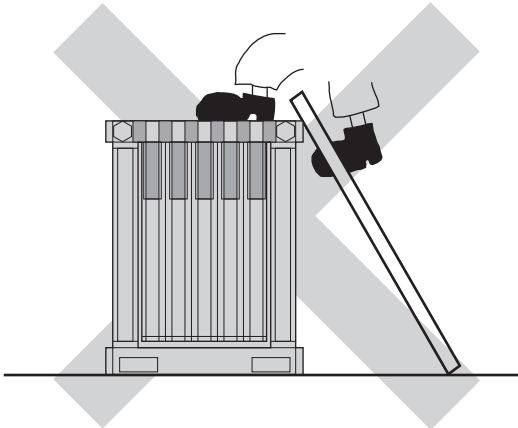


Types of chemicals	Category of chemicals	Main products of chemicals	General usage examples	Polycarbonate
Inorganic compound	Acid	Hydrochloric acid, sulfuric acid, fluorine, phosphoric acid, chromic acid, etc.	Acid washing of metals, acidic degreasing solution, film treatment liquid	X
	Alkaline	Caustic soda, caustic potash, calcium hydroxide, aqueous ammonia, sodium carbonate, etc.	Alkaline degreasing of metals	X
	Inorganic salt	Sodium sulfide, nitric acid potash, potassium bichromate, sodium sulfide, etc.		X
Organic compound	Aromatic hydrocarbon	Benzene, toluene, xylene, ethyl benzen, styrene, etc.	Contained in paint thinner (benzene, toluene, xylene)	X
	Chlorinated aliphatic hydrocarbons	Methyl chloride, ethylene chloride, methylene chloride, acethylene chloride, chloroform, trichlene, perchlene, carbon tetrachloride	Organic solvent-based washing solution for metals (trichlene, perchlene, carbon tetrachloride, etc.)	X
	Chlorinated aromatic hydrocarbons	Chlorobenzene, dichlorobenzene, benzene hexachloride (B/H/C), etc.	Agricultural chemicals	X
	Petroleum components	Solvent, naphtha, gasoline		X
	Alcohol	Methyl alcohol, ethyl alcohol, cyclohexanol, benzyl alcohol	Anti-freeze	X
	Phenol	Carbolic acid, cresol, naphthol, etc.	Liquid disinfectant	X
	Ether	Methyl ether, methyl ethyl ether, ethyl ether	Brake fluid additive	X
	Ketone	Acetone, methyl ethyl keton, cyclohexanone, acetophenone, etc.		X
	Carboxylic acid	Formic acid, acetic acid, butyl acid, acrylic acid, oxalic acid, phthalic acid, etc.	Dyes; oxalic acid for aluminum processing, phthalic acid for paint base	X
	Phosphate ester	Dimethyl phthalate (DMP), diethyl phthalate (DEP), dibutyl phthalate (DBP), dioctyl phthalate (DOP)	Lubricant, synthetic hydraulic fluid, rust-preventing agent additive plasticizer for synthetic resin	X
	Oxyacid	Glycocholic acid, lactic acid, malic acid, citric acid, tartrate		X
	Nitro compound	Nitro methane, nitro ethane, nitro ethylene, nitro benzene, etc.		X
	Amine	Methylamine, diethylamine, ethylamine, aniline, acetoanilide, etc.	Brake fluid additive	X
Nitrile	Acetonitrile, achrylonitrile, benznitrile, acetoilydine nitrile, etc.	Raw material for nitril rubber	X	

Installation & Adjustment

⚠ CAUTION

- Do not step onto this product.



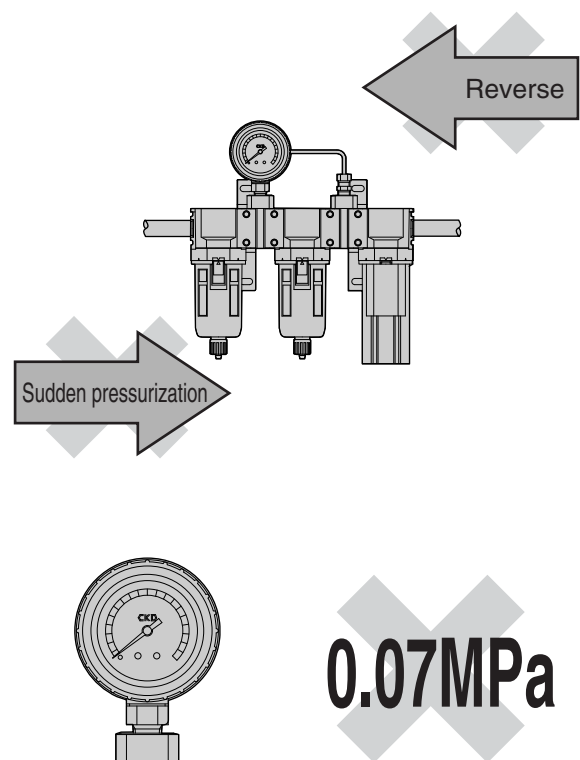
- When piping, remove cutting oil, rust proof oil or contaminant, etc.

- Install so that the drain faces directly downward. Use a bore size 5.7 to 6 dia. tube for drain discharge piping, and keep the length within 5m. Avoid upward sloping piping. (SU Series)
- Install an oil removing filter (M) near the dryer inlet to remove all water drops and oil. If oil adheres on the membrane module, dew point performance could drop.
- Install a regulator on the outlet of the dryer.
- When installing an SDM (2-row, 3-row), fix the inlet and outlet piping or fix the body with a bracket.
- When installing an SDM (6-rows or more), select a rigid and flat surface that does not vibrate, and fix the base with anchor bolts.

During Use & Maintenance

⚠ CAUTION

- Do not flow air in reverse. Do not pressurize suddenly as, the differential pressure gauge and mantle could be damaged. (SU Series)
- The oil mist filter is spent when the pressure drops to 0.07MPa. When product life is ended, replace the mantel with a new part. (Check the pressure drop with the differential pressure gauge.) (Do not touch the urethane rubber foam layer when replacing the mantel) (SU Series C2, C3)
- The life of the super dryer's membrane module differs according to the working conditions. As a guide, replace the membrane every 3 to 5 years.
- Mount and remove the bowl and bowl guard after checking that pressure is not being applied. (SU Series)



Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
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F.R.L. (Module unit)
F.R.L. (Separate)
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Precise regulator
F.R.L. (Related products)
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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

Dryer Main line unit



Dryer unit

SU300E/SU400E/SD300E/SD400E-W Series

Small air loss, and filter like E Series

- Reduce operation cost due to energy saving moisture removal with purge ratio 10%.
 - 3 types units are available. Appropriate system is available according to applications.
- Treating air flow rate: 75 to 450 ℓ/min. (ANR) (0.7MPa, atmospheric dew point -15°C)



Specifications

Descriptions	SU301E	SU302E	SU401E	SU402E	SU301E	SU302E	SU401E	SU402E	SU301E	SU302E	SU401E	SU402E	SD301E	SD302E	SD401E	SD402E
	*-W-C1	*-W-C1	*-W-C1	*-W-C1	*-W-C2	*-W-C2	*-W-C2	*-W-C2	*-W-C3	*-W-C3	*-W-C3	*-W-C3	*-W	*-W	*-W	*-W
Appearance																
	Simple & space saving structure unit removing moisture in the air whose solid impurities were already removed. (Note 1)				Unit supplying clean dry air in pressure adjustment not required line.				Unit supplying pressure adjusted clean dry air only by supplying compressed air.				Discrete dryer enabling easy system configuration with peripheral devices due to modular design.			
Configuration	Oil mist filter Dryer				Air filter Oil mist filter (with differential pressure gauge) Dryer				Air filter Oil mist filter (with differential pressure gauge) Dryer Regulator				Dryer			
Working conditions	Compressed air															
	Inlet air pressure MPa															
	Withstanding pressure MPa															
	Inlet air temperature °C															
	Ambient temperature °C															
Standard rating	Outlet air atmospheric dew point °C															
	Inlet air flow rate ℓ/min. (ANR)															
	Outlet air flow ℓ/min. (ANR)															
	Purge flow ℓ/min. (ANR)															
	Inlet pressure dew point °C															
	Inlet air pressure MPa															
	Inlet air temperature °C															
	Ambient temperature °C															
	Air filter	Filtration rating μm				5				-						
	Oil mist filter	Oil removing mg/m ³														
Regulator	Set pressure range MPa															
	Relief starting MPa															
Standard accessories																

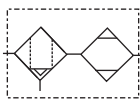
Note 1: An oil mist filter can not be controlled with a differential pressure gauge for C1 type. Replace a mantle of oil mist filter every one year.
 Note 2: Purge flow rate in standard rating section is also the same value at 0.5MPa.

JIS symbol

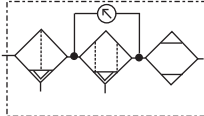
SD301E to 402E-*



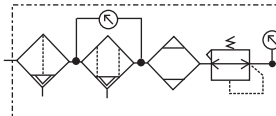
SU301E to 402E-*C1



SU301E to 402E-*C2



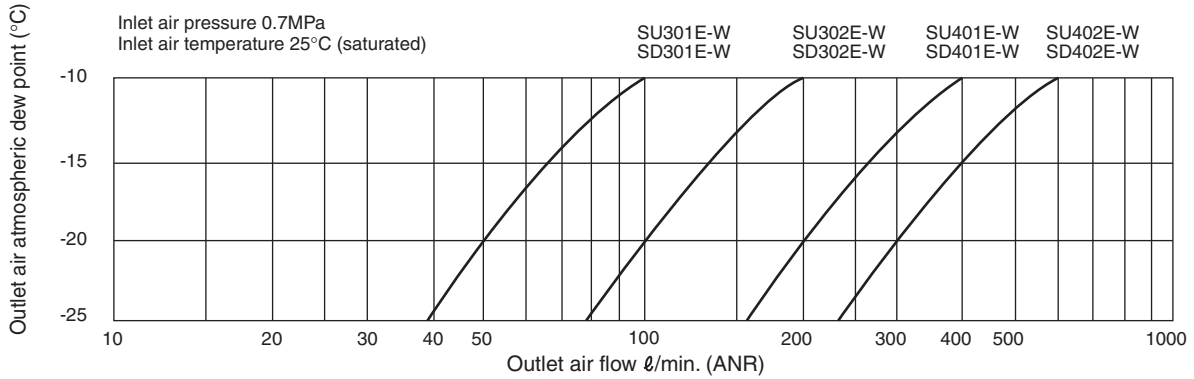
SU301E to 402E-*C3



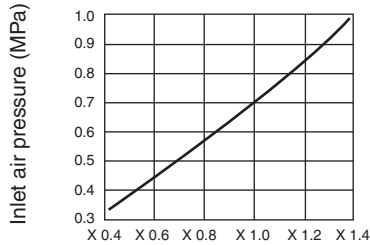
Dew point performance

Refer to page 151 for selection guide and compensation method.

● Dew point performance curve

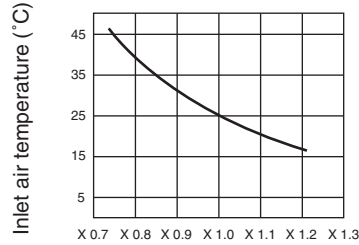


Inlet pressure - outlet air flow rate correction curve



Outlet air flow rate compensation value

Inlet temperature - outlet air flow rate correction curve



Outlet air flow rate compensation value

Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
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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

Dryer
Main line unit

SU³00E/SD³00E-W Series

How to order

● Dryer unit

SU301E - 05 - W - C1 - X1

A Model no.

B Inlet air pressure

C Unit type

D Option
Note 5

Symbol	Descriptions
A Model no.	
SU301E	
SU302E	
SU401E	
SU402E	
B Inlet air pressure	
05	0.5MPa (Note 1)
07	0.7MPa (Note 1)
C Unit type	
C1	
C2	
C3	
D Option	
Blank	None
E	Common exhaust (Note 4)
X1	IN-OUT reverse (Note 3)

● Dryer

SD402E - 05 - W - B

A Model no.

B Inlet air pressure

C Option
Note 5

Symbol	Descriptions
A Model no.	
SD301E	
SD302E	
SD401E	
SD402E	
B Inlet air pressure	
05	0.5MPa (Note 1)
07	0.7MPa (Note 1)
C Option	
Blank	None
B	C type bracket (Note 2)
E	Common exhaust (Note 4)
X1	IN-OUT reverse (Note 3)

⚠ Note on model no. selection

- Note 1. If inlet air pressure is less than 0.7MPa, indicate 05, while 0.7MPa and over, indicate 07.
- Note 2. If fixed by C type bracket, a modular unit can not be connected to peripheral devices.
- Note 3. Viewed from the front, a standard product has air inlet on the left port, while air outlet on the right port. For "X1", air inlet is provided on the right port, while air outlet is provided on the left port.
- Note 4. Purge air of standard products is released to the atmosphere. If "E" is indicated, common exhaust of purge air is enabled. In size of exhaust port, Rc1/8 is provided for 300 Series, while Rc1/4 for 400 Series.
- Note 5. When ordering several options, indicate the required options in alphabetical order.

Components

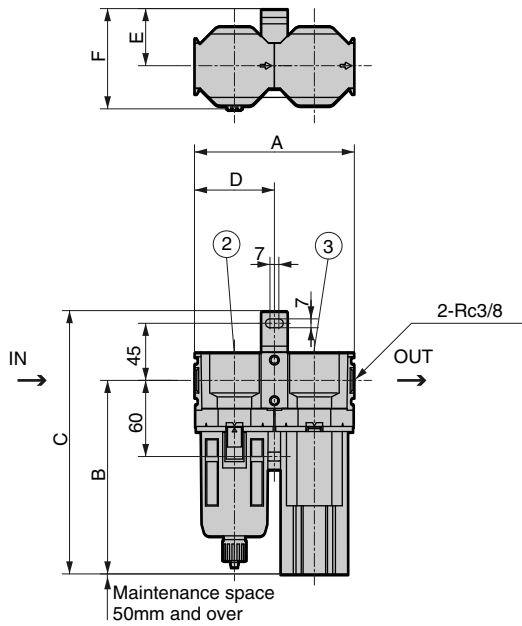
Components	(1) Air filter	(2) Oil mist filter	(3) Dryer	(4) Regulator	(5) Differential pressure gauge
Model no.					
SU301E-*-W-C1	-	M3000-10-W-F1	SD301E-*-W	-	-
SU302E-*-W-C1	-	M4000-10-W-F1	SD302E-*-W	-	-
SU401E-*-W-C1	-	M4000-10-W-F1	SD401E-*-W	-	-
SU402E-*-W-C1	-	SM4100-W	SD402E-*-W	-	-
SU301E-*-W-C2	F3000-10-W-F	M3000-10-W-F1	SD301E-*-W	-	GA400-8-P02
SU302E-*-W-C2	F4000-10-W-F	M4000-10-W-F1	SD302E-*-W	-	GA400-8-P02
SU401E-*-W-C2	F4000-10-W-F	M4000-10-W-F1	SD401E-*-W	-	GA400-8-P02
SU402E-*-W-C2	F4000-10-W-F	SM4100-W	SD402E-*-W	-	GA400-8-P02
SU301E-*-W-C3	F3000-10-W-F	M3000-10-W-F1	SD301E-*-W	R3000-10-W	GA400-8-P02
SU302E-*-W-C3	F4000-10-W-F	M4000-10-W-F1	SD302E-*-W	R4000-10-W	GA400-8-P02
SU401E-*-W-C3	F4000-10-W-F	M4000-10-W-F1	SD401E-*-W	R4000-10-W	GA400-8-P02
SU402E-*-W-C3	F4000-10-W-F	SM4100-W	SD402E-*-W	R4000-10-W	GA400-8-P02

Note 1: An oil mist filter (SM4100-W) is custom order.

Dimensions

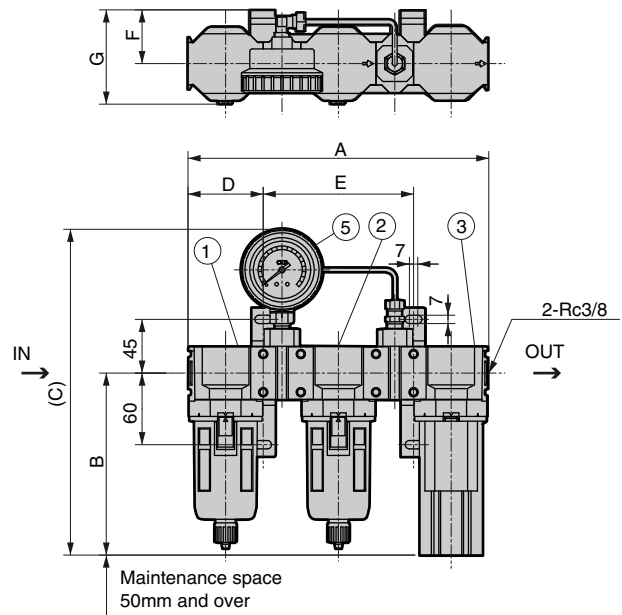


● Unit C1 type



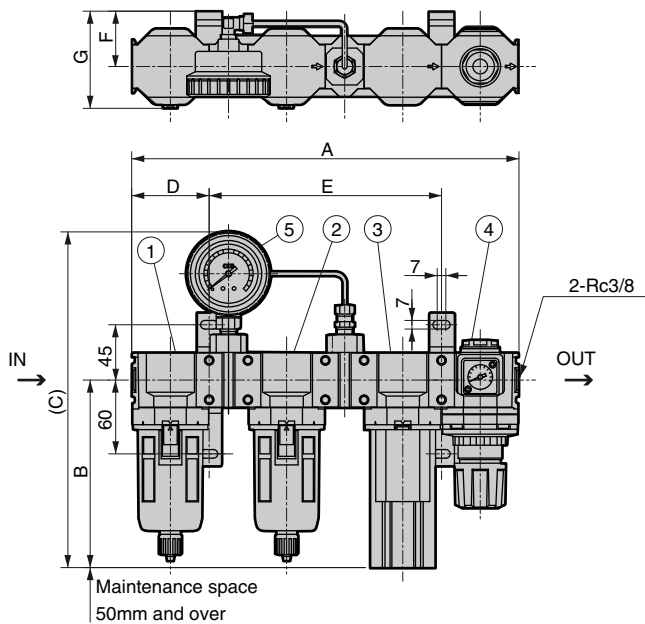
	A	B	C	D	E	F	Weight (kg)
SU301E*-W-C1	126	153	208	63	45	79	1.0
SU302E*-W-C1	143	223	278	80	55	97	1.6
SU401E*-W-C1	160	223	278	80	55	97	2.1
SU402E*-W-C1	160	328	383	80	55	95	3.5

● Unit C2 type



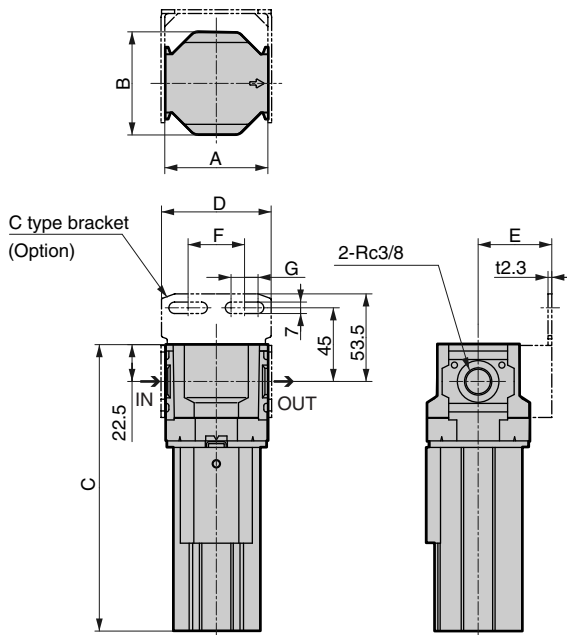
	A	B	C	D	E	F	G	Weight (kg)
SU301E*-W-C2	252	153	273	63	126	45	79	2.0
SU302E*-W-C2	286	223	343	80	143	55	97	2.8
SU401E*-W-C2	303	223	343	80	143	55	97	3.3
SU402E*-W-C2	303	328	448	80	143	55	97	4.7

● Unit C3 type



	A	B	C	D	E	F	G	Weight (kg)
SU301E*-W-C3	315	153	273	63	189	45	79	2.5
SU302E*-W-C3	366	223	343	80	206	55	97	3.5
SU401E*-W-C3	383	223	343	80	223	55	97	4.0
SU402E*-W-C3	383	328	448	80	223	55	97	5.4

● SD300E/SD400E



	A	B	C	D	E	F	G	Weight (kg)
SD301E*-W	63	63	175	67	45	34.5	16.5	0.6
SD302E*-W	63	63	245	67	45	34.5	16.5	0.9
SD401E*-W	80	80	245	84	55	55	14	1.4
SD402E*-W	80	80	315	84	55	55	14	1.8

Refrigerating type dryer
Desiccant type dryer
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
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
Dryer
Main line unit



Dryer unit dryer

SU300D/SU400D/SD300D/SD400D-W Series

Slim body and high performance D series

- Small and powerful removal performance. Appropriate for integrating in devices.
 - 3 types units are available. Appropriate system is available according to applications.
- Treating air flow rate: 125 to 750 ℓ/min. (ANR) (0.7MPa, atmospheric dew point -20°C)



Specifications

Descriptions	SU301D	SU302D	SU401D	SU402D	SU301D	SU302D	SU401D	SU402D	SU301D	SU302D	SU401D	SU402D	SD301D	SD302D	SD401D	SD402D	
	*-W-C1	*-W-C1	*-W-C1	*-W-C1	*-W-C2	*-W-C2	*-W-C2	*-W-C2	*-W-C3	*-W-C3	*-W-C3	*-W-C3	*-W	*-W	*-W	*-W	
Appearance																	
	Simple & space saving structure unit removing moisture in the air whose solid impurities were already removed. (Note 1)				Unit supplying clean dry air in pressure adjustment not required line.				Unit supplying pressure adjusted clean dry air only by supplying compressed air.				Discrete dryer enabling easy system configuration with peripheral devices due to modular design.				
Configuration	Oil mist filter Dryer				Air filter Oil mist filter (with differential pressure gauge) Dryer				Air filter Oil mist filter (with differential pressure gauge) Dryer Regulator				Dryer				
Working conditions	Compressed air																
	Inlet air pressure MPa 0.4 to 1.0																
	Withstanding pressure MPa 1.5																
	Inlet air temperature °C 5 to 50																
	Ambient temperature °C 5 to 50																
	Outlet air atmospheric dew point °C -20																
Standard rating	Inlet air flow rate ℓ/min. (ANR)	125	250	500	750	125	250	500	750	125	250	500	750	125	250	500	750
	Outlet air flow ℓ/min. (ANR)	100	200	400	600	100	200	400	600	100	200	400	600	100	200	400	600
	Purge flow ℓ/min. (ANR)	25	50	100	150	25	50	100	150	25	50	100	150	25	50	100	150
	Inlet pressure dew point °C 25																
	Inlet air pressure MPa 0.7																
	Inlet air temperature °C 25																
Ambient temperature °C 25																	
Air filter	Filtration rating μm	-				5				-							
Oil mist filter	Oil removing mg/m ³	0.1 {approx. 0.1PPM} (inlet air 30°C)															
Regulator	Set pressure range MPa	-				-				0.05 to 0.85				-			
	Relief starting MPa	-				-				Setting pressure plus 0.05				-			
Standard accessories		Bracket				Differential pressure gauge, bracket				Pressure gauge, differential pressure gauge, bracket				-			

Note 1: An oil mist filter can not be controlled with a differential pressure gauge for C1 type. Replace a mantle of oil mist filter every one year.
 Note 2: Purge flow rate in standard rating section is also the same value at 0.5MPa.

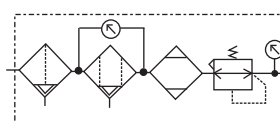
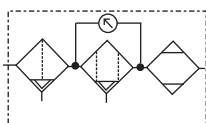
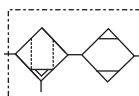
JIS symbol

SD301D to 402D-*

SU301D to 402D-*C1

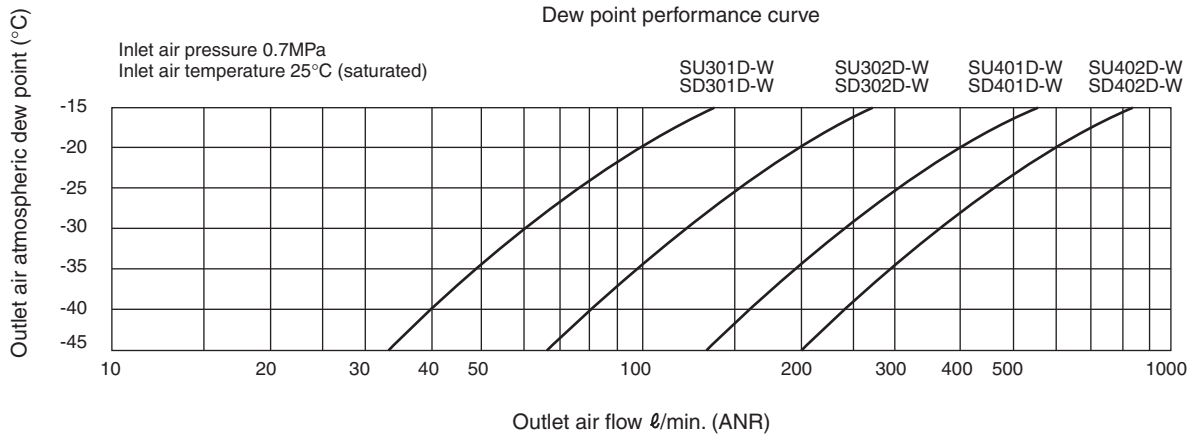
SU301D to 402D-*C2

SU302D to 402D-*C3

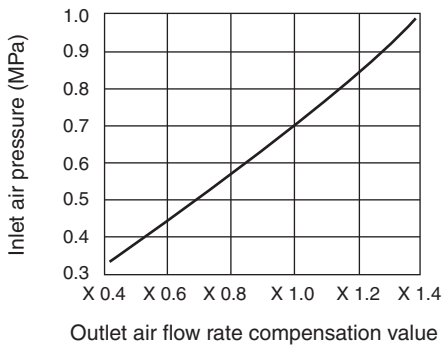


Dew point performance Refer to page 151 for selection guide and compensation method.

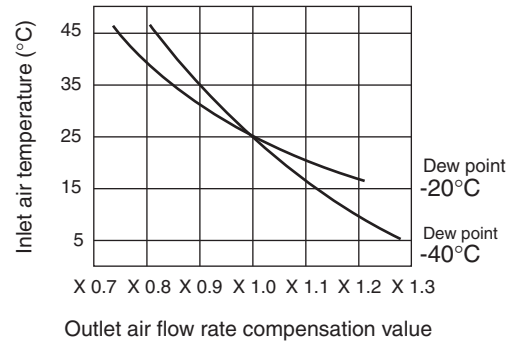
● Dew point performance curve



Inlet pressure - outlet air flow rate correction curve



Inlet temperature - outlet air flow rate correction curve



Refrigerating type dryer
Desiccant type dryer
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
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)

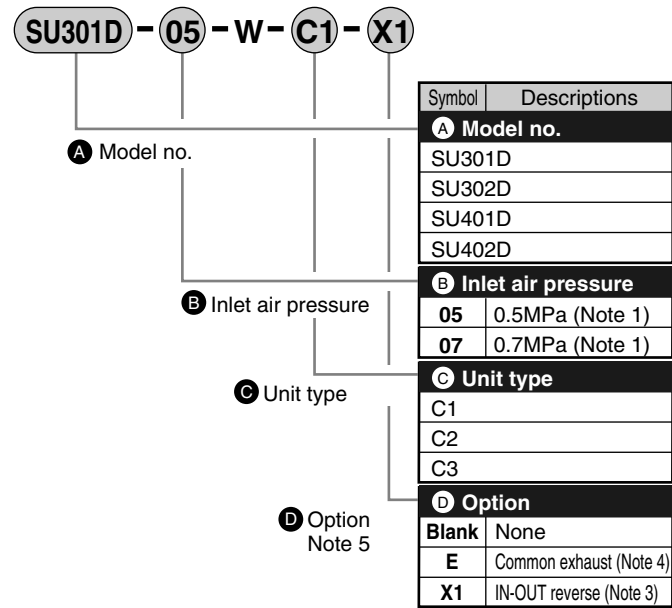
Ending

Dryer Main line unit

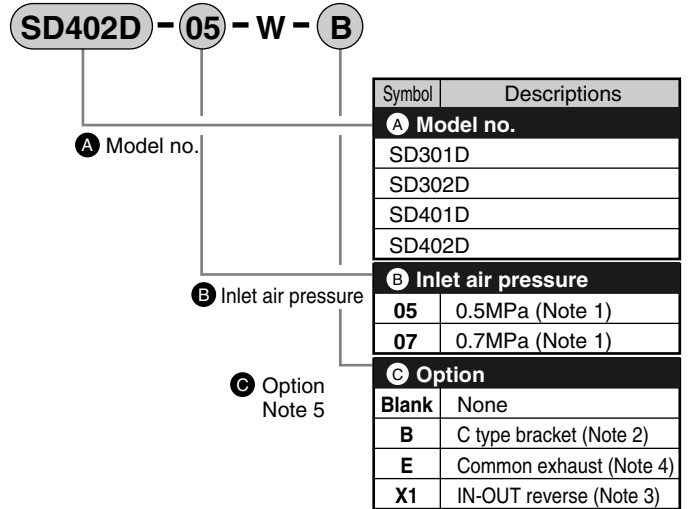
SU³00D/SD³00D-W Series

How to order

● Dryer unit



● Dryer



⚠ Note on model no. selection

- Note 1.** If inlet air pressure is less than 0.7MPa, indicate 05, while 0.7MPa and over, indicate 07.
- Note 2.** If fixed by C type bracket, a modular unit can not be connected to peripheral devices.
- Note 3.** Viewed from the front, a standard product has air inlet on the left port, while air outlet on the right port. For "X1", air inlet is provided on the right port, while air outlet is provided on the left port.
- Note 4.** Purge air of standard products is released to the atmosphere. If "E" is indicated, common exhaust of purge air is enabled. In size of exhaust port, Rc1/8 is provided for 300 Series, while Rc1/4 for 400 Series.
- Note 5.** When ordering several options, indicate the required options in alphabetical order.

Components

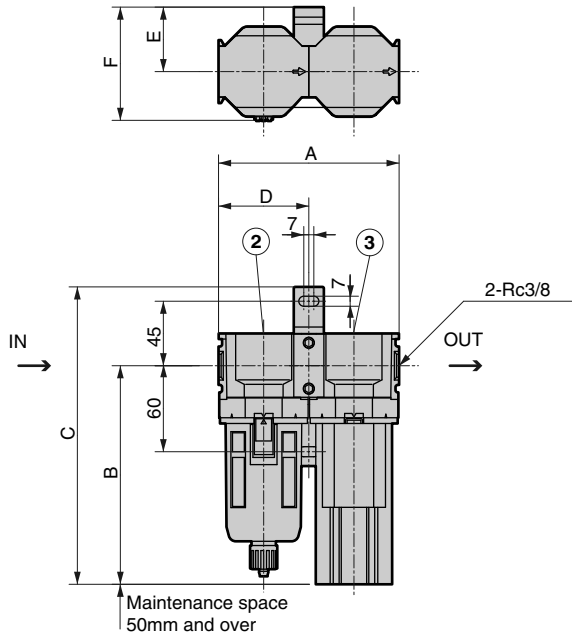
Components	(1) Air filter	(2) Oil mist filter	(3) Dryer	(4) Regulator	(5) Differential pressure gauge
Model no.					
SU301D-*-W-C1	-	M4000-10-W-F1	SD301D-*-W	-	-
SU302D-*-W-C1	-	M4000-10-W-F1	SD302D-*-W	-	-
SU401D-*-W-C1	-	SM4100-W	SD401D-*-W	-	-
SU402D-*-W-C1	-	SM4100-W	SD402D-*-W	-	-
SU301D-*-W-C2	F4000-10-W-F	M4000-10-W-F1	SD301D-*-W	-	GA400-8-P02
SU302D-*-W-C2	F4000-10-W-F	M4000-10-W-F1	SD302D-*-W	-	GA400-8-P02
SU401D-*-W-C2	F4000-10-W-F	SM4100-W	SD401D-*-W	-	GA400-8-P02
SU402D-*-W-C2	F4000-10-W-F	SM4100-W	SD402D-*-W	-	GA400-8-P02
SU301D-*-W-C3	F4000-10-W-F	M4000-10-W-F1	SD301D-*-W	R4000-10-W	GA400-8-P02
SU302D-*-W-C3	F4000-10-W-F	M4000-10-W-F1	SD302D-*-W	R4000-10-W	GA400-8-P02
SU401D-*-W-C3	F4000-10-W-F	SM4100-W	SD401D-*-W	R4000-10-W	GA400-8-P02
SU402D-*-W-C3	F4000-10-W-F	SM4100-W	SD402D-*-W	R4000-10-W	GA400-8-P02

Note 1: An oil mist filter (SM4100-W) is custom order.

Dimensions

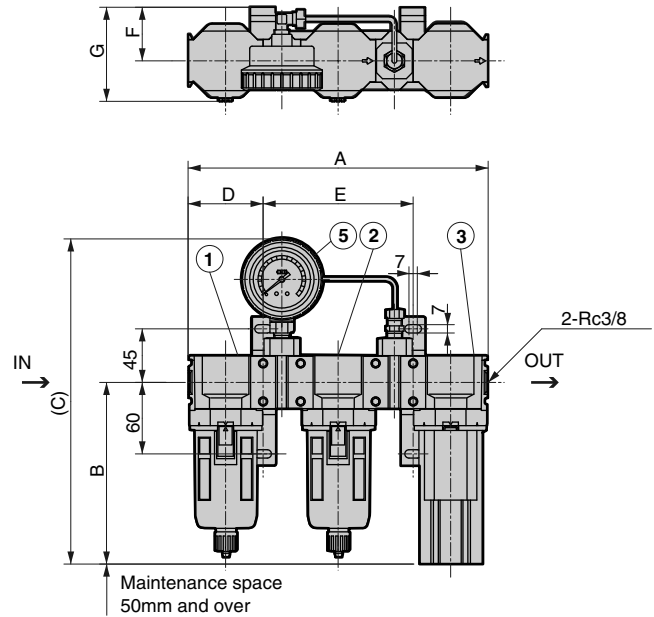


● Unit C1 type



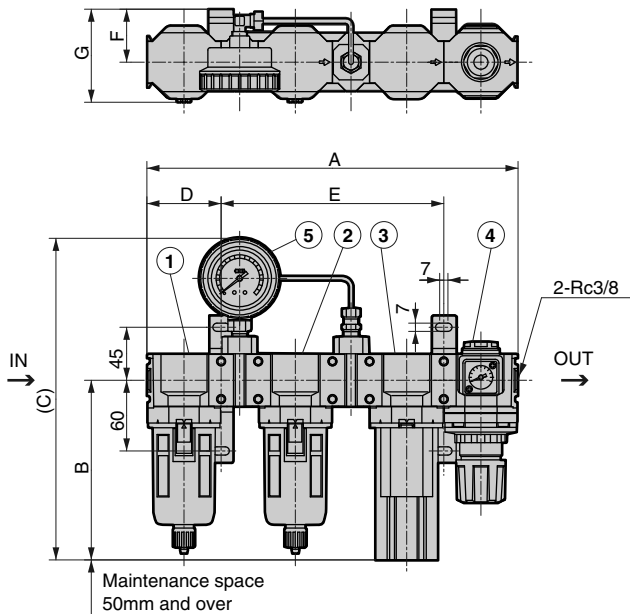
	A	B	C	D	E	F	Weight (kg)
SU301D-*-W-C1	143	169	224	80	55	97	1.3
SU302D-*-W-C1	143	223	278	80	55	97	1.6
SU401D-*-W-C1	160	328	383	80	55	95	3.1
SU402D-*-W-C1	160	328	383	80	55	95	3.5

● Unit C2 type



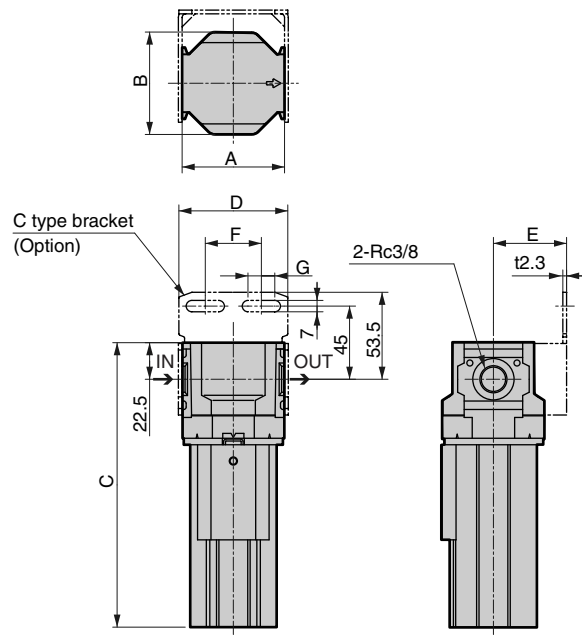
	A	B	C	D	E	F	G	Weight (kg)
SU301D-*-W-C2	286	169	289	80	143	55	97	2.5
SU302D-*-W-C2	286	223	343	80	143	55	97	2.8
SU401D-*-W-C2	303	328	448	80	143	55	97	4.3
SU402D-*-W-C2	303	328	448	80	143	55	97	4.7

● Unit C3 type



	A	B	C	D	E	F	G	Weight (kg)
SU301D-*-W-C3	366	169	289	80	206	55	97	3.2
SU302D-*-W-C3	366	223	343	80	206	55	97	3.5
SU401D-*-W-C3	383	328	448	80	223	55	97	5.0
SU402D-*-W-C3	383	328	448	80	223	55	97	5.4

● SD300D/SD400D



	A	B	C	D	E	F	G	Weight (kg)
SD301D-*-W	63	63	175	67	45	34.5	16.5	0.6
SD302D-*-W	63	63	245	67	45	34.5	16.5	0.9
SD401D-*-W	80	80	245	84	55	55	14	1.4
SD402D-*-W	80	80	315	84	55	55	14	1.8

- Refrigerating type dryer
- Desiccant type dryer
- 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
- 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

Dryer
Main line unit

Dryer unit

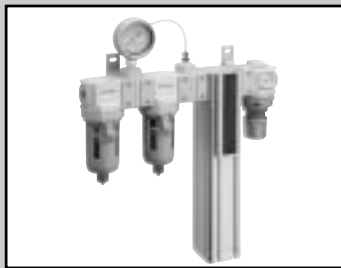
SU3000/SU4000-W Series

Easily and stably supplying ultra dry air

■ Ultra dry air with atmospheric dew point -60°C is obtained only with connecting to pneumatic sources.

■ All in one unit with superior installation performance

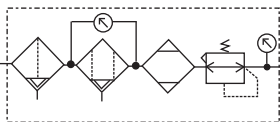
Treating air flow rate: 35 to 890 $\ell/\text{min.}$ (ANR) (0.7MPa, atmospheric dew point -40°C)



Specifications

Descriptions	SU 3015-A-W	SU 3025-A-W	SU 3035-A-W	SU 3050-A-W	SU 3075-A-W	SU 4100-A-W	SU 3015-B-W	SU 3025-B-W	SU 3050-B-W	SU 4050-B-W	SU 4100-B-W
Working conditions	Compressed air										
Inlet air pressure MPa	0.4 to 1.0										
Withstanding pressure MPa	1.5										
Inlet air temperature $^{\circ}\text{C}$	5 to 50										
Ambient temperature $^{\circ}\text{C}$	5 to 50										
Outlet air atmospheric dew point $^{\circ}\text{C}$	-20						-40				
Standard rating											
Inlet air flow rate $\ell/\text{min.}$ (ANR)	125	300	490	760	1200	1500	35	90	230	410	890
Outlet air flow $\ell/\text{min.}$ (ANR)	100	240	390	610	960	1260	25	65	170	300	650
Purge flow $\ell/\text{min.}$ (ANR)	25	60	100	150	240	240	10	25	60	110	240
Inlet pressure dew point $^{\circ}\text{C}$	25										
Inlet air pressure MPa	0.7										
Inlet air temperature $^{\circ}\text{C}$	25										
Ambient temperature $^{\circ}\text{C}$	25										
Air filter	Filtration rating μm 5										
Oil mist filter	Oil removing mg/m^3 0.1 {approx. 0.1PPM} (inlet air 30°C)										
Regulator	Set pressure range MPa 0.05 to 0.85										
	Relief starting MPa Setting pressure plus 0.05										
Standard accessories	Pressure gauge, differential pressure gauge, bracket										

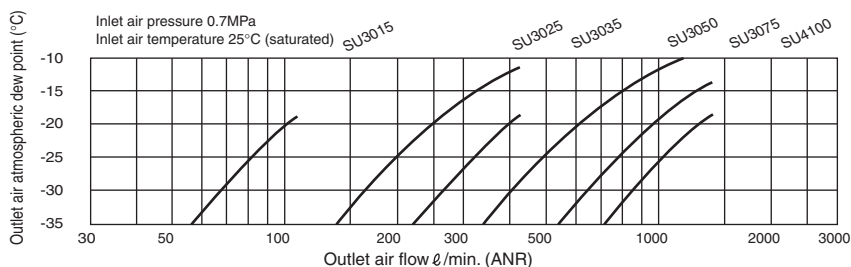
JIS symbol



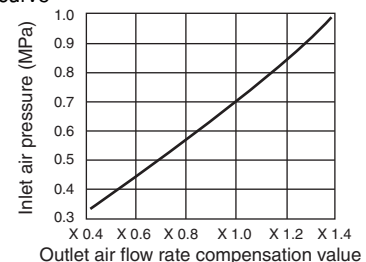
Dew point performance

Refer to page 151 for selection guide and compensation method.

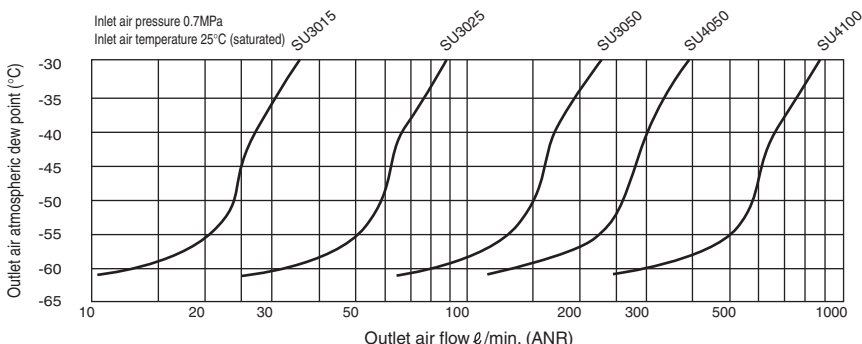
● Dew point performance curve (-20°C specifications)



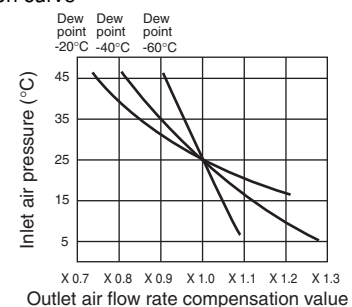
● Inlet pressure - outlet air flow rate correction curve



● Dew point performance curve ($-40, 60^{\circ}\text{C}$ specifications)



● Inlet temperature - outlet air flow rate correction curve



How to order

● Dryer unit

SU3015 - A 05 - W - E

A Model no.

B Outlet air atmospheric dew point

C Inlet air pressure

D Option
Note 6

Symbol	Descriptions
A Model no.	
	SU3015
	SU3025
	SU3035
	SU3050
	SU3075
	SU4050
	SU4100
B Outlet air atmospheric dew point	
A	-20°C
B	-40°C, -60°C (Note 5)
C Inlet air pressure	
05	0.5MPa (Note 1)
07	0.7MPa (Note 1)
D Option	
Blank	None
E	Common exhaust (Note 3)
X1	IN-OUT reverse (Note 2)

! Note on model no. selection

- Note 1. If inlet air pressure is less than 0.7MPa, indicate 05, while 0.7MPa and over, indicate 07.
- Note 2. Viewed from the front, a standard product has air inlet on the left port, while air outlet on the right port. For "X1", air inlet is provided on the right port, while air outlet is provided on the left port.
- Note 3. Purge air of standard products is released to the atmosphere. If "E" is indicated, common exhaust of purge air is enabled. Size of exhaust port is Rc1/2.
- Note 4. Purge flow rate in standard rating section is also the same value at 0.5MPa.
- Note 5. If outlet atmospheric dew point is -60°C, model No. is "B" as when -40°C.
- Note 6. When ordering several options, indicate the required options in alphabetical order.

Components

Components Model no.	(1) Air filter	(2) Oil mist filter	(3) Dryer	(4) Regulator	(5) Differential pressure gauge
SU3015-A-W	F3000-10-W-F	M3000-10-W-F1	SD3015-A-W	R3000-10-W	GA400-8-P02
SU3025-A-W	F4000-10-W-F	M4000-10-W-F1	SD3025-A-W	R4000-10-W	GA400-8-P02
SU3035-A-W	F4000-10-W-F	M4000-10-W-F1	SD3035-A-W	R4000-10-W	GA400-8-P02
SU3050-A-W	F4000-10-W-F	SM4000	SD3050-A-W	R4000-10-W	GA400-8-P02
SU3075-A-W	F4000-10-W-F	SM4000	SD3075-A-W	R4000-10-W	GA400-8-P02
SU4100-A-W	F4000-15-W-F	SM4000	SD4100-A-W	R4000-15-W	GA400-8-P02
SU3015-B-W	F3000-10-W-F	M3000-10-W-F1	SD3015-B-W	R3000-10-W	GA400-8-P02
SU3025-B-W	F3000-10-W-F	M3000-10-W-F1	SD3025-B-W	R3000-10-W	GA400-8-P02
SU3050-B-W	F4000-10-W-F	M4000-10-W-F1	SD3050-B-W	R4000-10-W	GA400-8-P02
SU4050-B-W	F4000-15-W-F	SM4000	SD4050-B-W	R4000-15-W	GA400-8-P02
SU4100-B-W	F4000-15-W-F	SM4000	SD4100-B-W	R4000-15-W	GA400-8-P02

Note 1: An oil mist filter (SM4000) is custom order.

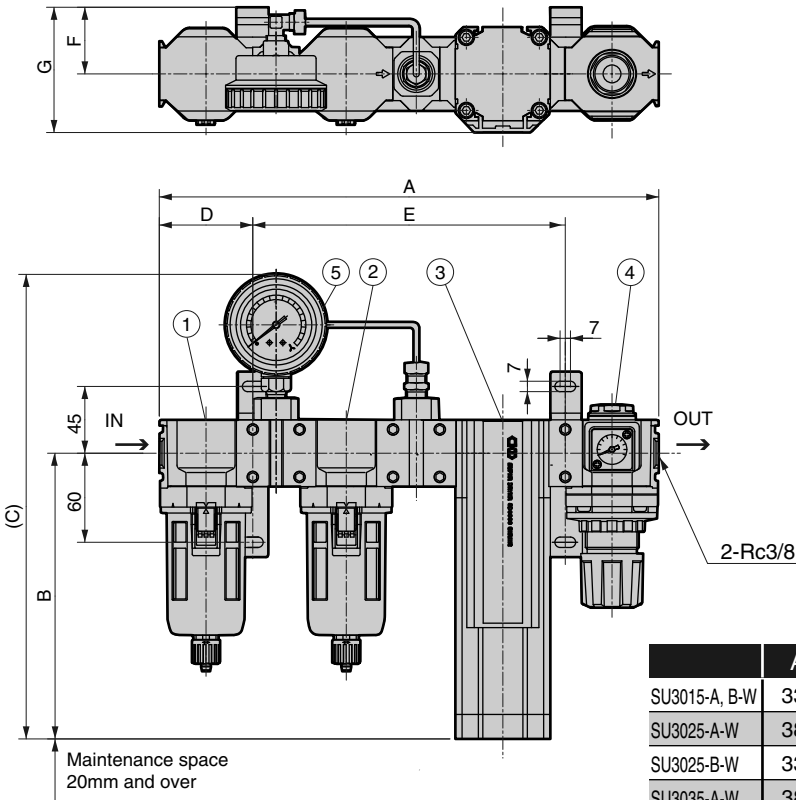
Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / 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
Dryer Main line unit

SU3000/SU4000-W Series

Dimensions

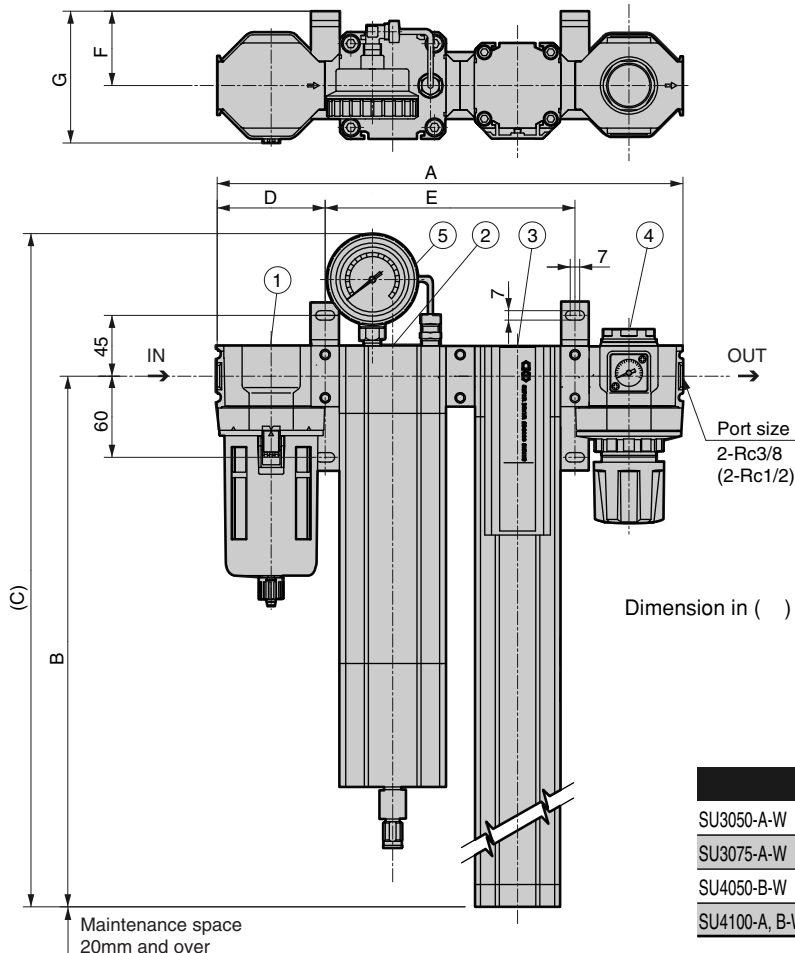


- SU-3015-A/B-W SU3025-A/B-W SU3035-A-W SU-3050-B-W



	A	B	C	D	E	F	G	Weight (kg)
SU3015-A, B-W	337	193	313	63	211	45	85	3.3
SU3025-A-W	388	293	413	80	228	55	97	4.4
SU3025-B-W	337	293	413	63	211	45	85	3.7
SU3035-A-W	388	393	513	80	228	55	97	4.8
SU3050-B-W	388	543	663	80	228	55	97	5.3

- SU3050-A-W SU3075-A-W SU4050-B-W SU4100-A/B-W



Dimension in () is for SU4000.

	A	B	C	D	E	F	G	Weight (kg)
SU3050-A-W	345	543	649	80	185	55	97	7.7
SU3075-A-W	345	793	899	80	185	55	97	8.6
SU4050-B-W	360	543	649	80	200	55	106	9.0
SU4100-A, B-W	360	1043	1149	80	200	55	106	11.8



Dryer

SD3000/SD4000 Series

Easy system up-grading between peripheral devices due to modular design

- Ultra dry air with atmospheric dew point -60°C is obtained easily.
- 1.5MPa maximum working pressure allows use in a variety of applications.

Treating air flow rate: 35 to 890 $\ell/\text{min. (ANR)}$ (0.7MPa, atmospheric dew point -40°C)



Specifications

Descriptions		SD3015	SD3025	SD3035	SD3050	SD3075	SD4050	SD4075	SD4100	
Working conditions	Working fluid	Compressed air								
	Inlet air pressure MPa	0.4 to 1.5								
	Withstanding pressure MPa	2.25								
	Inlet air temperature $^{\circ}\text{C}$	5 to 50								
Standard rating	Ambient temperature $^{\circ}\text{C}$	5 to 50								
	Inlet pressure dew point $^{\circ}\text{C}$	25								
	Inlet air pressure MPa	0.7								
	Inlet air temperature $^{\circ}\text{C}$	25								
Outlet air atmospheric dew point	-20°C	Inlet air flow rate $\ell/\text{min. (ANR)}$	125	300	490	760	1200	680	1100	1500
		Outlet air flow $\ell/\text{min. (ANR)}$	100	240	390	610	960	570	930	1260
		Purge flow $\ell/\text{min. (ANR)}$	25	60	100	150	240	110	170	240
	-40°C	Inlet air flow rate $\ell/\text{min. (ANR)}$	35	90	150	230	370	410	650	890
		Outlet air flow $\ell/\text{min. (ANR)}$	25	65	110	170	270	300	480	650
		Purge flow $\ell/\text{min. (ANR)}$	10	25	40	60	100	110	170	240
	-60°C	Inlet air flow rate $\ell/\text{min. (ANR)}$	20	55	90	140	220	240	380	520
		Outlet air flow $\ell/\text{min. (ANR)}$	10	30	50	80	120	130	210	280
		Purge flow $\ell/\text{min. (ANR)}$	10	25	40	60	100	110	170	240

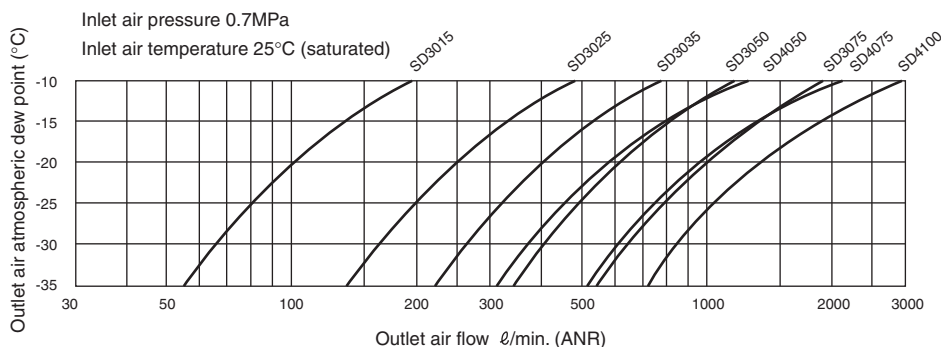
JIS symbol



Dew point performance

Refer to page 151 for selection guide and compensation method.

- Dew point performance curve (-20°C specifications)



Refrigerating type dryer
Desiccant type dryer
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
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)

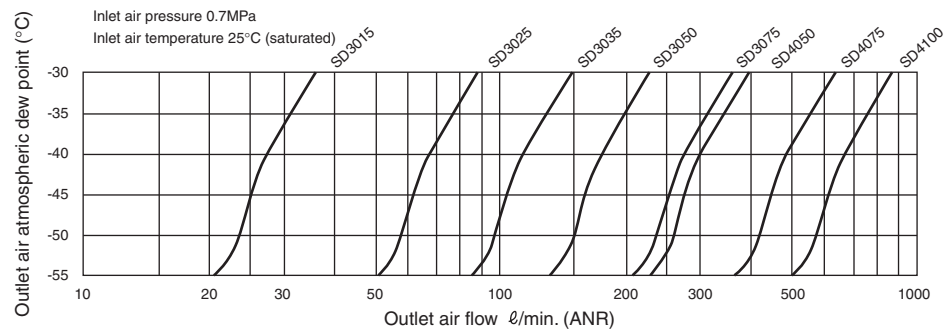
Ending

Dryer
Main line unit

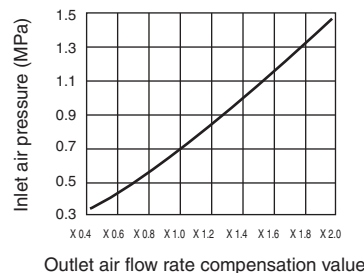
SD3000/SD4000 Series

Dew point performance Refer to page 151 for selection guide and compensation method.

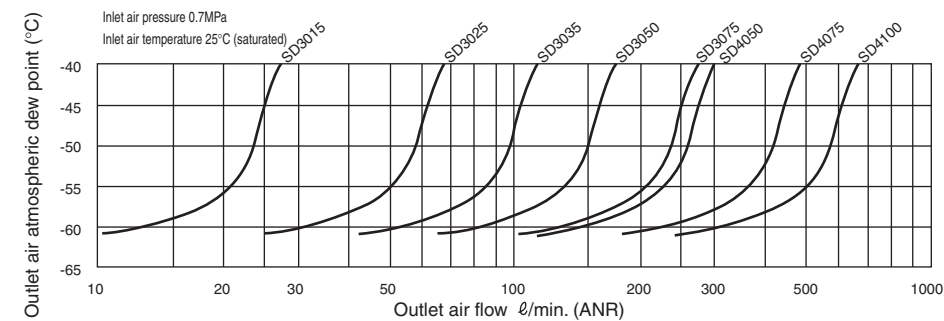
● Dew point performance curve (-40°C specifications)



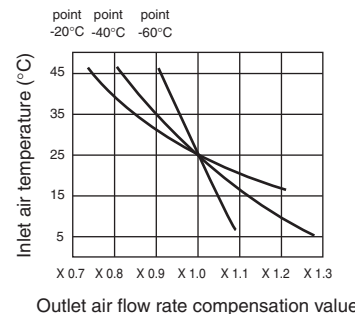
● Inlet pressure - outlet air flow rate correction curve



● Dew point performance curve (-60°C specifications)



● Inlet temperature - outlet air flow rate correction curve



How to order

● Dryer

SD3015 - A 05 - B

A Model no.

B Outlet air atmospheric dew point

C Inlet air pressure
Note 1
Note 2

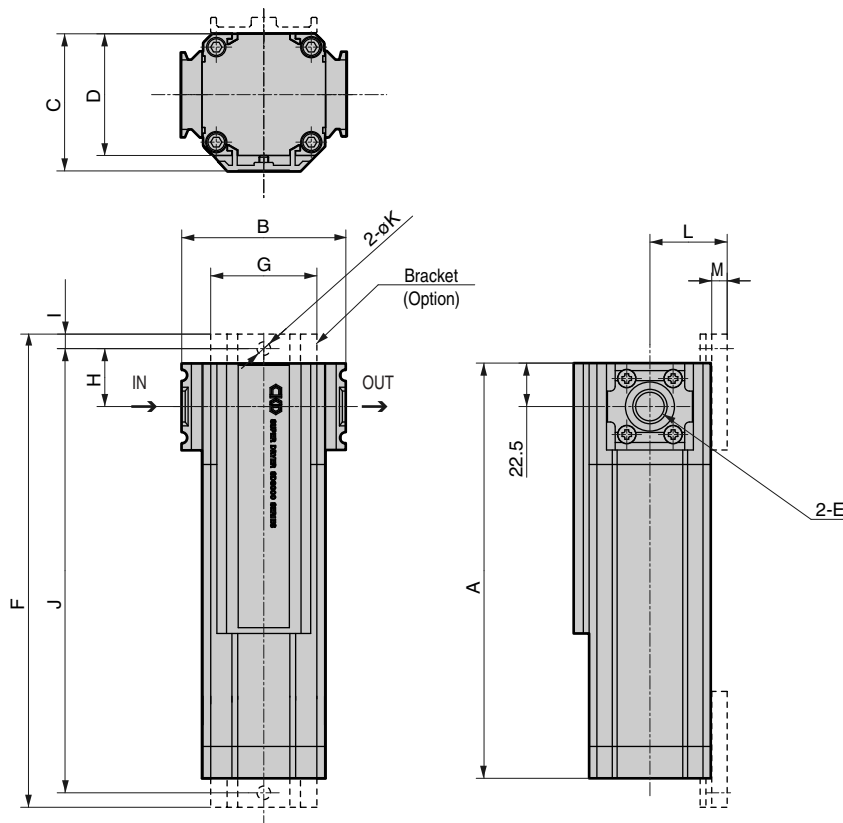
D Option
Note 3
Note 4
Note 5

Symbol	Descriptions
A	Model no.
	SD3015
	SD3025
	SD3035
	SD3050
	SD3075
	SD4050
	SD4075
	SD4100
B	Outlet air atmospheric dew point
A	-20°C
B	-40°C
C	-60°C
C	Inlet air pressure
05	0.5MPa
07	0.7MPa
14	(not selected for outlet air atmosphere dew point "A" -20°C.)
D	Option
Blank	None
B	With bracket
E	Common exhaust (Note 4)
X1	IN-OUT reverse (Note 3)

⚠ Note on model no. selection

- Note 1. If inlet air pressure is less than 0.7MPa, indicate 05, while 0.7MPa to 1.4MPa, indicate 07.
- Note 2. Outlet atmospheric dew point -20°C type setting is not available for inlet air pressure 1.4MPa specifications. Use of dryer is almost meaningless, because atmospheric dew point reaches -14°C in the state that inlet air temperature is 25°C and pressure is 1.4MPa. Select -40°C type or -60°C.
- Note 3. Viewed from the front, a standard product has air inlet on the left port, while air outlet on the right port. For "X1", air inlet is provided on the right port, while air outlet is provided on the left port.
- Note 4. Purge air of standard products is released to the atmosphere. If "E" is indicated, common exhaust of purge air is enabled. Size of exhaust port is Rc1/2.
- Note 5. When ordering several options, indicate the required options in alphabetical order.

Dimensions



Model no.	A	B	C	D	E	Weight (kg)	Bracket dimensions							
							F	G	H	I	J	K	L	M
SD3015	215	85	71	63	Rc3/8	1.4	245	55	30	7.5	230	7	40	8
SD3025	315	85	71	63	Rc3/8	1.8	345	55	30	7.5	330	7	40	8
SD3035	415	85	71	63	Rc3/8	2.2	445	55	30	7.5	430	7	40	8
SD3050	565	85	71	63	Rc3/8	2.7	595	55	30	7.5	580	7	40	8
SD3075	815	85	71	63	Rc3/8	3.6	845	55	30	7.5	830	7	40	8
SD4050	565	100	90	79	Rc1/2	4.0	605	70	32.5	10	585	9	50	10
SD4075	815	100	90	79	Rc1/2	5.4	855	70	32.5	10	835	9	50	10
SD4100	1065	100	90	79	Rc1/2	6.8	1105	70	32.5	10	1085	9	50	10

- Refrigerating type dryer
- Desiccant type dryer
- 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
- 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

Dryer
Main line unit



Dryer module unit Series

SDM4000 Series

Large flow rate is achieved with high polymer membrane.

- A unit treating compressor up to 75kW.
- Connection header system to meet wide working conditions.
- Optimum for explosion proof district.

Treating air flow rate: 1.36 to 12.4m³/min. (ANR) (0.7MPa, atmospheric dew point -20°C)

Specifications

Descriptions	SDM 4050-2	SDM 4050-3	SDM 4075-2	SDM 4075-3	SDM 4100-2	SDM 4100-3	SDM 4050-6	SDM 4050-8	SDM 4050-10	SDM 4075-6	SDM 4075-8	SDM 4075-10	SDM 4100-6	SDM 4100-8
Working conditions	Compressed air													
Inlet air pressure MPa	0.4 to 1.5													
Withstanding pressure MPa	2.25													
Inlet air temperature °C	5 to 50													
Ambient temperature °C	5 to 50													
Outlet air atmospheric dew point °C	-20													
Standard rating														
Inlet air flow rate m ³ /min. (ANR)	1.36	2.04	2.20	3.30	3.00	4.50	4.08	5.44	6.80	6.60	8.80	11.00	9.20	12.40
Outlet air flow m ³ /min. (ANR)	1.14	1.71	1.86	2.79	2.52	3.78	3.42	4.56	5.70	5.58	7.44	9.30	7.76	10.48
Purge flow m ³ /min. (ANR)	0.22	0.33	0.34	0.51	0.48	0.72	0.66	0.88	1.10	1.02	1.36	1.70	1.44	1.92
Inlet pressure dew point °C	25													
Inlet air pressure MPa	0.7													
Inlet air temperature °C	25													
Ambient temperature °C	25													

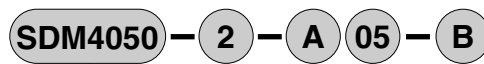
CAUTION: Floor installation type is provided for 6 stations and over.

JIS symbol



How to order

● Dryer



A Model no.

B Station number

C Outlet air atmospheric dew point

D Inlet air pressure
Note 1
Note 2

E Option
Note 3

Symbol	Descriptions
A Model no.	
	SDM4050
	SDM4075
	SDM4100
B Station number	
2	2 stations
3	3 stations
6	6 stations
8	8 stations
10	10 stations (Not available for SDM4100.)
C Outlet air atmospheric dew point	
A	-20°C
B	-40°C
C	-60°C
D Inlet air pressure	
05	0.5MPa
07	0.7MPa
14	(not selected for outlet air atmosphere dew point "A" -20°C.)
E Option	
Blank	None
B	With bracket

⚠ Note on model no. selection

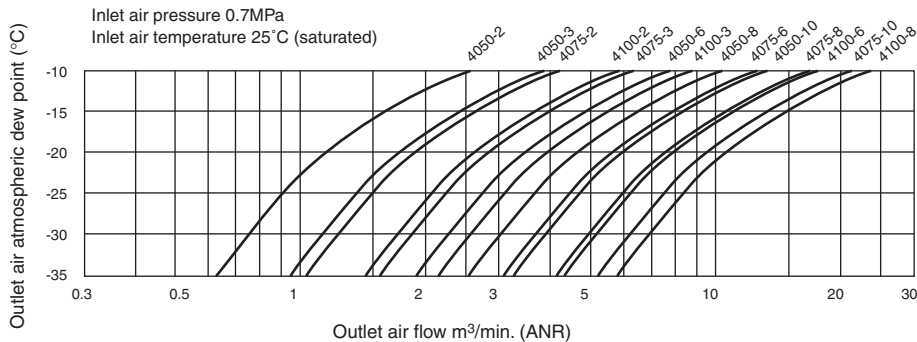
Note 1: If inlet air pressure is less than 0.7MPa, indicate 05, while 0.7MPa and over, indicate 07.

Note 2: Outlet atmospheric dew point -20°C type setting is not available for inlet air pressure 1.4MPa specifications. Use of dryer is almost meaningless, because atmospheric dew point reaches -14°C in the state that inlet air temperature is 25°C and pressure is 1.4MPa. Select -40°C type or -60°C.

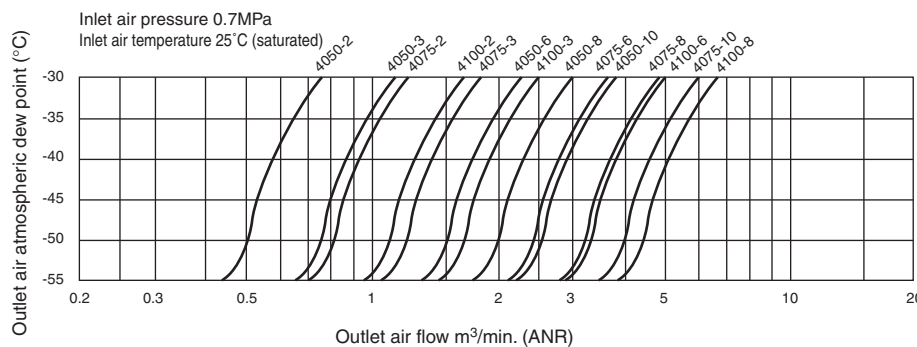
Note 3: If 6 stations and over, floor installation type is provided, so no bracket is provided.

Dew point performance Refer to page 151 for selection guide and compensation method.

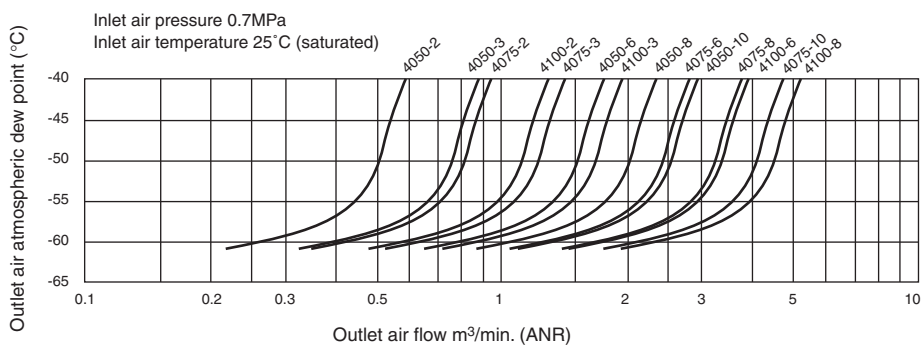
● Dew point performance curve (-20°C specifications)



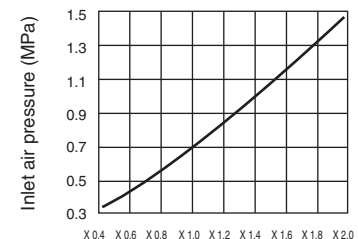
● Dew point performance curve (-40°C specifications)



● Dew point performance curve (-60°C specifications)

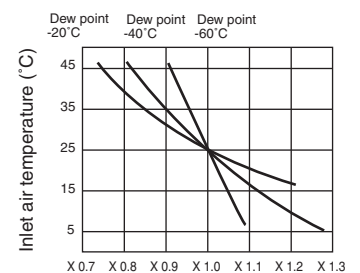


● Inlet pressure - outlet air flow rate correction curve



Outlet air flow rate compensation value

● Inlet temperature - outlet air flow rate correction curve



Outlet air flow rate compensation value

Example of model selection according to compressor capacity

Inlet air pressure 0.7MPa
Inlet air temperature 25°C (saturated) m³/min. (ANR)

Applicable compressor	kw	3.7	5.5	7.5	11	15	22	37	55	75
-20°C										
Model no.				SDM4050-2-A07	SDM4075-2-A07	SDM4075-3-A07	SDM4050-6-A07	SDM4075-6-A07	SDM4100-6-A07	SDM4100-8-A07
Inlet air flow rate				1.36	2.20	3.30	4.08	6.60	9.20	12.40
Outlet air flow				1.14	1.86	2.79	3.42	5.58	7.76	10.48
-40°C										
Model no.			SDM4050-2-B07	SDM4075-2-B07	SDM4075-3-B07	SDM4100-3-B07	SDM4075-6-B07	SDM4075-10-B07		
Inlet air flow rate			0.82	1.30	1.95	2.67	3.90	6.50		
Outlet air flow			0.60	0.96	1.44	1.95	2.88	4.80		
-60°C										
Model no.	SDM4050-2-C07	SDM4075-2-C07	SDM4075-3-C07	SDM4100-3-C07	SDM4075-8-C07	SDM4075-10-C07				
Inlet air flow rate	0.50	0.76	1.14	1.65	3.04	3.80				
Outlet air flow	0.28	0.42	0.63	0.93	1.68	2.10				

If flow rate and conditions differ, select the model according to the dew point performance curve above based on the required outlet air flow rate.

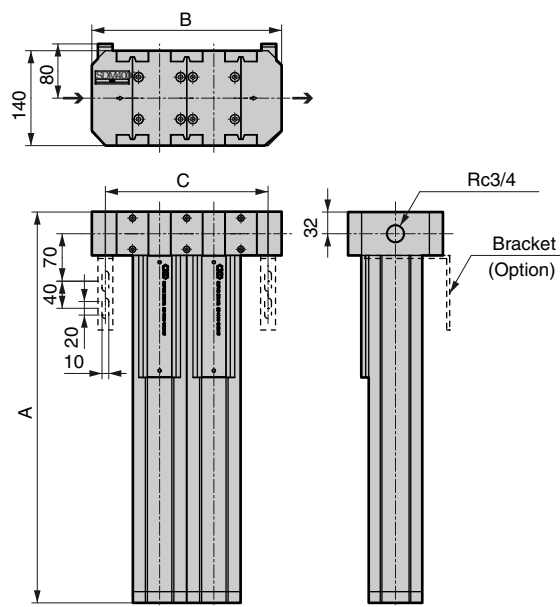
- Refrigerating type dryer
- Desiccant type dryer
- High polymer membrane type dryer
- Air filter
- Auto. drain / others
- F.R.L. (Module unit)
- F.R.L. (Separate)
- Compact F.R.
- Precise regulator
- F.R.L. (Related products)
- Clean F.R.
- Electro pneumatic regulator
- Air booster
- Speed control valve
- 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

Dryer
Main line unit

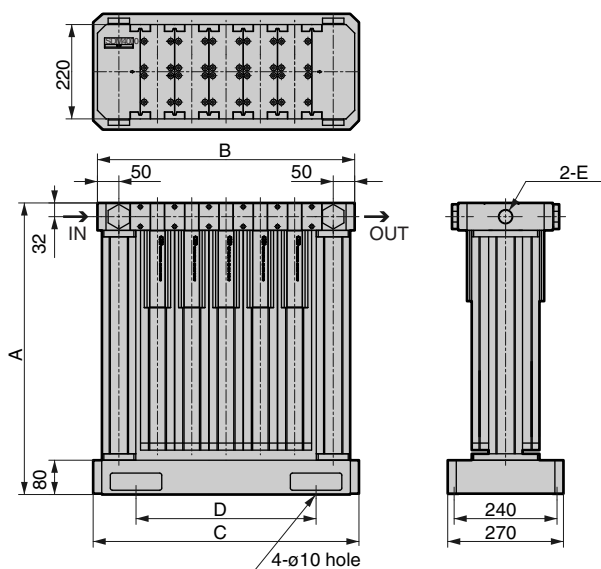
Dimensions

● 2, 3 stations



Model no.	A	B	C	Weight (kg)
SDM4050-2	577	280	240	12
SDM4050-3	577	360	320	17
SDM4075-2	827	280	240	15
SDM4075-3	827	360	320	21
SDM4100-2	1077	280	240	18
SDM4100-3	1077	360	320	25

● 6, 8, 10 stations



Model no.	A	B	C	D	E	Weight (kg)
SDM4050-6	680	440	460	260	Rc1	41
SDM4050-8	680	520	540	340	Rc1	50
SDM4050-10	680	600	620	420	Rc1	59
SDM4075-6	930	440	460	260	Rc1 1/2	52
SDM4075-8	930	520	540	340	Rc1 1/2	64
SDM4075-10	930	600	620	420	Rc1 1/2	76
SDM4100-6	1180	440	460	260	Rc1 1/2	63
SDM4100-8	1180	520	540	340	Rc1 1/2	78

Selection guide

(Selection guide)

Each performance curve shows the relation of the outlet air flow and the outlet air atmospheric dew point of each model at an inlet pressure of 0.7MPa and inlet air temperature of 25°C (saturate). Select the model shown on the right with the intersection of the required dew point and required flow rate.

(Flow compensation method)

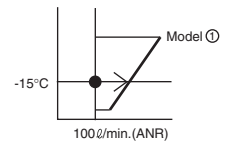
If the inlet pressure and inlet temperature differ from the rated values, the outlet air flow rate that can be supplied changes. Use each compensation curve and compensate in this case.

(Rated outlet air flow rate) x (Compensation value) = (Conditional outlet air flow rate)

If inlet air presses through the refrigerating air dryer, select the inlet air temperature as 10°C regardless of actual temperature.

(Example)

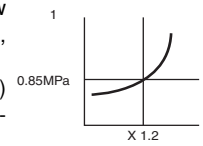
When required dew point -15°C, required flow rate is 100 ℓ /min. (ANR), the model (1) shown on the right of the intersection can be selected.



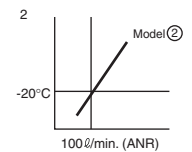
(Example)

When Inlet pressure 0.85MPa required dew point -20°C required flow 120 ℓ /min. (ANR),

1. Obtain compensation (in this case 1.2) from the pressure flow rate compensation curve.



2. With model (2) having an outlet atmospheric dew point of -20°C and outlet air flow rate of 100 ℓ /min, a 1.2-fold rate of 120 ℓ /min (ANR) can be flowed, so model (2) can be selected.



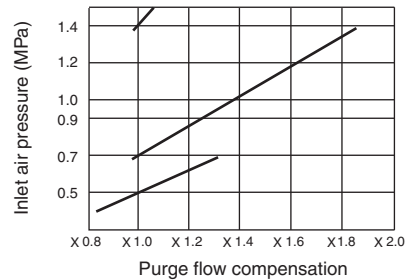
Purge flow rate

The purge flow rate is shown in the specifications.

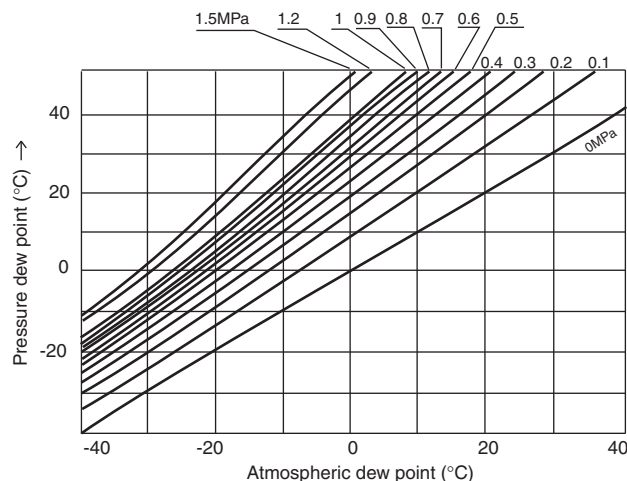
The flow rate obtained by adding the outlet's working air rate to the purge flow rate can be supplied from the inlet.

If the inlet air pressure differs from the rated valve, the purge flow rate will be obtained by multiplying the rated purge flow rate with the compensation value shown on the right.

Inlet pressure - purge flow compensation curve



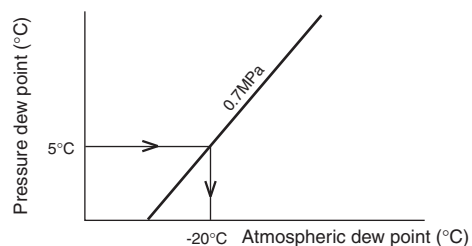
Pressure dew point - atmospheric dew point conversion table



Pressure dew point - reading atmospheric dew point conversion table

This table is used to convert the pressure dew point at each pressure into an atmospheric dew point, or vice versa.

Example: Obtain the atmospheric dew point when the pressure is 0.7MPa and the pressure dew point is 5°C.



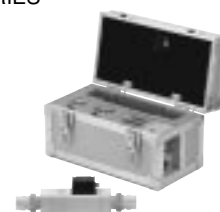
According to the above table, when the pressure is 0.7MPa, the 5°C pressure dew point is converted into a -20°C atmospheric dew point.

Measuring the working air flow rate

If the working flow rate is not clear when selecting the dryer model, measure the flow rate.

The compressor air flow sensor "FLULEX Tester Kit" with functions such as the cumulative display, peak display, peak value hold, and analog output is handy for measuring the flow rate.

● FLULEX Tester Kit
FLUEREX PFK SERIES



- Refrigerating type dryer
- Desiccant type dryer
- 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
- 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

Dryer
Main line unit