

Membrane Air Dryer Series *IDG*

Single Unit/Standard Dew Point -20°C Specifications

How to Order

IDG 10 - 03 -

Flow rate by size

Size	Outlet air flow rate Purge air flow rate	ℓ/min (ANR)
1	10/2.5	
3	25/6	
5	50/12	
10	100/25	
20	200/50	
30	300/75	
50	500/125	
60	600/125	
75	750/150	
100	1000/190	

Thread type

Symbol	Type
Nil	Rc
N	NPT
F	G

Port size

Symbol	Bore	Size													
		1	3	5	10	20	30	50	60	75	100				
01	1/8	—	●	●	—	—	—	—	—	—	—	—	—	—	—
02	1/4	●	●	●	●	●	●	●	—	—	—	—	—	—	—
03	3/8	—	—	—	●	●	●	●	●	—	—	—	—	—	—
04	1/2	—	—	—	—	—	—	—	●	●	●	—	—	—	—

Option

Symbol	Contents	Size													
		1	3	5	10	20	30	50	60	75	100				
Nil	None (Standard)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
P	With fitting for purge air discharge	●	●	●	●	●	●	●	●	●	●	●	●	●	●
R	Flow direction (Right → Left)	—	●	●	●	●	●	●	●	●	●	●	●	●	●
S	With dew point indicator	—	●	●	—	—	—	—	—	—	—	—	—	—	—

Note) In the case of two or more options, indicate them alphabetically.

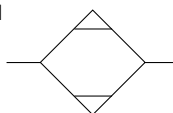
Accessory

Symbol	Description
Nil	None (Standard)
B	With bracket (Except IDG1)

Note) When symbol B is indicated, a bracket assembly with a part number shown in the table left below is included as an accessory.



JIS Symbol



Bracket Assembly (Accessory) Part No.

Part no.	Applicable model
BM59	IDG3, 5
BM61	IDG10
BM63	IDG20
BM64	IDG30, 50
BM65	IDG60, 75, 100

Standard Specifications/Single Unit Type (Standard dew point: -20°C)

Model		Standard dew point: -20°C									
		IDG1	IDG3	IDG5	IDG10	IDG20	IDG30	IDG50	IDG60	IDG75	IDG100
Range of operating conditions	Fluid	Compressed air									
	Inlet air pressure (MPa)	0.3 to 0.85					0.3 to 1.0				
	Inlet air temperature ($^{\circ}\text{C}$) ⁽¹⁾	-5 to 55					-5 to 50				
	Ambient temperature ($^{\circ}\text{C}$) ⁽¹⁾	-5 to 55					-5 to 50				
Standard performance	Outlet air atmospheric pressure dew point ($^{\circ}\text{C}$)	-20									
	Inlet air flow rate (ℓ/min (ANR)) ⁽²⁾	12.5	31	62	125	250	375	625	725	900	1190
Standard performance conditions	Outlet air flow rate (ℓ/min (ANR))	10	25	50	100	200	300	500	600	750	1000
	Purge air flow rate (ℓ/min (ANR)) ⁽³⁾	2.5	6	12	25	50	75	125	125	150	190
	Inlet air pressure (MPa)	0.7									
	Inlet air temperature ($^{\circ}\text{C}$)	25									
	Inlet air saturation temperature ($^{\circ}\text{C}$)	25									
	Ambient temperature ($^{\circ}\text{C}$)	25									
Dew point indicator purge air flow rate		—			1 ℓ/min (ANR) {In case of Inlet air pressure 0.7 MPa}						
Port size (Nominal size B)		1/4	1/8, 1/4		1/4, 3/8			3/8, 1/2		1/2	
Mass (kg) (With bracket)		0.11	0.25 (0.31)	0.43 (0.51)	0.66 (0.76)	0.74 (0.87)	0.77 (0.90)	1.50 (1.65)	1.50 (1.65)	1.55 (1.70)	

* With cap bolts (2 pcs.) and spring washers (2 pcs.)

Note 1) No freezing.

Note 2) ANR indicates the flow rate converted to the value at 20°C under the atmospheric pressure and the state of relative humidity 65%.

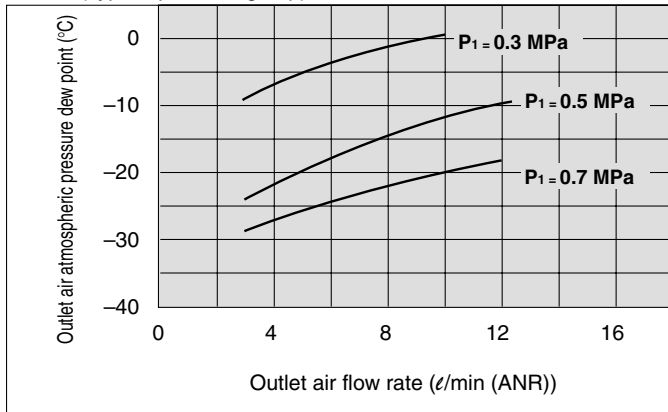
Note 3) Includes 1 ℓ/min (ANR) of purge air flow (at 0.7 MPa inlet air pressure) for the dew point indicator (except IDG1, 3, 5).

Conditions: Inlet air temperature 25°C (saturated air), Ambient temperature 25°C, P₁: Inlet air pressure, Tube for purge air discharge (Option: P): None
 Notice: For type with fitting for purge air discharge (Option: P), the outlet air atmospheric pressure dew point may become higher depending on the tube length for purge air discharge. Refer to page 100 for IDG30 and IDG50. For other models, if the tube length is 5 m or less, a rise of the outlet air at the atmospheric pressure dew point will be 1°C or less.

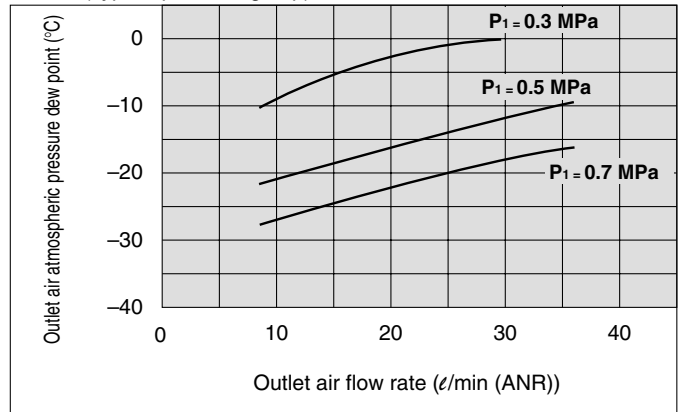
Performance Chart

Product groups inside parentheses in the graph are classification symbols for selecting a model. (Refer to page 93.)

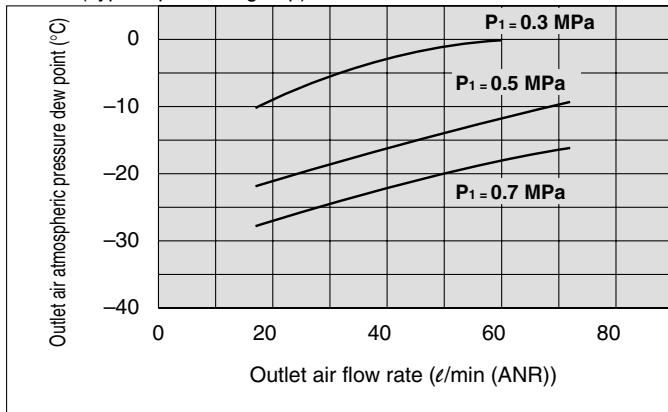
IDG1 (Type A products group)



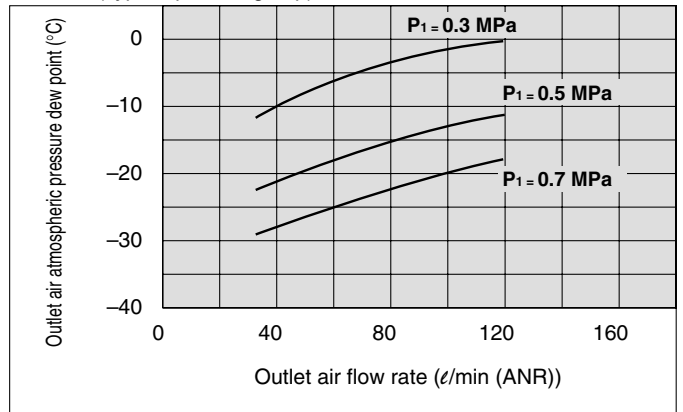
IDG3 (Type A products group)



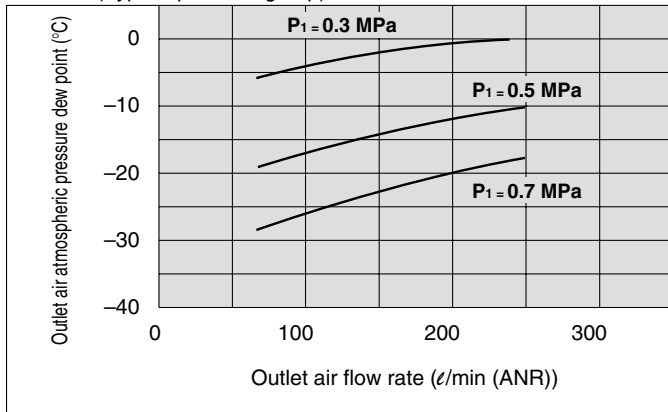
IDG5 (Type A products group)



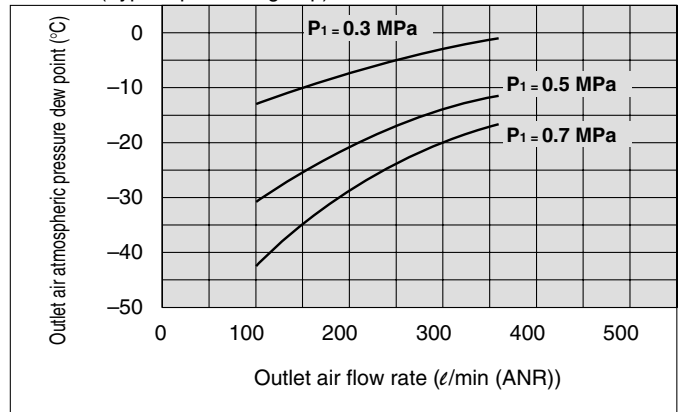
IDG10 (Type A product group)



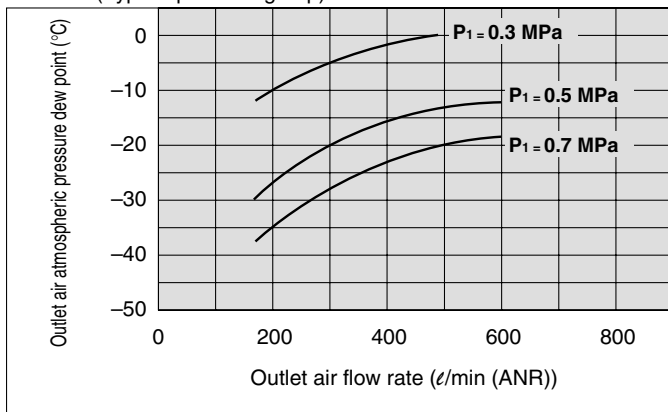
IDG20 (Type A products group)



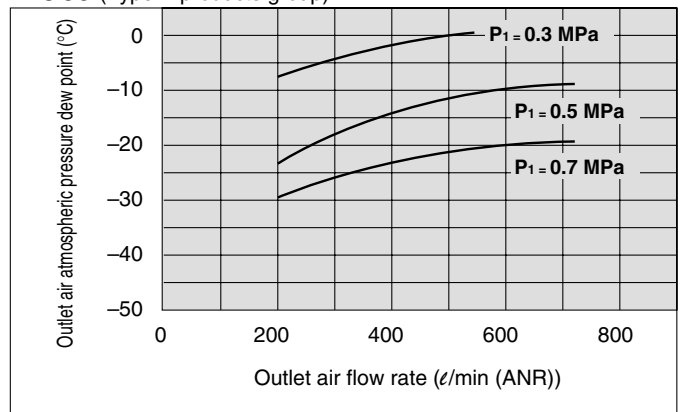
IDG30 (Type B products group)



IDG50 (Type B products group)



IDG60 (Type A products group)



HAA
HAW

AT

IDF
IDU

IDFA

IDFB

ID

IDG

AMG

AFF

AM

AMD

AMH

AME

AMF

SF

SFD

LLB

AD

GD

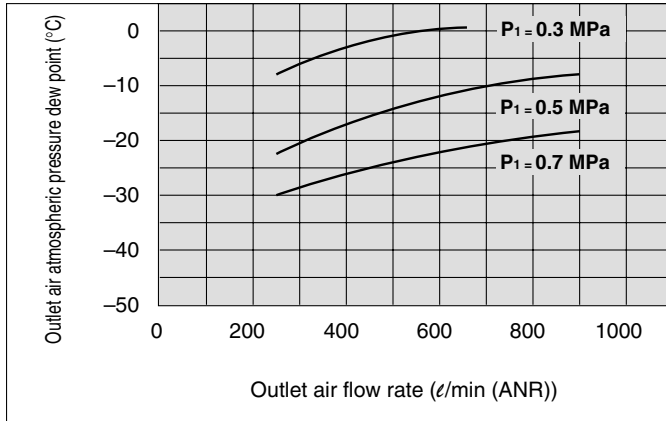
Series IDG

Conditions: Inlet air temperature 25°C (saturated air), Ambient temperature 25°C, P₁: Inlet air pressure Tube for purge air discharge (Option: P): None
 Notice: For type with fitting for purge air discharge (Option: P) except IDG30 and IDG50, if the tube length is 5 m or less, a rise of the outlet air at the atmospheric pressure dew point will be 1°C or less.

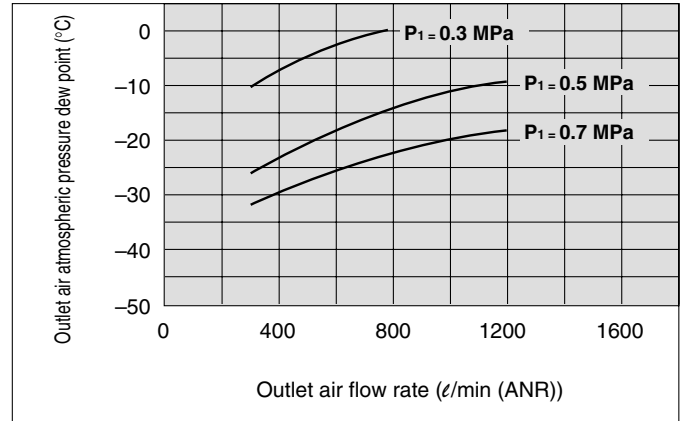
Performance Chart

Product groups inside parentheses in the graph are classification symbols for selecting a model. (Refer to page 93.)

IDG75 (Type A products group)



IDG100 (Type A products group)



With fittings for purge air discharge (Option: P)

As the length of tubing for purge air discharge becomes longer, the outlet air atmospheric pressure dew point becomes higher. Refer to the table below.

Outlet Air at the Atmospheric Pressure Dew point in Compliance with the Tube Length for Discharging the Purged Air (°C)

Tube length	Model	IDG30	IDG50
0 m		-20	
1 m		-19	
3 m		-17	
5 m		-16	

Refer to the Precautions on page 139 when piping the tube for purge air discharge.

■ Conditions

- Inlet air temperature : 25°C (Saturated)
- Ambient temperature : 25°C
- Inlet air pressure : 0.7 MPa
- Outlet air flow rate : Flow gained under conditions of the standard performance. (Refer to page 98.)
- Tubing size (O.D. x I.D.) mm: ø12 x ø9

Construction

Refer to pages 110 and 111.

Dimensions

Refer to pages 112 and 113.