

# Membrane Air Dryer

## Single Unit Type

# Series *IDG*

RoHS

### How to Order

IDG **10** **02** -

#### Size

|     |
|-----|
| 1   |
| 3   |
| 5   |
| 10  |
| 20  |
| 60  |
| 75  |
| 100 |

#### Standard dew point temperature/Outlet air flow rate

| Symbol | Standard dew point (°C) | Flow rate by size, Outlet air flow rate (L/min [ANR]) |    |    |     |     |                                   |     |      |
|--------|-------------------------|-------------------------------------------------------|----|----|-----|-----|-----------------------------------|-----|------|
|        |                         | 1                                                     | 3  | 5  | 10  | 20  | 60                                | 75  | 100  |
| Nil    | -20                     | 10                                                    | 25 | 50 | 100 | 200 | 600                               | 750 | 1000 |
| H      | -15                     | —                                                     | 25 | 50 | 100 | 200 | 600                               | 750 | 1000 |
| L      | -40                     | —                                                     | —  | —  | —   | —   | Select from Series IDG□A (page 1) |     |      |
| S      | -60                     | —                                                     | —  | —  | —   | —   |                                   |     |      |

#### Accessory

| Symbol | Specifications             |
|--------|----------------------------|
| Nil    | None (Standard)            |
| B      | With bracket (Except IDG1) |

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

#### Port size/Applicable tubing O.D.

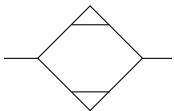
| Symbol | Port size | Piping type       | Size |   |   |    |    |    |    |     |
|--------|-----------|-------------------|------|---|---|----|----|----|----|-----|
|        |           |                   | 1    | 3 | 5 | 10 | 20 | 60 | 75 | 100 |
| 01     | 1/8       | Thread            | —    | ● | ● | —  | —  | —  | —  | —   |
| 02     | 1/4       |                   | ●    | ● | ● | ●  | ●  | —  | —  | —   |
| 03     | 3/8       |                   | —    | — | — | ●  | ●  | —  | —  | —   |
| 04     | 1/2       |                   | —    | — | — | —  | —  | ●  | ●  | ●   |
| 06     | ø6        | One-touch fitting | ●    | — | — | —  | —  | —  | —  | —   |

#### Thread type/One-touch fitting

| Symbol  | Type                 |
|---------|----------------------|
| Nil     | Rc                   |
| N       | NPT                  |
| F       | G                    |
| C Note) | ø6 One-touch fitting |

Note) Size 1 only

#### Symbol



#### Bracket Assembly (Accessory)/Part No.

| Part no. | Applicable model |
|----------|------------------|
| BM59     | IDG3, 5          |
| BM61     | IDG10            |
| BM63     | IDG20            |
| BM65     | IDG60, 75, 100   |

\* With hexagon socket head cap screws (2 pcs.) and spring washers (2 pcs.)

#### Semi-standard

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

Note) In the case of more than one symbol, indicate them alphabetically.

Single Unit Type

Unit Type

Model Selection

Made to Order

Specific Product Precautions

## Standard Specifications/Single Unit Type (Standard dew point -20°C, -15°C)

### Standard dew point----20°C

| Model                                   |                                                          | IDG1           | IDG3 | IDG5           | IDG10          | IDG20                                         | IDG30A         | IDG50A         | 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 (°C) <small>Note 1)</small>        | -5 to 55       |      |                |                |                                               | -5 to 50       |                |                |                |                |
|                                         | Ambient temperature (°C) <small>Note 1)</small>          | -5 to 55       |      |                |                |                                               | -5 to 50       |                |                |                |                |
| Standard performance                    | Outlet air atmospheric pressure dew point (°C)           | -20            |      |                |                |                                               |                |                |                |                |                |
| Standard performance conditions         | Inlet air flow rate (L/min [ANR]) <small>Note 2)</small> | 12.5           | 31   | 62             | 125            | 250                                           | 360            | 586            | 725            | 900            | 1190           |
|                                         | Outlet air flow rate (L/min [ANR])                       | 10             | 25   | 50             | 100            | 200                                           | 300            | 500            | 600            | 750            | 1000           |
|                                         | Purge air flow rate (L/min [ANR]) <small>Note 3)</small> | 2.5            | 6    | 12             | 25             | 50                                            | 60             | 86             | 125            | 150            | 190            |
|                                         | Inlet air pressure (MPa)                                 | 0.7            |      |                |                |                                               |                |                |                |                |                |
|                                         | Inlet air temperature (°C)                               | 25             |      |                |                |                                               |                |                |                |                |                |
|                                         | Inlet air saturation temperature (°C)                    | 25             |      |                |                |                                               |                |                |                |                |                |
|                                         | Ambient temperature (°C)                                 | 25             |      |                |                |                                               |                |                |                |                |                |
| Dew point indicator purge air flow rate |                                                          | —              |      |                |                | 1 L/min [ANR] (Inlet air pressure at 0.7 MPa) |                |                |                |                |                |
| Port size                               |                                                          | 1/4            | —    | 1/8, 1/4       |                | 1/4, 3/8                                      |                |                | 3/8, 1/2       | 1/2            |                |
| Applicable tubing O.D.                  |                                                          | —              | ø6   | —              |                | —                                             | —              | —              | —              | —              | —              |
| Weight (kg)<br>(With bracket)           |                                                          | 0.11           | 0.05 | 0.25<br>(0.31) | 0.43<br>(0.51) | 0.66<br>(0.76)                                | 0.78<br>(0.91) | 0.81<br>(0.94) | 1.50<br>(1.65) | 1.50<br>(1.65) | 1.55<br>(1.70) |

Note 1) When using the product in the temperature range between -5°C and 5°C, prevent water droplets from entering the inlet port. (No freezing of the fluid)

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 (Inlet air pressure at 0.7 MPa) for the dew point indicator (except IDG1, 3, 5).

### Standard dew point----15°C/Type H

| Model                                   |                                                          | IDG3H          | IDG5H          | IDG10H                                        | IDG20H         | IDG30HA        | IDG50HA        | IDG60H         | IDG75H         | IDG100H        |
|-----------------------------------------|----------------------------------------------------------|----------------|----------------|-----------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Range of operating conditions           | Fluid                                                    | Compressed air |                |                                               |                |                |                |                |                |                |
|                                         | Inlet air pressure (MPa)                                 | 0.3 to 0.85    |                |                                               |                | 0.3 to 1.0     |                |                |                |                |
|                                         | Inlet air temperature (°C) <small>Note 1)</small>        | -5 to 55       |                |                                               |                | -5 to 50       |                |                |                |                |
|                                         | Ambient temperature (°C) <small>Note 1)</small>          | -5 to 55       |                |                                               |                | -5 to 50       |                |                |                |                |
| Standard performance                    | Outlet air atmospheric pressure dew point (°C)           | -15            |                |                                               |                |                |                |                |                |                |
| Standard performance conditions         | Inlet air flow rate (L/min [ANR]) <small>Note 2)</small> | 28             | 56             | 111                                           | 222            | 329            | 550            | 665            | 830            | 1110           |
|                                         | Outlet air flow rate (L/min [ANR])                       | 25             | 50             | 100                                           | 200            | 300            | 500            | 600            | 750            | 1000           |
|                                         | Purge air flow rate (L/min [ANR]) <small>Note 3)</small> | 3              | 6              | 11                                            | 22             | 29             | 50             | 65             | 80             | 110            |
|                                         | Inlet air pressure (MPa)                                 | 0.7            |                |                                               |                |                |                |                |                |                |
|                                         | Inlet air temperature (°C)                               | 25             |                |                                               |                |                |                |                |                |                |
|                                         | Inlet air saturation temperature (°C)                    | 25             |                |                                               |                |                |                |                |                |                |
|                                         | Ambient temperature (°C)                                 | 25             |                |                                               |                |                |                |                |                |                |
| Dew point indicator purge air flow rate |                                                          | —              |                | 1 L/min [ANR] (Inlet air pressure at 0.7 MPa) |                |                |                |                |                |                |
| Port size                               |                                                          | 1/8, 1/4       |                | 1/4, 3/8                                      |                |                | 3/8, 1/2       |                | 1/2            |                |
| Weight (kg)<br>(With bracket)           |                                                          | 0.25<br>(0.31) | 0.43<br>(0.51) | 0.66<br>(0.76)                                | 0.78<br>(0.91) | 0.81<br>(0.94) | 1.50<br>(1.65) | 1.50<br>(1.65) | 1.55<br>(1.70) | 1.55<br>(1.70) |

Note 1) When using the product in the temperature range between -5°C and 5°C, prevent water droplets from entering the inlet port. (No freezing of the fluid)

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 (Inlet air pressure at 0.7 MPa) for the dew point indicator (except IDG3H, 5H).