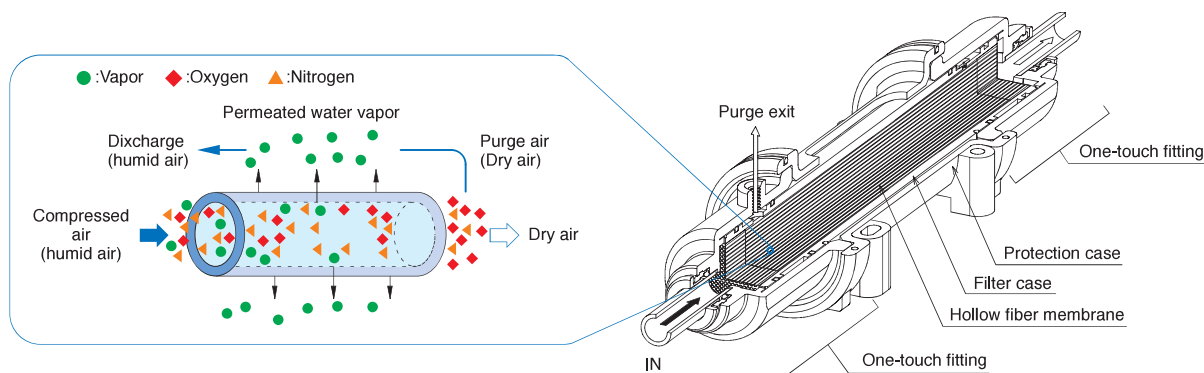


# Ultra-compact Dehumidification Filter

## The Principle of Dehumidification

### Construction Drawing



The high polymer hollow fiber membrane can remove water molecules from nitrogen and oxygen molecules. Water molecules permeate through the wall of hollow fiber membranes and exhausted outside the module. Nitrogen and Oxygen pass through inside of the fibers and come out as dry air. It is possible to dehumidify it continuously by returning a part of dry air (purge air).

## Line up



### Flow rate

IAD3

1~30L/min

IAD10

1~100L/min

IAD20

1~200L/min

## Features

**Compact Design**

**Variety Kinds of Fitting.**

**Power Sources Not Required**

## Benefits

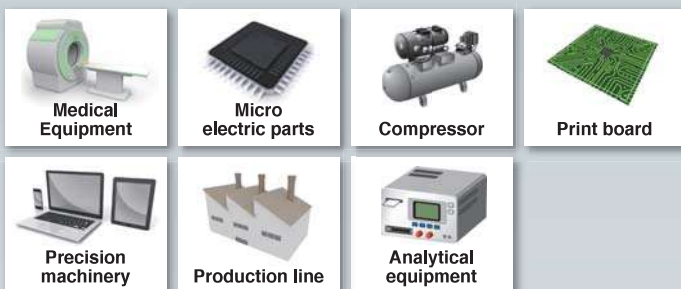
**Small Space instalation in Plants and equipments.**

**Quick and Convinient filter change  
One-touch tube connection type**

**You can use it in the explosion proof area.**

## Applications

- Precision Measuring Instruments
- Semiconductor Manufacturing Equipment
- Air Operation Equipment
- Ozone Generators
- Dental/Medical Equipment
- Analysis Equipment etc.



## Concrete Example

### The moisture outflow prevent

- dew condensation in piping by a difference in temperature

- Clinging of fine particle by moisture

### Moisture mixing prevention

- Analysis of the gas ingredient
- Oxygen concentrate machine and ozonizer

### Dehumidification of specific space


- Diffused reflection and diffusion measures in laser device
- Prevention of counting moisture as a particle
- Explosion-proof environment


**The longevity of the absorbent such as zeolite is extended**

## Specifications


| Product code           |                     | IAD3                     | IAD10               | IAD20              |
|------------------------|---------------------|--------------------------|---------------------|--------------------|
| Operating Temperature  |                     | 5°C ~ 50°C               |                     |                    |
| Max Operating Pressure |                     | 0.1 ~ 0.7MPa             |                     |                    |
| Fluid                  |                     | Compressed air, Nitrogen |                     |                    |
| Weight                 |                     | 28g                      | 100g                | 250g               |
| Flow rate              |                     | 1 ~ 30L/min              | 1 ~ 100L/min        | 1 ~ 200L/min       |
| Connection             | IN/OUT              | One tuch tube fitting    |                     | Screw              |
|                        | Size                | φ4, φ6                   | φ6, φ8              | Rc3/8              |
|                        | Purge port          | M5                       | M5                  | Rc1/8              |
| Purge method           |                     | Inner line purge         |                     | Outside line purge |
| Material               | Case                | Polycarbonate            |                     |                    |
|                        | Filter media        | Polyimido                |                     |                    |
|                        | Potting             | Polyurethane             |                     |                    |
|                        | Connection          | PBT+SUS                  | PBT+Glass fiber+SUS |                    |
|                        | O-ring              | NBR                      | FKM                 |                    |
|                        | Protection case     |                          | PBT+Glass fiber     |                    |
|                        | Steady pin,Bolt nut |                          | SUS                 |                    |

## Product Code

| IAD3 series                      |           | Connection size |             |  |
|----------------------------------|-----------|-----------------|-------------|---|
|                                  |           | φ4              | φ6          |   |
| Purge air rate<br>(Innner purge) | STD       | IAD3-N35-T4     | IAD3-N35-T6 |   |
|                                  | Low Purge | IAD3-N20-T4     | IAD3-N20-T6 |   |

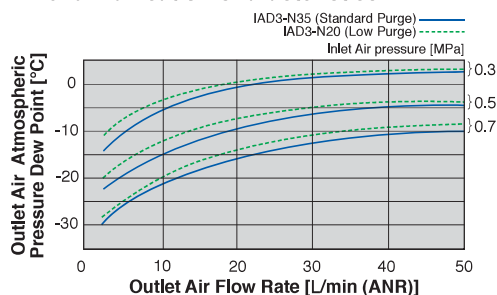
| IAD20 series   |  | Connection size |  |
|----------------|--|-----------------|---|
|                |  | Rc3/8           |   |
| Purge air rate |  | IAD20-G-3/8     |   |
| Outside purge  |  |                 |   |

Adaptor R1/8 2pcs  
Adaptor R3/8 2pcs

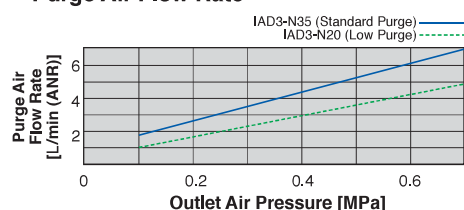
| IAD10 series   |           | Connection size |              |  |
|----------------|-----------|-----------------|--------------|---|
|                |           | φ6              | φ8           |   |
| Purge air rate | STD       | IAD10-N65-T6    | IAD10-N65-T8 |   |
|                | Low Purge | IAD10-N40-T6    | IAD10-N40-T8 |   |
| Outside purge  |           | IAD10-G-T6      | IAD10-G-T8   |   |

## IAD3 series

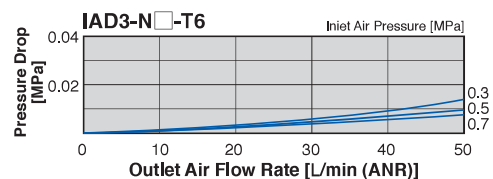
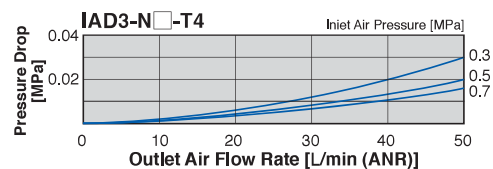
### Dehumidification Characteristics



### Purge Air Flow Rate

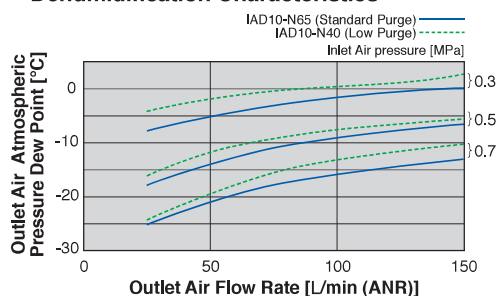


### Flow Characteristics (Pressure Drop)

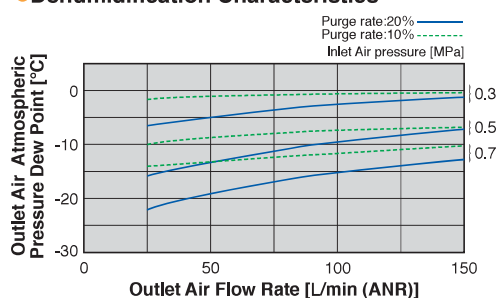


## IAD10 series

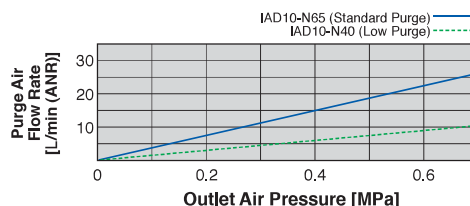
### Dehumidification Characteristics



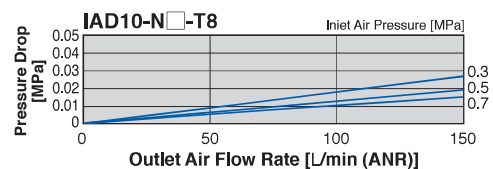
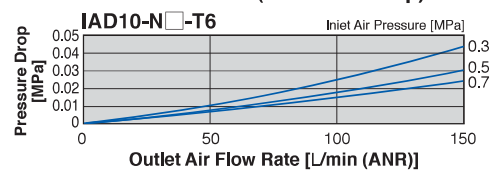
### Dehumidification Characteristics



### Purge Air Flow Rate

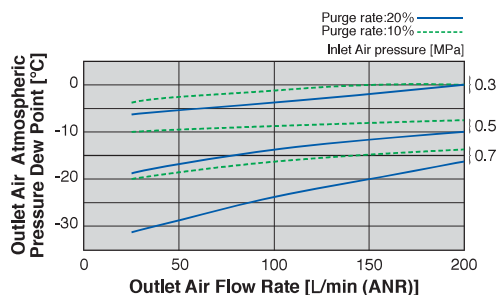


### Flow Characteristics (Pressure Drop)

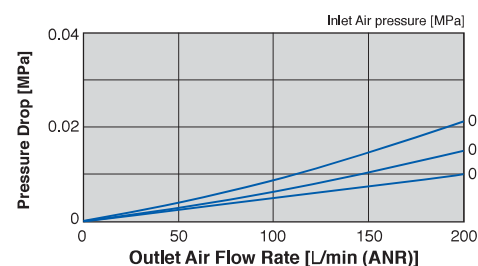


## IAD20 series

### Dehumidification Characteristics

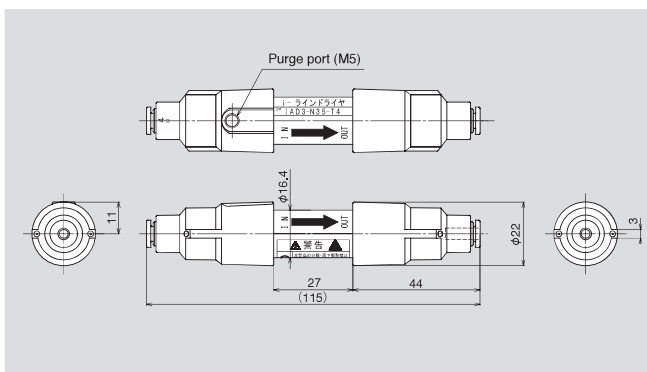


### Flow Characteristics (Pressure Drop)

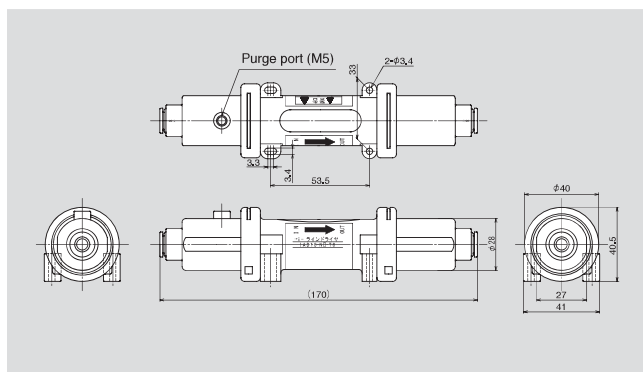


## Dimensions

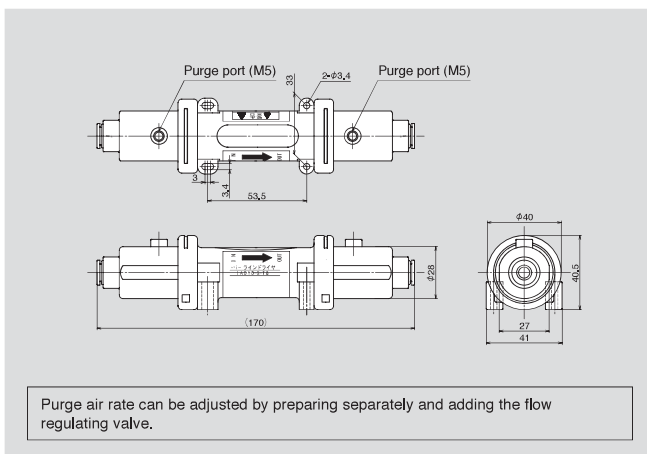
### IAD3-N- T6



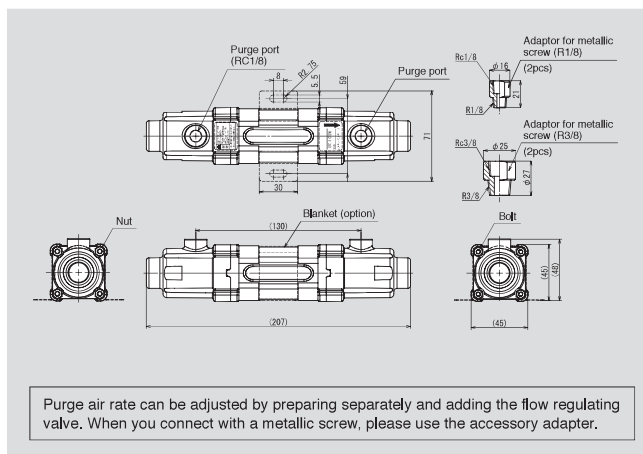
### IAD10-N (Inner line purge type)



### IAD10-G-T (Outside line purge type)



### IAD20-G-3/8

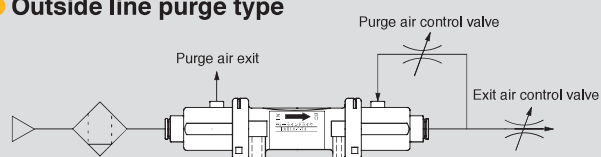


## Recommended circuit

### ● Inner line purge type



### ● Outside line purge type



Diverge the piping of the exit side, and connect for purge air entrance.

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