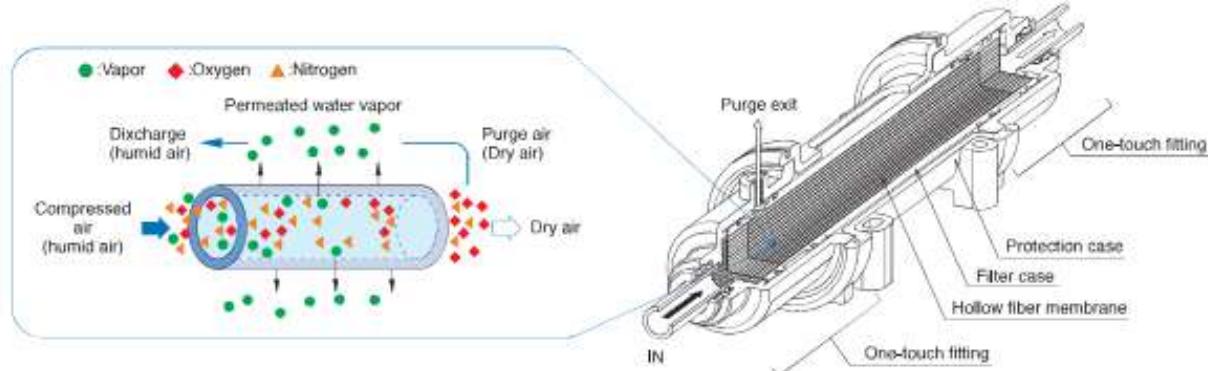


# Ultra-compact Dehumidification Filter

## 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

## Benefits

Compact Design	Small Space instalation in Plants and equipments.
Variety Kinds of Fitting.	Quick and Convinient filter change One-touch tube connection type
Power Sources Not Required	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 touch tube fitting	Screw
Size	φ4, φ6	φ6, φ8	Rc3/8
Purge port	M5	M5	Rc1/8
Purge method	Inner line purge	Outer 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	

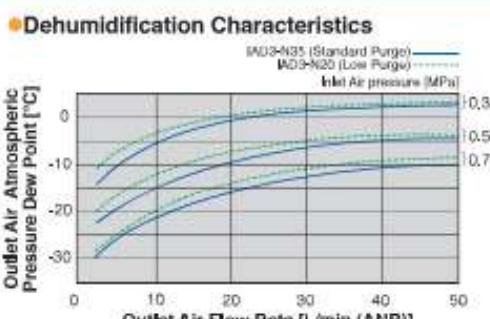
## Product Code

IAD3 series		Connection size		
Purge air rate (Innner purge)	STD	φ4	φ6	
Low Purge	IAD3-N20-T4	IAD3-N20-T6		
	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		

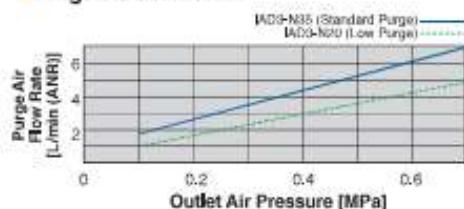
IAD10 series		Connection size		
Purge air rate	STD	φ6	φ8	
Innner purge	STD	IAD10-N65-T6	IAD10-N65-T8	
	Low Purge	IAD10-N40-T6	IAD10-N40-T8	
Outside purge		IAD10-G-T6	IAD10-G-T8	

## Flow Characteristics

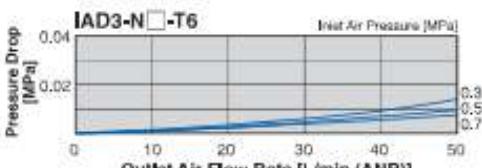
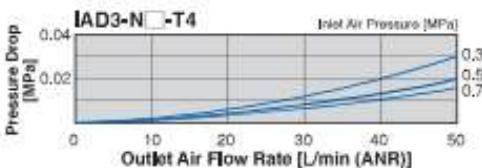
### IAD3 series



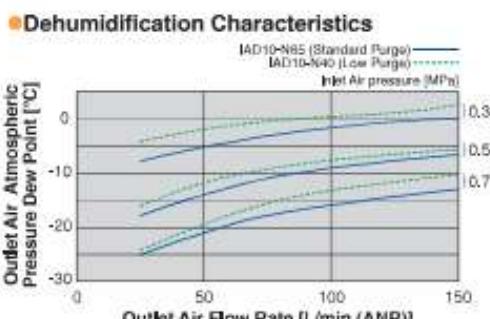
**Purge Air Flow Rate**



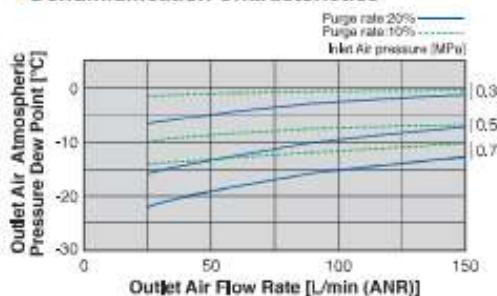
**Flow Characteristics (Pressure Drop)**



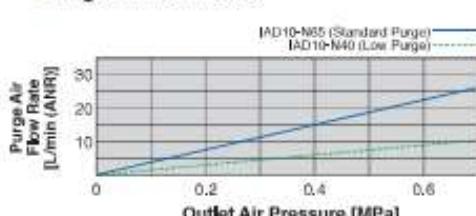
### IAD10 series



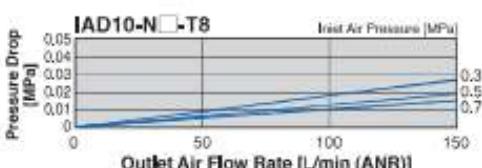
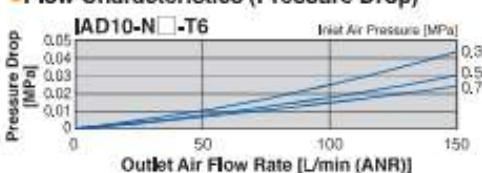
**Dehumidification Characteristics**



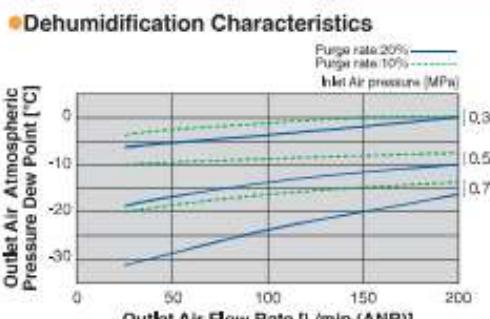
**Purge Air Flow Rate**



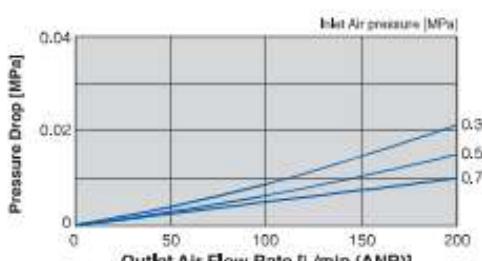
**Flow Characteristics (Pressure Drop)**



### IAD20 series

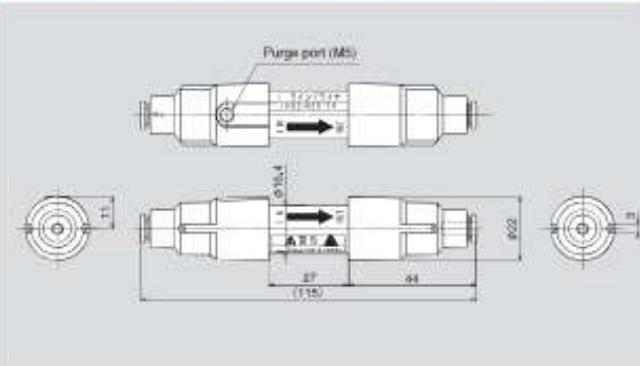


**Flow Characteristics (Pressure Drop)**

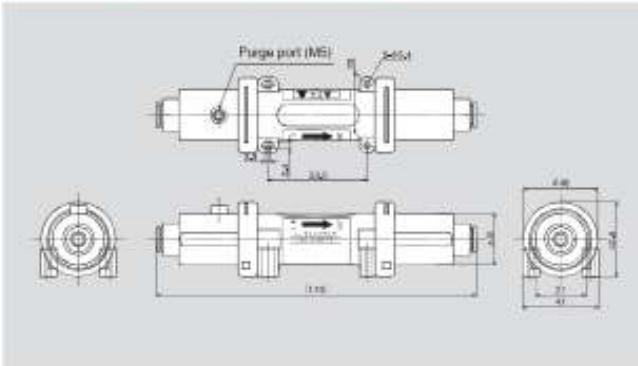


## Dimensions

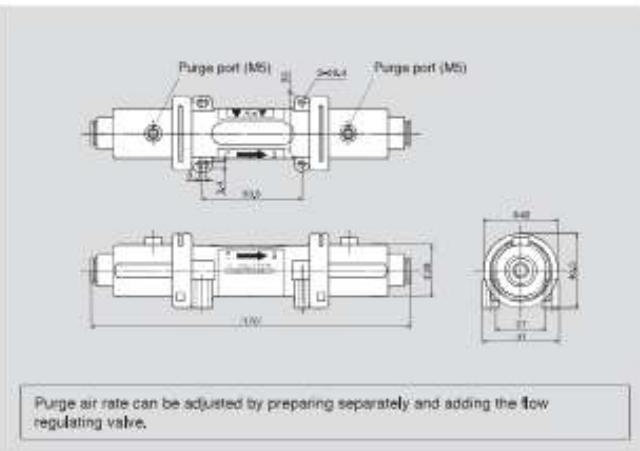
IAD3-N-T6



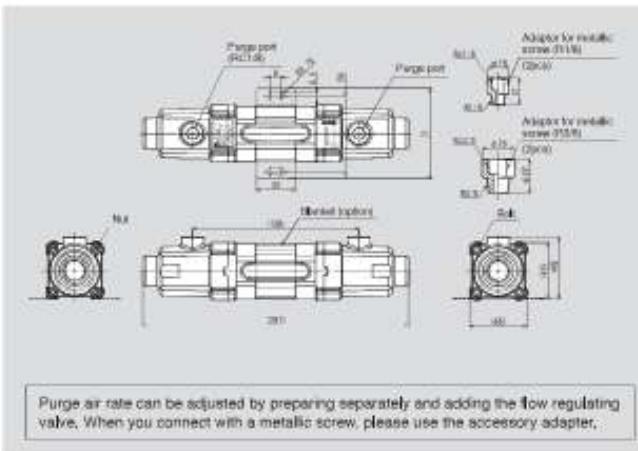
IAD10-N (Inner line purge type)



IAD10-G-T (Outside line purge type)



IAD20-G-3/8

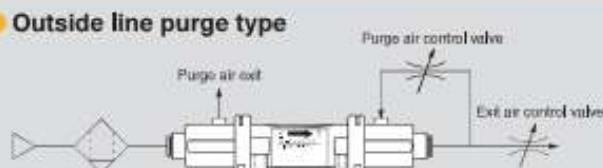


## Recommended circuit

### Inner line purge type



### Outer line purge type



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

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