



Inline Oxygen Monitor

Materials compliant with the Food Sanitation Act

# PNA Series

Purging not required due to the inline pressure resistant structure  
A modular structure that can be connected to the Nitrogen Extraction Unit NS Series and F.R. unit



## Specifications

Descriptions	Content
Measuring method	Zirconia solid electrolyte method
Sampling method	Natural diffusion method
Display	Switchable oxygen concentration display and nitrogen concentration display (100-oxygen concentration)
Working fluid	Nitrogen-rich compressed air
Working pressure MPa	0 to 1.0
Proof pressure MPa	1.5
Ambient temperature and humidity	0 to 50°C, 80% RH or less (no condensation)
Fluid temperature	0 to 50°C (no condensation)
Storage ambient temperature, humidity	-10 to 60°C, 80% RH or less (no condensation)
Max. flow rate L/min (ANR)	500 *1
Measured range %O <sub>2</sub>	0.00 to 25.00
Accuracy *2	For 0.00% to 1.00% O <sub>2</sub> ±0.05% O <sub>2</sub> For 1.01% to 2.50% O <sub>2</sub> ±0.10% O <sub>2</sub> For 2.51% to 10.00% O <sub>2</sub> ±0.5% O <sub>2</sub> For 10.01% to 25.00% O <sub>2</sub> ±1.0% O <sub>2</sub> *Note: There is a ±0.01% O <sub>2</sub> read accuracy that will be reflected in the display.
Response time	90% response within 20 s *3
Analog output	4 to 20 mA current output (for 0.00 to 25.00% O <sub>2</sub> )
Load resistance of analog output	0 to 400 Ω
Analog output accuracy	0.064 mA/0.1% O <sub>2</sub>
Switch output	Set value and detection element error: 1 (relay output)
Switch output capacity	24 VDC, 1 A
Power supply voltage	24 VDC ±15% (with AC adapter: 100 to 240 VAC)
Power consumption	10 W or less
Degree of protection	IP65 or equivalent
EMC Directive	EN61326-1
Weight kg	1.6
Warming up time	Approx. 5 min after turning the power ON *4

\*1 Contact CKD when 500 L/min (ANR) is exceeded.

\*2 Value referring to the dry gas made up of oxygen and nitrogen.

\*3 The response times are for flow rates of 5 L/min (ANR) or more.

\*4 While warming up, analog output and switch output cannot be output.

## How to order main body

PNA - 10A - N - FP2

A Port size

B Traceability

\* Connector cable is not included.  
Refer to page 2 for details.

Code	Content
<b>A Port size</b>	
10A	Rc3/8
10B	G3/8
10C	NPT3/8
<b>B Traceability</b>	
N	None
M	Traceability certification with series variation diagram and company certification

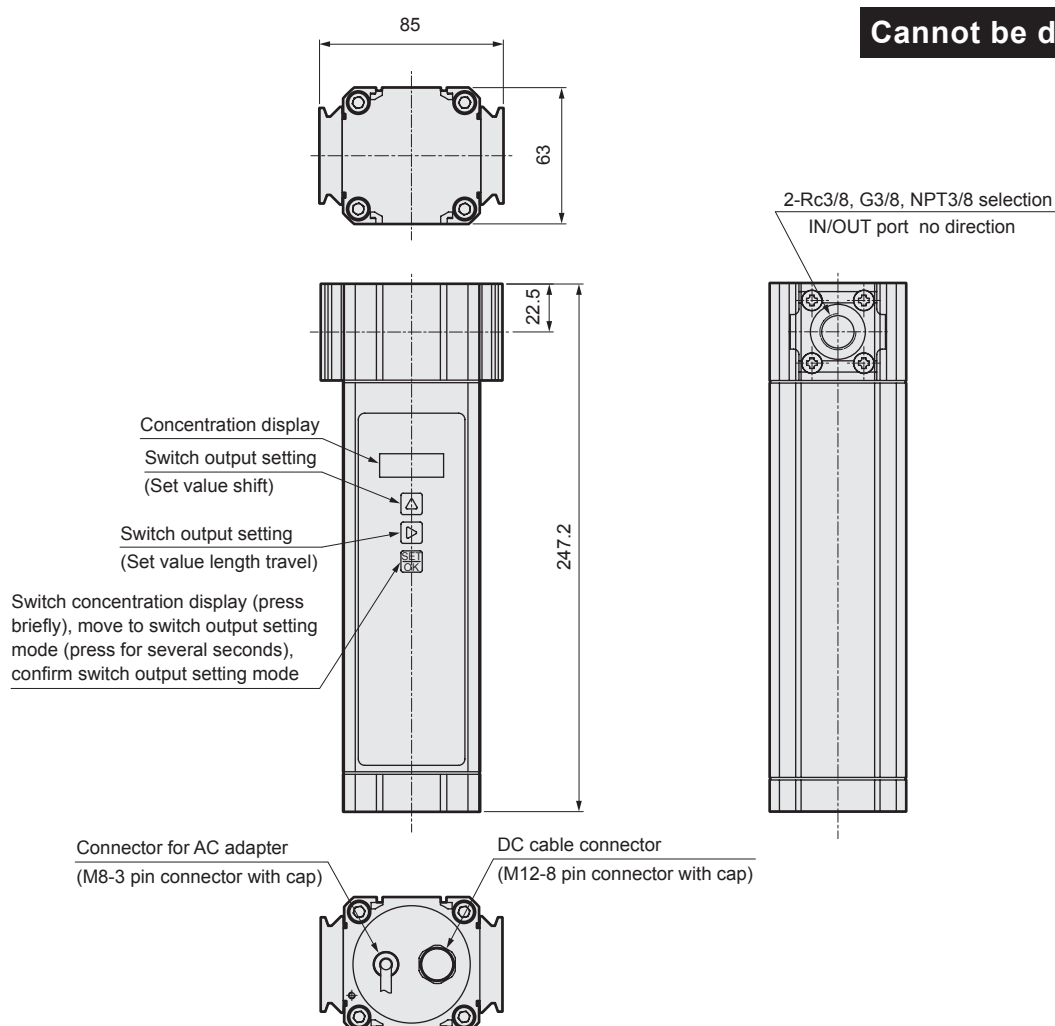
[Example of model No.]

**PNA-10A-M-FP2**

A Port size : Rc3/8

B Traceability: Traceability certification with series variation diagram and company certification

## Dimensions



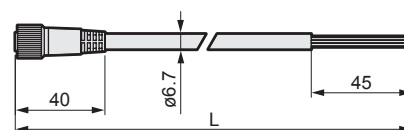
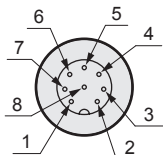
## How to order connector cable and dimensions

\* Connector cable is sold separately from the body.

### ● DC cable

Use when driving with a DC power supply and when using analog output or switch output.

Model No.	L dimensions	No.	Cable color	Content
PNA-1D	1000	1	White	Power supply +
PNA-3D	3000	2	Brown	Power supply -
PNA-5D	5000	3	Green	Analog output +
		4	Yellow	Analog output -
		5	Gray	Contact output (relay output)
		6	Pink	
		7	Blue	
		8	-	-



### ● AC adapter

Use when driving with an AC power supply.

Model No.	Content
PNA-A	AC adapter single unit A
PNA-AG	AC adapter single unit + conversion plug set * Global power supply conversion plugs B, C, O and BF included.

#### • Plug shape

B type	C type	D type	BF type

