



Inline oxygen monitor

# PNA-FP2 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

Item	Description	
Measuring method	Zirconia solid electrolyte method	
Sampling method	Natural diffusion	
Display	Can be switched between 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, 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)	±0.05%O <sub>2</sub> ±1digit	(For 0.00 to 1.00%O <sub>2</sub> )
	±0.10%O <sub>2</sub> ±1digit	(For 1.01 to 2.50%O <sub>2</sub> )
	±0.5%O <sub>2</sub> ±1digit	(For 2.51 to 10.00%O <sub>2</sub> )
	±1.0%O <sub>2</sub> ±1digit	(For 10.01 to 25.00%O <sub>2</sub> )
Response time	90% response within 20 seconds (*3)	
Analog output	4 to 20mA current output (For 0.00 to 25.00%O <sub>2</sub> )	
Load resistance of analog output	0 to 400 Ω	
Analog output accuracy	0.064mA/0.1%O <sub>2</sub>	
Switch output	Set value and detection element abnormality: 1 (relay output)	
Switch output capacity	24 VDC, 1A	
Power supply voltage	24 VDC ±15% (when AC adapter is used: 100 to 240 VAC)	
Power consumption	10 W or less	
Degree of protection	IP 65 or equiv.	
EMC Directive	EN61326-1	
Weight kg	1.6	
Warmup time	Approx. 5 minutes after power ON (*4)	

\*1: If exceeding 500L/min (ANR), contact CKD.

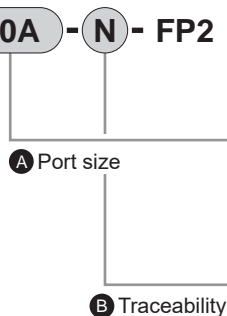
\*2: Value in dry gas composed of oxygen and nitrogen.

\*3: The response time is a value at a flow rate of 5L/min (ANR) and over.

\*4: Analog output and switch output are not output during warming-up.

## How to order main body

**PNA-10A-N-FP2**



\*Connector cable is not included.  
Refer to page 330 for details.

Code	Description
<b>A Port size</b>	
10A	Rc3/8
10B	G3/8
10C	NPT3/8
<b>B Traceability</b>	
N	No
M	Traceability certification with series variation diagram and company certification

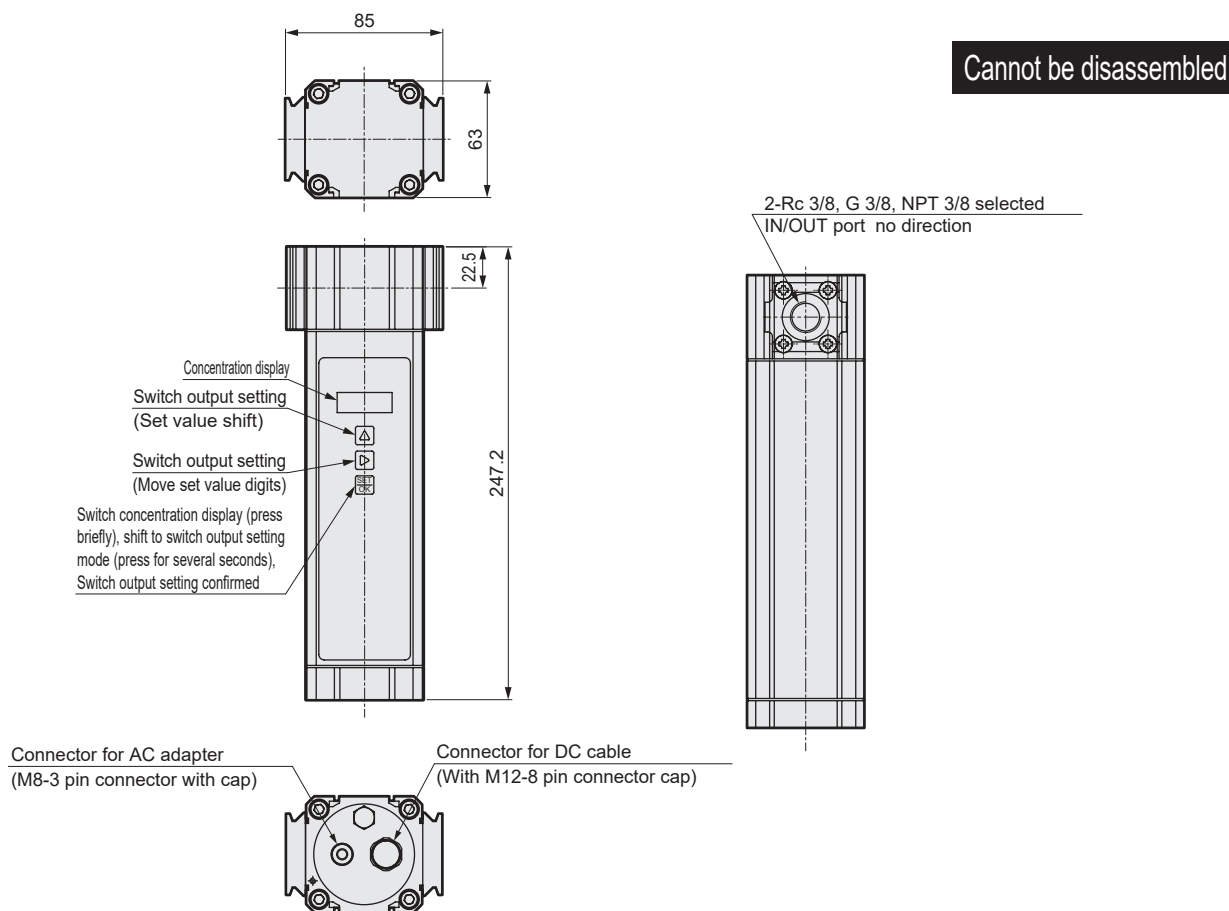
[Example of model No.]

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

A Port size: Rc3/8

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

### Dimensions



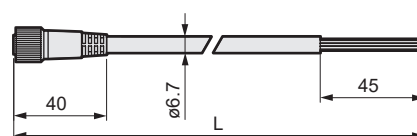
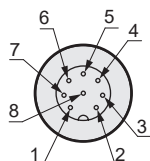
### How to order connector cable and dimensions

\*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.	Dimension L	No.	Cable color	Description
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.	Description
PNA-A	AC adapter single unit A
PNA-AG	AC adapter + conversion plug set *Global power supply conversion plugs B, C, O and BF included.

#### • Plug shape

B type	C type	O type	BF type

