



Inline Oxygen Analyzer

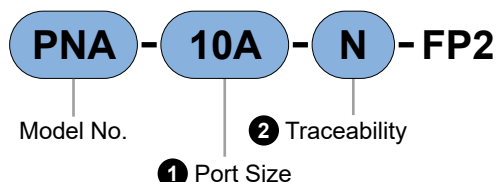
PNA Series

Inline pressure-resistant structure, purge unnecessary
Modular structure connectable to Nitrogen Extraction Unit
NS Series, F.R. Unit



For detailed applicable model numbers, refer to our website.

Model No. Indication Method



*: Connector cable is not included.

① Port Size

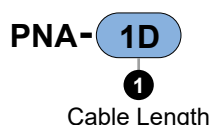
| Code | Content |
|------------|---------|
| 10A | Rc3/8 |
| 10B | G3/8 |
| 10C | NPT3/8 |

② Traceability

| Code | Content |
|----------|--|
| N | None |
| M | With Traceability Certificate, System Diagram, Inspection Report |

Connector Cable Standalone Model No.

●DC Cable



① Cable Length

| Code | Content |
|-----------|---------|
| 1D | 1000 mm |
| 3D | 3000 mm |
| 5D | 5000 mm |

●AC Adapter Standalone

PNA-A

●AC Adapter + Conversion Plug Set

PNA-AG

For Dimensions diagrams, refer to P. 32.

Specifications

| Item | PNA |
|---------------------------------------|---|
| Measurement Method | Zirconia Solid Electrolyte Method |
| Sampling Method | Natural Diffusion Type |
| Display | Oxygen concentration display, nitrogen concentration display (100 - oxygen concentration) switchable |
| Operating Fluid | Nitrogen-Enriched 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 ₂ | 0.00 to 25.00 |
| Accuracy *2 | ±0.05 %O ₂ ±1digit (for 0.00 to 1.00%O ₂) ±0.10%O ₂ ±1digit (for 1.01 to 2.50%O ₂) ±0.5%O ₂ ±1digit (for 2.51 to 10.00% O ₂ .) ±1.0%O ₂ ±1digit (for 10.01 to 25.00% O ₂) |
| Response Time | 90% response within 20 seconds (*3) |
| Analog Output | 4 to 20 mA current output (for 0.00 to 25.00% O ₂) |
| Analog Output Load Resistance | 0 to 400 Ω |
| Analog Output Accuracy | 0.064 mA/0.1% O ₂ |
| Switch Output | Setting value and detection element abnormality: 1 pc (Relay output) |
| Switch Output Capacity | 24 VDC, 1A (*4) |
| Power Supply Voltage | 24 VDC ±15% (When using AC adapter: 100 VAC to 240 VAC) |
| Power Consumption | 10 W or less |
| Protection Structure | IP65 Equivalent |
| EMC Directive | EN61326-1 |
| Weight kg | 1.6 |
| Warm-up Time | Approx. 5 minutes after power ON (*5) |

*1) If exceeding 500 L/min (ANR), please inquire.

*2) Value in dry gas consisting of oxygen and nitrogen.

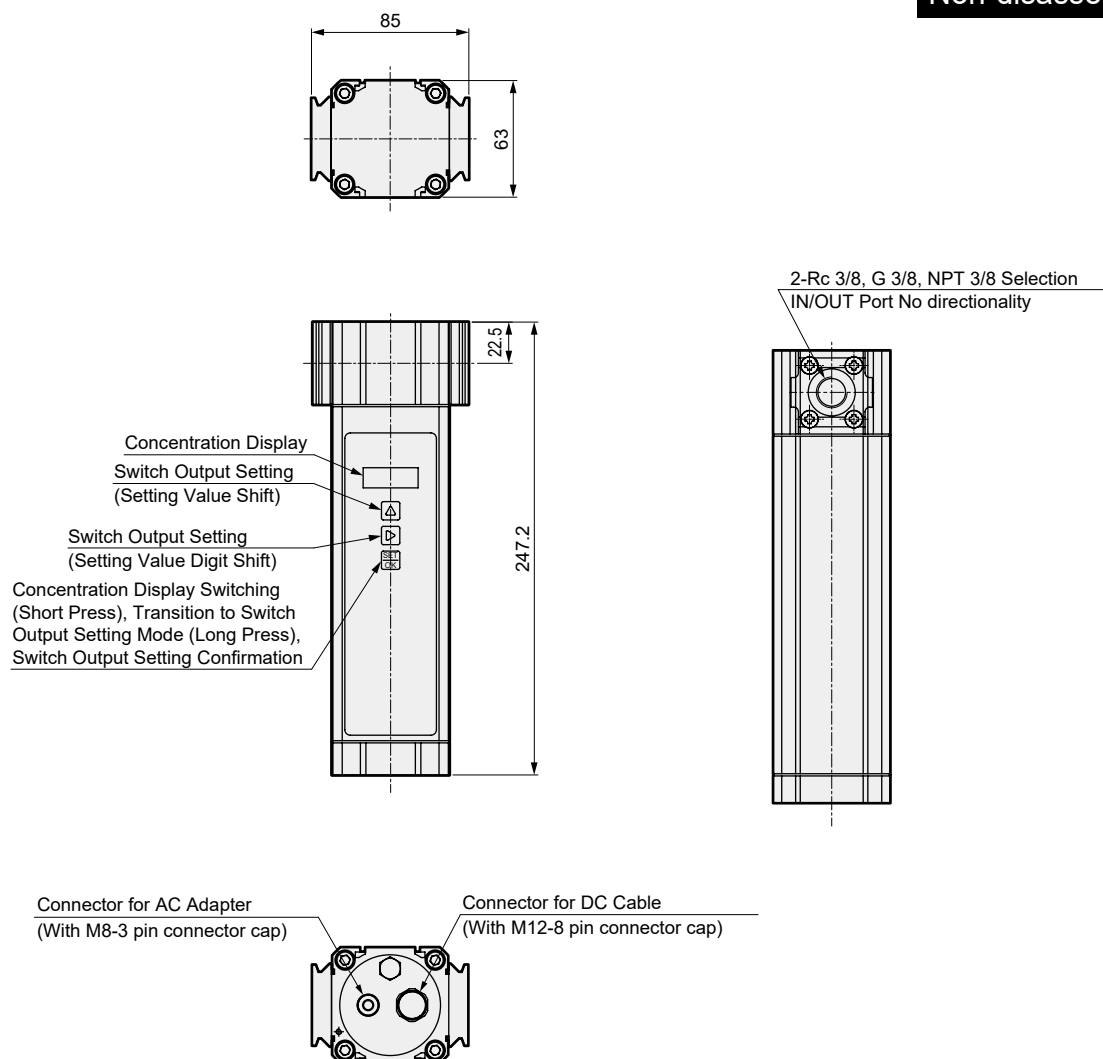
*3) Response time is the value at a flow rate of 5 L/min (ANR) or more.

*4) Switch output capacity is DC only. Cannot be used with AC.

*5) During warm-up, analog output and switch output are not output.

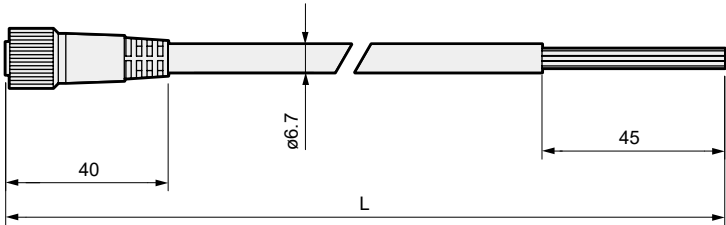
External Dimension Drawing

Non-disassemblable

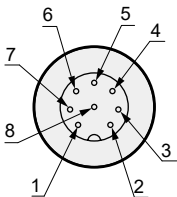
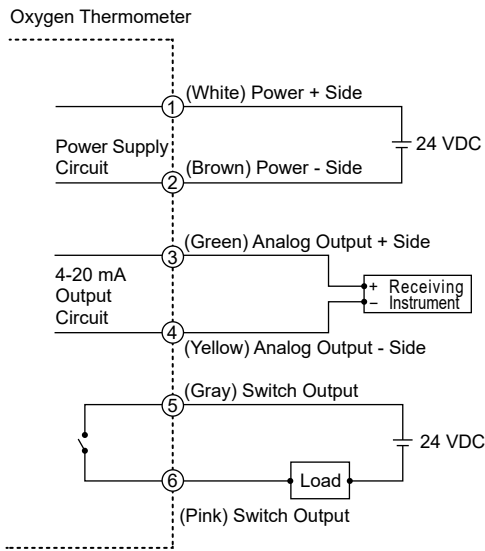


● DC Cable
Use when driving with DC power and when using analog output or switch output.

| Model No. | L Dimension |
|-----------|-------------|
| PNA-1D | 1000 |
| PNA-3D | 3000 |
| PNA-5D | 5000 |



Wiring Example



| No. | Cable Color | Content |
|-----|-------------|-----------------|
| 1 | White | Power + |
| 2 | Brown | Power - |
| 3 | Green | Analog Output + |
| 4 | Yellow | Analog Output - |
| 5 | Gray | Contact Output |
| 6 | Pink | (Relay Output) |
| 7 | Blue | - |
| 8 | - | - |

● AC Adapter
Use when driving with AC power.

| Model No. | Content |
|-----------|---|
| PNA-A | AC Adapter Standalone Type A |
| PNA-AG | AC Adapter + Conversion Plug Set * Global power conversion plugs B, C, O, BF type included |

• Plug Shape

| B-type | C-type | O-type | BF-type |
|--------|--------|--------|---------|
| | | | |

