# Nitrogen Dioxide Duct & Rough Service Sensor

Air Quality Sensors





# Features & Options

- Field Replaceable Electrochemical Sensor with Self-Test
- Two Independent Alarm Contacts
- Field Selectable NO<sub>2</sub> Ranges and Outputs
- Certificate of Calibration Included with Sensors and Replacement Modules

BAPI's Nitrogen Dioxide Sensor offers enhanced electrochemical sensing with outstanding accuracy at low concentrations. The Duct unit samples duct air using an aspiration tube. The Rough Service unit features a ventilated BAPI-Box and is ideal for parking ramps, equipment rooms and warehouses.

The sensor has field selectable NO<sub>2</sub> ranges of 0 to 2.5, 0 to 5, 0 to 7.5 and 0 to 10 ppm. It also has field selectable outputs of 0 to 5, 1 to 5, 0 to 10 and 2 to 10 VDC as well as a 3-wire 4 to 20 mA output. The LCD is backlight for 10 seconds after a button push.

Two independent SPDT alarm contacts switch at 5 field-selectable NO<sub>2</sub> concentrations from 1 to 10 ppm. An alarm timer holds the output relays on for a fixed time after the NO<sub>2</sub> level has fallen below 80% of setpoint to allow additional fan time to ensure the NO<sub>2</sub> has been purged. The field replaceable sensor element lasts approximately 7 years and is self-tested daily.



Rough Service (top) and **Duct NO<sub>2</sub> Sensors** 



Part # **Description** 

**BA/NO2-V-BB** ... Rough Service NO<sub>2</sub> Sensor, Ventilated BAPI-Box

BA/NO2-D-BB... Duct Mount NO<sub>2</sub> Sensor

BA/NO2S..... Factory Calibrated Replacement NO<sub>2</sub> Module

# Specifications 5 4 1

Power:

18 to 28 VAC, 7.2 VA Max 18 to 40 VDC, 180 mA Max

### Field Selectable Ranges:

0 to 2.5 ppm • 0 to 5.0 ppm 0 to 7.5 ppm • 0 to 10.0 ppm

Accuracy: ±5.0% FS

#### **Alarm Relays:**

2 Independent, Dry SPDT (Form C) 2 Amps at 24 VAC/DC, Resistive 140 VA Inrush, 48 VA Holding at 24 VAC

### **Field Wiring Terminals:**

Pluggable Screw Terminals, 14 to 22 AWG

# **Response Time:**

<80 seconds from 10% to 90% of range

# **Alarm Relay Setpoints:**

1.0, 2.5, 5.0, 7.5 or 10 ppm

Alarm Timer: 0, 1, 5 & 10 minutes

Field Selectable Analog Outputs: 3-wire 4 to 20 mA

0 to 5 VDC, 1 to 5 VDC 0 to 10 VDC, 2 to 10 VDC

Sensor Element Life: 7 Years Typical

## **Environmental Operation Range:**

Continuous: -4 to 104°F (-20 to 40°C), 15 to 95%RH Non-condensing Intermittent: -22 to 122°F (-30 to 50°C), 0 to 95%RH Non-condensing

Agency: RoHS • CE: EN 61326-1:2013 EMC





