Nitrogen Dioxide Duct & Rough Service Sensor

Air Quality Sensors





Features & Options

- Field Replaceable Electrochemical Sensor with Self-Test
- Two Independent Alarm Contacts
- Field Selectable NO₂ 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 NO₂ 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 fieldselectable NO₂ concentrations from 1 to 10 ppm. An alarm timer holds the output relays on for a fixed time after the NO₂ level has fallen below 80% of setpoint to allow additional fan time to ensure the NO₂ has been purged. The field replaceable sensor element lasts approximately 7 years and is self-tested daily.



Rough Service (top) and Duct NO₂ Sensors

Specifications

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



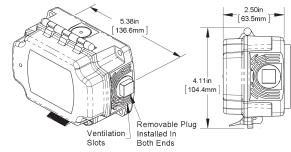
Continuous: -4 to 104°F (-20 to 40°C),

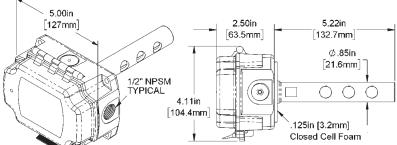
15 to 95%RH Non-condensing

Intermittent: -22 to 122°F (-30 to 50°C),

0 to 95%RH Non-condensing

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









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Submittal sheets without List Prices are available on our website at www.bapihvac.com

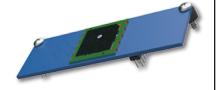
Ordering Information

Part #	Description	List Price
BA/NO2-V-BB	. Rough Service NO ₂ Sensor, Ventilated BAPI-Box	\$1,170
BA/NO2-D-BB	. Duct Mount NO ₂ Sensor	\$1,100
BA/NO2S	. Factory Calibrated Replacement NO ₂ Module (For use with BA/NO2-V-BB and BA/NO2-D-BB sensors only)	\$570

Note: Sensors and Replacement NO₂ Modules must be installed and powered within 4 months of purchase to prevent loss of accuracy.

Replacement NO₂ Module

The Replacement NO_2 Module is factory calibrated so no calibration is needed at installation. It has a sensor life of approximately 7 years which doesn't begin until the module is installed in the sensor.



BA/NO2S: Factory Calibrated Replacement NO₂ Module (For use with BA/NO2-V-BB and BA/NO2-D-BB sensors only)

