



# SGX

## SENSORTECH

An Amphenol Company



**SGX-403-20**

# Ozone sensor Datasheet

The **SGX-403-20** is a premium industrial ozone sensor, ideal for portable and fixed gas detectors.



*Quality, Safety, Responsibility*

# Technical Specifications

## Performance

<b>Sensitivity</b>	1000 ± 400 nA/ppm
<b>Measurement Range</b>	0 – 20 ppm
<b>Response Time</b>	T90 < 40s
<b>Maximum Overload</b>	50 ppm
<b>Repeatability</b>	< ±2% O <sub>3</sub> equivalent
<b>Long-term output drift</b>	< 20% per Annum
<b>Linearity</b>	Linear
<b>Recommended Load Resistor</b>	10 Ω
<b>Warranty</b>	12 months from date of dispatch

## Operating Conditions

<b>Temperature Range</b>	-30°C to +50°C
<b>Pressure Range</b>	800 to 1200 hPA
<b>Operating Humidity Range</b>	15-90% RH
<b>Storage Temperature</b>	0 to 20°C
<b>Expected Lifetime</b>	> 24 months in air

## Intrinsic safety data

<b>Maximum at 2000 ppm</b>	0.3 mA
<b>Maximum o/c Voltage</b>	1.3 V
<b>Maximum s/c Current</b>	< 1.0 A

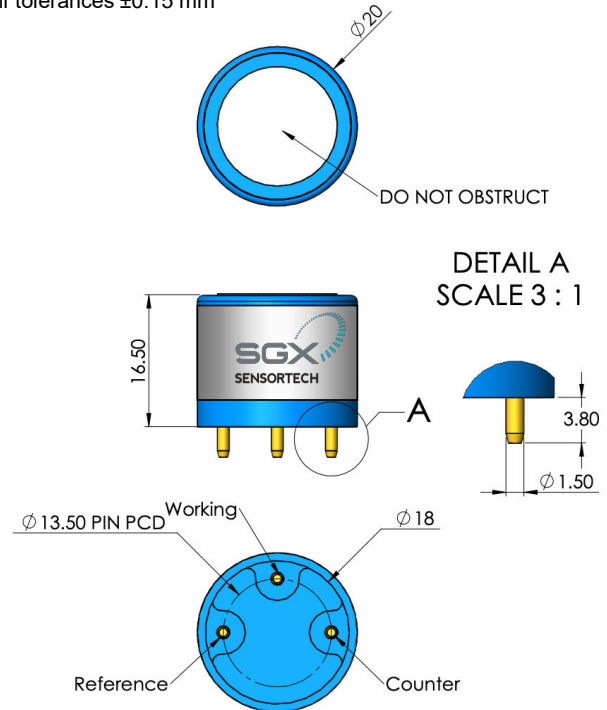
## Cross-sensitivity data

Gas	CONC.	SGX-403-20
Carbon Monoxide	300 ppm	0 ppm
Sulfur Dioxide	20 ppm	0 ppm
Nitrogen Dioxide	20 ppm	15-20 ppm
Nitric Oxide	50 ppm	<-1 ppm
Ammonia	50 ppm	<5 ppm
Chlorine	1 ppm	0.7 ppm
Hydrogen Sulphide	15 ppm	<1 ppm
Carbon Dioxide	5000 ppm	0 ppm

**Note:** The output of the SGX-403-20 sensor is of a negative polarity compared to CO or H<sub>2</sub>S for example.

## Product dimensions

All dimensions in mm  
All tolerances ±0.15 mm



## Key features

- high stability,
- fast response and recovery,
- robust environment performance,
- cost effective

## Important Notes

- All performance is based on conditions at 20°C, 50% RH and 1 atm, flow rate > 150 qcm/min, using SGX recommended circuitry.
- Sensor performance is temperature dependant; please contact SGX for temperature performance other than 20°C.
- Do not solder to the connector pins as this may damage the sensor and thereby invalidate the warranty.
- Details on recommended connector pins can be found in the Frequently Asked Questions within the Gas Sensor section of the SGX website.