

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

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

Operating Conditions

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

Intrinsic safety data

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

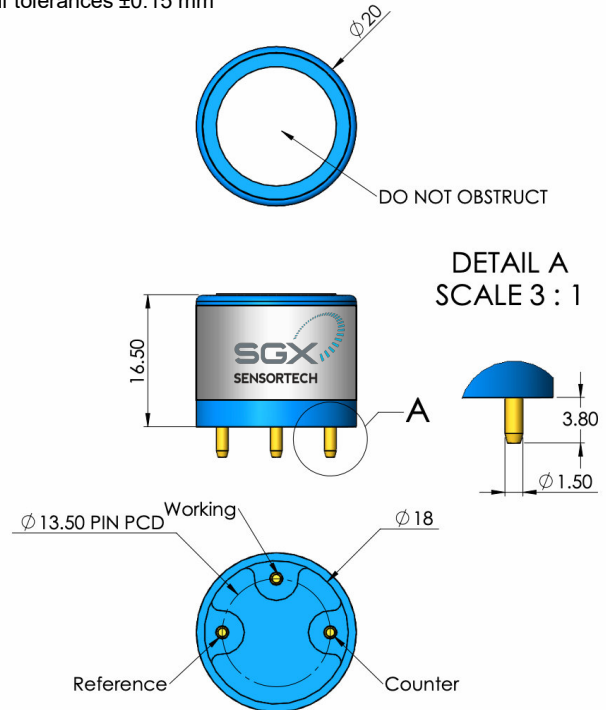
Cross-sensitivity data

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 H₂S for example.

Product dimensions

All dimensions in mm
All tolerances ±0.15 mm



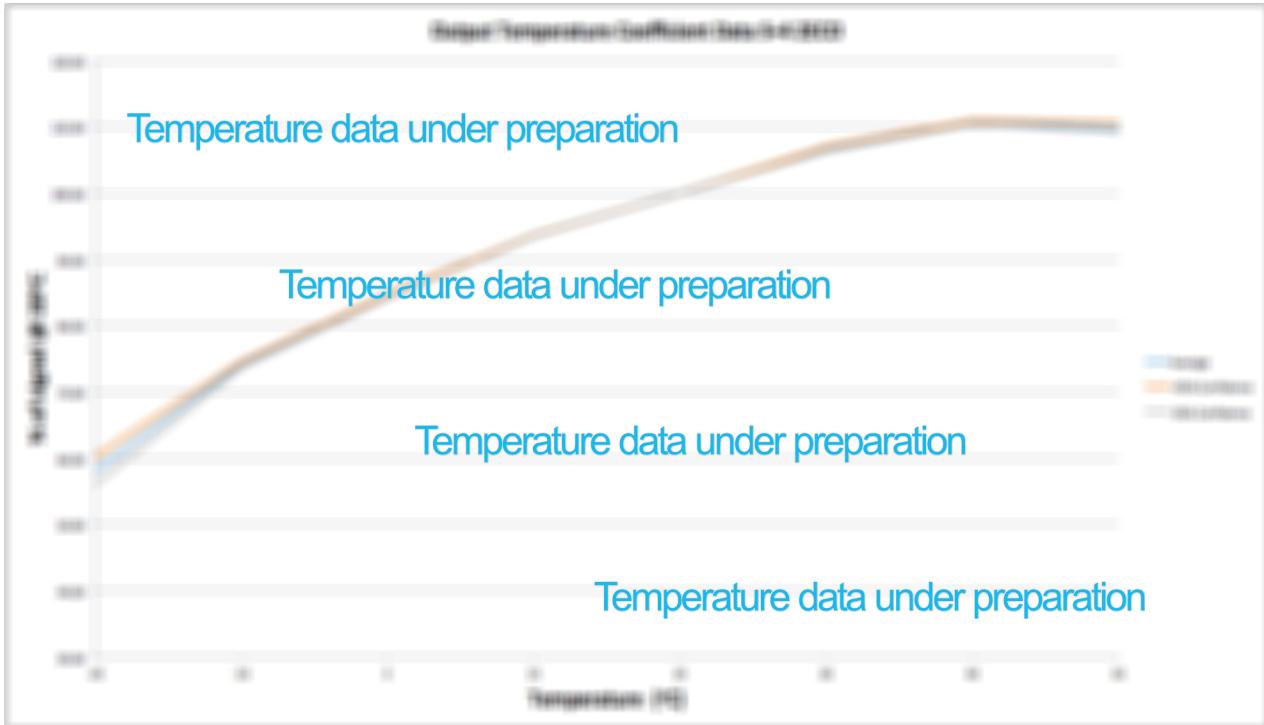
Key features

- 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.

Temperature Curve



Poisoning

SGX sensors are designed to operate in a wide range of harsh environments and conditions. However it is important that exposure to high concentrations of solvent vapours is avoided, both during storage, fitting into instruments and operation. When using sensors on printed circuit boards (PCBs), degreasing agents should be used prior to the sensor being fitted.

DISCLAIMER:

SGX Europe Sp. z o.o. reserves the right to change design features and specifications without prior notification. We do not accept any legal responsibility for customer applications of our sensors. SGX Europe Sp. z o.o. accepts no liability for any consequential losses, injury or damage resulting from the use of this document, the information contained within or from any omissions or errors herein. This document does not constitute an offer for sale and the data contained is for guidance only and may not be taken as warranty. Any use of the given data must be assessed and determined by the user thereof to be in accordance with federal, state and local laws and regulations. All specifications outlined are subject to change without notice.

SGX Europe Sp. z o.o. sensors are designed to operate in a wide range of harsh environments and conditions. However, it is important that exposure to high concentrations of solvent vapours is to be avoided, both during storage, fitting into instruments and operation. When using sensors on printed circuit boards (PCBs), degreasing agents should be used prior to the sensor being fitted. SGX Europe Sp. z o.o. makes every effort to ensure the reliability of its products. Where life safety is a performance requirement of the product, we recommend that all sensors and instruments using these sensors are checked for response to gas before use.

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