

DrägerSensor® XS EC NO₂

Order no. 68 09 155

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life	Selective filter
Dräger X-am 7000	yes	yes	1 year	> 2 years	–

MARKET SEGMENTS

Inorganic chemicals, metal processing, oil and gas, petrochemicals, steel, shipping, rocket engineering, mining and tunneling.

TECHNICAL SPECIFICATIONS

Detection limit:	0.5 ppm
Resolution:	0.1 ppm
Measurement range:	0 to 50 ppm NO ₂ (nitrogen dioxide)
Response time:	≤ 15 seconds (T ₉₀)
Measurement accuracy	
Sensitivity:	≤ ± 2% of measured value
Long-term drift, at 20°C (68°F)	
Zero point:	≤ ± 1 ppm/month
Sensitivity:	≤ ± 2% of measured value/month
Warm-up time:	≤ 15 minutes
Ambient conditions	
Temperature:	(–40 to 50)°C (–40 to 122)°F
Humidity:	(10 to 90)% RH
Pressure:	(700 to 1,300) hPa
Influence of temperature	
Zero point:	≤ ± 1 ppm
Sensitivity:	≤ ± 5% of measured value
Influence of humidity	
Zero point:	No effect
Sensitivity:	≤ ± 0.2% of measured value/% RH
Test gas:	approx. 1 to 50 ppm NO ₂ test gas

SPECIAL CHARACTERISTICS

This sensor offers a fast response time and stable readings, even after experiencing high concentrations of nitrogen dioxide.

The values shown in the following table are standard and apply to new sensors. The values may fluctuate by $\pm 30\%$. The sensor may also be sensitive to additional gases (for more information, please contact Dräger). Gas mixtures may be displayed as the sum of all components. Gases with a negative cross sensitivity may displace an existing concentration of NO₂. To be sure, please check if gas mixtures are present.

RELEVANT CROSS-SENSITIVITIES

Gas/vapor	Chem. symbol	Concentration	Display in ppm NO ₂
Acetaldehyde	CH ₃ CHO	500 ppm	No effect
Acetone	CH ₃ COCH ₃	1,000 ppm	No effect
Ammonia	NH ₃	200 ppm	No effect
Carbon dioxide	CO ₂	2.5 Vol. %	No effect
Carbon monoxide	CO	125 ppm	No effect
Chlorine	Cl ₂	10 ppm	≤ 10
Ethene	C ₂ H ₄	1,000 ppm	≤ 1 ⁽⁻⁾
Ethine	C ₂ H ₂	200 ppm	≤ 60 ⁽⁻⁾
Formaldehyde	HCHO	50 ppm	No effect
Hydrogen	H ₂	1,000 ppm	≤ 2 ⁽⁻⁾
Hydrogen cyanide	HCN	50 ppm	≤ 10 ⁽⁻⁾
Hydrogen sulfide	H ₂ S	20 ppm	≤ 100 ⁽⁻⁾
Methane	CH ₄	5 Vol. %	No effect
Methanol	CH ₃ OH	175 ppm	No effect
Nitrogen monoxide	NO	20 ppm	No effect
Phosphine	PH ₃	5 ppm	≤ 25 ⁽⁻⁾
Sulfur dioxide	SO ₂	50 ppm	≤ 50 ⁽⁻⁾
Tetrahydrothiophene	C ₄ H ₈ S	10 ppm	≤ 5 ⁽⁻⁾