

DrägerSensor® XS EC ClO₂

Order no. 68 11 360

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

MARKET SEGMENTS

Food and beverage, breweries, waste water treatment, swimming pools, industrial gases, pulp and paper.

TECHNICAL SPECIFICATIONS

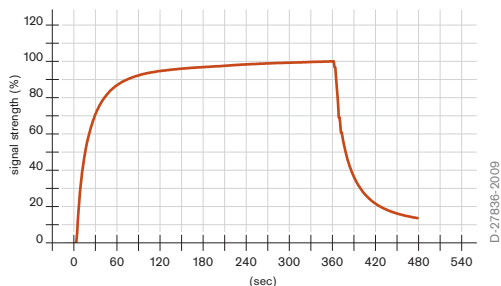
Detection limit:	0.02 ppm
Resolution:	0.01 ppm
Measurement range:	0 to 20 ppm ClO ₂ (chlorine dioxide)
Response time:	≤ 20 seconds (T ₅₀)
Measurement accuracy	
Sensitivity:	≤ ± 5% of measured value
Long-term drift, at 20°C (68°F)	
Zero point:	≤ ± 0.03 ppm/year
Sensitivity:	≤ ± 2% of measured value/month
Warm-up time:	≤ 12 hours
Ambient conditions	
Temperature:	(-20 to 50)°C (-4 to 122)°F
Humidity:	(10 to 90)% RH
Pressure:	(700 to 1,300) hPa
Influence of temperature	
Zero point:	≤ ± 0.02 ppm
Sensitivity:	≤ ± 5% of measured value
Influence of humidity	
Zero point:	No effect
Sensitivity:	≤ ± 0.1% of measured value/% RH
Test gas:	test gas 1 to 20 ppm ClO ₂

SPECIAL CHARACTERISTICS

The chlorine dioxide sensor is especially selective (see cross sensitivity table) and has a particularly low cross sensitivity to chlorine.

Sensor reaction to ClO₂ at 20 °C / 68 °F

Flow = 0.5 l/min, with 0.1 ppm ClO₂



The values given in the table are standard and apply to new sensors. The values may fluctuate by $\pm 30\%$. The sensor may also be sensitive to other gases (for information contact Dräger).

Gas mixtures can be displayed as the sum of all components. Gases with negative sensitivity may displace a positive display of chlorine dioxide. A check should be carried out to see if mixtures of gases are present.

RELEVANT CROSS-SENSITIVITIES

Gas/vapor	Chem. symbol	Concentration	Display in ppm ClO ₂
Ammonia	NH ₃	50 ppm	No effect
Carbon dioxide	CO ₂	10 Vol. %	No effect
Carbon monoxide	CO	200 ppm	No effect
Chlorine	Cl ₂	1 ppm	≤ 0.1
Hydrogen	H ₂	1,000 ppm	≤ 0.02
Hydrogen cyanide	HCN	10 ppm	No effect
Hydrogen sulfide	H ₂ S	20 ppm	$\leq 0.5^{(-)}$
Methane	CH ₄	1 Vol. %	No effect
Methanol	CH ₃ OH	500 ppm	No effect
Nitrogen dioxide	NO ₂	20 ppm	≤ 1
Nitrogen monoxide	NO	20 ppm	≤ 0.05
Ozone	O ₃	0.5 ppm	≤ 0.05
Sulfur dioxide	SO ₂	20 ppm	No effect

(-) Indicates negative deviation