DrägerSensor® XS EC ClO_2

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.

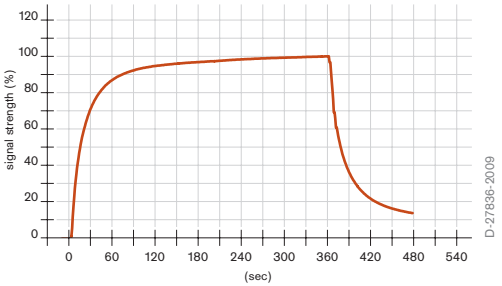
TECHNICAL SPECIFICATIONS

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})
Precision	
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 ClO_2 at 20 °C / 68 °F
Flow = 0.5 l/min, with 0.1 ppm ClO_2



The values given in the table are standard an apply to new sensors, The values maybe fluctuate be ± 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_2S	20 ppm	≤ 0.5(–)
Methane	CH_4	1 Vol. %	No effect
Methanol	CH_3OH	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