DrägerSensor® XS EC CO_2

Order no. 68 09 175

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life	Selective filter
Dräger X-am 7000	yes	yes	1 year	> 1.25 years	–

MARKET SEGMENTS

Waste disposal, Food and beverage, breweries, metal processing, petrochemicals, fertilizer production, sewage, police, customs and rescue services, mining and tunneling, shipping and transport, power generation.

TECHNICAL SPECIFICATIONS

Detection limit:	0.2 Vol. %
Resolution:	0.1 Vol. %
Measurement range:	0 to 5 Vol. % CO_2 (carbon dioxide)
Response time:	≤ 45 seconds (t_{90})
Precision	
Sensitivity:	≤ ± 20% of measured value
Long-term drift, at 20°C (68°F)	
Zero point:	≤ ± 0.1 Vol. %/month
Sensitivity:	≤ ± 15% of measured value/month
Warm-up time:	≤ 12 hours
Ambient conditions	
Temperature:	(–20 to 40)°C (–4 to 104)°F
Humidity:	(10 to 90)% RH
Pressure:	(700 to 1,300) hPa
Influence of temperature	
Zero point:	≤ ± 0.01 Vol. %/K
Sensitivity:	≤ ± 2% of measured value/K
Influence of humidity	
Zero point:	≤ ± 0.005 Vol. %/% RH
Sensitivity:	≤ ± 0.1% of measured value/% RH
Test gas:	approx. 0.5 to 4 Vol. % CO_2 test gas

SPECIAL CHARACTERISTICS

This sensor is highly sensitive (see cross-sensitivity list) and offers an economical alternative to infrared sensors, if you need to warn against CO_2 concentrations in the ambient air.

The values shown in the following table are standard and apply to new sensors. The values maybe fluctuate by ± 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 dioxide. To be sure, please check if gas mixtures are present.

RELEVANT CROSS-SENSITIVITIES

Gas/vapor	Chem. symbol	Concentration	Display in Vol. % CO_2
Ammonia	NH_3	50 ppm	≤ 0.1(–)
Boron trichloride	BCl_3	15 ppm	No effect
Carbon monoxide	CO	100 ppm	No effect
Chlorine	Cl_2	5 ppm	≤ 0.1(–)
Ethanol	C_2H_5OH	130 ppm	≤ 0.1(–)
Ethene	C_2H_4	50 ppm	≤ 0.1(–)
Hydrogen	H_2	1,000 ppm	≤ 0.1(–)
Hydrogen chloride	HCl	20 ppm	≤ 0.1(–)
Hydrogen phosphide	PH_3	5 ppm	≤ 0.1(–)
Hydrogen sulfide	H_2S	20 ppm	≤ 0.1(–)
Methane	CH_4	30 Vol. %	No effect
Methanol	CH_3OH	200 ppm	≤ 0.1(–)
Nitrogen dioxide	NO_2	20 ppm	≤ 0.1(–)
Nitrogen monoxide	NO	20 ppm	≤ 0.1(–)
Sulfur dioxide	SO_2	20 ppm	≤ 0.1(–)

(–) Indicates negative deviation