DrägerSensor® XS EC O_2-LS
DrägerSensor® XS 2 O_2
DrägerSensor® XS R O_2

Order no. 68 09 130
68 10 375
68 10 262

Used in	Plug & Play	Replaceable	Guaranty*	Expected sensor life	Selective filter
Dräger X-am 7000	yes	yes	XS EC: 3 years XS 2: 2 years XS R: 5 years	> 5 years > 3 years = 5 years (limited operation time)	–

MARKET SEGMENTS

Sewage, mining and tunneling, fumigation, biogas, measuring hazmat, industrial gases.

TECHNICAL SPECIFICATIONS

Detection limit:	0.1 Vol. %
Resolution:	0.1 Vol. %
Measurement range:	0 to 25 Vol. % O_2 (oxygen)
Response time:	≤ 25 seconds (t_{90}) – XS EC
	≤ 20 seconds (t_{90}) – XS 2 / XS R
Precision	
Sensitivity:	≤ ± 1% of measured value
Long-term drift, at 20°C (68°F)	
Zero point:	≤ ± 0.5 Vol. %/year
Sensitivity:	≤ ± 1% of measured value/month
Warm-up time:	≤ 1 hour
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:	≤ ± 0.4 Vol. % XS EC
	≤ ± 0.2 Vol. % XS 2 / XS R
Sensitivity:	≤ ± 2% of measured value XS EC
	≤ ± 1% of measured value XS R / XS 2
Influence of humidity	
Zero point:	≤ ± 0.002 Vol. %/% RH – XS EC
	No effect – XS 2 / XS R
Sensitivity:	≤ ± 0.1% of measured value/% RH
Test gas:	N_2 (zero gas)
	11.5 to 23.0 Vol. % O_2

SPECIAL CHARACTERISTICS

DrägerSensor® XS oxygen sensors are lead-free, thus complying with Directive 2002/95/EC (RoHS). Because they are non-consuming sensors, they have a much longer life spans than sensors that are consuming.

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 O_2. To be sure, please check if gas mixtures are present.

RELEVANT CROSS-SENSITIVITIES DrägerSensor® XS EC O_2 LS

Gas/vapor	Chem. symbol	Concentration	Display in Vol. % O_2
Acetylene	C_2H_2	0.5 Vol. %	≤ 0.2(–)
Chlorine	Cl_2	20 ppm	No effect
Carbon dioxide	CO_2	5 Vol. %	No effect
Carbon monoxide	CO	0.5 Vol. %	≤ 0.3(–)
Ethane	C_2H_6	5 Vol. %	No effect
Ethanol	C_2H_5OH	1 Vol. %	≤ 0.2(–)
Ethene	C_2H_4	2 Vol. %	≤ 0.5(–)
Hydrogen	H_2	1 Vol. %	≤ 1.6(–)
Hydrogen chloride	HCl	40 ppm	No effect
Hydrogen sulfide	H_2S	100 ppm	No effect
Methane	CH_4	10 Vol. %	No effect
Nitrogen dioxide	NO_2	50 ppm	No effect
Nitrogen monoxide	NO	100 ppm	No effect
Propane	C_3H_8	2 Vol. %	No effect
Sulfur dioxide	SO_2	50 ppm	No effect

(–) Indicates negative deviation

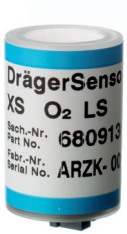
RELEVANT CROSS-SENSITIVITIES DrägerSensor® XS 2 O_2

Gas/vapor	Chem. symbol	Concentration	Display in Vol. % O_2
Acetylene	C_2H_2	0.5 Vol. %	≤ 0.2(–)
Chlorine	Cl_2	20 ppm	No effect
Carbon dioxide	CO_2	5 Vol. %	No effect
Carbon monoxide	CO	0.5 Vol. %	≤ 0.3(–)
Ethane	C_2H_6	5 Vol. %	No effect
Ethanol	C_2H_5OH	1 Vol. %	≤ 0.2(–)
Ethene	C_2H_4	2 Vol. %	≤ 0.5(–)
Hydrogen	H_2	1 Vol. %	≤ 1.6(–)
Hydrogen chloride	HCl	40 ppm	No effect
Hydrogen sulfide	H_2S	100 ppm	No effect
Methane	CH_4	10 Vol. %	No effect
Nitrogen dioxide	NO_2	50 ppm	No effect
Nitrogen monoxide	NO	100 ppm	No effect
Propane	C_3H_8	2 Vol. %	No effect
Sulfur dioxide	SO_2	50 ppm	No effect

RELEVANT CROSS-SENSITIVITIES DrägerSensor® XS R O_2

Gas/vapor	Chem. symbol	Concentration	Display in Vol. % O_2
Acetylene	C_2H_2	0.5 Vol. %	≤ 0.2(–)
Chlorine	Cl_2	20 ppm	No effect
Carbon dioxide	CO_2	5 Vol. %	No effect
Carbon monoxide	CO	0.5 Vol. %	≤ 0.3(–)
Ethane	C_2H_6	5 Vol. %	No effect
Ethanol	C_2H_5OH	1 Vol. %	≤ 0.2(–)
Ethene	C_2H_4	2 Vol. %	≤ 0.5(–)
Hydrogen chloride	HCl	40 ppm	No effect
Hydrogen sulfide	H_2S	100 ppm	No effect
Methane	CH_4	10 Vol. %	No effect
Nitrogen dioxide	NO_2	50 ppm	No effect
Nitrogen monoxide	NO	100 ppm	No effect
Propane	C_3H_8	2 Vol. %	No effect
Sulfur dioxide	SO_2	50 ppm	No effect

(–) Indicates negative deviation



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