DrägerSensor® XS EC O_2 100

Order no. 68 09 550

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life	Selective filter
Dräger X-am 7000	yes	yes	1 year	3 years	–

MARKET SEGMENTS

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

TECHNICAL SPECIFICATIONS

Detection limit:	0.5 Vol. %
Resolution:	0.5 Vol. %
Measurement range:	0 to 100 Vol. % O_2 (oxygen)
Response time:	≤ 5 seconds (T_{90})
Measurement accuracy	
Sensitivity:	≤ ± 1% of measured value
Long-term drift, at 20°C (68°F)	
Zero point:	≤ ± 0.5 Vol. %/year
Sensitivity:	≤ ± 3% of measured value/month
Warm-up time:	≤ 1 hour
Ambient conditions	
Temperature:	(0 to 45)°C (32 to 133)°F
Humidity:	(10 to 90)% RH
Pressure:	(700 to 1,100) hPa
Influence of temperature	
Zero point:	No effect
Sensitivity:	≤ ± 5% of measured value
Influence of humidity	
Zero point:	No effect
Sensitivity:	≤ ± 0.01% of measured value/% RH
Test gas:	N_2 (zero gas)
	10 to 100 Vol. % O_2

SPECIAL CHARACTERISTICS

This sensor can be used for measuring oxygen concentrations of up to 100 Vol. % O_2 in the ambient air. The principle upon which the sensor is based is the measurement of the partial oxygen pressure, which means it can also measure oxygen in inert gases like nitrogen, argon, and helium.

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

Gas/vapor	Chem. symbol	Concentration	Display in Vol. %O_2
Carbon dioxide	CO_2	5 Vol. %	≤ 1(–)
Chlorine	Cl_2	20 ppm	No effect
Helium	He	50 Vol. %	≤ 1(–)
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	0.05 Vol. %	≤ 1(–)
Propane	C_3H_8	2 Vol. %	No effect
Sulfur dioxide	SO_2	50 ppm	No effect

(–) Indicates negative deviation