DrägerSensor® XXS O_2
DrägerSensor® XXS E O_2

Order no. 68 10 881
68 12 211

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life	Selective filter
Dräger Pac 3500/ 5500	no	yes	3 years	> 5 years	no
Dräger Pac 6000/ 6500	no	yes	3 years	> 5 years	no
Dräger Pac 7000	no	yes	3 years	> 5 years	no
Dräger Pac 7000 5Y	no	yes	5 years	> 5 years	no
Dräger X-am 2500	no	yes	3 years	> 5 years	no
Dräger X-am 5000	no	yes	3/5 years	> 5 years	no
Dräger X-am 5600	no	yes	3/5 years	> 5 years	no
Dräger X-am 8000	no	yes	3/5 years	> 5 years	no

MARKET SEGMENTS

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

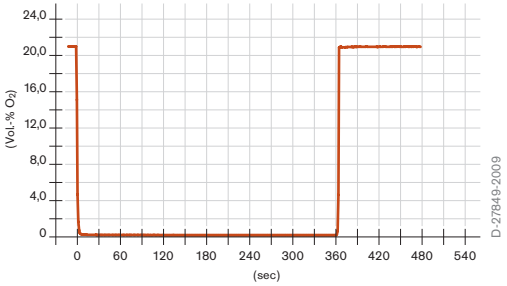
TECHNICAL SPECIFICATIONS

Detection limit:	0.1 Vol.-%
Resolution:	0.1 Vol.-%
Measurement range:	0 to 25 Vol.-% O_2 (oxygen)
Response time:	≤ 10 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:	≤ ± 1% of measured value/year
Warm-up time:	≤ 15 minutes
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:	≤ ± 0.2 Vol.-%
Sensitivity:	≤ ± 2% of measured value
Influence of humidity	
Zero point:	No effect
Sensitivity:	≤ ± 0.1% of measured value/% RH
Test gas:	approx. 12 to 20 Vol.-% O_2 in N_2

SPECIAL CHARACTERISTICS

DrägerSensor® XXS oxygen sensors are lead-free, thus complying with Directive 2002/95/EC (RoHS). Because they are non-consuming sensors, they have much longer life times than sensors that are consuming. An extremely fast response time of less than ten seconds produces a reliable warning of any lack or excess of oxygen.

Sensor reaction to O_2 at 20 °C/68 °F
Flow = 0.5 l/min, with 100% N_2



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® XXS O_2

Gas/vapor	Chem. symbol	Concentration	Display in Vol.-% O_2
Acetylene	C_2H_2	1 Vol.-%	≤ 0.5(–)
Ammonia	NH_3	500 ppm	No effect
Carbon dioxide	CO_2	10 Vol.-%	≤ 0.4(–)
Carbon monoxide	CO	0.5 Vol.-%	No effect
Chlorine	Cl_2	10 ppm	No effect
Ethane	C_2H_6	1.0 Vol.-%	≤ 0.2(–)
Ethanol	C_2H_5OH	250 ppm	No effect
Ethene	C_2H_4	2 Vol.-%	≤ 2(–)
Hydrogen	H_2	1.6 Vol.-%	≤ 2.5(–)
Hydrogen chloride	HCl	40 ppm	No effect
Hydrogen cyanide	HCN	50 ppm	No effect
Hydrogen sulfide	H_2S	100 ppm	No effect
Isobutylene	$(CH_3)_2CCH_2$	100 ppm	No effect
Methane	CH_4	10 Vol.-%	No effect
Nitrogen dioxide	NO_2	20 ppm	No effect
Nitrogen monoxide	NO	30 ppm	No effect
Propane	C_3H_8	2 Vol.-%	No effect
Sulfur dioxide	SO_2	20 ppm	No effect

(–) Indicates negative deviation

RELEVANT CROSS-SENSITIVITIES DRÄGERSENSOR® XXS E O_2

Gas/vapor	Chem. symbol	Concentration	Display in Vol.-% O_2
Acetylene	C_2H_2	1 Vol.-%	≤ 0.5(–)
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(–) negative reading