DrägerSensor® XXS O_2 PR

Order No. 68 00 530

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life	Selective filter
Dräger X-am 2500/5000	no	yes	2 years	> 5 years	no
Dräger X-am 5600	no	yes	2 years	> 5 years	no
Dräger X-am 3500/8000	no	yes	2 years	> 5 years	no

MARKET SEGMENTS

Sewage, mining and tunneling, fumigation, biogas, hazmat and fire services, industrial gases

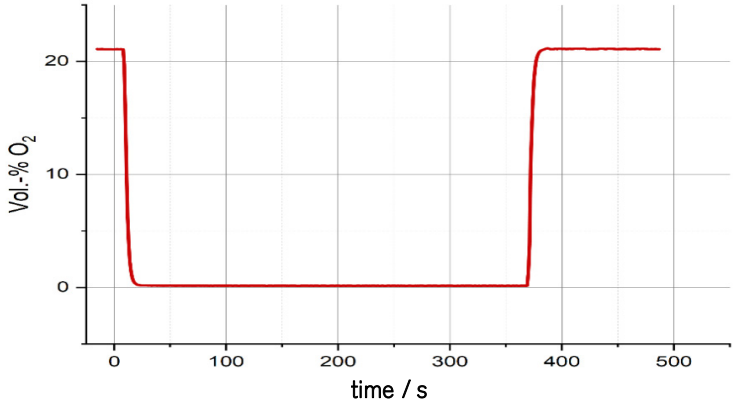
TECHNICAL DATA

Detection limit:	0.1 Vol.-%
Resolution:	0.1 Vol.-%
Measurement range:	0 to 30 Vol.-% O_2 (oxygen)
Response time:	≤ 13 Sekunden (t_{90})
Precision:	
Sensitivity:	≤ ± 1 % of measured value for 0 to 25 Vol.-%
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) % r. h.
Pressure:	700 to 1300 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/% r. h.
Test gas:	approx. 12 to 20 Vol.-% O_2

SPECIAL CHARACTERISTICS

DrägerSensor® XXS oxygen sensors are lead-free, thus complying with Directive 2002/95/EG (RoHS).
Due to the internal filter, this sensor is less sensitive to influences caused by outgassing of plastics.
The extremely fast response time of less than 13 seconds provides a reliable warning of oxygen deficiency or excess.

Typical gas response O_2 at 20 °C
Flow = 0.5 l/min, purged 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

Gas / vapor	Chem. symbol	Concentration	Display in Vol.-% O_2
Acetylene	C_2H_2	1.0 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.-%	≤ $2^{(-)}$
Ethanol	C_2H_5OH	250 ppm	No effect
Ethene	C_2H_4	2.0 Vol.-%	≤ $2^{(-)}$
Helium	He	20 Vol.-%	≤ 3*
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	i-C_4H_8	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

* nonlinear false positive display value

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