

## DrägerSensor® XXS NO

Order no. 68 11 545

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life	Selective filter
Dräger Pac 7000	no	yes	1 year	> 2 years	no
Dräger X-am 5000	no	yes	1 year	> 2 years	no
Dräger X-am 5600	no	yes	1 year	> 2 years	no

### MARKET SEGMENTS

Power and district heating plants, chemical industry.

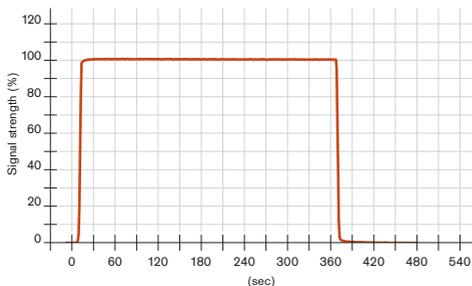
### TECHNICAL SPECIFICATIONS

<b>Detection limit:</b>	0.3 ppm
<b>Resolution:</b>	0.1 ppm
<b>Measurement range:</b>	0 to 200 ppm NO (nitrogen monoxide)
<b>Response time:</b>	≤ 10 seconds (T <sub>90</sub> )
<b>Measurement accuracy</b>	
Sensitivity:	≤ ± 3% of measured value
<b>Long-term drift, at 20°C (68°F)</b>	
Zero point:	≤ ± 0.3 ppm/year
Sensitivity:	≤ ± 2% of measured value/month
<b>Warm-up time:</b>	≤ 20 hours
<b>Ambient conditions</b>	
Temperature:	(-40 to 50)°C (-40 to 122)°F
Humidity:	(10 to 90)% RH
Pressure:	(700 to 1,300) hPa
<b>Influence of temperature</b>	
Zero point:	≤ ± 0.02 ppm/K
Sensitivity:	≤ ± 0.3% of measured value/K
<b>Influence of humidity</b>	
Zero point:	No effect
Sensitivity:	≤ ± 0.05% of measured value/% RH
<b>Test gas:</b>	approx. 3 to 175 ppm NO

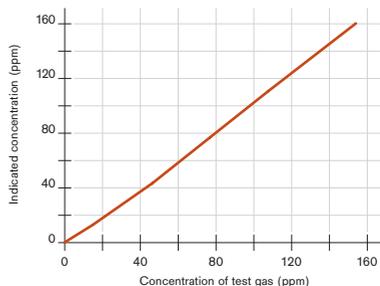
## SPECIAL CHARACTERISTICS

This sensor enables a selective measurement of NO. NO<sub>2</sub> concentrations < 20 ppm have not effects. It also offers a very fast response time and excellent linearity across its entire measurement range.

Typical gas response of XXS NO at 20°C flow = 0.5 l/min, purging with 20 ppm NO



Linearity of NO sensor calibrated with 76 ppm NO



The values shown in the following table are standard and apply to new sensors. The values may fluctuate by  $\pm 30\%$ . 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 NO. To be sure, please check if gas mixtures are present.

## RELEVANT CROSS-SENSITIVITIES

Gas/vapor	Chem. symbol	Concentration	Display in ppm NO
Acetone	CH <sub>3</sub> COCH <sub>3</sub>	1,000 ppm	No effect
Ammonia	NH <sub>3</sub>	500 ppm	No effect
Benzene	C <sub>6</sub> H <sub>6</sub>	0.6 Vol.-%	No effect
Carbon dioxide	CO <sub>2</sub>	5 Vol.-%	No effect
Carbon monoxide	CO	2,000 ppm	No effect
Chlorine	Cl <sub>2</sub>	5 ppm	No effect
Ethanol	C <sub>2</sub> H <sub>5</sub> OH	250 ppm	No effect
Ethene	C <sub>2</sub> H <sub>4</sub>	0.1 Vol.-%	No effect
Ethine	C <sub>2</sub> H <sub>2</sub>	0.8 Vol.-%	No effect
Hydrogen	H <sub>2</sub>	1.5 Vol.-%	No effect
Hydrogen chloride	HCl	40 ppm	No effect
Hydrogen cyanide	HCN	50 ppm	No effect
Hydrogen sulfide	H <sub>2</sub> S	5 ppm	1
Isobutylene	(CH <sub>3</sub> ) <sub>2</sub> CCH <sub>2</sub>	100 ppm	No effect
Methane	CH <sub>4</sub>	2 Vol.-%	No effect
Nitrogen dioxide	NO <sub>2</sub>	20 ppm	No effect
Phosphine	PH <sub>3</sub>	2 ppm	No effect
Propane	C <sub>3</sub> H <sub>8</sub>	1 Vol.-%	No effect
Sulphur dioxide	SO <sub>2</sub>	10 ppm	No effect
Tetrachloroethylene	CCl <sub>2</sub> CCl <sub>2</sub>	1,000 ppm	No effect
Toluene	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	0.6 Vol.-%	No effect
Trichloroethylene	CHClCCl <sub>2</sub>	1,000 ppm	No effect