DrägerSensor® XXS HCN PC

Order no. 68 13 165

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life
Dräger Pac 7000	no	yes	1 year	> 1.5 years
Dräger X-am 5000	no	yes	1 year	> 1.5 years
Dräger X-am 5600	no	yes	1 year	> 1.5 years
Dräger X-am 8000	no	yes	1 year	> 1.5 years

Selective filter

B2X (6812424) - replaceable.

Cross sensitivities to hydrogen sulfide (H₂S) and sulfur dioxide (SO₂) are eliminated.

The filter's service life can be calculated as follows: 1,000 ppm x hours of contaminant gas. Example: Given constant concentration of 10 ppm H_2S will be: Service life = 1,000 ppm x hours / 10 ppm = 100 hours. Due to the change of sensitivity, a calibration is necessary after installation. The measurement value response time increases after the installation of the filter.

MARKET SEGMENTS

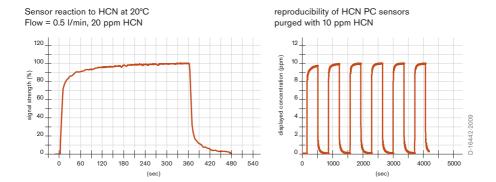
Metal processing, mining, fumigation and pest control, chemical warfare agent (blood agents).

TECHNICAL SPECIFICATIONS

Detection limit:	3 ppm		
Resolution:	0.5 ppm		
Measurement range:	0 to 50 ppm HCN (hydrogen cyanide)		
Response time:	≤ 10 seconds (T ₅₀)		
Measurement accuracy			
Sensitivity:	≤ ± 5% of measured value		
Long-term drift, at 20°C (68°F)			
Zero point:	≤ ± 3 ppm/year		
Sensitivity:	≤ ± 2% of measured value/month		
Warm-up time:	≤ 15 minutes		
Ambient conditions			
Temperature:	(-20 to 50)°C (-4 to 122)°F		
Humidity:	(10 to 90)% RH		
Pressure:	(700 to 1,300) hPa		
Influence of temperature			
Zero point:	≤ ± 3 ppm		
Sensitivity:	≤ ± 5% of measured value		
Influence of humidity			
Zero point:	No effect		
Sensitivity:	≤ ± 0.1% of measured value/% RH		
Test gas:	approx. 7 to 45 ppm HCN		

SPECIAL CHARACTERISTICS

This sensor's extremely quick response time and excellent repeatability provides a fast and reliable warning against Prussic acid (hydrogen cyanide).



The values shown in the following table are standard and apply to new sensors. The values maybe 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 HCN To be sure, please check if gas mixtures are present.

RELEVANT CROSS-SENSITIVITIES

Gas/vapor	Chem. symbol	Concentration	Display in ppm HCN
Acetylene	C ₂ H ₂	100 ppm	≤ 10
Ammonia	NH ₃	50 ppm	No effect
Carbon dioxide	CO ₂	10 Vol%	No effect
Carbon monoxide	CO	200 ppm	No effect
Chlorine	Cl ₂	1 ppm	2 (-)
Ethanol	C ₂ H ₅ OH	250 ppm	No effect
Hydrogen	H ₂	0.5 Vol%	≤ 3
Hydrogen chloride	HCI	20 ppm	≤1
Hydrogen sulfide	H ₂ S	1 ppm	≤ 3
Isobutylene	(CH ₃) ₂ CCH ₂	100 ppm	No effect
Methane	CH ₄	1 Vol%	No effect
Nitrogen dioxide	NO ₂	1 ppm	≤ 1 (-)
Nitrogen monoxide	NO	20 ppm	No effect
Ozone	O ₃	0.5 ppm	No effect
Phosphine	PH ₃	0.1 ppm	≤1
Sulfur dioxide	SO ₂	1 ppm	≤ 2