

DrägerSensor® XS EC CO HC

Order no. 68 09 120

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

MARKET SEGMENTS

Waste disposal, metal processing, petrochemicals, fertilizer production, mining and tunneling, shipping, inorganic chemicals, steel, organic chemicals, oil and gas, hazmat, biogas.

TECHNICAL SPECIFICATIONS

Detection limit:	10 ppm
Resolution:	5 ppm
Measurement range:	0 to 10,000 ppm CO (carbon monoxide)
Response time:	≤ 10 seconds (T ₉₀)
Measurement accuracy	
Sensitivity:	≤ ± 1% of measured value
Long-term drift, at 20°C (68°F)	
Zero point:	≤ ± 2 ppm/month
Sensitivity:	≤ ± 2% of measured value/month
Warm-up time:	≤ 12 hours
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:	≤ ± 10 ppm
Sensitivity:	≤ ± 0.3% of measured value/K
Influence of humidity	
Zero point:	No effect
Sensitivity:	≤ ± 0.05% of measured value/% RH
Test gas:	50 to 10,000 ppm CO test gas

SPECIAL CHARACTERISTICS

Because of its excellent linearity, this sensor (measurement range 10,000 ppm) can be calibrated at the lower levels of its measurement range. It also offers very stable measurements, even at high concentrations and over long periods of time.

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 carbon monoxide. To be sure, please check if gas mixtures are present.

RELEVANT CROSS-SENSITIVITIES

Gas/vapor	Chem. symbol	Concentration	Display in ppm CO
Acetone	CH ₃ COCH ₃	1,000 ppm	≤ 30
Ammonia	NH ₃	200 ppm	No effect
Benzene	C ₆ H ₆	0.6 Vol. %	No effect
Carbon dioxide	CO ₂	10 Vol. %	No effect
Chlorine	Cl ₂	20 ppm	≤ 8 ⁽⁻⁾
Ethanol	C ₂ H ₅ OH	200 ppm	≤ 400
Ethene	C ₂ H ₄	20 ppm	≤ 50
Hydrogen	H ₂	0.1 Vol. %	≤ 400
Hydrogen chloride	HCl	40 ppm	No effect
Hydrogen cyanide	HCN	50 ppm	≤ 10
Hydrogen sulfide	H ₂ S	20 ppm	≤ 80
Methane	CH ₄	5 Vol. %	No effect
Nitrogen dioxide	NO ₂	20 ppm	No effect
Nitrogen monoxide	NO	20 ppm	≤ 40
Phosgene	COCl ₂	50 ppm	No effect
Phosphine	PH ₃	5 ppm	≤ 20
Sulfur dioxide	SO ₂	20 ppm	≤ 20
Tetrahydrothiophene	C ₄ H ₈ S	10 ppm	≤ 4