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})
Precision	
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 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 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_3COCH_3	1,000 ppm	≤ 30
Ammonia	NH_3	200 ppm	No effect
Benzene	C_6H_6	0.6 Vol. %	No effect
Carbon dioxide	CO_2	10 Vol. %	No effect
Chlorine	Cl_2	20 ppm	≤ 8(–)
Ethanol	C_2H_5OH	200 ppm	≤ 400
Ethene	C_2H_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_2S	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_4H_8S	10 ppm	≤ 4

(–) Indicates negative deviation