DrägerSensor® IR CO_2 ES

Order no. 68 51 882

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life
Dräger X-am 5600	no	yes	5 years	> 5 years
Dräger X-am 8000	no	yes	5 years	> 5 years

MARKET SEGMENTS

Telecommunications, shipping, sewage, gas supply companies, refineries, chemical industry, mining, landfills, biogas plants, tunneling.

TECHNICAL SPECIFICATIONS

Detection limit:	0.01 Vol.-%
Resolution:	0.01 Vol.-% or 50 ppm (depending on set unit)
Measurement range:	0 to 5 Vol.-%
Ambient conditions	
Temperature:	(-20 to 50) °C (-4 to 122) °F
Humidity:	(0 to 95) % r. F.
Pressure:	(700 to 1300) hPa
Warm-up time:	≤ 3 minutes

TYPICAL MEASURING PROPERTIES FOR THE MEASUREMENT RANGE 0 TO 5 VOL.-% CO_2 WHEN CALIBRATED WITH 2.0 VOL.-% CARBON DIOXIDE IN AIR*:

Response time:		X-am 5600	X-am 8000
	Diffusion mode (t_{50})	≤ 15 seconds	≤ 14 seconds
	Diffusion mode (t_{90})	≤ 31 seconds	≤ 48 seconds
	Pump mode (t_{50})	≤ 8 seconds	≤ 10 seconds
	Pump mode (t_{90})	≤ 11 seconds	≤ 14 seconds
Precision			
Zero point:	≤ ± 0.01 Vol.-%		
Sensitivity:	≤ ± 0.08 Vol.-% at 2.5 Vol.-%		
Linearity error:	≤ ± 10 % of measured value or ≤ ± 1.5 % of the end of measurement range (the larger value applies in each case)		
Influence of temperature (-20 to 50 °C)			
Zero point:	≤ ± 0.0002 Vol.-%/K		
Sensitivity:	≤ ± 0.015 % Vol.-%/K at 2.5 Vol.-%		
Influence of humidity, at 40 °C (104 °F) (0 to 95 % RH, non-condensing)			
Zero point:	≤ ± 0.0001 Vol.-%/ % RH		
Influence of pressure of the respective measured value/hPa			
	X-am 5600	X-am 8000	
Zero point:	≤ ± 0.15 % (uncompensated)	≤ ± 0.09 % (compensated)	
Long-term drift			
Zero point:	± 0.005 Vol.-%/month		
Sensitivity:	± 0.1 Vol.-%/6 months at 2.5 Vol.-%		
Test gas	2 Vol.-% CO_2		

* s. a. Notes on Approval 9033890 (X-am 5600), 9033655 (X-am 8000)

SPECIAL CHARACTERISTICS

With its extremely low drift and low detection limit, this sensor is ideal for measuring carbon dioxide in indoor areas, and for monitoring CO_2 in the workplace. As with all other IR sensors, it requires little maintenance and has a high level of long-term stability.

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