DrägerSensor® Smart IR CO_2

Order no. 68 10 590

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life	Selective filter
Dräger X-am 7000	yes	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.-% CO_2
Measurement range:	0 to 5 Vol.-% CO_2
Ambient conditions	
Temperature:	(–20 to 60)°C (–4 to 140)°F
Humidity:	(10 to 95)% RH
Pressure:	(700 to 1,300) hPa
Warm-up time:	≤ 4 minutes

FOR THE MEASUREMENT RANGE 0 TO 5 VOL.-% CO_2

Response time	Diffusion mode ≤ 20 seconds (t_{50}) Diffusion mode ≤ 45 seconds (t_{90}/t_{10}) Pump mode ≤ 20 seconds (t_{50}) Pump mode ≤ 50 seconds (t_{90}/t_{10})
Precision:	≤ ± 0.06 Vol.-% CO_2 at 2.5 Vol.-%
Linearity error, typical:	> 0 to ≤ 1 Vol.-% CO_2 <± 1 % of end of measuring range > 1 to ≤ 4 Vol.-% CO_2 <± 5 % of the measured value > 4 to ≤ 5 Vol.-% CO_2 <± 10 % of end of measuring range
Long-term drift	
Zero point:	≤ ± 0.004 Vol.-% CO_2/month
Precision:	≤ ± 3% of measured value/month at 2.5 Vol.-%
Influence of temperature	
Zero point:	≤ ± 0.002 Vol.-% CO_2/K at (–20 to 60)°C (–4 to 140)°F
Precision:	≤ ± 0.4% of measured value/K at 2.5 Vol.-% and (–20 to 60)°C (–4 to 140)°F
Effect of humidity, at 40°C (104 °F) (0 to 95% RH, non-condensing)	
Zero point:	≤ ± 0.02 Vol.-% CO_2
Test gas:	0 to 5 Vol.-% CO_2

SPECIAL CHARACTERISTICS

With its extremely low drift and low detection limit, this sensor is ideal for measuring carbon dioxide inside closed spaces, 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.

DrägerSensor® Smart IR CO_2

D-10120-2009