DrägerSensor® Smart IR CO_2 HC

Order no. 68 10 599

Used in	Plug & Play	Replaceable	Guaranty	Expected sensor life	Selective filter
Dräger X-am 7000	yes	yes	5 years	> 5 years	–

MARKET SEGMENTS

Biogas, process gas

TECHNICAL SPECIFICATIONS

Detection limit:	0.4 Vol.-%
Resolution:	0.2 Vol.-% CO_2
Measurement range:	0 to 100 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 100 VOL.-% CO_2

Response time:	Diffusion mode ≤ 20 seconds (T_{50}) Diffusion mode ≤ 65 seconds (T_{90}) Pump mode ≤ 20 seconds (T_{50}) Pump mode ≤ 65 seconds (T_{90})
Measurement accuracy	
Sensitivity:	≤ ± 2.0 Vol.-% CO_2 at 50 Vol.-%
Linearity error, typical:	≤ ± 1 Vol.-% CO_2 or ≤ ± 5% of measured value (whichever is higher)
Long-term drift	
Zero point:	≤ ± 0.2 Vol.-% CO_2/month
Sensitivity:	≤ ± 3% of measured value/month at 50 Vol.-%
Influence of temperature	
Zero point:	≤ ± 0.004 Vol.-% CO_2/K at (–20 to 60)°C (–4 to 140)°F
Sensitivity:	≤ ± 0.4% of measured value/K at 50 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:	≤ ± 0.5 Vol.-% CO_2
Test gas:	50 Vol.-% CO_2

SPECIAL CHARACTERISTICS

This sensor is especially suitable if you need to measure high concentrations of CO_2 in process gas, for example. CO_2 concentrations of up to 100 Vol.-% can be detected reliably with this sensor. Other qualities that distinguish this sensor are low cross-sensitivities, long-term stability, and minimal maintenance.