

DOL 19 CO₂ Sensor 0-10,000 ppm

The sensor is used for climate monitoring or climate control through measuring the CO₂ content of the housing air.

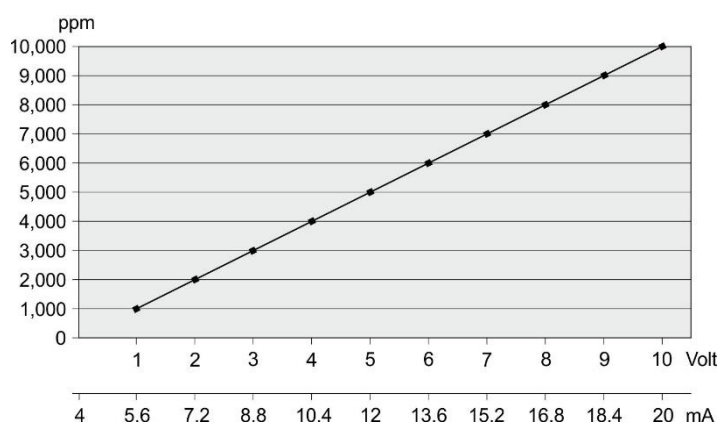


PRODUCT DESCRIPTION

DOL 19 is a carbon dioxide/CO₂ sensor that is intended for measurement in livestock house and industrial environments. The sensor's measuring range has been selected both to care for the animals' comfort and also to monitor potential error conditions in livestock houses with direct combustion.

The sensor is protected by a sturdy casing, and lies behind a carefully selected filter. The sensor ships with a connector and cable solution that makes it simple to remove the sensor for cleaning and disinfection of e.g. livestock houses.

PERFORMANCE CURVE



PRODUCT SURVEY



140231 DOL 19 CO₂ SENSOR 0-10,000 PPM

The sensor comes in a sturdy plastic casing, protecting it from the harsh livestock house environment. Connection is made with the supplied plug system, so that the sensor can be removed easily from the livestock house while cleaning.



140269 CABLE 2M M12 PLUG INCL SEALING PLUG

The plug makes it possible to connect the sensor without needing to open the casing. The sealing plug keeps water and dirt from entering the plug when the sensor has been removed.

TECHNICAL DATA

Measuring values

Measuring principle	Non-Dispersive Infrared Technology (NDIR)	
Measuring range	0...10,000 ppm	
Accuracy at 25 °C (77 °F) and 1013 mbar	0-7,000: 50 ppm +5 % of measuring value 7,000-10,000: 100 ppm +5 % of measuring value	
Time constant τ_{63} ¹⁾	Typ. 300 s	¹⁾ minimum air velocity 1 m/s (200ft/min.)
Temperature dependence	Typ. 1 ppm CO ₂ /°C (-20...45 °C)	
Sample rate	Approx. 15 s	
Analogue output	Voltage	Current
0...10,000 ppm	0 – 10 V	4 – 20 mA
Load	> 10 k Ω	\leq 500 Ω
Recommended load	\geq 100 k Ω	500 Ω
General		
Supply voltage SELV	15 – 35 V DC SELV = Safety Extra Low Voltage	
Power supply	Voltage output: Typ. 16 mA Max. 0.5 A in 0.3 s	Current output: Max. 36 mA Max. 0.5 A in 0.3 s
Warm up time	< 5 min	
Housing / protection class	Polycarbonate / IP54	
Electrical connection	Cable with M12 plug	
Cable	2 m. 4 x 22AWG / 0.34 mm ²	
Electromagnetic compatibility	EN 61326-1 EN 61326-2-3	
Working temp. and conditions	-20...60 °C (-4...140 °F) 0...100 % RH (non condensing)	
Storage temp. and conditions	-20...60 °C (-4...140 °F) 0...95 % RH (non condensing)	

DIMENSIONAL SKETCH

