

# DOL 119 CO2 sensor



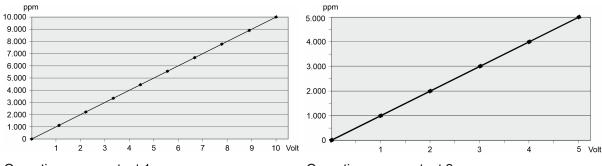
DOL 119 is a sensor for measuring carbon dioxide/CO2. The sensor is intended for measurement in live-stock houses and industrial environments.

The measuring range of the sensor is partly based on monitoring the comfort area of the animals and partly supervising fault conditions, if any, in livestock houses integrating direct combustion.

The sensor has two analogue outputs one 0-10V and one 0-5V output. Both are with low output impedance and are protected against short circuiting and incorrect connection.

The sensor is protected by a sturdy casing and behind a carefully selected filter. The sensor is supplied with cable and a cap for protection of the sensor during washing and disinfection.

The sensor must be placed in the middle of the house.



Operation curve output 1.

Operation curve output 2.



### **Product survey**



#### 140331 DOL 119 CO2 sensor 5000/10000 ppm

Sensor for measuring the CO2 content in the air. Supplied with a M12 plug and sealing plug as well as protection cap for DOL 119.



#### 140330 DOL 119 CO2 sensor with adapter cable

Sensor for measuring the CO2 content in the air. Supplied with a M12 plug and sealing plug as well as protection cap for DOL 119, also including adapter cable for fast replacement of DOL 19 with DOL 119 0-10V.

#### **Accessories**



#### 140261 DOL 119/139 Protection cap plug 5 pcs.

Protection cap for DOL 119/139 for protection of the sensor during, for example, cleaning.



#### 140269 Cable 2 m M12 plug incl. sealing plug

2 meter cable for sensor with M12 plug and sealing plug.



#### 140329 Adapter cable for DOL 119

Adapter cable is used when replacing DOL 19 with DOL 119 in an existing installation.



## Technical data

		DOL 119 0-10V	
Specification		Parameter	Unit
Output	Measurement range (Output 1)	0 - 10	VDC
	Measurement range (Output 2)	0 - 5	VDC
	Limited output power per port	20	mA
	Output impedance	<1	Ω
	Recommended load impedance	>100	kΩ
	Max. Cable length @ 0.75 mm²	100	m
	Max. cable length @ 1.50 mm²	200	m
	Load impedance	0.5 – 10000	kΩ
CO <sub>2</sub> – Output 1	Measurement range	0-10000	ppm
	Output resolution	0.001	V/ppm CO <sub>2</sub>
	Accuracy 400 – 10000 ppm	50 ppm ± 5% of measured value	ppm
	Temperature stability (0-50°C)	<u>+</u> 2.5	ppm/°C
	Time constant: T63	2 min. at 0.5 m/s air speed	
CO <sub>2</sub> – Output 2	Measurement range	0 - 5000	ppm
	Output resolution	0.001	V/ppm CO <sub>2</sub>
	Accuracy 400 – 10000 ppm	50 ppm ± 5% of measured value	ppm
	Temperature stability	<u>+</u> 2.5	ppm/°C
	Time constant T63	2 min. at 0.5 m/s air speed	
Supply voltage		13.5 - 30	VDC
Supply current	No load	8	mA
	Max. load	55	mA
Temperature, operation CO <sub>2</sub>	CO <sub>2</sub> valid	0 - +50	°C
Temperature, operation		-40 - +60	°C
Temperature, storage		-40 - +70	°C
IP classification		IP67 (DIN 40050-9)	
		NEMA 1, 3, 4, 6	
Cable length		2	m
Cable conductor size		4 x 0.34 (4 x AWG22)	mm <sup>2</sup>
Dimensions (diameter/ width)		33.3	mm
Dimensions (length)		128.3	mm
Weight			g
Approvals		CE	



### **Dimensions**

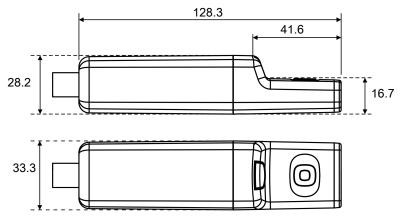


Figure 1: In mm.