

DOL 119 CO₂ Sensor

4-20 mA



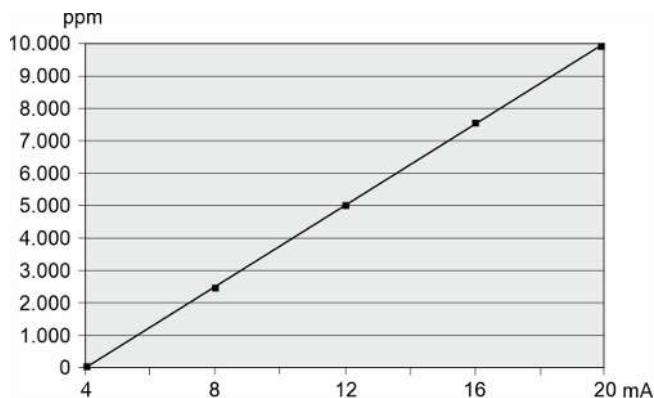
DOL 119 is a sensor for measuring carbon dioxide/CO₂. The sensor is intended for measurement in live-stock houses and industrial environments.

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.

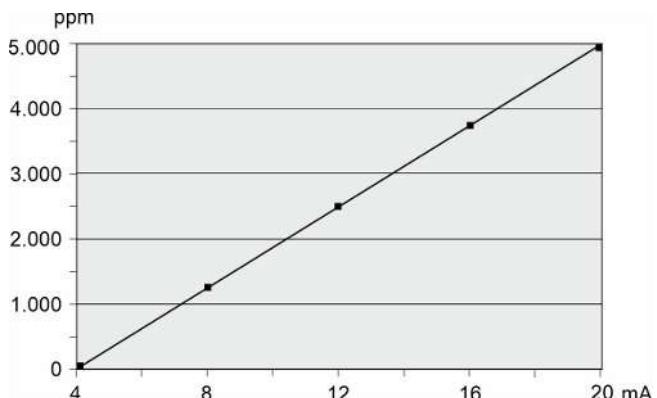
DOL 119 4-20 mA has two analogue current outputs, both are set up to supply 4-20 mA. Output 1 has a measuring range of 0-10000ppm, output 2 has a measuring range of 0-5000ppm. The outputs are protected against short circuiting and incorrect connection.

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 med 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.



140332 DOL 119 CO2 sensor 4-20 mA

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.

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 with M12 plug and sealing plug.

When replacing DOL 19 with DOL 119, the cable must be replaced or the connection must be moved.



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	Current range (Output 1)	4 – 20	mA
	Current range (Output 2)	4 - 20	mA
	Limited output power per port	20	mA
	Output impedance	See Graph "Load vs. Supply"	
	Recommended load impedance		
	Load impedance		
CO ₂ – Output 1	Measuring range	400-10000	ppm
	Resolution	0.0016	mA/ppm CO ₂
	Accuracy 400 – 10000 ppm	50 \pm 5% of measured value	ppm
	Temperature stability (0-50°C)	\pm 2.5	ppm/°C
	Time constant: T63	2 min. at 0.5 m/s air speed	
CO ₂ – Output 2	Measuring range	400 - 5000	ppm
	Resolution	0.0032	mA/ppm CO ₂
	Accuracy 400 – 5000 ppm	50 \pm 5% of measured value	ppm
	Temperature stability	\pm 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 ₂ valid	0 - +50	°C
Humidity, operation		0 – 100 (non-condensing)	% RH
Temperature, storage		-40 - +70	°C
Humidity, storage		0 – 95 (non-condensing)	% RH
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 ²
Max. Cable length at 0.75 mm ²		500	m
Max. cable length at 1.50 mm ²		500	m
Dimensions (diameter/width)		33.3	mm
Dimensions (length)		128.3	mm
Weight		243	g
Approvals		CE	

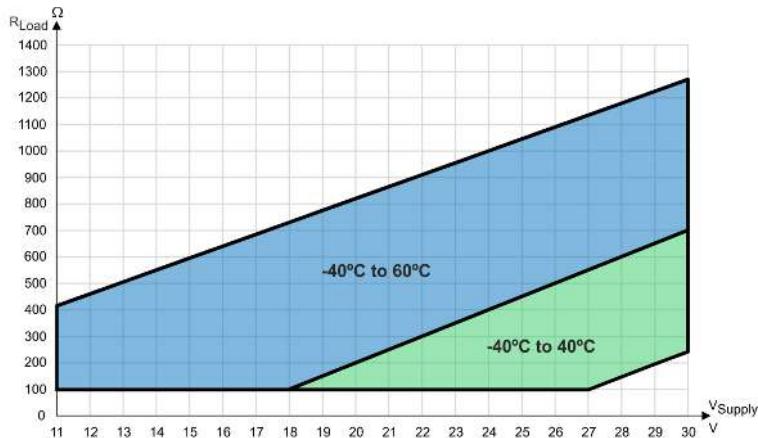


Figure 6. Graph: Load vs Supply.

Dimensions

Dimensions in mm.

