

# DOL 139

## CO<sub>2</sub>, Humidity and Temperature Sensor



DOL 139 is a sensor for measuring carbon dioxide/CO<sub>2</sub>, relative humidity and temperature. The sensor is intended for measurement in live-stock houses and industrial environments.

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.

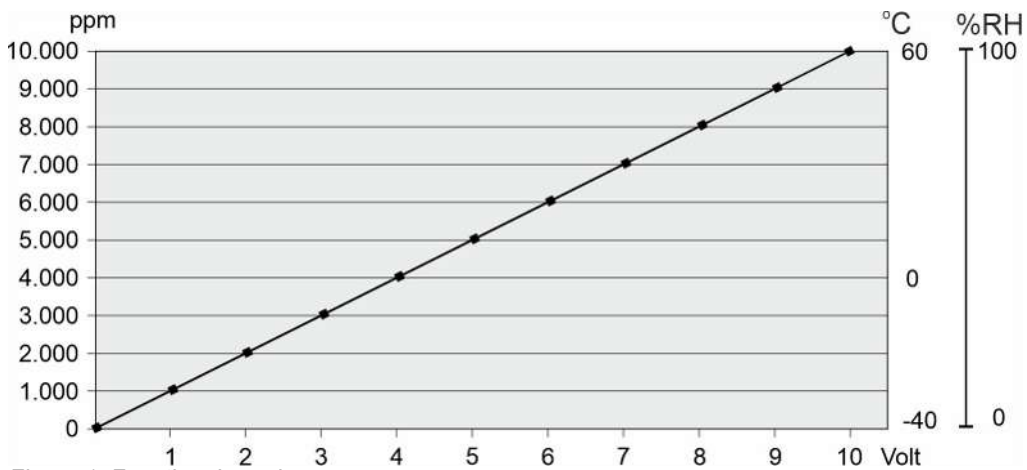


Figure 1: Functional graph.

## 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.



**301241 Cable 2m 5xAWG 22 UL2464, M12 female plug**

2m cable for sensor mounting.

## Technical data

		DOL 139 0-10V	
Specification		Parameter	Unit
Output	Voltage range	0 - 10	VDC
	Limited output power per port	20	mA
	Output impedance	<1	$\Omega$
	Recommended load impedance	>100	k $\Omega$
	Load impedance	>0.5	k $\Omega$
Relative humidity	Measuring range	0-100	%RH
	Resolution	0.1	V/%RH
	Accuracy +10 °C - +40 °C (40-80% RH)	+/-3	%RH
	Accuracy 10%RH – 95%RH	+/-3 $\pm$ 2% of measured value	%RH
	Time constant: T63	4 min. at 0.5 m/s air speed	
Temperature	Measuring range	-40 - +60	°C
	Resolution	0.1	V/°C
	Accuracy +10 °C - +40 °C	+/-0.75	°C
	Accuracy 0 °C - +60 °C	+/-1.5	°C
	Time constant T63	7 min. at 0.5 m/s air speed	
CO <sub>2</sub>	Measuring range	0-10000	ppm
	Resolution	0.001	V/ppm
	Accuracy 400 - 10000	50 $\pm$ 5% of measured value	ppm
	Time constant T63	2 min. at 0.5 m/s air speed	
Supply voltage		13.5 - 30	VDC
Supply current	No load	9	mA
	Max. load	105	mA
Temperature, operation CO <sub>2</sub>		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		5 x 0.34 (5 x AWG22)	mm <sup>2</sup>
Max. Cable length at 0.75 mm <sup>2</sup>		100	m
Max. Cable length at 1.50 mm <sup>2</sup>		200	m
Dimensions (diameter/width)		33.3	mm
Dimensions (length)		128.3	mm
Weight (sensor and cable)		243	g
Approvals		CE	

## Dimensions

Dimensions in mm.

