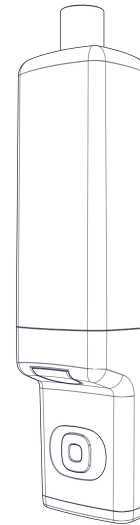


DOL 139

CO2 - Humidity - Temperature sensor



DOL 139 is a sensor for measuring carbon dioxide/CO2, 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 protection cap for protection of the sensor during washing and disinfection.

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

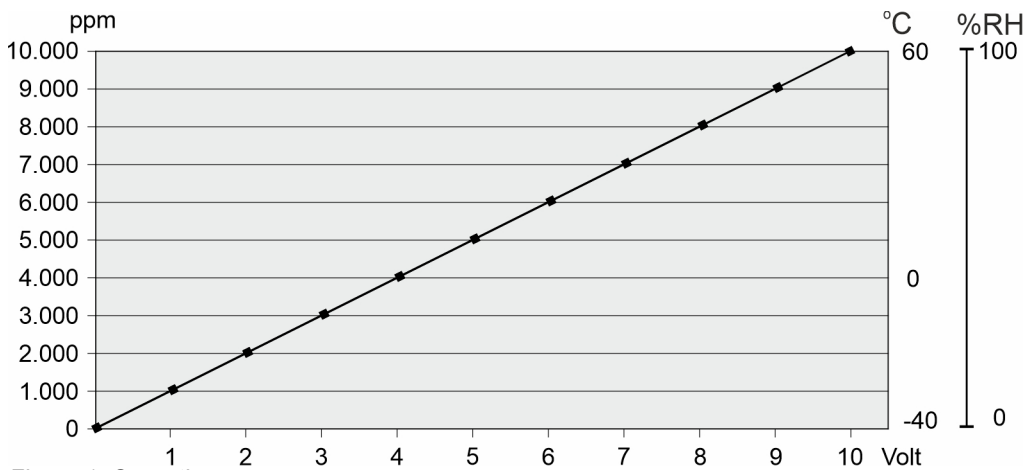


Figure 1: Operation curve.

Accessories



345028 DOL 119/139 protective cap, silicone

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	Ω
	Recommended load impedance	>100	k Ω
	Max. Cable length @ 0.75 mm ²	100	m
	Max. cable length @ 1.50 mm ²	200	m
	Load impedance	0.5 – 10000	k Ω
Relative humidity	Measurement range	0-100	%RH
	Output resolution	0.1	V/%RH
	Accuracy +10 °C - +40 °C (40-80% RH)	+/-3	%RH
	Accuracy 10%RH – 95%RH	+/-3 \pm 0.02 x mv	%RH
	Time constant: T63	4 min. at 0.5 m/s air speed	
Temperature	Measurement range	-40 - +60	°C
	Output 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 ₂	Measurement range	0-10000	ppm
	Output resolution	0.001	V/ppm
	Accuracy 400 - 10000	50 ppm \pm 5% of measured value	ppm
	Time constant T63	2 min. at 0.5 m/s air speed	s
Supply voltage		13.5 - 30	VDC
Supply current	No load	9	mA
	Max. load	105	mA
Temperature, operation		0 - +60	°C
Temperature, storage		-40 - +60	°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 ²
Dimensions (diameter/ width)		33.3	mm
Dimensions (length)		128.3	mm
Weight (sensor and cable)		243	g
Approvals		CE	

Dimensioned sketch

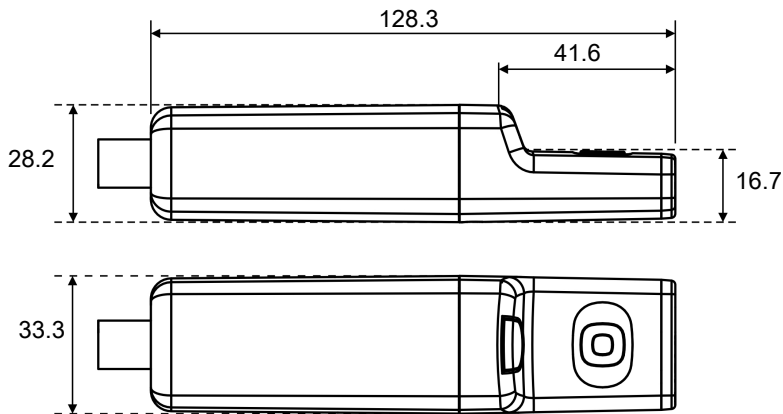


Figure 2: In mm.