Gas Sensor ME 1250
Propane C_3H_8

Müller-Elektronik AG
Gaswarnanlagen & Wasserqualität

$$C_3H_8$$

Gas	Propane
Formula	C_3H_8
CAS number	74-98-6
Lower Explosive Limit (LEL)	1.7 Vol.-%
Relative density	1.55 ▼
Appearance	Colorless Odorless
Hazards	High flammability Narcotic

■ **Automatic zero point calibration**

■ **Active noise reduction on the output signal**

■ **Linear measurement signal depending on the gas concentration**

■ **High response sensitivity with a short response time**

■ **Selective and reliable measurement with stable measuring signal and zero point**

■ **Temperature compensated measurement**

■ **Long service life**

The ME1250 Gas Sensor is a remote measuring unit for monitoring gas concentration and is used as a leak detector for explosion protection.
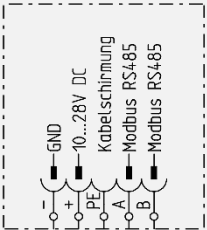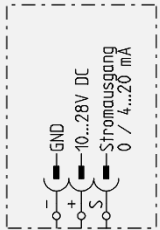
The microprocessor-controlled electronics of the sensor, adapted to the specific properties of the measuring cell, enable fast and reliable signal processing. The measured gas concentration is transmitted to a Gas Control Panel, which can manage a large number of distributed gas sensors.

Thanks to bus communication, only one cable is required, which can be continued from sensor to sensor. The ME 1250 Gas Sensor is also available with an analogue output signal of 4…20 mA. The measured gas concentration can thereby be processed by other PLC (Programmable Logic Controllers). The optional relay module expands the ME 1250 Gas Sensor internally with 3 relays for direct switching of signal transmitters without the use of a control panel.

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Technical Specifications

Measurement method	Catalytic / Pellistor Heat-of-reaction principle	
Measuring range	0…100% LEL	other measuring ranges on request
Alarm thresholds	Alarm 1: 20% LEL Alarm 2: 40% LEL	recommendation
Lifespan in air	up to 5 years	according to cell manufacturer
Break-in period	4 h	according to cell manufacturer
Response time t_{90}	8 sec	
Operating voltage	10…28 VDC	nominal 24 VDC
Ambient temperature	-10…+40 °C	
Humidity	20…90% rF	non-condensing
Mounting height	30 cm above floor	heavier than air
Casing	*Default:* Powder-coated aluminum Orange RAL 2004 80 x 125 x 59 mm 500 g	*Optional:* ABS plastic Light gray RAL 7035 81 x 121 x 56 mm 250 g
Cable entry	M20	
EU conformity	CE mark including EMC test	

Versions

Article code	**12BUS-C3H8-12**	**1250-C3H8-12**
Description	ME 1250 Bus	ME 1250 Analogue
Output signal	Bus communication with Control Panel	Analogue 4…20 mA Load max. 800 Ω at 24V input
Connection	4-core cable U72M 1x4x0.6 mm Shielded	3-core cable U72M 1x4x0.6 mm or CY 0.5 mm² Shielded

Topology	Bus, tree or star topology	Star topology
Power	< 1.0 W	< 1.6 W

Cross sensitivity

Due to the catalytic measuring principle, all combustible hydrocarbon compounds are measured. If different explosive gases are to be expected at the measuring location, calibration must be carried out on the substance for which the sensor has the lowest sensitivity.

Accessories

Article code	
1250-REL	Relay module for single sensor
1250-AIR-BOX	Add-on box for ventilation duct
1250-AIR-FLOW	Hose fitting
1250-SUP	Mounting plate for round columns
1250-SCHUTZ	Weather protection

Maintenance

Annual calibration and function check with calibration gas, carried out by trained staff.

Consumables

Article code	
CELL-PEL	Measuring cell for flammable gases Lifespan: up to 5 years

- Catalyst poisons can destroy the measuring cell
- Exposure above 40% LEL requires recalibration
- Exposure above 100% LEL can destroy the measuring cell

Related Products

Article code	
12IRB-C3H8-12	Gas Sensor ME 1250 Bus Propane C_3H_8 Infrared
12IR-C3H8-12	Gas Sensor ME 1250 Analogue Propane C_3H_8 Infrared