3-026-R225
GasSafetySensor

The GasSafetySensor is designed for monitoring the ambient air in rooms with gas-filled equipment for measuring different tracer gases. The Sensor unit detects the lowest concentrations of the gas to which it is adjusted/calibrated and permanently shows the current measured value on the display.
There is no radioactive source in any of the DILO Sensors, so no special precautions regarding radioactive hazardous substances are required during operation. The Sensors are also characterised by a fast response time with stable measuring results.
Naturally existing gas components in the air can be suppressed. For example, when using a CO_2 sensor, it can be set in such a way as to hide the natural CO_2 content in the air so that only values which are above this natural content are measured.
The warning and alarm levels of each Sensor can be freely configured. If the default setting is to be changed this can be done either via the connected GasSafetyMonitor or via a web server.

Special features

- Gas type: CO_2

Advantages & functions

Sensor data							
	SF_6 gas 3-026-R205	CO_2 gas 3-026-R225	O_2 gas 3-026-R210	SO_2 gas 3-026-R230	C4-FN 3-026-R215	C5-FK 3-026-R220	CO 3-026-R235
Measuring principle	NDIR (dual beam)	NDIR (dual beam)	Electro-chemical reaction	Electro-chemical reaction	NDIR (dual beam)	NDIR (dual beam)	Electro-chemical reaction
Measuring range	0 – 1500 ppm	0 – 5000 ppm	0 – 25 Mol-%	0 – 20 ppm	0 – 1000 ppm	0 – 1000 ppm	0 - 500 ppm CO
Measuring accuracy	≤ ±30 ppm	≤ ± 2 % of the upper range value	≤ ± 2 % of the upper range value	≤ ± 2 % of the upper range value	≤ ± 2 % of the upper range value	≤ ± 2 % of the upper range value	≤ ± 2 % of the upper range value
Lifetime	> 10 years	> 10 years	3 years	2 years	> 10 years	> 10 years	3 years
Operating temperature	-10 to +40 °C	-20 to +45 °C	0 to 50 °C	-20 to +45 °C	0 to +50 °C	0 to +50 °C	-40 to +50 °C
Power consumption	4.3 W	4.3 W	3.2 W	3.2 W	6.8 W	6.8 W	3.2 W

*) 50 - 100 ppm: ±5 % (of 100 ppm) ≙ ±5 ppm; 100 - 1000 ppm: ±2 % (of 1000 ppm) ≙ ±20 ppm

- operation either as a stand-alone unit or in networks connected to a GasSafety Monitor
- different acoustic signals to be set on the unit; visual display of errors, warnings and alarms
- potential-free relays for errors, warnings and alarms
- high long-term stability
- Sensors are connected via an RJ45 cable (Ethernet and Power over Ethernet (PoE))
- no maintenance and no consumables required
- analogue output (4…20 mA)
- message on the expiry of the recommended calibration interval
- power is supplied separately (24 V DC) or alternatively in the network via Power over Ethernet (PoE)

Technical data

Dimensions (W x H x D)	170 x 275 x 88 mm
Weight	0.25 kg approx.
Indication	16x2-LCD display with RGB background
Ambient moisture	max. 95 % relative moisture, non condensing
Operating voltage	24 V DC, or PoE (802.3af-2003)
Power	0.8 A max.
Protection class	IP 41
Sound level	75 dB integrated alarm
Measuring principle of CO sensor	NDIR (double beam)
Measuring range of CO sensor	0 - 5000 ppm
Measuring accuracy of CO sensor	≤ ± 2 % of measuring range final value
Lifetime	10 years
Operating temperature	-20 to +45 °C
Power consumption	4,3 W

Note

Note:

All types of Sensors can be operated together in networks with one Monitor (Ill. 2) or autonomously as a single unit (Ill. 3). Each Sensor has a 4 ... 20 mA output and 3 relays for connecting warning systems. This output can always be used irrespective of the arrangement.
In networks, up to three Sensors can be connected directly to one Monitor without separate power supply. When connecting more than three Sensors, a PoE switch is required for each additional three Sensors. An Ethernet cable is needed for each Sensor connected to the network. A maximum of 32 Sensors can be connected to one Monitor.