CO-Transducer

with TÜV certificate acc. to VDI 2053 for
CO surveillance systems in underground garages etc.

GT1 - CO

Properties

High quality, TÜV certified CO transmitter for detection of carbon monoxide in underground garages, parking garages, boiler plants, heating systems, garages as well as in the ambient air.
The CO transducer has a very long-lasting electrochemical measuring cell and could be easily integrated in existing CO surveillance systems (without loss of validity of existing TÜV certificates).
Via two-wire system, displays, controller and alarm devices with 4-20 mA input could be connected without any problem.

Range of Application:

- underground garages, parking garages
- boiler plant and heating systems
- motorcar garage

Highlights:

- TÜV certification according to VDI 2053
- also suitable as replacement sensor for existing CO surveillance systems
- long-lasting electrochemical measuring cell
- automatic zero calibration
- 3 years warranty for the co sensor element

Specification

Measuring range:	0 ... 300 ppm CO (carbon monoxide)
Measuring principle:	electrochemical, permanent measuring
Reproducibility:	< 3 ppm according to VDI 2053
Response Time T_{90}:	< 60 s
Cross sensitivity:	≤ 2% of 300 ppm CO (acc. to VDI 2053)
Linearity error:	≤ 2% of 300 ppm CO (acc. to VDI 2053)
Offset adjustment:	automatically
Output signal:	4 - 20 mA, 2-wire, max. burdon = 500 Ohm
Power supply:	12 - 28 V DC (at option VO: 16 - 28 V DC)
Permissible burdon:	R_A [Ω] = (Uv [V] - 12 V or 16 V) / 0.02 A
Working condition:	-10 ... +40 °C, 15 ... 95 %RH (non-condensing)
Option: on site display	approx. 13 mm high, 3½-digit LC-display
EMC:	according to EN 50 081-1, EN 50 082-2 B
Electric connection:	elbow-type plug acc. to EN 175301-803/A (IP65), max. wire cross section: 1.5 mm², wire diameter from 4.5 to 7 mm
Housing:	ABS, 82 x 80 x 55 mm (without elbow-type plug)
Mounting:	with fixing holes for wall mounting
Mounting distance:	70 x 50 mm (W x H)
Fixing screws:	max. shaft-Ø
Weight:	approx. 190 g

Options / upcharge

VO: on site display

Accessories

GZ-01	test gas cap GT (for controlled flow with test gas)
GZ-02	gas bottle with 12l test gas: 30 ppm CO
GZ-03	gas bottle with 12l test gas: 300 ppm CO
GZ-04	gas valve unit MiniFlo for gas bottles with 12l
GSN 24	plug-in power supply ($230V_{AC}$ => $24V_{DC}$/300mA)

additional accessories upon request

CO_2-Transducer

GT10 - CO2 - 1R

Properties

Due to the fact, that CO_2 is an important indicator for the quality of air in rooms, it's super important to measure the CO_2 content.
The recommended CO_2 limit value for ambient air is 1000ppm . An exceeding of this limit causes tiredness and a loss of concentration.

The high quality and precise CO_2-transducer works according to the infrared principle (NDIR). An auto-calibration procedure compensates aging effects and is responsible for an excellent long term stability of this CO_2 transducer.

Due to the freely adjustable output signal the transmitter could be used for nearly each existing controller input etc..
Additionally, there is a local display which shows beside the actual CO_2 concentration, the minimum and maximum values as well as an optical alarm.

Highlights:

- excellent long term stability
- auto-calibration procedure
- for surveillance of the recommended CO_2 concentration in ambient air
- output signal free scaleable

Specification

Meas. range:	standard:	0 ... 2000 ppm CO_2 (carbon dioxide)
	opt. /5000:	0 ... 5000 ppm CO_2 (carbon dioxide)
Measuring principle:		infrared principle (NDIR)
Accuracy:	standard:	±50 ppm ±2 % of meas. value (at 20°C, 1023 mbar)
	opt. /5000:	±50 ppm ±3 % of meas. value (at 20°C, 1023 mbar)
Output signal:		4 - 20 mA (3-wire), standard 0 - 1 V or 0 - 10 V (3-wire), optional
Output scaling:		free scaleable, by entering display range
Auxiliary energy:		12 ... 30 V DC, max. 600 mA (at option 0-10V: 18 ... 30 V DC, max. 600 mA)
Perm. burdon (at 4-20mA)**:**		R_A < 200 Ω
Perm. load (at 0-...Volt)**:**		R_L > 3000 Ω
Display:		approx. 10 mm high, 4-digit LC-display
Working condition:		-10 ... +50 °C, 5 ... 95 % r.F., 850 ... 1100 hPa
Storage condition:		-25 ... +60 °C, 5 ... 95 % r.F., 700 ... 1100 hPa
Electric connection:		elbow-type plug acc. to EN 175301-803/A (IP65), max. wire cross section: 1.5 mm², wire diameter from 4.5 to 7 mm
Housing:		ABS, 82 x 80 x 55 mm (without elbow-type plug)
Mounting:		with fixing holes for wall mounting
Mounting distance:		70 x 50 mm (W x H)
Fixing screws:		max. shaft-Ø
Weight:		approx. 225 g
Features:		- min-/max-value memory, - optical alarm, - input of offset and scale for adjusting

Options / upcharge

5000: measuring range: 0 ... 5000 ppm CO_2
AV01: output signal 0-1V
AV010: output signal 0-10V

Accessories

GSN 24-750 plug-in power supply ($230V_{AC}$ => $24V_{DC}$/750mA)