Fixed gas detection systems

smart
GasDetection
Technologies

CC28 D Transmitter

Monitoring flammable gases in Ex zones

Ex

SIL

MADE IN
GERMANY

GfGsafety.com

CC28 D Transmitter

Monitoring flammable gases in Ex zones

For monitoring combustible gases and vapors in hazardous areas, the CC28 D transmitter with display in combination with GfG's proven controllers is a reliable and economical solution. Short response times (t_{90} ≤ 9 s; depending on gas type and sensor) allow fast warning of gases such as methane or propane.
The design is ATEX certified. With ignition protection types "d" (flameproof enclosure) and "e" (increased safety), safe use in Ex zone 1 is possible. In addition, the CC28 D hardware complies with the European Functional Safety Standard DIN EN 61508-2: 2011.

Communication and service

Signal transmission is based on the 4–20 mA industry standard. Smart Sensor technology enables fast and uncomplicated sensor replacement. Test gas can be added via calibration adapter. If the CC28 D has to be mounted in a difficult-to-access location, the optional RC2 remote control simplifies adjustment and service (one-man calibration).

Display and pushbuttons

The CC28 D transmitter has a 2.2 inch LC display and three pushbuttons. In normal operation, the display shows the measured value or information on faults or alarms. In addition, the operating parameters (sample gas, measuring range, limit values, etc.) can be called up via the pushbutton interface.

Reliable measurement and minimal operating costs

The stack effect provides rapid detection of combustible gases and vapors. This leaves crucial seconds to initiate countermeasures. The built-in temperature compensation ensures highest measurement accuracy. The low maintenance requirements and long sensor service life keep operating costs to a minimum. Sensor wear is significantly reduced by the automatic shutdown (from 112 % LEL).

CC28 D with display and pushbutton interface

Variants for different applications

The basic variant of the CC28 is sufficient for many applications. For special requirements, the CC28 is also available in additional versions:

CC28 basic version for a wide range of flammable gases

CC28 D with display to indicate the current measured value

CC28 DA with display, LED warning lights and alarm buzzer

In combination with GfG's high-performance controllers, all versions of the CC28 are a good choice for a wide range of combustible gases to be monitored.

Overview of gases:

» *Acetone*	(C_3H_6O)	» *Ethyl acetate*	($C_4H_8O_2$)	» *n-Nonane**	(C_9H_{20})
» *Acetylene*	(C_2H_2)	» *Ethylene*	(C_2H_4)	» *n-Butane / Isobutane*	(C_4H_{10})
» *Ammonia**	(NH_3)	» *Hexane*	(C_6H_{14})	» *Natural gas*	(*HC mixture*)
» *Carbon monoxid*	(*CO*)	» *Hydrogen**	(H_2)	» *Propane**	(C_3H_8)
» *Diethyl ether*	($C_4H_{10}O$)	» *Isopropanol**	(C_3H_8O)	» *Propyne*	(C_3H_4)
» *Ethane*	(C_2H_6)	» *Methane**	(CH_4)	» *Propylene*	(C_3H_6)
» *Ethanol*	(C_2H_6O)	» *Methanol*	(CH_4O)	» *Toluole*	(C_7H_8)

** with measuring function for explosion protection*

Other gases on request

CC28 D Technical Data:

Detection principle:
Catalytic combustion

Detection ranges:
0 to 100 % LEL
0 to 4 vol%[1]

Gas supply:
Diffusion or gassing with flow adapter

Expected sensor life:
5 years[2]

Response time:
t_{90} ≤ 9 s[3]

Temperature:
-20 to +50 °C (Ex zone)
-25 to +55 °C (not Ex zone)

Humidity:
5 to 90 % r. h.

Air pressure:
80 to 110 kPa (Ex zone)
80 to 120 kPa (not Ex zone)

Output signal:
4–20 mA

Power supply:
15 to 30 V DC

Housing:
Plastic, antistatic

Protection class:
IP64

Weight:
800 g

Dimensions with sensor:
100 x 193 x 55 mm (W x H x D)

Approvals / Certifications

ATEX labeling:
⟨Ex⟩ II 2G Ex db eb mb [ib] IIC T4 Gb CE0158
-20 °C ≤ Ta ≤ +50 °C

EC Type Examination Certificate:
BVS 04 ATEX E 132 X
(electric explosion protection)

BVS 05 ATEX G 001 X
(measuring function[4])

Functional Safety (SIL):
DIN EN 61508-2: 2011

EMC:
DIN EN 50270: 2015
Radio shielding: Type class I
Interference resistance: Type class II

[1] For ammonia only
[2] Depending on operating conditions
[3] Depending on gas type and sensor
[4] See gas list

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