

# Remote Sensors for Combustible Gases and Vapors

# EX



Simple Calibration and Setup  
Output 4 to 20 mA Linear  
With large LCD display option  
Poison Resistant Sensors  
Ex-proof Housing UL and CENELEC

Worldwide Supplier of Gas Detection Solutions

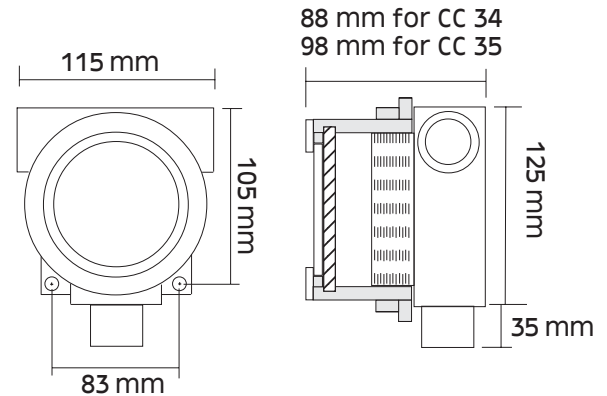


# Stationary Monitoring of Combustible Gases and Vapors

## Detection Principles

The detection principle for the measurement of combustible gases in the LEL range is the catalytic combustion (CC) sensor. The catalytic combustion sensor element is heated. When a combustible gas or vapor comes in contact with the sensor, the flammable components of the gas are burn on the sensor, changing its electrical resistance. The change in resistance is proportional to the gas concentration.

To ensure stable measurement signals, all GfG sensors have integrated electronics circuits for voltage stabilization, signal transmission and temperature compensation.



## CC 34 / CC 35 Series **Technical Data**

### General

#### Gas

Combustible Gases  
Vapors

#### Ranges

0 ... 100 % LEL

#### Gas Supply

Diffusion

#### Response Time

T<sub>90</sub> < 8 seconds (depending on gas)

#### Expected Sensor Life

Approx 5 years

#### Environmental Conditions

Temperature : - 40 to + 60 deg C.

Humidity : 10 to 96% RH

Pressure : 700 to 1300 hPa

#### Signal Connection to Controller

3 shielded wire x 18 AWG; < 1000 ft

### CC 34 / CC 35

#### Output Signal

4 ... 20 mA Linear

#### Relay

1 x relay volt-free contact

#### Power Supply

18 to 24 V dc, 300 mA

#### Housing

Aluminium Explosion proof

#### Housing Approval

UL Class I, Groups B, C, D.

CENELEC EEx d IIC T4 ; EN 50014; EN 50018

NEMA 4 X ; IP 66

#### Physical Measurements

Weight : 1587 gm

Dimensions : 115 x 125 x 95 (mm)

#### LCD Display (Model CC 35 only)

Digital and LED

#### Calibration

Potentiometer (CC 34)

Potentiometer or non-intrusive Magnet (CC 35)



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