

Transmitter CC/IR

State-of-the-art monitoring of
Combustible Gases

EX



Catalytic Combustion or Infra-red Technology Sensor
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

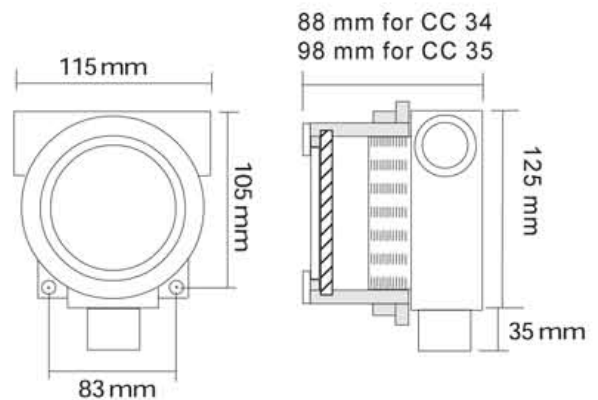
The detection principle for the measurement of combustible gases in the LEL range is the Catalytic Combustion for CC type, or using the Infra-Red (IR) for IR type sensor.

Catalytic Combustion:

The catalytic combustion sensor element is heated. When a combustion 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.

Infra-Red:

Infra-red sensor uses a single source, dual beam, double detector technology. When a combustible gas or vapor comes in contact with the sensor, the flammable components of the gas are diagnosed and absorption peak is compared with the reference peak. The change in peak 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 34/35 Series IR 34/35 Series

Technical Data

General

Gas
Combustible Gases
Vapors

Ranges
0 ... 100 % LEL

Detection Principle
Catalytic Combustion for CC type sensor
Infra-red for IR type sensor
(single source double detector)

Response Time
T 90 < 8 seconds (depending on gas)

Expected Sensor Life
Approx 5 years

Environmental Conditions
Temperature : - 20 to +50 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 34/35, IR 34/35

Output Signal
4 ... 20 mA Linear

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)

Display (Model 35 series only)
Digital LCD and LED

Calibration
Microprocessor based-Auto Zero; Auto Cal



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