GD10PE
IR Extended Point Gas Detector

The GD10PE is designed for critical applications involving large volumes of air with high velocity. Places where you need fast reliable detection of low gas concentrations. GD10PE is in a class of its own.

Applications
Typical critical applications include the monitoring of air intakes for HVAC systems in living quarters or generators, and monitoring for potential gas leakages in areas with high temperatures in gas turbine packages.

The GD10PE is a stable instrument, and with a measuring range of 0 – 20% LEL the sensitivity for the GD10PE is 5 times higher than standard point detectors.

The GD10PE is designed for installation in air ducts and for mounting through walls and bulkheads in places such as pump rooms, but may also be used as a stand alone point detector in places where the properties of the GD10PE is required, such as low ppm level detection.

A weather protection accessory is used for exposed detector installations.
- Duct mounted close to the intake.
- Directly mounted on an air intake.
- General outdoor locations.

Technology
The detection concept is based on the measurement of infrared radiation passing through a volume of gas.

SOLID STATE IR-SOURCE
The silicon-based IR-source used in the GD10PE is insensitive to shock and vibration, and does not need to be replaced during the detector service life.

NO FALSE GAS ALARMS
A false alarm, resulting in a production shut-down is extremely expensive. The dual wavelength, dual path concept, together with the electronic design, guarantees that there are no false gas alarms.

NO FIELD RECALIBRATION
Field recalibration of gas detectors is time consuming (cost) and introduces a risk of mistakes (safety). The GD10PE stays within the specifications for its service lifetime without recalibration.

Safety
The response time is among the fastest on the market, giving real world figures. We measure the response from the actual gas release, taking delays of the weather protection, initial detection, etc. into account. Trip levels down to 4% LEL combined with a response time in the area of 1 second should cover even the most demanding requirements.
Technical Data

GENERAL
Detection method: IR-absorption, dual wavelength, dual path
IR-Source: Solid state IR source, 50 Hz flash
Detection range: 0-20% LEL (0-1% Vol.) methane
Gases detected: Hydrocarbons
Self-test: Continuous
Calibration: Factory set, no field recalibration

PERFORMANCE
Lifetime stability *:
±1.4%LEL
Accuracy *:
±1%LEL (0-10 % LEL reading)
±1.4%LEL (10-20 %LEL reading)
Response time:
Detector: 100% LEL 20% LEL
Reading: test gas: test gas:
4% LEL 0.6 sec. 1 sec.
10% LEL 0.9 sec. 2.5 sec.
18% LEL 1.3 sec. 6 sec.
Start-up time *:
Less than 60 sec.
* Refers to -20°C to +60°C

TEMPERATURE RANGE
Storage: -40°C to +70°C
Operating: -40°C to +65°C
Probe, inside duct: up to +85°C
Humidity (operation): 100% RH

EXPLOSION PROOF HOUSING
Main compartment: Exd IIIC T6
Terminal comp.: EExe
Protection category: IP66/IP67 DIN 40050
Housing material: Stainless steel S31234 (ASTM 316)
Weight: Approx. 6.5 kg

WARRANTY
5 years full warranty on complete instrument
15 years warranty on the IR-sources

APPROVALS
ATEX Directive 94/9/EC, EMC directive 89/336/EEC Article 4
SIL Qualified for SIL2 systems

VERSIONS
Gas Ranges
Methane 0-20% LEL
Other versions are available, please contact your dealer.

ACCESSORIES
Weather protection For additional protection
Sample flow housing For sampling systems and testing
Duct mount kit Through wall installation

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