

THE FINNISH SOLUTION FOR YOUR GAS DETECTION



Target Gases

- Ammonia
- Oxygen
- Carbon Monoxide
- Hydrogen Sulphide
- Hydrogen
- Other Gases, ask **Detector Oy**



Applications

- Food Industry
- Water Treatment Plants
- Chemical Industry
- Engine Rooms
- Laboratories
- Process Industry
- Wood Pellet and Coal Stores
- Pharmaceutical Industry
- Hospitals
- Oil Refineries

Benefits

- Quality assured manufacturing, VTT (Technical Research Centre of Finland) ISO 9001
- Many different gases can be measured with different sensors
- Target gas specific sensors
- Industrial standard output signal
- Stylish and robust enclosure, impact resistant cast-aluminium or stainless steel (option)
- Non-intrusive calibration



DGTeex belongs to Equipment Group II and to Equipment Category 2 G (Gas) and D (Dust). The detector can be installed in Zone 1, 21, 2, and 22.

Areas with  - sign

ISO 9001:2008



Accessories



SS Rain Cover
Ceiling Mounting Kit



SS Protection Enclosure
Pipe Mounting Kit



Test Gas Kit



Analyser Adaptor



Principle and Gases

Sensor Type: electrochemical

	Gas	Measurement Range	Typical sensor replace frequency	Operating Temperature Range*	T90 Response Time
Ammonia:	NH ₃	0.....200 ppm	24kk	-30°C ... +50°C	<90s
Ammonia:	NH ₃	0.....1000 ppm	24kk	-30°C ... +50°C	<120s
Oxygen:	O ₂	0.....25 %	24kk	-30°C ... +55°C	<15s
Carbon Monoxide:	CO	0.....1000 ppm	24kk	-30°C ... +50°C	<15s
Hydrogen Sulphide:	H ₂ S	0.....50 ppm	24kk	-30°C ... +50°C	<15s
Hydrogen:	H ₂	0.....10000 ppm	24kk	-20°C ... +50°C	<15s

Other Target Gases: ask **Detector Oy**

Calibration: The detectors are delivered factory calibrated to the measuring range. After installation it is recommended to calibrate the detector at least once per year. It is also recommended to do functional tests to the detector 4-6 times a year. According to the ATEX directive only **Detector Oy** and personnel authorized by **Detector Oy** can carry out the calibration and maintenance work.

Environmental

* Operating Temperature Range: ATEX limitations in Zone 1 and 2: -40°C ... +80°C
ATEX limitations in Zone 21 and 22: -20°C ... +80°C
Operating Humidity: non-condensing 15...90%RH (momentary 0...99%RH for Oxygen)
Operating Air Pressure: normal air pressure ±10%



Electrical

Output Signal: 4-20mA linear response
Operating Voltage: 24VDC ±20%, regulated
Cable Requirements: four-wire connection, suggested type JAMAK 2x(2+1)x0,5mm² or equal
Power Consumption: 3W (max)

Enclosure

Installation Possibilities: wall, ceiling and pipe assembly
Material: aluminium (standard) or AISI 316L (special enclosure)
Surface Treatment: epoxy paint
Ingress Protection Code: IP65
Dimensions: 110mm x 127mm (diameter x depth)
Weight: 1,66kg
Cable Penetration: body: nickel-plated brass (standard) or AISI 316L (for AISI 316L enclosure)
gasket: CMP SOLO LSF thermoplastic elastomer

Certificate

EC-TYPE EXAMINATION CERTIFICATE: Equipment or Protective Systems Intended for use in Potentially explosives atmospheres Directive 94/9/EC
Reference: VTT 09 ATEX 063X (Notified Body Number 0537)
Equipment: **DGTeex**
Manufactured by: **Detector Oy**
Compliance: Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0 (2004), EN 60079-1 (2004)
Ex markings:  II 2 G Ex d IIC T6
 II 2 D Ex tD A21 T85°C IP65