



Applications

Process Industry Food Industry Pharmaceutical Industry Hospitals Laboratories **Compressor Rooms Water Treatment Plants**

THE FINNISH SOLUTION FOR YOUR GAS DETECTION

Target Gases

- Ammonia
- Oxygen
- Carbon Monoxide
- Chlorine
- Ozone
- Sulphur Dioxide
- Hydrogen Sulphide
- Hydrogen Chloride
- Nitrogen Dioxide
- Nitric Oxide
- Hydrogen

Other Gases, ask **Detector Oy**





DGTec-ex

Benefits

Quality assured manufacturing, Eurofins ISO 9001 and ISO 14001

DGTec2

DGTec2-ex

- Many different gases can be measured with different sensors
- Target gas specific sensors
- Industrial standard output signal
- Easy mounting due to the isolating/mounting plate
- Stylish and robust enclosure, impact resistant cast-aluminium
- Non-intrusive calibration



The Ex version DGTec2-ex can be installed in Zone 2 areas. The Ex version **DGTec-ex** belongs to Equipment Group II and Equipment Category 1. The detector can be installed in Zone 0, 1 and 2 energized through a galvanic isolator.















Accessories











Duct Assembly Kit

SS Protection Enclosure

Pipe Mounting Kit

Test Gas Kit

Galvanic Isolator



Principle and Gases

Sensor Type: electrochemical

Ammonia:
Ammonia:
Oxygen:
Carbon Monoxide:
Chlorine:
Ozone:
Sulphur Dioxide:
Hydrogen Sulphide:
Hydrogen Chloride:
Nitrogen Dioxide:
Hydrogen:
Hydrogen:

Gas	Measurement Range	Typical sensor replace frequency	Operating Temperature Range	T90 Response Time
NΗ ₃	0200 ppm	24 months	-20°C +40°C	<60s
NH_3	01000 ppm	24 months	-20°C +40°C	<90s
O ₂	025 %	18 months	-20°C +55°C	<15s
СО	01000 ppm	24 months	-30°C +50°C	<40s
Cl ₂	05 ppm	24 months	-20°C +50°C	<45s
O ₃	01 ppm	24 months	-20°C +40°C	<60s
SO ₂	020 ppm	24 months	-30°C +50°C	<30s
H ₂ S	050 ppm	24 months	-30°C +50°C	<30s
HCI	020 ppm	24 months	-20°C +50°C	<120s
NO ₂	020 ppm	24 months	-20°C +50°C	<40s
NO	0100 ppm	24 months	-20°C +50°C	<15s
H ₂	01000 ppm	24 months	-20°C +50°C	<50s
H ₂	010000ppm	24 months	-20°C +50°C	<110s

Other Target Gases: please 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 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: 16...36VDC, regulated

Cable Requirements: Safe zone: 2-wire connection, JAMAK 2x(2+1)x0,5 mm2 or equal

Ex zone: cable must be in accordance with 60079-14 standard

Power Consumption: 0,9W (max)

Enclosure

Installation Possibilities: wall, ceiling, duct and pipe assembly

Material: cast aluminium silicate

Surface Treatment: epoxy painted beige/grey tone RAL7032 Ingress Protection Code: IP54 (IP56 with SS Protection Enclosure)

Dimensions: 89mm x 89mm x 69mm

Weight: 450g

Mounting: isolating/mounting plate with 2-4 screws and/or enclosure with 2 screws
Cable Penetration: STR16, for cables with diameters 6 - 12mm, body polyamide, gasket CR

Certificate

EC-TYPE EXAMINATION CERTIFICATE: Equipment or Protective Systems Intended for use in Potentially explosives

atmospheres Directive 2014/34/EU, Annex II

Reference: VTT 09 ATEX 041X (Notified Body Number 0537)

Equipment: DGTec-ex
Manufactured by: Detector Oy

Ex markings: DGTec-ex



II 1 G Ex ia IIC T4 DGTec2-ex:



