

DGTkex Gas Detectors



Applications

Process Industry Chemical Industry Metal Industry **Natural Gas Stations Foundries Solvent Stores**

THE FINNISH SOLUTION FOR YOUR GAS DETECTION

Target Gases

- **Alkanes**
- Acetylene
- **Alcohols**
- Ammonia
- Acetone
- **Ethyl Acetate**
- Carbon Monoxide
- Methyl Ethyl Ketone
- **Aromatic Hydrocarbons**
- Hydrogen
- Other Gases, ask **Detector Oy**



Benefits

- Quality assured manufacturing, Eurofins ISO 9001 and ISO 14001
- Detects a big variety of combustible chemical compounds
- Industrial standard output signal
- Stylish and robust enclosure, impact resistant cast-aluminium
- Non-intrusive calibration



DGTkex 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.















Accessories



SS Rain Cover Ceiling Mounting Kit



SS Protection Cover Pipe Mounting Kit



Test Gas Kit



Splash Protection w Fixed Test Gas Hose



Principle and Gases

Sensor Type: catalytic

Gases and Solvents: alkanes such as methane, propane, butane, pentane, hexane,

heptane, octane, cyclo-hexane and cyclo-heptane

alcohols such as methanol, ethanol and (iso-)propanol

aromatic hydrocarbons such as toluene and xylene

other gases: such as ammonia, acetone, ethyl acetate, carbon

monoxide MEK, hydrogen

other target gases - ask Detector Oy

Measurement Range: 0...100 % LEL

Typical T90 Response Time: < 30 sec (the longer the C-chain is the longer is the response time)

Typical Sensor Replace Frequency: 5 years

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: DGTkex in Zone 1 and 2: -40...+65 °C

DGTkex D in Zone 21 and 22: -20...+65 °C

Operating Humidity: 0...95 % RH, non-condensing Operating Air Pressure: normal air pressure ±10 %

Electrical

Output Signal: 4...20 mA linear response + a signal light indicating the measuring / sensor fault /

gas alarm

Operating Voltage: 24 VDC ±20 %, regulated

Cable Requirements: Safe zone: 3-wire connection, JAMAK 2x(2+1)x0,5 mm² or equal

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

Power Consumption: 3 W (max)

Enclosure

Installation Possibilities: wall, ceiling and pipe assembly

Material: aluminium (standard) or AISI 316L (special enclosure)

Surface Treatment: epoxy paint Ingress Protection Code: IP66

Dimensions: DGTkex 185 mm x 129 mm (height x depth)

Weight: 1,8 kg

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 2014/34/EU

Reference: Eurofins (Notified Body Number 0537)

Equipment: DGTkex
Manufactured by: Detector Oy

Ex markings: (Ex) II 2G Ex db IIC T6 Gb

II 2D Ex tb IIIC T85°C Db



Distributor: