

DGTkex Digital 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
- Alcohols
- Ammonia
- Acetone
- Ethyl Acetate
- Carbon Monoxide
- Methyl Ethyl Ketone
- Aromatic Hydrocarbons
- Hydrogen
- Other Gases, ask Detector Oy



Benefits

- Quality assured manufacturing, VTT (Technical Research Centre of Finland) ISO 9001
- 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.

ISO 9001:2008





Accessories



SS Rain Cover Ceiling Mounting Kit



SS Protection Cover Pipe Mounting Kit



Test Gas Kit



Splash Protection w Fixed Test Gas Hose



Detector Oy reserves the right to make any changes, without notice, to the technical characteristics of its equipment

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: 3-electrode, 4-wire connection, twisted and shielded pairs JAMAK 2x(2+1)x0,5

mm² or equal

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 94/9/EC

Reference: VTT 06 ATEX 062 with Supplements 1-3 (Notified Body Number 0537)

Equipment: DGTkex
Manufactured by: Detector Oy

Compliance: Compliance with the Essential Health and Safety Requirements has been assured

by compliance with: EN 60079-0 (2009), EN 60079-1 (2007), EN 61241-0 (2006),

EN 61241-1 (2004)

Ex markings: (F) II 2 G Ex d IIC T6



