

THE FINNISH SOLUTION FOR YOUR GAS DETECTION



Target Gases

- LNG
- Combustible Gases
- Acetylene
- Alcohols
- Carbon Dioxide



Applications

- Process Industry
- Chemical Industry
- Metal Industry
- Oil Industry
- Natural Gas Stations
- Organic Solvent Stores
- Book Printing Houses
- Breweries

Benefits

- Quality assured manufacturing, VTT (Technical Research Centre of Finland) ISO 9001
- Industrial standard output signal
- The detector can function in demanding environment, resists most weak acids, solvents, bases and corrosive gases
- The measuring can be done in complete oxygen free environment as well
- Stylish and robust enclosure, impact resistant cast-aluminium
- Non-intrusive calibration



DGTiex belongs to Equipment Group II and Equipment Category 2 G (gas). The detector can be installed in Zone 1 and 2 areas.

Areas with  - sign

ISO 9001:2008



Accessories



SS Rain Cover
Ceiling Mounting Kit



SS Protection Enclosure
Pipe Mounting Kit



Test Gas Kit



Analyser adapter



Principle and Gases

Sensor Type:	NDIR infrared-sensor (Non Dispersive InfraRed)	
Gases and Solvents:	alcohols	such as methanol, ethanol and (iso-)propanol
	alkanes	such as methane, propane, butane, pentane, hexane, heptane, octane, cyclo-hexane and cyclo-pentane
	aromatic gases	such as toluene and xylene
	other gases	carbon dioxide, acetone, acetylene other target gases - ask Detector Oy
Measurement Range:	carbon dioxide:	0 ... 5%volCO ₂
	LNG, combustible gases:	0 ... 100%LEL
Resolution:	carbon dioxide:	<0,01%volCO ₂
	LNG, combustible gases:	0,1%LEL
T90 Response Time:	<60sec	
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:	-20°C - +40°C
Operating Humidity:	non-condensing 0...95%RH
Operating Air Pressure::	normal air pressure ±10%


Electrical

Output Signal:	4-20mA linear response + a signal light indicating the measuring/sensor fault/gas alarm
Operating Voltage:	24VDC ±20%, regulated
Cable Requirements:	four-wire connection, suggested type JAMAK 2x(2+1)x0,5mm ² or equal
Power Consumption:	3.0W (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
Penetration:	body: nickel plated brass 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 07 ATEX 28 (Notified Body Number 0537)
Equipment:	DGTiex
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 marking:	 II 2 G Ex d IIC T5