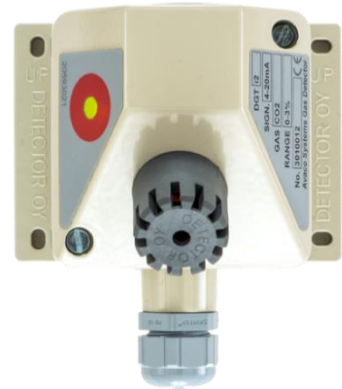


THE FINNISH SOLUTION FOR YOUR GAS DETECTION



**Target Gases**

- Carbon Dioxide
- Alcohols
- Combustible Gases



**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
- Easy mounting due to the isolating/mounting plate
- Stylish and robust enclosure, impact resistant cast-aluminium
- Non-intrusive calibration
- DGTi2r and **DGTi2r-ex** types functions as independent gas detection units, equipped with a relay, buzzer and acknowledgement button

**Applications**

- Process Industry
- Engine Rooms
- Organic Solvent Stores
- Painting Shops
- Breweries
- Green Houses
- Schools
- Hotels
- Libraries



**DGTi2-ex** belongs to Equipment Group II and Equipment Category 3. The detector can be installed in Zone 2 areas.

ISO 9001:2008



**Accessories**



SS Protection Enclosure



Pipe Mounting Kit



Test Gas Kit



## 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
	other gases	such as carbon dioxide, other target gases - ask <b>Detector Oy</b>
Measurement Range:	carbon dioxide:	0 ... 5%volCO <sub>2</sub>
	combustible gases:	0 ... 100%LEL
Resolution:	carbon dioxide:	<0,01%volCO <sub>2</sub>
	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.	

## Environmental

Operating Temperature Range:	-20°C - +50°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 + a relay output 24VDC/250mA in the DGTi2r and <b>DGTi2r-ex</b> -models
Operating Voltage:	24VDC ±20%, regulated
Cable Requirements:	four-wire connection, suggested type JAMAK 2x(2+1)x0,5mm <sup>2</sup> or equal
Power Consumption:	3.0W (max)

## Enclosure

Installation Possibilities:	wall, ceiling and pipe assembly
Material:	cast aluminium silicate
Surface Treatment:	epoxy painted beige/grey tone RAL7032
Ingress Protection Code:	IP54
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

## Approvals

Ex Marking:  II 3 G Ex nA IIC T4 Gc X