

THE FINNISH SOLUTION FOR YOUR GAS DETECTION



Target Gases

- Ammonia
- Alcohols
- Car Exhaust
- CFC
- HCFC
- HFC
- Hydrogen
- Combustible Gases
- Other Gases, ask **Detector Oy**



Applications

- Indoor Car Parks
- Freezer Compartments
- Cold Stores
- Factory Trawlers
- Battery Recharge Points
- Forklift Garages
- Production Areas
- Painting Shops
- Ice Skating Rinks
- Kitchens

Benefits

- Quality assured manufacturing, VTT (Technical Research Centre of Finland) ISO 9001
- Industrial standard output signal
- Easy mounting due to the isolating/mounting plate
- Stylish and robust enclosure, impact resistant cast-aluminium
- Non-intrusive calibration
- Easy to replace an outworn sensor by using an interchangeable package
- DGTt2r and **DGTt2r-ex** types functions as independent gas detection units, equipped with a relay, buzzer and acknowledgement button



DGTt2-ex belongs to Equipment Group II and Equipment Category 3. The detector can be installed in Zone 2 areas.

ISO 9001:2008



Accessories



Duct Assembly Kit



SS Protection Enclosure



Pipe Mounting Kit



Test Gas Kit



'Stand alone'-type



Principle and gases

Sensor Type: semi-conductor

Alcohols**:
Ammonia:
Car Exhaust:
Refrigerants HCFC***:
Refrigerants HFC***:
Combustible Gases and Solvents****:
Hydrogen:

Gas	Measurement Range	Resolution from Reading	Sensor Repl. Frequency	Operating Temp. Range*	T90 Response Time
R-OH	50.....5000ppm	±20%	3 - 5v	-20°C ... +40°C	<1 s
NH ₃	10.....500ppm	±20%	3 - 5v	-20°C ... +40°C	<1 s
HC/CO	10.....300ppm	±20%	3 - 5v	-20°C ... +40°C	<1 s
R22 ...	10.....1000ppm	±20%	3 - 5v	-20°C ... +40°C	<1 s
R134a ..	10.....1000ppm	±20%	3 - 5v	-20°C ... +40°C	<1 s
Methane	50.....5000ppm	±20%	3 - 5v	-20°C ... +40°C	<1 s
H ₂	50.....5000ppm	±20%	3 - 5v	-20°C ... +40°C	<1 s

Other Target Gases: ask **Detector Oy**

* -30°C with reduced sensitivity

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

*** HCFC (Hydro-ChloroFuoroCarbons) such as R123, R21, R22, R401A, R402A, R403B...(permission to use ends at year 2015)

*** HFC (Hydro-FluoroCarbons) such as R125, R134a, R245fa, R404A, R407C, R410A, R507...

**** combustible gases and solvents such as methane, propane, butane, pentane, hexane, heptane, kerosene, petrol...

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 Humidity: non-condensing 15...90%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 24V/1A in the DGTt2r and **DGTt2r-ex**-models
Operating Voltage: 24VDC ±20%, regulated
Cable Requirements: four-wire connection, suggested type JAMAK 2x(2+1)x0,5mm² or equal
Power Consumption: 4W (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
Dimensions: 89mm x 89mm x 69mm
Weight: 620g
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 3G Ex nA IIC T4 Gc X