



GROVELEY DETECTION

Groveley Detection Limited

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Flameproof Ultrasonic Gas Leak Detector **GDU-01 Ex-d**

The Groveley GDU01 Exd is an Omni-Directional Flameproof detector which will respond to any pressurized gas leaks.

The GDU01 Exd is not a volumetric measuring detector, but detects the ultrasonic noise generated by escaping pressurized gas. Ultrasonic noise is generated when leakage occurs at sonic velocity, which requires a driving pressure of at least 2 barA. The detected sound is proportional to the leak rate (mass flow rate). In basic terms, the greater the leak rate (pressure/velocity/volume), the greater the ultrasound emitted.

The GDU01 Exd is factory calibrated and has no moving or replaceable parts, it responds instantly to leaks operating over a wide dB range.

The GDU01 Exd is a 3 wire 4-20mA device, and alarm levels can be selected and adjusted at the control system.

Features

- Instant 'speed of sound' gas leakage detection
- ATEX Approved, Flameproof
- No set up required
- Supplied with mounting plate
- No replaceable parts
- Calibrated for life, no field service required
- Enhanced area coverage

Support Services

- Site sound level mapping to determine exact sensor coverage
- Theoretical mapping to site drawings
- On site commissioning



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*No-one ever regretted
buying quality...*

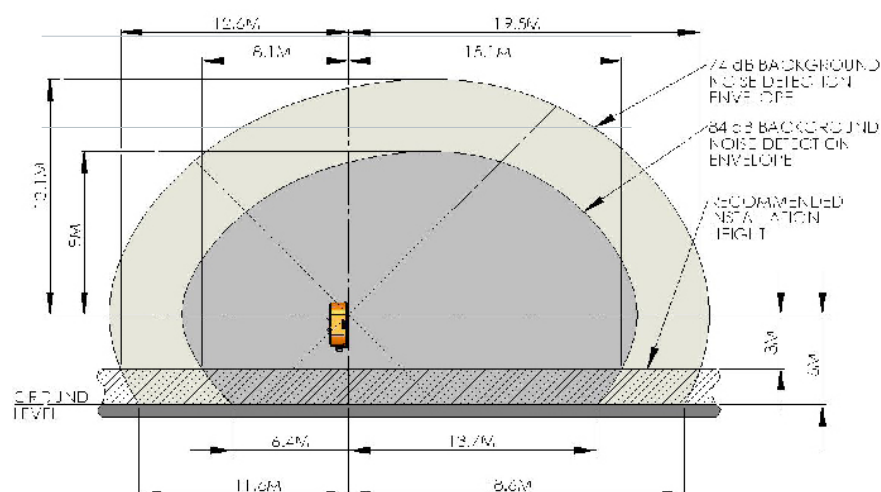
Flameproof Ultrasonic Gas Leak Detector GDU-01 Ex-d

TECHNICAL DETAILS

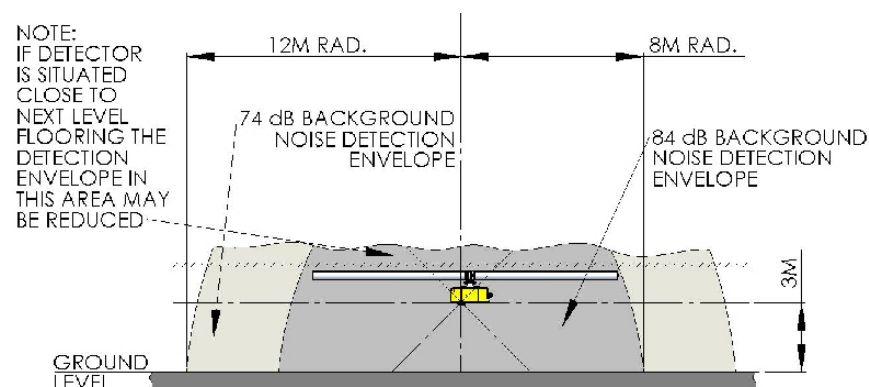
■ Ultrasonic Range	30kHz - 80kHz	■ Cable Entry	1 x M20 (M25 option)
■ Power	24V dc (<0.5W)	■ Certification	Ex II 1GD E.Ex d IIC T4
■ Output	4-20 mA (3 wire) Corresponds to 40-100dB	■ Approval Number	DNV-2005-OSL-ATEX-0327
■ Standard Op. Temp.	-30°C to +75°C	■ Enclosure Material	Semi-crystalline modified PPS
■ Optional Op. Temp.	-40°C to +75°C	■ Junction Box	Coated cast aluminium
■ Relative Humidity	100% non-condensing	■ Mounting Bracket	AISI 316 stainless steel
■ Ingress Protection	IP66	■ Galvanic Isolator	$V_i \leq 30V$ $I_i \leq 100mA$ $P_i \leq 0.9W$
■ Weight	11.2 kgs	■ Dimensions	571 x 200 x 238mm

Area of Coverage

The degree of coverage is determined by the background sound levels and physical installation.



Horizontal pole mount (onshore),
detector 3m from ground level
(free space)



Vertical pole mount (offshore),
detector 3m from ground level
(free space)

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