

R134a

R407c

R22

R410a

R404a

R600a

# Multi-Gas LS-4

## Quick-check reference leak for multi-gas leak detectors

### KEY FEATURES

- Check the sensitivity of your detector with multiple refrigerants or other gases.
- Use the chart to look up the exact flow rate for the specific gas you are using.
- Fits to standard refrigerant / gas supply. (1/4" SAE Flare Nut)
- Fulfil your F-Gas obligations.
- No More Uncertainty. *Gain confidence that your multi-gas leak detector is accurate when used with the gases that you need to detect.*

- Advanced Micro-Flow Technology
- Attach quickly to standard bulk supply
- 1/4" SAE brass housing for standard refrigeration fittings
- 5 grams per year flow rate for common refrigerants.
- Fulfil the requirements of current FGas legislation (EN14624, SAE J1627)
- Patented manufacturing process to deliver technology to engineers at low cost
- RAC Cooling Industry Award winning technology (2009)
- Designed and Manufactured in the UK

**Add peace of mind on-site, eliminate your doubts and prove your equipment complies with FGas rules.**

The Multi-Gas LS-4 provides a useful reference against which an engineer can check the sensitivity of their leak detector at regular intervals during a leak detection job. This can help to quickly identify battery or sensor problems which can affect the performance of the detector.

When fitted to the outlet of a bulk refrigerant supply the Multi-Gas LS-4 will produce a flow of refrigerant at 5g/Yr. If a leak detector responds to the Multi-Gas LS-4 output then it can be considered sensitive enough for use under current F-Gas regulations (EN-14624).

The LS-4 is made from a stainless steel sinter leak element in a stainless steel body and a brass 1/4" SAE flare nut for easy use with standard refrigeration equipment.

The basic element is also available in expanded formats with gauges, reservoirs and certification.

### APPLICATION

- **SUITABLE FOR:** Refrigeration Engineers, Contractors, Quality Control Operatives, Service Technicians
- Offer the 'sniffer' probe up to the leak output to check the calibration and proper function of a refrigerant leak detector using a reference flow rate of 5g/Yr for a specific gas.

# CALIBRATED REFERENCE LEAKS

## understanding f-gas leak detection

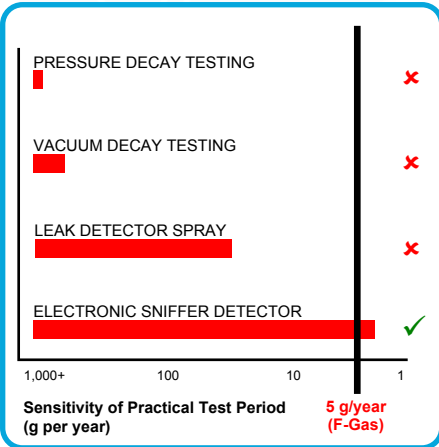
### WHAT DOES F-GAS SAY ABOUT LEAK DETECTION?

Current F-Gas legislation demands a sensitivity of 5g/year from all electronic refrigerant detectors. The legislation also demands that the detectors are tested every 12 months against a calibrated reference leak standard.

### HOW DOES THE LEGISLATION AFFECT ME?

Site engineers are expected to perform leak detection work accurately and in compliance with the legislation or face penalties and fines. Traditional leak detection methods, (such as the use of bubble spray, vacuum or pressure testing of systems) are not as accurate as electronic leak detectors and the timescale of testing using traditional methods is often prohibitive.

### ACCURACY OF REFRIGERANT LEAK DETECTION METHODS



### WHAT DOES THE INDUSTRY SAY ABOUT REFERENCE LEAKS?



*"Use a reference leak to check your detector is working correctly – just opening a cylinder or a connection on the system to check your detector is not accurate enough. A simple calibrated reference leak can be fitted onto the cylinder valve. When the valve is opened the flow through the device is approximately 5 g / year. If your leak detector does not pick this up it needs servicing."*

**Environmental Protection Agency**  
[RealZero Guide to Good Leak Detection + Training Module 2.3](#)



*"Electronic detectors need to be checked every 12 months to ensure their proper functioning. The sensitivity of portable gas detection devices shall be at least five grams per year."*

**DEFRA**  
[F-Gas Support Practical Guidance Document \(RAC 6\)](#)



*HT Products Ltd. won a prestigious DTI Smart Award Grant for the patented technology used to manufacture it's calibrated reference leak products.*



*'A neat product, small but fundamental to the success of the industry in tackling F-Gas.'*  
**Cooling Industry Award Judges**

### DETECTOR CALIBRATION SERVICE

HT Products Ltd. also offers an express leak detector calibration service with certification to EN14624 (the european standard for portable and fixed refrigerant detector calibration). Please enquire for further information.