



# LS-400

## Premium Variable Leak

Video Demonstration   
([www.htproducts.co.uk/demo](http://www.htproducts.co.uk/demo))

### KEY FEATURES

- **High Output Variable Reference Leak**
- **Cooling Industry Award Winning Technology (2009)**
- **Graph and Equation provided for Accurate Flow Selection.**
- **Gauge for Accurate Pressure Readout.**
- **Multiple Point Calibration with Traceability to National Standards**

- Certification available for traceability and record keeping (ISO9001, ISO17025 etc.).
- 1/4" SAE connection to recharge from a standard bulk supply.
- Fulfil the requirements of current FGas legislation (EN14624, SAE J1627).
- Individual calibration and NIST traceable flow certification.
- RAC Cooling Industry Award winning technology (2009).
- Designed and Manufactured in the UK using our patented production techniques.

### Fully portable reference leak with large refillable reservoir for use at high flow rates.

The LS-400 is a comprehensive adjustable leak unit suitable for use in calibration laboratories and standards rooms where a wide range of accurate flow rates are required. The unit consists of a rechargeable gas reservoir; the output of which is controlled by a variable pressure regulator; a pressure gauge is included to monitor the gas output to the reference leak and an optional shut off valve can also be fitted to stop gas flow when the leak is not being used. The leak element has a 1/8" BSP thread which can be used to attach a hood or fitting (please enquire) to accommodate the detector's probe.

The unit includes a rechargeable, stainless steel reservoir of 400cc capacity for a selected gas and high integrity regulator for fine adjustments to pressure and accurate control, over the output flow rate.

Along with a Certificate of Calibration across a full range of flow rates (typically 5-20 grams per year for refrigerant gases) the LS-400 is supplied with a Graph specific to the gas and calibration. The graph provides details of the relationship between the gauge pressure and the output flow rate for a specified gas.

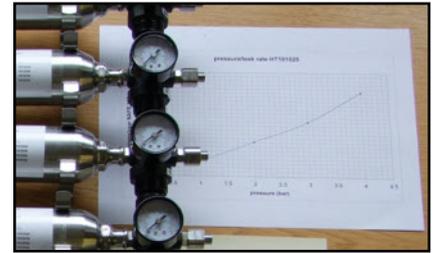
### APPLICATION

- **SUITABLE FOR:**  
Standards Room  
Production Line Tests  
Research & Development  
Training Presentations  
In-House Detector Calibrations
- Conduct experiments using variable flows and .
- **KITS AVAILABLE :**  
*Carry cases, FGas Labels, Multiple gas calibrations, options for fittings and shut-off valves, charging equipment and other accessories.*

## LS-400: PREMIUM VARIABLE LEAK - TECHNICAL NOTES

The LS-400 implements a variable regulator which reduces the reservoir pressure of the refrigerant to between 0 and 6 bar before it is supplied to the leak element. This allows for the pressure to be manually adjusted and within a few minutes the leak output will stabilise at the new flow rate. The 40mm gauge allows for pressure adjustments and the adjustable regulator allows for adjustments during experiments or test processes. A small amount of gas is vented from the regulator when the output pressure is reduced, during tests low flow rates should be tested first where possible.

Extensive research and investigation into low flow metrology over the last 30 years has given HT Products a wealth of test data and calibration records to draw from. Combined with years of practical leak detection experience in the vacuum industry the products deliver the benefits of scientific precision and provide traceable certification as required in modern laboratory practice.



### SPECIFICATIONS

Max Fill Pressure:	16 Bar
Recharge Fitting:	1/4" SAE (with Schaefer Valve)
Weight:	1000 grams
Dimensions:	350 x 110 x 110 (L x W x H)
Available Gases:	R134a, R404a, R600a, R407c, R290, R22, B7
Available Flow Rates:	Variable : Choose Minimum Value (5 - 100 g/Yr)
Recalibration Period:	12 Months

### PRODUCT OPTIONS

HT9-LS400-XXX-YYY	LS-400 (XXX = Gas YYY = Minimum Flow Rate (Grams /Year))
HT9-LS400V-XXX-YYY	LS-400 with Shut-Off Valve

### ACCESSORIES / SPARES

HT9-FILL-SAE-1000	1/4" SAE Fill Line 1m
HT9-LS4RC-XXX-YYY	Extra Leak Element for LS-R with Certification Traceable to National Standards
HT9-LS400-CAP	LS-400 Replacement End Cap, Brass, 1/4" SAE Cap.

### KITS / A1BUNDLES



**Head Office**  
Unit 3B, Hackhurst Industrial Estate, Lower Dicker, East Sussex, BN27 4BW, United Kingdom

tel : +44 (0)1323 442 035  
fax : +44 (0)1323 840 003

info@htproducts.co.uk  
www.htproducts.co.uk

Due to our continuing program of product improvements, all details are subject to change without notice.  
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