



VSLT Sniffer-Detector Calibrators

The VSLT Model CALIBRATORS FOR SNIFFER-TYPE HELIUM LEAK DETECTORS

The VSLT Adjustable (Variable) Leak-Rate Calibrators have been developed specifically to calibrate sniffer leak detectors and are designed with Teflon-permeation leak rate control elements to avoid the clogging problems common to Calibrators that have capillary leak elements. This is particularly important for small leak rates and industrial use.

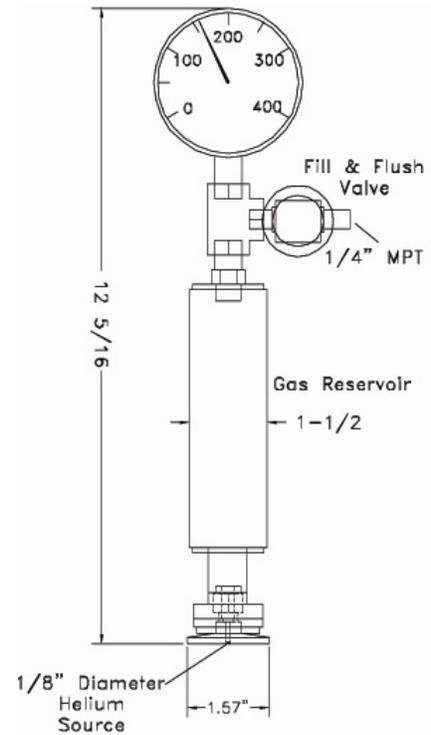
The VSLT Accu-Flow™ Calibrated Leaks are available for adjustable leak rates in limited ranges within the usual values for "Sniffing" of 10⁻⁴ to 10⁻⁶ atm-cc/sec, as shown overleaf. VTI calibrates each leak at three pressures/leak rates and provides a curve of leak rate vs. pressure. Using the curve, the fill/exhaust valve and the integral pressure gauge (to preserve NIST-traceability), the user changes the Helium pressure in the VSLT reservoir to obtain the specific leak-rate desired.



Choosing the VSLT Calibrator

- WILL NOT CLOG OR BREAK – has permeation-type leak element of Teflon®.
ADJUSTABLE LEAK RATES – by changing the pressure.
CAN BE SET TO AN EXACT LEAK RATE – without the usual manufacturing variance.
REFILLABLE RESERVOIR – from the user’s gas supply.
WIDE LEAK-RATE CHOICE – the full range that is used for sniffing.
NO FALSE READINGS - no large dead spaces.
EASY PROBE POSITIONING – for repeatable results.
MEETS ISO REQUIREMENTS - NIST-traceable, A2LA-accredited Calibration Certification.

VTI's Calibration Laboratory is Accredited by the American Association for Laboratory Accreditation. Calibration Laboratory Certificate No. 1707.01



VSLT Calibrator

As the major manufacturer of Calibrated Leaks for all gases, all leak rates, and all makes of leak detectors, VTI supplies them worldwide to users, distributors, and other manufacturers. These Accu-Flow™ Leak Standards are recognized internationally for their superior quality construction and calibration.

The "point-source" design for the gas flow assures that excessive Helium gas will not accumulate in "dead spaces". Any trapped gas causes erroneous high readings during detector calibration, which can later result in "passing" bad product.



ORDERING INFORMATION

The VSLT Calibrators can be ordered for various adjustable leak-rate ranges commonly used for sniffer-type leak detection. When ordering or requesting a quotation, please provide the Part Number and also specify the Approximate Leak-Rate Range requested including your preferred leak-rate Units (for example, "approximately 3 to 8 x 10^5 atm-cc/sec"). The Range specification is "approximate" because the minimum and the maximum value of the range will vary slightly for individual leaks due to the Manufacturing Variance. The leak-rate range available for each VSLT Leak is limited to somewhat less than a factor of 10, so the leak-rate range should be specified as approximately 1 to 6, 3 to 8, or 4 to 9 x 10^x atm-cc/sec.

A leak-rate range extending between two decades can also be requested, such as from 6 x 10^6 up to 3 x 10^5 atm-cc/sec. (This is also an appropriate way to order a VSLT if you want to be able to obtain an exact leak rate of 1.0 x 10^5 atm-cc/sec.) An alternative specification is to identify the "Central Leak Rate" for a VSLT Leak, such as 5 x 10^5 atm-cc/sec, and VTI will build the Leak to provide that leak-rate at a mid range pressure on the 400-psig gauge. Using additional calibrations at a lower and higher pressure, the total leak-rate range of the Leak then extends above and below this central value. For each VSLT Leak, it is noted that exact leak rates like 4.5 x 10^5 can be obtained within its available range.

Various leak-rate units can be specified and the calibration data will then be reported in the units requested. Please contact us for assistance if you have any questions or want a customized VSLT Leak.

"Special Orders" are everyday products for us ! Just let us know what you need !

PART NUMBER BUILD-UP

The VSLT Part Numbers are constructed as follows:

VSLT-X-3C-HE

where X = the code for the Leak Rate "Decade" within which an adjustable range of leak-rates is being requested, where 3C designates three calibration points, and HE designates that it is a Helium gas leak.

The X codes are listed below. As noted above, the actual range of leak rates requested within that decade/range should also be specified.

NOTE:

Without requiring specification, the VSLT Model Calibrator always has a fill/exhaust valve to allow the users to exhaust gas from its 110 cc reservoir to lower the leak rate, or to refill the reservoir to a higher pressure (using their clean gas supply) to increase the leak rate. The 400-psig pressure gauge on the VSLT is used in VTI's NIST-traceable Leak-rate Calibrations and preserves the NIST-traceability of the calibration for the user as the pressure and leak rate are varied.

LEAK-RATE RANGES AND PART NUMBERS FOR VSLT MODEL LEAKS

Table with 3 columns: Examples of requested Leak-Rate Ranges, Leak-Rate Code (X), and Correct Part Number. Rows include ranges like 1 to 6x10^-4 atm-cc/sec and corresponding part numbers like VSLT-4-3C-HE.