

Calibration Leaks

The easy way to calibrate hydrogen leak detectors.

Leak testing is a matter of quantifying leaks. To be able to correctly accept/reject test objects you need to measure to a set standard. You also need to calibrate your leak detector against a reliable reference leak.

INFICON calibration leaks for hydrogen leak detectors cover a wide range of leak rates to suit your specific application.

For maximum accuracy, our calibration leaks are best used with a specially developed diffuser nozzle. This nozzle allows the gas to spread evenly after leaving the leak without variations caused by air convection.

The distinctive diffuser holder also eliminates the risk of varying or irregular readings depending on the way the probe approaches the leak.

The calibration leaks are designed to suit INFICON Hydrogen Leak Detector Sensistor Sentrac, but can easily be used to calibrate most gas detectors.

The INFICON family of calibration leaks for hydrogen leak detectors include bigger leaks and smaller leaks.

Leak Type A is intended for accumulation testing only. Our leaks are traceable to NIST, NMIIJ, NPL, PTB, etc., through the "Mutual Recognition Arrangement of the BIPM".



TYPES AND CONNECTIONS

Sintered stainless steel leaks (types A to C)

- Inlet: Compression connector for 6 x 4 mm and 1/4" x 5/32" tubing. ISO G1/8" internal behind connector
- Outlet: ISO G1/8" external
- Purge valve: Plug to be opened with 2.5 mm Allen key (hex drive). M5 internal behind plug. Fits also UNF10-32

Quartz capillary leaks

- nozzle to be ordered separately

ADVANTAGES AT A GLANCE

- ✓ Suitable for industrial applications
- ✓ Refillable and simple to use
- ✓ Special nozzles available for all INFICON hydrogen leak detector hand probes (not Leak A)
- ✓ Traceable to NIST, NMIIJ, NPL, PTB
- ✓ Certificate included
- ✓ Available in different flows
- ✓ Suit different concentrations of hydrogen tracer gas

REFERENCE LEAKS

CONTENT AT DELIVERY

P/N 590-420



- Calibration leak assembly comprising leak and purge valve assembly
- Red G1/8" gasket
- Collet nut for connection to 1/4" tubing (marked red)
- Calibration certificate
- Delivery and storage case
- Manual

P/N 590-421 and 590-422



- Calibration leak assembly comprising leak and purge valve assembly
- Diffusor holder (for hand probe calibration)
- Diffusor filter (2 pcs)
- Probe guide rings, 8-11 mm diameter (4 pcs)
- Red G1/8" gasket
- Collet nut for connection to 1/4" tubing (marked red)
- 2.5 mm Allen key (hex drive) for purge valve and assembly of diffusor
- Calibration certificate
- Delivery and storage case
- Manual

P/N 12344



P/N 599-116



- Reference leak assembly
- Diffusor holder (for hand probe calibration)
- Diffusor filter
- Probe guide rings, 8-11 mm diameter (4 pcs)
- 2.5 mm Allen key (hex drive) for assembly of diffusor
- Calibration certificate

SPECIFICATIONS AND ORDERING INFORMATIONS

Target flow for standard leaks:

	Part no.	Nominal flow** atm ml/s	Accuracy	Equivalent to g/yr (R134a)	For equivalent flow in mbar.l/s or atm cc/s (air)
Type A	590-420	5x10 ⁻² (5% H ₂ /95% N ₂)	±2 %		multiply with 0.96
Type B	590-421	5x10 ⁻³ (5% H ₂ /95% N ₂)	±2 %		multiply with 0.96
Type C	590-422	5x10 ⁻⁴ (5% H ₂ /95% N ₂)	±2 %		multiply with 0.96
	12344	5.2x10 ⁻⁵ (5% H ₂ /95% N ₂)	±10 %	10	multiply with 0.96
Diffusor to 12344	599-116				

A-C leaks are certified at 1 bar pressure.

* Type A leaks are delivered without diffuser nozzle and are recommended for accumulation testing only.
They can not be used for calibrating hand probes with 5% H₂/ 95% N₂.

** A-C leaks are delivered with leak size within ±10% of nominal flow.