

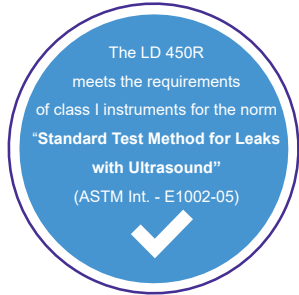


Leak detector LD 450R

If gases escape through leaks in pressurized pipe systems (e.g. non-tight screwed connections, corruptions and so on), ultra-sonic noises are generated. By means of LD 450R, even the smallest leakages which cannot be heard by the human ear and which are not visible due to their size can be detected even

from distances of several meters. LD 450R transforms the inaudible signals into a frequency which can be identified by human beings. By means of the comfortable sound-proof headset, these noises can be detected even in extremely noisy environments. The LD 450R leak detector is the advancement of our proven technology since 2006 and

it impresses with its significantly refined sensor technology and its improved support in the tracing of leaks. By means of the integrated laser pointer, which serves for target heading, the leak can be localized more accurately.



Applications

Leak detection on:

- All compressed gas leaks (Refrigerant gas,
- Nitrogen, CO₂, H₂, Ammonia,...)
- Vacuum systems
- Door seals and other special applications



LD 450R with straightening tube and straightening tip for intense search.



↑
Acoustic trumpet



Sound-proof headset:

Enables leak detection in an extremely loud environment

Minimal detectable leak size (kg / month) *

	Nitrogen (N ₂)	CO ₂	R134A	R410A	R507
Quick search (5m distance)	1.20	1.19	18.28	13.0	17.7
Normal search (2m distance)	0.048	0.047	0.731	0.52	0.71
Intensive search	0.0005	0.0005	0.00731	0.005	0.007

* The detectable leak size is calculated based on field experience with the LD 450R. Every leak is different and the true leak rate is often unknown.

High system pressures (minimum Δp 0,3bar) cause louder leaks which can be detected more easily. This makes the LD 450R a strong tool for detecting refrigerant leaks while the system is in operation, during a nitrogen pressure test and on vacuumed systems.

Through the use of a specially designed acoustic trumpet, a better bundling of the sound waves is achieved. This trumpet acts like a directional microphone, which bundles ultrasonic waves and thus improves acoustic behavior. Due to the special design of the acoustic

trumpet, the use of the laser pointer is not hindered. Leak test: A handy ultrasonic transmitter is available for detecting leaks in pressureless systems. The transmitter is positioned so that the sound can enter the pipe system. The ultrasonic signal penetrates the small-

est openings, which can then be detected with the LD 450R.

Special features

- Special calibration for small refrigerant leaks
- Scan up to 50m piping per minute
- No start up time or calibration needed
- Detect leaks through piping insulation
- Robustness and low weight ensure fatigue-free use in industrial environments
- Adjustable sensitivity



LD 450R is available either as standalone device or in a complete set. The set includes a robust impact-proof transportation case which contains all necessary components and accessories.

DESCRIPTION	ORDER NO.	TECHNICAL DATA LD 450R	
Set LD 450R consisting of:	0450 0001	Operating frequency:	40 kHz ± 2 kHz
LD 450R leak detector for Refrigerant gas and special applications	0560 0204R	Connections:	3.5 mm stereo jack for headset. Power supply socket for connecting an external charger
Transport case	0554 0106	Laser:	Wavelength: 630...660 nm Output power: < 1 mW (laser class 2)
Sound-proof headset	0554 0104	Operating time:	>10 h (Continuous operation)
Focus tube with focus tip	0530 0104	Charging time:	approx. 1.5 h
AC adapter plug	0554 0009	Operating temperature:	-20 °C to 50 °C
Acoustic trumpet	0530 0109	Storage temperature:	-20 °C to +60 °C
Holster with shoulder strap for LD 450R	02000 1795		
Accessories not included in the set:			
Ultrasonic transmitter	0554 0103		