Leak detector LD 400

If gases escape through leaks in piping systems (e.g. untight screwed connections, corrosions and so on) ultrasonic noises are generated. By means of LD 400 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 400 transforms the inaudible signals into a frequency which can be identified. By means of the comfortable sound-proof headset these noises can be realized even in extremely noisy environments.
The LD 400 leak detector is the advancement of the proven LD 300 and it convinces by its obviously 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.

Das LD 400 entspricht den Anforderungen der Klasse I Instrumente der Norm „**Standard Test Method for leaks using Ultrasonic**“ (ASTM Int. - E1002-05)

Applications

Leak detection in:

- Compressed air lines, gas, vapor and vacuum plants
- Door seals

LD 400 with focus tube and focus tip for precise locating.

Acoustic trumpet

Sound-proof headset enables:
leak detection in extremely noisy environments

Costs per year						
Pressure	Leak size - Diameter (mm)					
	0,5 mm	1,0 mm	1,5 mm	2,0 mm	2,5 mm	3,0 mm
3 bar	90 €	361 €	812 €	1.444 €	2.256 €	3.248 €
4 bar	113 €	451 €	1.015 €	1.805 €	2.820 €	4.061 €
5 bar	135 €	541 €	1.218 €	2.166 €	3.384 €	4.873 €
6 bar	158 €	632 €	1.421 €	2.527 €	3.948 €	5.685 €
7 bar	180 €	722 €	1.624 €	2.888 €	4.512 €	6.497 €
8 bar	203 €	812 €	1.827 €	3.248 €	5.076 €	7.309 €

Table: Leakage costs within one year in case of operation 24 h/365 days, calculated with compressed air costs of 1.9 ct/Nm³.

Through the use of a specially designed trumpet, a better bundling of the sound waves is achieved. This trumpet acts like a directional microphone, suppressing unwanted noise and facilitating the pinpoint location of leaks even in hard-to-reach areas. Due to the special design of the bell, the use of the laser pointer is not hindered.
A handy ultrasonic transmitter is available for detecting leaks in pressureless systems. The transmitter is positioned so that the sound can enter the piping system. The ultrasonic signal penetrates the smallest openings, which can then be detected with the LD 400.

Even very small leaks at hatches, doors and windows can be detected.

Special features

- Robustness and low weight ensure fatigue-free use in industrial environments
- Improved detection of leaks with optional acoustic trumpet
- Modern lithium-ion battery with high capacity, external recharger
- Minimum operating time 10 h
- Easy operation via keypad

LD 400 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-NR.
Set LD 400 consisting of:	0601 0104
LD 400 Leak detector	0560 0104
Transport case	0554 0106
Sound-proof headset	0554 0104
Focus tube with focus tip	0530 0104
Battery charger	0554 0009
Acoustic trumpet	0530 0109
Accessory, not included in the set: Ultrasonic tone generator	0554 0103

TECHNICAL DATA LD 400	
Working frequency:	40 kHz ± 2 kHz
Connections:	3.5 mm stereo jack for headset. Power supply socket for connecting a external recharger
Laser:	wave length: 645...660 nm output power: < 1 nW (laser class 2)
Operating duration:	10 hours
Charging time:	approx. 1.5 hours
Operating temp.:	0 to 40 °C
Storage temp.:	-10 °C to 50 °C