

# Leak detector LD 400

Leakage

Highly sensitive leak detector

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.



Sound-proof headset enables leak detection in extremely noisy environments

### Annual energy costs caused by leakages

Acoustic trumpet

Hole	Loss in air		Energy loss		Costs p.a.	
Ø	at 6 bar	at 12 bar	at 6 bar	at 12 bar	at 6 bar	at 12 bar
(mm)	(l/s)	(l/s)	kW/h	kW/h	€	€
1	1.2	1.8	0.3	1.0	144	480
3	11.1	20.8	3.1	12.7	1.488	6.096
5	30.9	58.5	8.3	33.7	3.984	16.176
10	123.8	235.2	33.0	132.0	15.840	63.360
Source: www.druckluft.effizient.de				(*) kW x 0.06 € x 8.000 Bh/a		

#### Applications

Leak detection in:

- Compressed air lines, gas, vapour and vacuum plants
- Refrigerating plants
- Door seals



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

Leakage



## LD 400 leak detector

Due to a particularly designed acoustic trumpet a better focusing of the acoustic waves is achieved. This acoustic trumpet acts like a directional microphone while interfering ambient noises are cushioned and the accurate localization of the leakages is eased even in areas which are difficult to access. Due to the special design of the acoustic trumpet the use of the laser pointer is not obstructed.

### **Special features**

- Robustness and the little weight ensure • a fatigue-proof 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

A handy ultrasonic transmitter is available for detecting leaks in depressurized systems. The transmitter is positioned in a way that the sound can access the piping system. The ultrasonic signal passes through smallest

holes which then can be detected by means of LD 400. Even very small leaks at hatches, doors and windows can be realized.





Description	Order No.				
Set LD 400	0601 0104				
consisting of:					
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				

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.

### **Technical data LD 400**

Working frequency:	40 kHz ± 2 kHz		
Connections:	3.5 mm stereo jack for headset Power supply socket for connecting a exter- nal recharger		
Laser:	wave length: 645660 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		