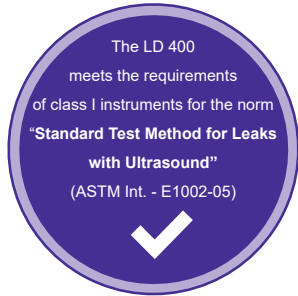


# Leak detector LD 400

If gases escape through leaks in pipe systems (e.g. non-tight 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 sev-

eral 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 detected even in extremely noisy environments. The LD 400 leak detector is the advancement of the proven LD 300, 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 localised more accurately.



### Applications

Leak detection on:

- compressed air, gas, vapour and vacuum systems
- Door seals



**LD 400** with straightening tube and straightening tip for accurate detection.



↑  
Acoustic trumpet

### Sound-proof headset:

Enables leak detection in an extremely loud environment

### Costs per year

| Pressure | Size of leakage - 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/Nm<sup>3</sup>.

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, suppressing unwanted noise and facilitating the pinpoint location of leaks even in hard-to-reach areas. Due to the special design of the acoustic trumpet, 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 pipe system. The ultrasonic signal penetrates the smallest openings, which can then be detected with the LD 400.

## Special features

- Robustness and low weight ensure fatigue-free use in industrial environments
- Improved detection of leakages with the acoustic trumpet
- Modern Li-Ion battery with high capacity, external charger
- Minimum operating time 10 h
- Easy operation via membrane keypad



Laser beam



**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 NO. |
|---|-----------|
| <b>Set LD 400 consisting of:</b>                | 0601 0104 |
| LD 400 leak detector for compressed air systems | 0560 0104 |
| Transport case                                  | 0554 0106 |
| Sound-proof headset                             | 0554 0104 |
| Focus tube with focus tip                       | 0530 0104 |
| AC adapter plug                                 | 0554 0009 |
| Acoustic trumpet                                | 0530 0109 |
| Accessories not included in the set:            |           |
| Ultrasonic transmitter                          | 0554 0103 |

| TECHNICAL DATA LD 400         |   |
|-------------------------------|---|
| <b>Operating frequency:</b>   | 40 kHz ± 2 kHz  |
| <b>Connections:</b>           | 3.5 mm stereo jack for headset.<br>Power supply socket for connecting an external charger |
| <b>Laser:</b>                 | Wavelength: 645...660 nm<br>Output power: < 1 mW (laser class 2)                          |
| <b>Operating time:</b>        | 10 h  |
| <b>Charging time:</b>         | approx. 1.5 h   |
| <b>Operating temperature:</b> | 0 to 40 °C  |
| <b>Storage temperature:</b>   | -10 °C to 50 °C   |