

## Principle:

High and avoidable energy costs are caused every year by leaks in compressed air and gas installations. Noise in the ultrasonic range is caused by gases escaping from leaks. These ultrasonic sounds are not audible to the human ear.

The LS 250 leak detector picks up even smallest leaks from a distance of several metres. How? It transforms the inaudible ultrasonic sounds into a frequency that can be detected visually on the display and acoustically with the aid of the soundproof headphones.

The LS 250 is the further development of the proven LS 200. Like the LS 200, it convinces with a fine sensor technology that effectively improves the detection of leaks. The integrated laser pointer is used for target bearing. This allows leaks to be localised precisely. In addition to the advantages of the LS 200, the LS 250 also has a large touch display.

The specially designed bell achieves a better bundling of the sound waves. This horn acts like a directional microphone. Disturbing background noises, for example those that occur during operation, are suppressed or faded out. This makes it easier to locate leaks even in areas that are difficult to access.

## Applications:

Leak detection in compressed air, gas, steam and vacuum systems (not suitable for helium)

## Advantages:

- Fast and simple measurements, even from a distance of several metres
- Measurements can be carried out "on the fly" without disrupting operation
- High cost saving means a short payback period
- Not affected by the presence of wind or airborne contaminants because the acoustic frequency is in the ultrasound range

## Included in the handy carrying case:

- Leak detector with ultrasonic sensor
- Focus tube with focus tip
- Acoustic trumpet
- High-comfort, padded headset
- Battery charger / power plug
- Carrying case



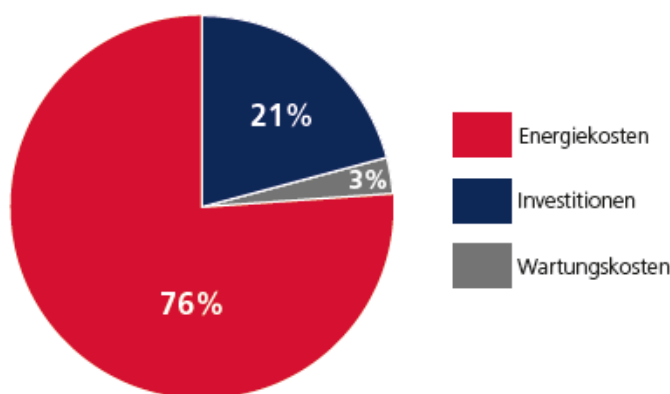
|                        |  |
|------------------------|--|
| Working frequency      | 40 kHz $\pm$ 2 kHz   |
| Connection             | Mains adapter socket for external charging unit<br>3,5 mm jack plug for headphones |
| Laser as a visual tool | Wave length: 630...660 nm, Output power: < 1 mW                                    |
| Power supply           | Lithium-ion battery with high capacity, external recharger                         |
| Operating time         | > 10 hours   |
| Charging time          | max. 4 hours   |
| Operating temperature  | -5 °C to +50 °C  |
| Storage temperature    | -20 °C to +60 °C   |

## Leak detector

| Article No. | Type No. | Description  |
|-------------|----------|--|
| 206419      | LS 250   | Leak detector LS 250 incl. accessories in a practical case |

- Existing compressed air systems often have enormous potential for optimisation. This can lead to significant cost savings and at the same time contribute to resource and climate protection.  
In Germany alone, 62.000 installed compressed air systems consume 14 billion kWh of electrical energy every year.  
At least 15% to 20% of this can easily be saved.  
(Source: Fraunhofer Institute, Karlsruhe)

#### KOSTENAUFTEILUNG EINES DRUCKLUFTSYSTEMS



Ein Großteil dieser Kosten entsteht durch Leckagen im Druckluftsystem. Die Luft „entweicht“ ungenutzt. Der Energieaufwand zum Ausgleich der dadurch entstehenden Druckluftverluste ist beträchtlich.

#### JÄHRLICH ENTSTEHENDE KOSTEN DURCH LECKAGEN:

| Loch | Luftverlust/Sekunde |            | Luftverlust/Jahr |            | Kosten/Jahr |            |
|------|---------------------|------------|------------------|------------|-------------|------------|
| in   | bei 6 bar           | bei 12 bar | bei 6 bar        | bei 12 bar | bei 6 bar   | bei 12 bar |
| mm   | (l/s)               | (l/s)      | m³/Jahr          | m³/Jahr    | Euro        | Euro       |
| 1    | 1,2                 | 1,8        | 34.560           | 51.840     | 691         | 1.037      |
| 3    | 11,1                | 20,8       | 319.680          | 599.040    | 6.394       | 11.981     |
| 5    | 30,9                | 58,5       | 889.920          | 1.684.800  | 17.798      | 33.696     |

Quelle: VDMA

Berechnungsgrundlage:

Druckluftsystem 8.000 h/Jahr in Betrieb

Angenommene Kosten 0,02€/Nm³