SONAPHONE-Family

PRODUCT OVERVIEW
PREVENTIVE MAINTENANCE

- LEAK DETECTION AND CLASSIFICATION
- CONDITION MONITORING OF MACHINERY
- STEAM TRAP INSPECTION
- VALVE INSPECTION
- TIGHTNESS TESTING
- DETECTION OF PARTIAL DISCHARGES
Our SONAPHONE-Family

SONAPHONE

The new SONAPHONE extends the product range of SONOTEC with a digital ultrasonic testing device including touchscreen technology. This device for maintenance 4.0 is a hit with users thanks to apps that are intuitive to operate and opens up new domains of application in connection with innovative sensors.

SONAPHONE Pocket

The compact ultrasonic testing device SONAPHONE Pocket is characterized by an optimal price–performance ratio. The smallest testing device of the SONAPHONE family is intuitive to use and is applied primarily for leak detection on compressed air, gas and vacuum systems in preventive maintenance.

SONAPHONE E

Due to its intrinsically safe construction, the SONAPHONE E is suitable for the use in the most hazardous areas and potentially explosive atmospheres. For maintenance staff on fixed offshore platforms, in petrochemical plants and other areas where a potentially explosive atmosphere may be present, the ultrasonic testing device is an essential part for numerous inspection tasks.
SONAPHONE
Digital ultrasonic testing device for maintenance 4.0

SONAPHONE Pocket
The smallest testing device of the SONAPHONE-family

SONAPHONE E
ATEX certificated for the use in areas with risk of explosion
Discover the New Device Class from SONOTEC

The digital ultrasonic testing device combines novel sensors and software that can be operated intuitively for preventive maintenance. Innovative airborne and structure-borne sound sensors that can be connected to the multi-function testing device with just one simple motion, pave the way for new domains of use. The mobile handheld device is operated via touchscreen and is the ideal companion throughout the entire test procedure. Besides test values and spectrograms, it is also possible to store photographs, voice memos and comments relating to the measuring points. With only a few clicks you receive a test report and can prove management your contribution to energy efficiency and process optimization.

Applications

✓ Leak detection and classification on compressed air, gas and vacuum systems
✓ Tightness testing of unpressurized systems
✓ Detection of partial discharges
✓ Condition monitoring of machinery
✓ Steam trap and valve inspection

Advantages

✓ Intuitive thanks to touchscreen technology
✓ Robust housing
✓ Broadband ultrasonic analysis from 20 to 100 kHz
✓ Store test data and spectrograms
✓ Create test reports with just a few clicks
SONAPHONE
Digital Testing Device for Maintenance 4.0

SONAPHONE Basic Set

Consisting of: digital ultrasound testing device SONAPHONE, software LevelMeter, peltor headphones, transport case, power supply, user documentation
Item Number: 700 01 0293

Sensor Set Airborne Sound

Consisting of: airborne sound sensor BS10, attachments: precise locator BS10-1, small acoustic horn BS10-2, large acoustic horn BS10-3, user documentation
Item Number: 700 01 0294

Application Set LeakExpert

Consisting of: airborne sound sensor BS10, LeakExpert App, attachments: precise locator BS10-1, small acoustic horn BS10-2, large acoustic horn BS10-3, user documentation
Item Number: 700 01 0295
Upgrade LeakExpert

Consisting of: LeakExpert App, user documentation
Item Number: 600 01 0046

Sensor Set Structure-Borne Sound & Temperature

Consisting of: structure-borne sound & temperature sensor BS20, waveguides: short waveguide 22 mm BS20-1, long waveguide 150 mm BS20-2, magnetic waveguide BS20-3, set of keys for changing the waveguides, user documentation
Item Number: 700 01 0284

DataViewer for LevelMeter App

PC software (Windows 7 and later version) for LevelMeter visual presentation of sound levels, time signals and spectrograms
Item Number: 600 01 0043
SONAPHONE
Digital Testing Device for Maintenance 4.0

Protection Set

Consisting of: protective cover for the housing, protective foil for the display, carrying strap
Item Number: 700 01 0283

Spare Parts

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>700 01 0301</td>
<td>SONAPHONE digital ultrasonic testing device</td>
</tr>
<tr>
<td>800 01 0049</td>
<td>SONAPHONE sensor cable</td>
</tr>
<tr>
<td>200 01 0299</td>
<td>Airborne sound sensor BS10</td>
</tr>
<tr>
<td>700 01 0296</td>
<td>Precise locator BS10-1</td>
</tr>
<tr>
<td>400 01 0145</td>
<td>Small acoustic horn BS10-2</td>
</tr>
<tr>
<td>400 01 0148</td>
<td>Large acoustic horn BS10-3</td>
</tr>
<tr>
<td>200 01 0300</td>
<td>Structure-borne sound &amp; temperature sensor BS20</td>
</tr>
<tr>
<td>300 01 0099</td>
<td>Short waveguide 22 mm BS20-1</td>
</tr>
<tr>
<td>300 01 0098</td>
<td>Long waveguide 150 mm BS20-2</td>
</tr>
<tr>
<td>300 01 0097</td>
<td>Magnetic waveguide BS20-3</td>
</tr>
<tr>
<td>500 01 0097</td>
<td>Set of keys for structure-borne sound &amp; temperature sensor</td>
</tr>
<tr>
<td>400 01 0136</td>
<td>International power supply</td>
</tr>
<tr>
<td>400 01 0137</td>
<td>Transport case</td>
</tr>
<tr>
<td>400 01 0138</td>
<td>Peltor ear protection headphones</td>
</tr>
</tbody>
</table>
While other ultrasonic testing devices can only find leaks, SONAPHONE can also be used to classify their size at the same time. Based on methods of aeroacoustics SONOTEC developed the world’s latest process for classification of leaks for the newest generation of SONAPHONE testing devices. The results of the patent-pending methods are plausible values for the classification of the leak size and for estimation of the savings potential.
Compact Design for Your Pocket

With the SONAPHONE Pocket you identify problems even before they arise and create value at all levels of your company. Numerous preventive maintenance tasks can be handled quickly and efficiently with the compact ultrasonic testing device from SONOTEC. Find leaks in compressed air, gas and vacuum systems and lower your energy costs. Detect bearing damage and avoid downtimes. Provide evidence for electrical insulation damage and increase your operational safety. The SONAPHONE Pocket is easy to handle and very effective.

Applications

✓ Leak detection on compressed air, gas and vacuum systems
✓ Tightness testing of unpressurized systems
✓ Detection of partial discharges
✓ Condition monitoring of machinery

Advantages

✓ Compact design for your pocket
✓ Easy to handle
✓ Illuminated display
✓ Extensive accessories allow versatile options for use
SONAPHONE *Pocket*

The Smallest Testing Device of the SONAPHONE-Family

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**SONAPHONE Pocket - Basic Set**

Consisting of: SONAPHONE *Pocket*, noise protected stereo headphones with coiled cable, transport case, lanyard, batteries, user documentation

Item Number: 700 01 0279

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**SONAPHONE Pocket - Leak Detection Set**

Consisting of: SONAPHONE *Pocket*, airborne sound probe L 50, directional tube with tip, acoustic horn for airborne sound probe L 50, leak tags (25 pcs.), noise protected stereo headphones with coiled cable, transport case, lanyard, batteries, user documentation

Item Number: 700 01 0277

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**Application Set Leak Detection**

Consisting of: airborne sound probe L 50, directional tube with tip, acoustic horn, leak tags (25 pcs.)

Item Number: 700 01 0280
Airborne Sound Probe L 50
For leak detection, tightness testing and detection of partial discharges
Item Number: 100 01 0336

Structure-borne Sound Probe L 51
For valve inspection
Item Number: 100 01 0149

Structure-borne Sound Probe L 52
For testing of progression and abrasions of bearings
Item Number: 100 01 0150
SONAPHONE *Pocket*
The Smallest Testing Device of the SONAPHONE-Family

**Flexible Airborne Sound Probe L 53**

For pipes difficult to access
Item Number: 100 01 0151

**SONOSPOT L 55**

Parabolic probe to pinpoint leakages precisely over long distances and to localize electrical partial discharges
Item Number: 100 01 0350
ATEX Certificated

Due to its intrinsically safe construction, the SONAPHONE E is suitable for the use in the most hazardous areas and potentially explosive atmospheres. For maintenance staff on fixed offshore platforms, in petrochemical plants and other areas where a potentially explosive atmosphere may be present, the ultrasonic testing device is an essential part for numerous inspection tasks.

Applications

- Leak detection on compressed air, gas and vacuum systems
- Tightness testing of unpressurized systems
- Detection of partial discharges
- Condition monitoring of machinery
- Steam trap and valve inspection

Advantages

- Approved for potentially explosive atmospheres
- Integrated data logger
- Data transfer between device and computer
- Temperature measurements up to 800 °C
- Fast amortisation
- Robust housing
SONAPHONE E
For the Use in Areas with Risk of Explosion

SONAPHONE E Basic Set

Consisting of: SONAPHONE E (Ex ia IIC T4 Gb resp. Ex ia IIB T4 Ga according to ZELM 03 ATEX 0130X), head phone (high sound deadening), carrying strap, transport case, user documentation
Item Number: 700 01 0167

Application Set Leak Detection

Consisting of: airborne sound probe L 60, directional tube with tip, acoustic horn, leak tags (25 pcs.), extension cable 30 cm
Item Number: 700 01 0168

Application Set Steam Trap Testing

Consisting of: structure-borne sound probe L 62 with stainless steel tip, surface temperature sensor (Tmax = 800°C), extension cable for temperature sensor
Item Number: 700 01 0169

Structure-borne Sound Probe L 61

For valve inspection
Item Number: 100 01 0020
Structure-borne Sound Probe L 62

For condition monitoring of machinery
Item Number: 100 01 0018

Flexible Airborne Sound Probe L 63

For pipes difficult to access
Item Number: 100 01 0021

SONAPHONE E Communicator

SONAPHONE E Communicator; incl. USB cable and software for data transfer to the PC (on CD)
Item Number: 600 01 0008
Tightness Testing of Unpressurized Systems

The mobile ultrasonic transmitter SONAPHONE T is designed for the rapid and reliable detection of seal failures on windows, doors, cabins, vehicles and containers. Used in addition with an ultrasonic receiver from the SONAPHONE series, the SONAPHONE T enables efficient tightness testing. The advantage of the method lies in how simple it is to handle. The transmitter emits ultrasound that passes through leaks and gaps of the test object. By using a SONAPHONE testing device these signals can be detected accurately from outside the object. The option of using the additional omnidirectional spherical transmitter SONOSPHERE enables the testing of both very large and awkwardly-shaped areas. This all-round carefree package is the ideal solution for challenging inspection tasks.

Applications

Tightness Testing:
- Of road and railed vehicles
- In ship and aircraft building
- Of fire doors and climate cabinets
- On doors and windows
- Of pipe systems and containers
- Of clean rooms

Advantages

- Modulation of transmission signal
- Adjustable sound intensity
- Easy to handle, without costly jigs
- Robust and ergonomic design
- Cost-effective method
SONAPHONE T & SONOSPHERE
Ultrasonic Transmitter for the Reliable Detection of Leaks

SONAPHONE T & SONOSPHERE SET

Consisting of: SONAPHONE T V2.0, SONOSPHERE spherical transmitter L 56 with magnetic- and suction cup holder, batteries, lanyard keychain, tripod, bag with carrying strap, user documentation
Item Number: 700 01 0143

SONAPHONE T V2.0

Ultrasonic transmitter with adjustable intensity to detect defect seals in conjunction with L 50 or L 56 (not for use in areas with risk of explosion)
Item Number: 200 01 0201

SONOSPHERE L 56

Spherical transmitter for SONAPHONE T V2.0
Item Number: 100 01 0237

Airborne Sound Probe L 50

As transmitter for SONAPHONE T V2.0
Item Number: 100 01 0336
The ultrasonic transmitter SONAPHONE T and the spherical transmitter SONOSPHERE can be used in combination with all models of the SONAPHONE-family for tightness testing of unpressurized systems.