LEAK DETECTION

FITTING SEAL INTEGRITY

BEARING DIAGNOSTICS

SONAPHONE RD
Ultrasonic detector

User friendly
Quick response time
Reliable
Low cost

SONOTEC

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Ultrasonic detector

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FITTING SEAL INTEGRITY
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APPLICATIONS

Detection of leakages in compressed-air or vacuum systems
- Saves energy costs

Applications in the field of motor and rail vehicles
- Location of leaks at compressed-air breaks or aggregates
- Sealing tests in cabins, doors, boot/trunk or cold storage chambers
- Check of fuel injection in diesel engines

In industry
- Verify steam pipes seales
- Seal integrity of fittings and condenser drains
- Search for faults in electrical insulation
- Detection of early wear in bearings with rotating parts


Air sound probe


Waterproof body sound probe


Body sound probe

Air sound probe
probe is used for limited access locations, e.g. of leaks at compressed-air systems.

Ultrasonic transmitter SONAPHONE T
This device emits ultrasonic signals. With the transmitter it is possible to test the seals in cars, vessels, doors or windows or for example, under conditions with no pressure difference. The signals are frequency-modulated to achieve a differentiation from the noise of the environment. The intensity is variable.

Battery charger

Directional tube and tip

Headphones
highly sensitive, sound-insulated headphone

Leather bag
The bag simplifies the measurements by leaving one of your hands free.

Waterproof body sound probe
This encapsulated sensor allows the detection of signals from liquids and is thought for tests below the liquid surface. In contact with the investigated object it serves as a body probe sensor

Body sound probe
for the registration of body sounds of pipes or fittings, high reproducibility

Frequency of measurement:	40kHz +/- 1 kHz
Display:	digital LC-display with illumination, loudspeaker and LED-bargraph
Maximum value storage:	switchable
Accumulator:	internal, for 10 h of use with charge control
Auto-power-off-function	
Dimensions:	120 x 65 x 25 (transmitter) 190 x 110 x 85
Weight:	complete case about 3.6 kg

Socket
Used to connect air sound, waterproof or body sound probe

LC-display
Displays a signal independent of the position of the amplification controller. The values for sound intensity follow a dB-scale. An integrated light sensor initiates the illumination of the display in the dark

LED-display
The displayed intensity at the LED-bars agrees with the volume of the headphones and both are regulated via the amplification controller.

Plug in of recharger

Charge control of the battery

Amplification controller
Individual adjustment of the received signals in the headphones.

MAX
Pressing this button one stores the selected maximum intensity value.

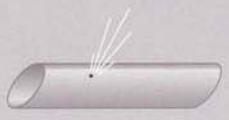
on/off – button
with automatic power-off-function

Plug in of headphones

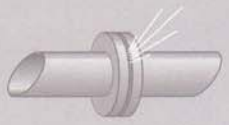
PRINCIPLES OF OPERATION

- At leakages the stream of gas or liquids in pipelines gives rise to internal friction and thus to the emission of ultrasonic waves. These high frequency signals can be precisely located. In the SONAPHONE they are transformed into audible or electrical signals.
- In pressure less systems a small ultrasonic transmitter is inserted, the signals of which can pass leakages and are located with the SONAPHONE RD.
- Developing wear at bearings give rise to enhanced friction which is detectable with a body sound detector.

There is no problem to detect and locate leaks in compressed-air or steam systems with the SONAPHONE RD.



The recognition of pressure losses in any compressed-air or vacuum system is done with the ultrasonic probe; at difficult accessible locations a separate flexible probe is used.



The control of correct operation of gates, valves, ball taps, condenser drains and other fittings is fast and reliably done with body sound probes.

YOUR ADVANTAGE ...

The ease of operation

The SONAPHONE RD allows fast and reliable checks. The received ultrasonic signals are transformed into audible signals. After a few preliminary tests, the instrument can be reliably used. Changing the gain, the sensitivity is adjusted to satisfy the specific conditions. The SONAPHONE RD is equipped with a second amplification circuit such that the digital display is independent of the amplification controller. A built-in memory for maximum values assists in identifying the location of faults or leaks.

SONOTEC
certified with
DIN EN ISO 9001:2000 TÜV Cert