

Technical Data Sheet

Structure-Borne Sound Probe T20



The Structure-Borne Sound Probe T20 is used for condition monitoring of machines, plants and processes where detectable structure-borne sound in the ultrasonic range is generated. Changes in the sound signals indicate a change in the condition and/or process of the test object. The detection of these changes forms the basis for condition monitoring in preventive maintenance.

The Structure-Borne Sound Probe T20 is used when installation space is limited and the machine surface or test point is preferably magnetic.

The type of coupling depends on the type of test. For recurring measurements with recording of measurement data, the probe can be fixed with a magnetic base or universal magnet. For permanent monitoring or fixed mounting within a safety cover/zone, the probe is screwed on with a grub screw.

General data

| | |
|-------------------------------|--|
| Order number | 100 01 0391 |
| Dimensions (L × W × H) | Ø 24 × 21,5 mm (housing without connector) |
| Weight | 40 g |
| Electrical connection | UNF 10-32 (Microdot) |

Acoustic data

| | |
|--------------------|--------------------------------------|
| Sensitivity | 1,5 mV / 1 m/s ² @ 40 kHz |
|--------------------|--------------------------------------|

| Materials | | |
|-------------------------------|---|---|
| Housing | Stainless steel | |
| Protective cap | Silicone | |
| Ambient conditions | | |
| Operating/storage temperature | -20 ... +65 °C | |
| Protection type | IP64 | |
| Order details | | |
| Scope of delivery | <ul style="list-style-type: none"> • Structure-Borne Sound Probe T20 • Protective cap • Calibration certificate • Technical data sheet | |
| Accessories | <ul style="list-style-type: none"> • Sensor cable for T10 UNF 10-32 • Magnetic waveguide BS20-3 • Flat Surface Magnetic Base • Multi-Purpose Magnetic Base • Mounting Stud M5 to 1/4"-28 • Mounting Pad (1 pce.) • Plastic Welder Adhesive Kit | <ul style="list-style-type: none"> 800 01 0068 300 01 0097 300 01 0102 300 01 0103 300 01 0106 300 01 0104 300 01 0105 |



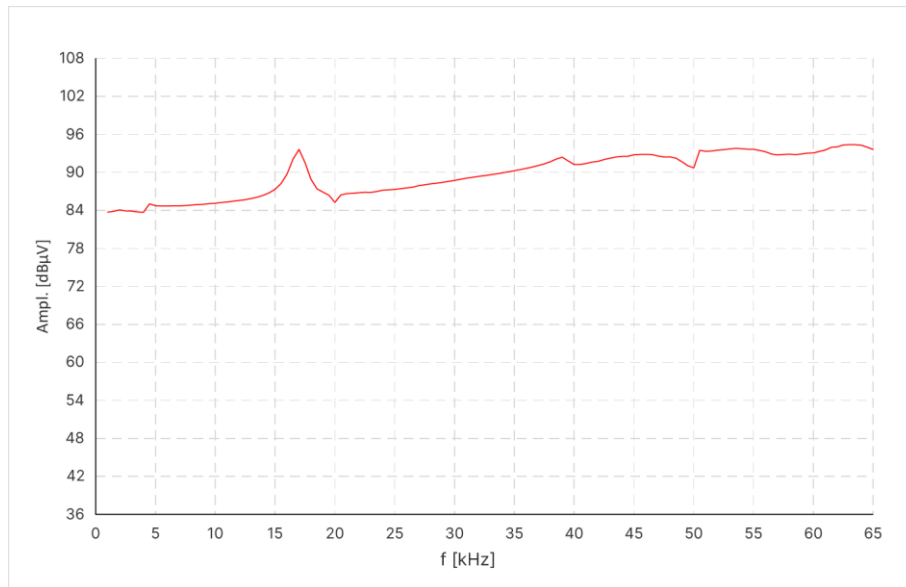
Figure 1: Structure-Borne Sound Probe T20



Figure 2: Structure-Borne Sound Probe T20 with protective cap

Frequency response

Frequency response at excitation 20 m/s²



Coupling

| | | |
|--|---|---|
| Inspection method | Recurring measurement with recording of measurement data | Permanent monitoring / fixed mounting |
| Couplant / coupling accessories (recommended) | Flat Surface Magnetic Base or Multi-Purpose Magnetic Base (see Order details – Accessories) | Glued mounting plate on the machine surface or existing test point and thread adapter (see Order details – Accessories) |
| Coupling method | Magnetic connection with the machine surface or test point | Screw on (long-term coupling) |

ATTENTION

The coupling method has a significant influence on the measurement results!

Technical drawing

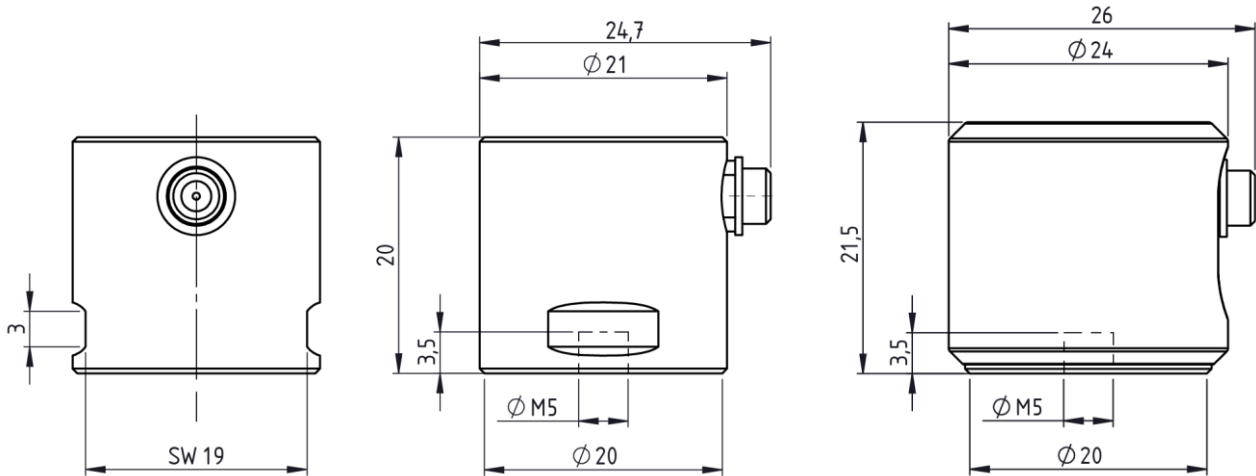


Figure 3: Structure-Borne Sound Probe T20 without/with protective cap

Drawings are not to scale. Dimensions in mm, unless otherwise specified. Information is subject to change without notice.

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