

## ECLA EUROPEAN CLASSIFICATION

### G01H

**MEASUREMENT OF MECHANICAL VIBRATIONS OR ULTRASONIC, SONIC OR INFRASONIC WAVES** (generation of mechanical vibrations without measurement B06B, G10K; measuring position, direction or velocity of an object G01C, G01S; measuring quasi-steady pressure of a fluid [G01L7/00](#); determining unbalance [G01M1/14](#); determining properties of material by sonic or ultrasonic waves transmitted therethrough G01N; systems using the reflection or reradiation of acoustic waves, e.g. acoustic imaging, [G01S15/00](#); seismology, seismic prospecting, acoustic prospecting [G01V1/00](#); acousto-optical devices per se G02F; obtaining records by techniques analogous to photography using ultrasonic, sonic or infrasonic waves [G03B42/06](#); speech analysis or synthesis, speech recognition G10L; information storage based on relative movement between record carrier and transducer G11B; piezo-electric, electrostrictive or magnetostrictive elements in general H01L; manufacture of electromechanical resonators by processes which include measurement of frequency with consequential modification of the resonator [H03H3/00](#), [N: [H03H3/007](#), [H03H9/00](#)] [C9809]

#### Note

[C1112]

1. This subclass covers the combination of generation and measurement of mechanical vibrations.
2. Attention is drawn to the Notes following the title of class G01.

### G01H1/00

**Measuring [N: characteristics of] vibrations in solids by using direct conduction to the detector** ([G01H9/00](#), [G01H11/00](#) take precedence)

#### G01H1/00B

. [N: of rotating machines ([G01H1/10](#) takes precedence)]

#### G01H1/00B2

. . [N: of the rotor of turbo machines]

#### G01H1/04

. of vibrations which are transverse to direction of propagation

#### G01H1/06

. . Frequency

#### G01H1/08

. . Amplitude

#### G01H1/10

. of torsional vibrations

#### G01H1/12

. of longitudinal or not specified vibrations [C9511]

#### G01H1/14

. . Frequency [C9511]

#### G01H1/16

. . Amplitude [C9511]

### G01H3/00

**Measuring [N: characteristics of] vibrations by using a detector in a fluid** ([G01H7/00](#), [G01H9/00](#), [G01H11/00](#) take precedence)

#### G01H3/00B

. [N: Testing or calibrating of detectors covered by the subgroups of [G01H3/00](#) (calibrating geophysical instruments, e.g. seismic receivers [G01V13/00](#))]

#### G01H3/04

. Frequency

- G01H3/06 . . by electric means
- G01H3/08 . . Analysing frequencies present in complex vibrations, e.g. comparing harmonics present [N: (acoustic presence detection [G01V1/00A](#))]
- G01H3/10 . Amplitude; Power
- G01H3/12 . . by electric means ([G01H3/14](#) takes precedence)
- G01H3/12B . . . [N: for representing acoustic field distribution (using optical means [G01H9/00B](#); sonar systems for imaging [G01S7/56](#), [G01S15/89](#); acoustic holography [G03H3/00](#))] [C9511]
- G01H3/14 . . Measuring mean amplitude; Measuring mean power; Measuring time integral of power
  
- G01H5/00** **Measuring propagation velocity of ultrasonic, sonic or infrasonic waves, [N: e.g. of pressure waves]**
  
- G01H7/00** **Measuring reverberation time; [N: Room acoustic measurements] (measuring absorption of vibrations in a material [G01N](#); modifying acoustic properties to change reverberation time [G10K](#)) [C9511]**
  
- G01H9/00** **Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves by using radiation-sensitive means, e.g. optical means**
  
- G01H9/00B . [N: for representing acoustic field distribution (sonar systems for imaging [G01S7/56](#), [G01S15/89](#); acoustic holography [G03H3/00](#))] [C9511]
- G01H9/00C . [N: using fibre optic sensors (light guides per se [G02B6/00](#), acousto-optical devices specially adapted for gating or modulating in optical wave guides [G02F1/125](#))] [C9505]
- G01H9/00C2 . . [N: the vibrations causing a variation in the relative position of the end of a fibre and another element] [N9505]
- G01H9/00U . [N: by using ultrasonic waves (measuring position using ultrasonic waves [G01S15/02](#))]
  
- G01H11/00** **Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves by detecting changes in electric or magnetic properties, [N: e.g. capacitance or reluctance (structural combination of musical instruments with microphones or other pick-up devices [G10H3/16](#), [G10H3/18](#), [G10H3/20](#))]**
  
- G01H11/02 . by magnetic means e.g. reluctance [C9511]
- G01H11/04 . . using magnetostrictive devices [C9511]
- G01H11/06 . by electric means [C9511]
- G01H11/08 . . using piezo-electric devices
  
- G01H13/00** **Measuring resonant frequency**
  
- G01H15/00** **Measuring mechanical or acoustic impedance**
  
- G01H17/00** **Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves, not provided for in the preceding groups [N: see provisionally also [G01H1/00](#)] [C9511]**