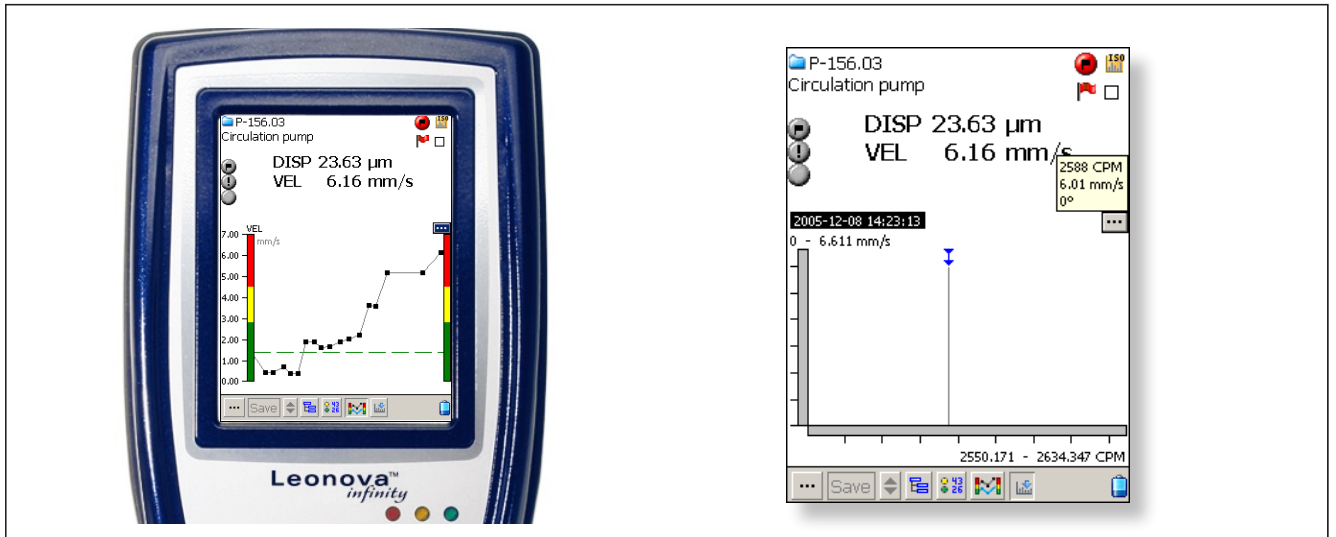


Leonova™ Infinity – Vibration ISO 10816 with spectrum



Broad band vibration measurement is the most widely used and cost-efficient method for the diagnosis of general machine condition.

There are two ISO recommendations concerning machine condition monitoring by this type of measurement, the much used ISO 2372 and the more recent ISO 10816, which is an ongoing replacement of the older standard.

With Leonova, ISO 2372 measurement is a platform function, always included for unlimited use (see TD-225). ISO 10816 is an option with ordering numbers LEO133 (unlimited use) and LEO233 (limited use).

Features of ISO 10816 are:

- Measurements are made in three direction (horizontal, vertical, axial).
- Machine condition is generally diagnosed on the basis of broad band vibration measurements returning an RMS value. ISO 10816 keeps the lower frequency range flexible between 2 and 10 Hz, depending on the machine type. The upper frequency is 1000 Hz.
- ISO 10816 operates with the term vibration magnitude, which, depending on the machine type, can be an RMS value of **vibration velocity, acceleration or displacement**. If two or more of these parameters are measured, vibration severity is the one returning the relative highest RMS value. For certain machines, ISO 10816 also recognises peak-to-peak values as condition criteria.

- The standard consists of several parts, each treating a certain type of machines, with tables of limit values differentiating between acceptable vibration (green range), unsatisfactory vibration (yellow range), and vibration that will cause damage unless reduced (red range).

In Leonova, ISO part, machine group and foundation type are input using a multiple choice guide which displays the various ISO definitions and leads to the limit values.

Exceeding the requirements of the ISO standard, Leonova also provides a 1600 line spectrum.

Technical data

Measurement quantities: Velocity, acceleration, and displacement, RMS values over 2 or 10 Hz to 1000 Hz, peak, peak-to-peak

Spectrum: Linear, 1600 lines, Hanning window.

Spectrum unit: Velocity, mm/s or inch/s

Transducer type: Vibration transducer SLD 144 or IEPE* (ICP®) type transducers with voltage output

* Integral Electronic PiezoElectric

Ordering numbers

LEO133 Vibration ISO 10816 with spectrum, unlimited use
LEO233 Vibration ISO 10816 with spectrum, limited use

