

NSK

VIBROSTORE 100/100E

ASSET MONITORING AT THE PUSH OF A BUTTON



Brüel & Kjær Vibro

A member of the NSK Group

THE EASY WAY TO DETECT THE MOST COMMON MACHINE FAULTS

Critical machinery usually is equipped with an online protection system to avoid catastrophic failure. In most cases, operators will add online condition monitoring to be able to diagnose and trend a developing fault at an early stage.

But how about semi-critical or so-called balance-of-plant machines?

It's probably too costly to install an online monitoring system on all of them. Even a sophisticated large portable device would be over-kill. Yet you don't want to let them run without any inspection as any sudden machine failure will undoubtedly impact the whole production process.

The ideal solution is a simple, cost-efficient handheld device that measures vibration levels and bearing wear at the push of a button. Download the readings to a PC for reporting, further analysis and trending - and you're done!

Don't leave your balance-of-plant machines to chance.

Detect faults early so you can cost-effectively plan maintenance ahead of time!



VIBROSTORE 100/100E IS IDEALLY SUITED FOR THIS TASK AND FILLS A REAL GAP

This lightweight device can be used single-handedly and allows even untrained personnel to take accurate vibration measurements and quickly assess the machine's overall vibration condition. Even an ATEX compliant version is available (VST-100E) for use in explosive environments. The VST-100 is for standard applications.

The instrument is equipped with a cable-connected high-quality Brüel & Kjær Vibro acceleration sensor that's already preset. Choose the type and size of the machine you want to monitor, enter its running speed and press one button to perform the measurement. A traffic-light coded display immediately indicates the severity of the vibration based on the built-in ISO 20816 levels (velocity inch/s or mm/s).

The main screen also shows the bearing condition in BDU (Bearing damage unit) and total g (rms acceleration). The display of the vibration level in frequency ranges indicates the most common machine faults like imbalance, misalignment or looseness. For a more detailed analysis, the instrument provides spectra with up to 800 lines with zoom and cursor.



VIBROSTORE 100/100E comes ready-to-use in a case including a removable protective rubber sleeve.

Alternatively, it fits into the docking cradle with a belt clip and a USB mini connector for data transfer to a PC.

Optional accessories (not applicable for VIBROSTORE 100E) include a strobe to measure the running speed in case it's not available. Headphones (not included) can be connected via Bluetooth to listen to the bearing noise.

1 Spiral cable with two-pin connector

2 USB-A to USB-C connector

3 Vibration accelerometer AS-063 (ASA-063 for VST-100E)

4 Magnet for curved surfaces

5 VST-100 with rubber sleeve

6 Docking cradle

7 Nylon carrying case

THERE IS NOTHING LIKE A POWERFUL TEAM

VIBROSTORE 100/100E is available either stand-alone or packaged with the Brüel & Kjær Vibro Report & Route Manager software. Together, they provide all you need for quick, reliable and cost-efficient machine health monitoring. Report & Route Manager is a very powerful and highly functional route editor and analysis software. Optional accessories (not applicable for VIBROSTORE 100E) include a strobe to measure the running speed in case it's not available. Headphones (not included) can be connected via Bluetooth to listen to the bearing noise.

Set up your route, upload it to VIBROSTORE 100/100E, perform the route-based inspection and download the results to Report & Route Manager. The data can be displayed in a variety of different ways including vibration frequency spectra, bearing noise and trend plots as well as waterfall diagrams. You may also generate reports either manually or automatically.



This lightweight device can be used single-handedly
Show: VIBROSTORE 100 in a rubber sleeve



Report & Route Manager benefits at a glance:

- › Superior reporting functionality
- › Modular design
- › Optimized workflow
- › Advanced navigation in measurement analysis and diagnosis tools
- › Fast and efficient measurement reporting
- › Can be used with both VIBROSTORE 100/100E and the Vx-80 handheld series



VIBROSTORE 100/100E connects to the Report & Route Manager software on your PC via USB (or Bluetooth).

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When machine health monitoring and safety is paramount:

- › VST-100E for use in explosive environments



VIBROSTORE 100/100E AT A GLANCE

VST-100/100E SPECIFICATIONS AND SCOPE OF DELIVERY:		
Size	7.95 in. (200 mm) x 2.36 in. (60 mm) x 1.02 in. (26 mm)	
Weight	0.62 lbs (VST-100E: 0.92 lbs)	
Environmental	Degree of protection: IP67 Operating: 32 °F to 122 °F (0 °C to +50 °C) Storage: -4 °F to 158 °F (-20 °C to +70 °C)	
Power supply	2 x AA batteries	
Frequency range	ISO: 2/10 Hz to 1 kHz BDU: 1 kHz to 10 kHz	Vibration bands: 10 Hz to 1 kHz
Max frequency resolution	1.25 Hz @ 800 lines FFT setting Acceleration in g Velocity in inch/s (or mm/s)	Bearing noise in BDU (bearing damage units) Displacement (mils, microns, mm)
Bluetooth connectivity	For headphones (VST-100 only) and data communications	
Displayed frequency units	Hertz (Hz), RPM or CPM	
Input range Vibration analysis diagnostic bands (RPM = run speed)	User selectable with accelerometer sensitivity Unbalance 1x RPM Alignment 2x RPM Looseness 3x RPM	
Accuracy	+/-5 % (acceleration: +/- 10% below 20Hz)	
Data storage	Up to 1000 measurements/machines (with a maximum of 10 measurements per machine)	
Supported languages	English / Spanish / German / French / Italian / Portuguese / Dutch / Chinese / Korean / Japanese / Russian / Czech	
Accessories	Docking cradle and USB cable Protective boot (mandatory for VST-100E to use in hazardous areas) Spiral cable with two pin connector	Accelerometer AS-063 for VST-100, ASA-063 for VST-100E Nylon carrying case
Optional accessories	AC-7315 strobe attachment (VST-100 only) AC-172 magnet for flat surfaces	Report & Route Manager software for VIBROSTORE 100/100E
Hazardous area approvals (VST-100E)	ATEX II 2G IIC T4 Gb (-20°C ≤ Ta ≤ +40°C) IECEx IIC T4 Gb (-20°C ≤ Ta ≤ +40°C)	UL hazardloc area Class I, zone I, IIC Class I, division, groups A-D (-20°C ≤ Ta ≤ +40°C)

VIBROSTORE 100/100E is the perfect combination of high Brüel & Kjær Vibro quality and cost-effective condition monitoring.

Start monitoring your machine health today and benefit from valuable machine data at your fingertips.

VIBROSTORE 100/100E is fully supported by our service and training teams.

For additional information, contact NSK.



NSK experts

With the support of NSK experts, our customers embark on a critical path to achieving optimal performance and service life from their bearing assets. And to realizing improvements in the operation of people, machinery and equipment that result in measurable gains in reliability and productivity.

Whether identifying and resolving problems that contribute to frequent bearing replacement and unplanned machine outage, or instituting holistic process and maintenance improvement plans, NSK experts support our customers in a complete, collaborative and continuous way.

From bearing specification to installation and ongoing monitoring of bearing and machine health, NSK delivers integrated insights, products and technologies to provide sustainable contributions to maintenance and cost efficiencies.



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