

VBA20/VBT30 VIBROMETER

Vibration • Bearing Status • Temperature*



Machine Vibration Measures

Velocity in mm/s RMS
Acceleration in g RMS
Displacement in μm Peak-Peak



Vibration Evaluation

According to ISO10816-3



Bearing Condition Measures

Bg - Hi Frequency Acceleration in g RMS
Bv - Hi Frequency Velocity in mm/s RMS



Bearing Status Check

By using rules of thumb



Temperature Measure*

Non-contact Infrared Sensor
Target and Environment in $^{\circ}\text{C}$ or $^{\circ}\text{F}$
Red Laser Pointer

* VBA20 does not have Temperature Measure

The VBA20/VBT30 VIBROMETER is a reliable and easy to use hand-held condition inspection instrument, a fundamental tool of predictive maintenance on the plant floor. It provides vibration measurement, built-in machine alarm indication and bearing status check facilities. The VBA20/VBT30 VIBROMETER enables plant maintenance technicians to monitor their machines, find potential problems in advance of failure, and to ensure machine reliability.

VBA20/VBT30 Specifications

Sensor Input:	IEPE Accelerometer, 100 mv/g, Integral 80 cm cable, BNC connector Sensitivity range: 80-600 mv/g (adjustable)	
Vibration*:	Acceleration: 0-50 g Peak	Frequency 10-12 kHz
	Velocity: 0-500mm/s RMS	Frequency 10 Hz-1 kHz
	Displacement: 0-5000 µm Peak-Peak	Freq. 10 Hz-1 kHz
Bearing Status*:	Bg: 0-50 g RMS	Freq. Range 1 kHz-12 kHz
	Bv: 0-500 mm/s RMS	Freq. Range 1 kHz-12 kHz
	* The vibration measurement range refers to 100mv/g sensor used.	
Accuracy:	< +/-5%	
Units:	Metric-1: g RMS, mm/s RMS, um P-P; Metric-2: m/s ² RMS, mm/s RMS, um P-P Imperial: g RMS, ips RMS, mils P-P	
Alarm Indication:	Vibration Evaluation for velocity measure: ISO10816-3 Bearing Status check for BG and BV: Rule-of-thumb	
Temperature* : (VBT30 only)	IR Sensor temperature range: -20 °C to 120°C or -5°F to +250°F Accuracy: ±2°C; Resolution: 1°C; Laser guide: Red, <1mW. IEC 60825-1 compliant Distance to surface D:S = 8:1; Recommend distance range: < 20 cm	
Display:	Monochromatic LCD, 128x64 pixels Viewing area: 3 x 1.5cm	
Power & Charger:	Lithium rechargeable battery, 3.6V 1700 mAh Recharge time 3 hours; Operating time >48 hours continuous Mains charger: AC 100-240 V, 50/60 Hz input; 4.2 V DC 600 mA output In-car charger: DC 12-24 V input; 4.2 V DC 600 mA output	
Environment:	Operation temperature: -10°C to +50°C; Storage temperature: -20°C to +60°C Enclosure: IP64 - Dust-tight and splash-resistant Electromagnetic compatibility certificate: 2004/108/EC	
Physical:	Size: L 115mm x W 70-80mm x T 25mm Weight: 250 g Including sensor and cable	

VBT20/VBT30 Complete Kit:

VBA20/VBT30 VIBROMETER unit, 100mv/g Accelerometer with integral cable, Magnetic base, Stainless steel probe
Mains battery charger, In-car battery charger, Carrying case, Calibration and Quality card, Operating manual