VM100 Kit for Hand-Arm and Whole-Body

VM100A-HA2WB

	Vibration Analyzer VM100
	1: HA Health 1X: 5:58 m/s ² RMS 1Y: 5:58 m/s ² RMS a _{y1} = 9.666 m/s ²
	1: HA Shock 1X. 5.91 m/s ² Peak 1Y. 8.10 m/s ² Peak 1Z. 6.14 m/s ⁴ Peak VPM = 4657.72 m/s ² VSI = 313.13
	R = 0 /s 0.1 ⁸ 1: HA Unweighted 1X: 20.23 m/s ² RMS 1Y: 20.23 m/s ² RMS 1Y: 20.23 m/s ² RMS 1X: 20.17 m/s ² RMS a _{y1} = 35.001 m/s ² 0.01
	Duration 01:09:39
7	

Application

- Based on the balancing software license VM100-HUM for the vibration analyzers VM100A and VM100B
- Includes the 9-channel Vibration Analyzer VM100A, sensors and accessories
- Measurement of the vibration effect on the hand-arm system at two handles
- Measurement of the vibration effect on the body via seat, backrest and feet
- Hand-Arm: Vibration Total Value (Ahv) according to ISO 5349-2 / ISO 8041-1
- Hand-Arm:Vibration Peak Magnitude VPM for isolated and repeated shock to ISO/DIS 5349-4
- Whole-Body: Maximum Interval RMS of X/Y/Z to ISO 2631 / ISO 8041-2
- Whole-Body: Maximum Vibration Dose Value(VDV) of X/Y/Z to ISO 2631 / ISO 8041-1
- Occupational health measurements to EU directive 2002/44/EC and development-related measurements on hand-held tools
- Suitable for hand-arm measurements according to the EU Machinery Regulation (EU) 2023/1230, Section 2.2.1.2
- Measurement of automotive ride comfort to GB /T 4970 with 3 triaxial sensors

Properties

- Easy to use and clear user guidance
- Simultaneous display of 3 different meaurements, e.g. for 2 handles and whole-body
- Display of 3 axis values (X/Y/Z) for each sensor and 3 total values
- Graphical plot display up to 10 hours
- Display of the remaining work time before reaching the exposure limit value
- External reset via dgital input
- Advantageous in combination with the FFT analysis included in the scope of delivery



Technical Data

Measuring channels	9	
Weighting filters hand-arm	Wh and band filter 6.3 – 1250 Hz	
Weighting filters whole-body	Wb, Wc, Wd, We, Wj, Wk, Wm and band filter 0.4 – 100 Hz	
Operating modes	Vibration Total Value (Ahv) for hand-arm health evaluation to ISO 5349-2	
	Vibration peak magnitude (VPM) for hand-arm to ISO/DIS 5349-3	
	Maximum interval RMS for whole-body vibration to ISO 2631	
	Maximum vibration dose value (VDV) for whole-body vibration to ISO 2631	
	Maximum transient vibration value (MTVV) to ISO 2631	
	Crest factor for whole-body vibration to ISO 2631	
Plot diagram	Up to 10 h running RMS of X/Y/Z or Ahv/VPM	
Data export	CSV measurement data table and bitmap screenshot	

Scope of delivery

Kit VM100A-HA2WB:

VM100A Vibration Analyzer, 9 channels

- 2 triaxial accelerometers KS963B10
- 2 Sensor cable, 3 m
- 2 Hand-held adapters model 141B
- 2 Handle adapters for cable ties model 143B
- Sensor calibration adapter model 028
- Triaxial seat pad accelerometer KS963B100-S





Settings Human Vibration					
Sensor 1 🗸	Sensor 2 🗸 🗸	Sensor 3 💌			
HA Health 🛛 🔻	HA Health 🛛 🔻	WB Health 🔽			
Weightings: Wh / Wh / Wh	Weightings: Wh / Wh / Wh	Weightings: Wd / Wd / Wk			
Factors: 1.00 / 1.00 / 1.00	Factors: 1.00 / 1.00 / 1.00	Factors: 1.40 / 1.40 / 1.00			
RMS 🗸	RMS 🗸	RMS 🔽			
Plot RMS (1s) of all sensors ▼					
Reset by trigger input D1					

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