SV 38V
Whole-Body Vibration Accelerometer

The SV 38V accelerometer is dedicated for whole-body vibration measurements with the SV 106 human vibration analyser. The accelerometer has a built-in memory (TEDS) containing information about the sensitivity that is automatically transferred to the SV 106 instrument. In accordance with ISO 2631-1 seat accelerometers such as SV 38V are placed on the operator's seat either on the seat-rest.

Technical Specifications

Performance:

Number of Axes	3
Sensitivity (± 5 %)	50 mV/(ms^{-2}) at 15.915 Hz
Measurement Range	0.01 ms^{-2} RMS ÷ 50 ms^{-2} PEAK
Frequency Response (by design guideline, ± 3 dB)	0.1 Hz ÷ 100 Hz
Resonant Frequency	5.5 kHz (MEMS transducer)
Electrical Noise	< 0.005 ms-2 RMS, HP1 weighting

Electrical:

Supply Current	< 5.0 mA
Supply Voltage	5.2 V ÷ 16 V
Bias Voltage	2.5 V ± 0.05 V
Output Impedance	51 Ohms
Charge / Discharge Time Constant (start-up time)	30 sec. typ.
TEDS Memory	installed (power supply pin)

Environmental Conditions:

Maximum Vibration	100 000 ms^{-2} shock survival for MEMS sensor
Temperature Coefficient	<+/-0.01 %/°C
Temperature	from -10 °C to +50 °C
Humidity	up to 90 % RH, non-condensed

Physical:

Sensing Element	MEMS
Cable	integrated 1.4 meters
Connector	LEMO 5-pin plug (SV 106 compatible)
Dimensions	236 mm diameter; thickness from 3.6 mm to 12 mm
Weight	550 grams (including cable and rubber cushion)

Accessories:

SA 38 (optional)	Calibration adapter

The policy of our company is to continually innovate and develop our products.
Therefore, we reserve the right to change the specifications without prior notice.

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