SV 105
Hand-Arm Vibration Accelerometer

The SV 105 accelerometer is dedicated for hand-arm vibration measurements with the SV 106 human vibration analyser. The accelerometer have a built-in memory (TEDS) containing information about the sensitivity that is automatically transferred to the SV 106 instrument.
The SV 105 should be worn directly on the operator's hand. The accelerometer has a high shock resistance, no DC-shift effect and consume much less energy than IEPE / ICP sensors.

Technical Specifications

Performance:

Number of Axes	3
Sensitivity (± 5 %)	0.661 mV/ms^{-2} at 79.58 Hz
Measurement Range	2000 ms^{-2} PEAK
Frequency Response (by design guideline, ± 3 dB)	0 Hz ÷ 1500 Hz
Resonant Frequency	16.5 kHz (MEMS transducer)
Electrical Noise	< 0,14 ms^{-2} RMS, Wh weighting

Electrical:

Supply Current	< 5.0 mA
Supply Voltage	3.3 V ÷ 5.5 V
Bias Voltage	1.5 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	<+/-0.02 %/°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	69.6 mm x 31.4 mm, thickness from 8.3 mm to 15 mm
Weight	50-60 grams (including cable and one of the vibration contact adapters)

Accessories:

SA 105 (optional)	calibration adapter

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