

# SV 150

## Hand-Arm Vibration Accelerometer

The SV 150 accelerometer is dedicated for hand-arm 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. The SV 150 is designed to be mounted on the tool being measured. The accelerometer has a high shock resistance, no DC-shift effect and consumes much less energy than IEPE / ICP sensors.



### Technical Specifications

#### Performance:

Number of Axes	3
Sensitivity ( $\pm 5\%$ )	0.661 mV/ms <sup>-2</sup> at 79.58 Hz
Measurement Range	2000 ms <sup>-2</sup> PEAK
Frequency Response (by design guideline, $\pm 3$ dB)	0 Hz $\div$ 1500 Hz
Resonant Frequency	16.5 kHz (MEMS transducer)
Electrical Noise	< 0,14 ms <sup>-2</sup> RMS, Wh weighting

#### Electrical:

Supply Current	< 5.0 mA
Supply Voltage	3.3 V $\div$ 5.5 V
Bias Voltage	1.5 V $\pm$ 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 <sup>-2</sup> shock survival for MEMS sensor
Temperature Coefficient	< $\pm$ 0.02 %/ $^{\circ}$ C
Temperature	from -10 $^{\circ}$ C to +50 $^{\circ}$ 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	15.5mm x 15.5 mm x 15.5mm
Weight	20 grams (without cable)

#### Accessories:

SA 155 (optional)	calibration adapter
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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.