

SV 85

General Purpose Vibration Accelerometer



SV85 is a triaxial accelerometer (IEPE) for vibration measurements with the SVAN 958A Vibration Meter. The accelerometer housing is hermetically sealed and suitable to monitor the vibration in a harsh industrial environments. The signal ground is isolated from the mounting surface and the outer housing to prevent ground loops.

Technical Specifications

Performance

Number of Axes	3
Sensitivity ($\pm 10\%$)	10 mV/(m/s ²) ~ 100 mV/g
Measurement Range	0.005 m/s ² RMS ÷ 500 m/s ² Peak
Frequency Response (± 3 dB)	0.5 Hz ÷ 13 000 Hz (Z axis); 0.5 Hz ÷ 10 000 Hz (X, Y axis)
Resonant Frequency	40 kHz
Residual Noise (1 Hz, 24°C)	300 µg RMS
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Electrical

Supply Current (IEPE)	2 mA ÷ 10 mA
Supply Voltage (IEPE)	22 V ÷ 28 V
Bias Voltage (IEPE)	+12 ± 2 VDC
Output Impedance (Nominal)	50 Ω
Charge / Discharge Time Constant (start-up time)	< 1 sec. typ.

Environmental Conditions

Maximum Vibration (shock survival)	50 000 m/s ² Peak
Thermal Sensitivity Coefficient	0.1 %/°C F.S.
Operating Temperature Range (recommended)	from -10 °C to +50 °C
Humidity / Enclosure	Not affected, hermetically sealed

Physical

Connector	M12 glass sealed
Dimensions	33,3x46,6x17.5 mm (with connector) 33,3x32,7x17.5 mm (without connector)
Weight	117 grams (with M6 mounting thread) 111 grams (without M6 mounting thread)
Mounting Thread	M6
Material Housing & Connector	Stainless steel

Optional accessories



SV 111
Field
Vibration Calibrator



SV 110
Hand-held
Vibration Calibrator



SA 154
Calibration Adapter
to SV 85



SC 282
Cable to SV 85
and SVAN 958A