

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 Sensitivity (± 10 %) Measurement Range Frequency Response (± 3 dB)

Residual Noise (1 Hz, 24°C) Residual Noise (1 kHz, 24°C)

Electrical

Supply Current (IEPE) Supply Voltage (IEPE) Bias Voltage (IEPE) Output Impedance (Nominal) Charge / Discharge Time Constant (start-up time)

Environmental Conditions

Maximum Vibration (shock survival) Thermal Sensitivity Coefficient Operating Temperature Range (recommended) Humidity / Enclosure

Physical

Connector Dimensions

Weight

Mounting Thread Material Housing & Connector 3 $10~\text{mV/(m/s}^2) \sim 100~\text{mV/g}$ $0.005~\text{m/s}^2~\text{RMS} \div 500~\text{m/s}^2~\text{Peak}$ $0.5~\text{Hz} \div 13~000~\text{Hz}$ (Z axis); $0.5~\text{Hz} \div 10~000~\text{Hz}$ (X, Y axis) 40~kHz $300~\mu g~\text{RMS}$ $3000~\mu g~\text{RMS}$

2 mA ÷ 10 mA 22 V ÷ 28 V +12 +/- 2 VDC 50 Ω

< 1 sec. typ.

50 000 m/s² Peak 0.1 %/°C F.S.

from -10 °C to +50 °C Not affected, hermetically sealed

M12 glass sealed 33,3x46,6x17.5 mm (with connector) 33,3x32,7x17.5 mm (without connector) 117 grams (with M6 mounting thread) 111 grams (without M6 mounting thread)

Stainless steel

Optional accessories



SV 111 Field Vibration Calibrator



Hand-held Vibration Calibrator



SA 154 Calibration Adapter to SV 85



SC 282 Cable to SV 85 and SVAN 958A