SV 81
General Purpose Vibration Accelerometer

The SV 81 is an IEPE piezoelectric accelerometer offered to SVAN 974. The accelerometer's high sensitivity and low electronic noise enable measurements of very low vibration amplitudes over the typical machines' frequency operating ranges. The accelerometer is mounted on a vibrating surfaces with the mounting magnet.

Technical Specifications

Performance:	
Number of Axes	1
Sensitivity (± 5 %)	50 mV/(ms^{-2}) ~ 500 mV/g
Measurement Range	0.002 ms^{-2} RMS ÷ 100 ms^{-2} PEAK
Frequency Response (by design guideline, ± 3 dB)	0.2 Hz ÷ 3 700 Hz
Resonant Frequency	16 kHz
Residual Noise (1 Hz, 24°C)	2.4 µg RMS
Residual Noise (1 Hz to 25 kHz, 24°C)	25 µg RMS
Transverse Response Sensitivity (20 Hz, 50 m/s2)	< 5 %
Electrical:	
Supply Current (IEPE)	2 mA ÷ 10 mA
Supply Voltage (IEPE)	22 V ÷ 28 V
Bias Voltage (IEPE)	+12 VDC
Output impedance (Nominal)	50 Ω
Charge / Discharge Time Constant (start-up time)	< 10 sec. typ.
Environmental Conditions:	
Maximum Vibration (shock survival)	50 000 ms^{-2} Peak
Thermal Sensitivity Coefficient	0.1 %/^{o} C F.S.
Operating Temperature Range (recommended)	from -10 °C to +50 °C
Humidity / Enclosure	IP67, epoxy sealed
Physical:	
Connector	TNC socket, top radially mounted
Weight	44 grams
Mounting Thread	10-32 UNF 2B
Accessories:	
Mounting Stud	10-32 to M5 (included)
SA 27/10-32	Mounting magnet base (optional)
SC 27	Coil cable TNC plug – TNC plug, 2 meters (optional)

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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