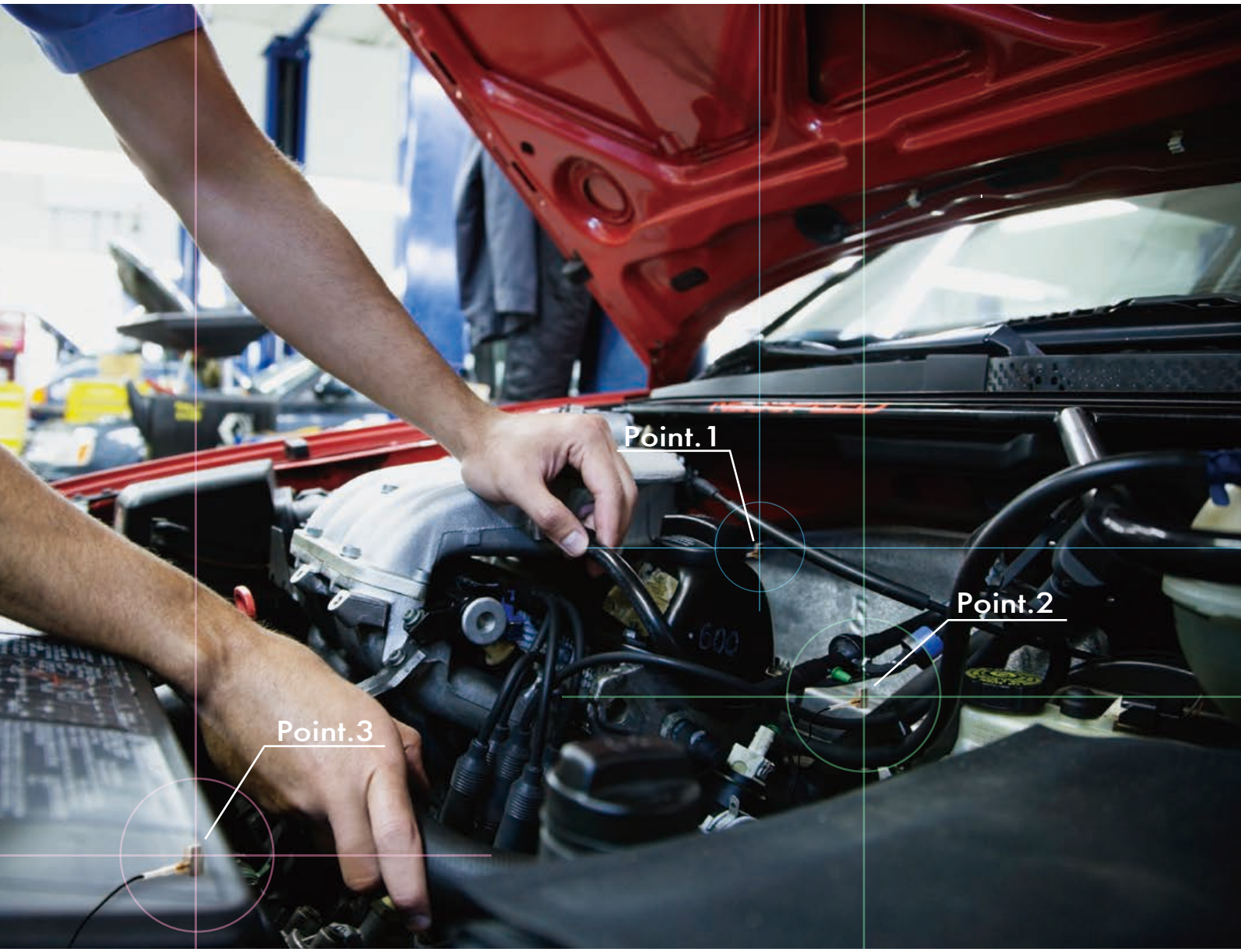


Piezoelectric Accelerometer

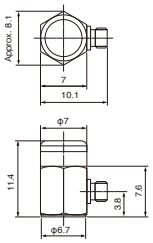
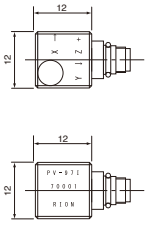
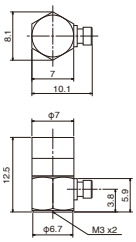
PV-90T

- With built-in amplifier, compact and lightweight
- Suitable for vibration measurement and mode analysis of lightweight structures.
- Available for reading sensor parameters by connecting to TEDS applicable instruments

TEDS: TEDS is a format to describe tranceducer information regulated by IEEE 1451, PV-90T will be calibrated automatically when connected to TEDS applicable instruments as PV-90T has the following recorded parameters inside

TEDS Parameters: Manufacturer ID, Model Number, Serial Number, Sensitivity, Sensitivity Direction, Weight, Polarity, Reference Frequency, Reference Temperature, Calibration Date, etc.

Piezoelectric Accelerometers
With built-in amplifier

Model	Compact, lightweight, TEDS applicable	Compact, tri-axial	High-Temperature Resistance CCLD Type
Photo			
	PV-90T	**PV-97I**	**PV-91C**
Principle	Shear	Shear	Shear
Mass g	2	8	1.8
Voltage sensitivity mV/(m/s²) ※1	0.5	1.1	1
Vibration frequency range Hz ※2	1 to 12 000 (±10 %)	1 to 7 000 (Z) ※4 1 to 5 000 (X・Y) (±10 %)	1 to 20 000 (±10 %) ※5
Mounting resonance frequency kHz ※2	50	—	55
Transverse sensitivity	5 % or less	5 % or less	5 % or less
Standard mounting method, ※3 Screw torque N-m	VP-53K M3 screws・0.5	Bond	VP-53K M3 screws・0.5
Maximum measurable acceleration m/s² (peak)	7 000	5 000	5 000 ※6
Base distortion sensitivity (m/s²)/μstrain	0.05	0.1	0.006 ※7
Thermal transient response (m/s²) / °C	1.0	1.0	0.04 ※7
Ambient temperature range for operation / °C	−20 to +100 (TEDS: −20 to +85)	−20 to +125	−50 to +170
Case material	Titanium	Titanium	Titanium
Connecting equipment	2 mA to 4 mA regulated power supply	2 mA to 4 mA regulated power supply	2 mA to 4 mA regulated power supply
External dimensions mm			
Dimensions mm	7 (Hex) ×11.4 (H)	12 (H)×12 (W)×12 (D)	7 (Hex)×12.5 (H)
Supplied accessories — Cable	VP-51LC	VP-51W	VP-51LC
Supplied accessories — Screw, Attachment, Adapter	VP-53K×2,VP-53W×1 Single-head spanner (7 mm), Hex wrench 1.5	VP-57ES (Option)	VP-53K×2, VP-53W×1 Single-head spanner (7 mm), Hex wrench 1.5

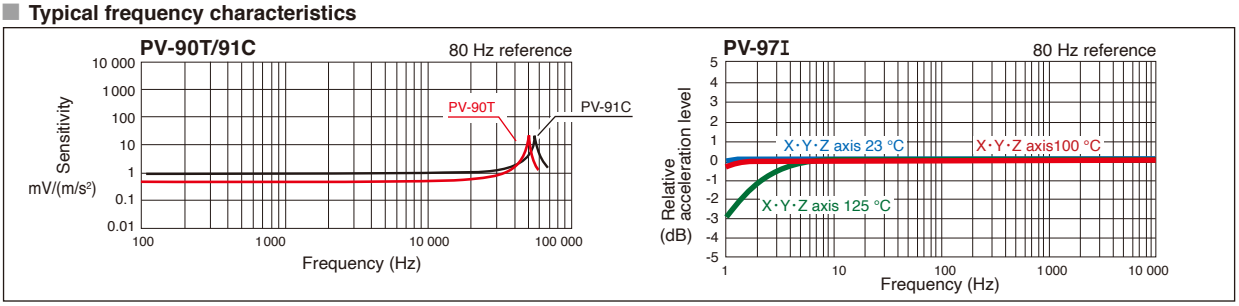
Notes ※1 Representative value; actual value is noted on calibration sheet supplied with accelerometer. ※2 Representative value when mounted on flat surface according to standard mounting method (※3). ※4 100 °C or less 1 000 m/s² or less ※5 150 °C to 170 °C from 1 Hz to 2 Hz (±15 %) ※6 The maximum measurable acceleration differs, depending on temparature, voltage sensitivity,and power supply voltage. ※7 Representative value.PV-90T/97I/41 denotes maximum value.

● Please take care not to drop accelerometers and carefully handle them with attachments.
There is likely to be trouble of piezoelectric accelerometers by (giving) excessive shock. The excessive shock carries some damages onto piezoelectric ceramic element.

Noiselevel of acceleration (m/s²)

General-Purpose Vibration Meter	**VM-83**	0.2	0.04	0.1
Vibration Level Meter Unit	**UV-15**	0.2	0.04	0.1
2-channel Charge Amplifier	**UV-16**	0.2	0.04	0.1

Typical frequency characteristics



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JCSS 0197

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