

Piezoelectric Accelerometer

NEW

PV-90T







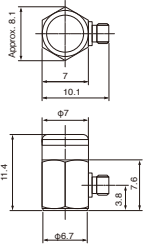
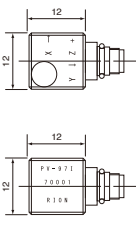
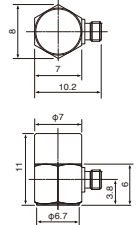
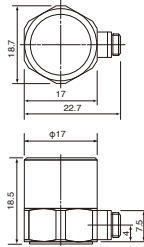
- With built-in amplifier, compact and lightweight
- Suitable for vibration measurement and mode analysis of lightweight structures.
- Available for reading sensor parameters by connecting to TEDS applicable instruments

TEDS TEDS is a format to describe transducer 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**

Photo
Model

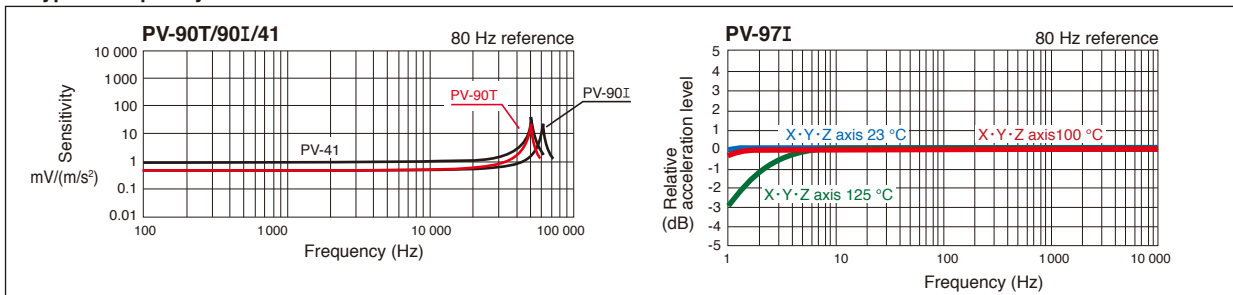
	Compact, lightweight, TEDS applicable	Compact, tri-axial	Compact, lightweight	General-purpose
	 PV-90T	 PV-971I	 PV-90I	 PV-41
Specifications				
Principle	Shear	Shear	Shear	Shear
Mass g	2	8	1.8	23
Voltage sensitivity mV/(m/s ²) ^{*1}	0.5	1.1	0.44	1.02
Vibration frequency range Hz ^{*2}	1 to 12 000 (±10 %)	1 to 7 000 (Z) ^{*4} 1 to 5 000 (X·Y) (±10 %)	3 to 20 000 (±1 dB)	3 to 10 000 (±1 dB)
Mounting resonance frequency kHz ^{*2}	50	—	60	50
Transverse sensitivity	5 % or less	5 % or less	5 % or less	4 % or less
Standard mounting method, ^{*3} Screw torque N·m	VP-53K M3 screws · 0.5	Bond	VP-53K M3 screws · 0.5	VP-53A M6 screws · 3.5
Maximum measurable acceleration m/s ² (peak)	7 000	5 000	5 000	2 000
Base distortion sensitivity (m/s ²)/μstrain	0.05	0.1	0.1	0.03
Thermal transient response (m/s ²) / °C	1.0	1.0	10	0.01
Ambient temperature range for operation / °C	-20 to +100 (TEDS: -20 to +85)	-20 to +125	-20 to +100	-20 to +100
Case material	Titanium	Titanium	Titanium	Stainless steel
Connecting equipment	2 mA to 4 mA regulated power supply	2 mA to 4 mA regulated power supply	2 mA regulated power supply	2 mA regulated power supply
External dimensions mm				
Dimensions mm	7 (Hex) × 11.4 (H)	12 (H) × 12 (W) × 12 (D)	7 (Hex) × 11 (H)	17 (Hex) × 18.5 (H)
Supplied accessories	Cable: VP-51L Screw, Attachment, Adapter: VP-53Kx2, VP-53Wx1 Single-head spanner (7 mm), Hex wrench 1.5	Cable: VP-51W Attachment: VP-57ES (Option)	Cable: VP-51L Attachment: VP-53Kx2, VP-53Wx2 Single-head spanner (7 mm), Hex wrench 1.5, Dual-sided adhesive tape	Cable: VP-51A Attachment: VP-53A

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
 ● 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	0.2	0.025
Vibration Meter Unit: UV-15	0.2	0.04	0.2	0.025
2-channel Charge Amplifier: UV-16	0.2	0.04	0.2	0.025

Typical frequency characteristics



* Specifications subject to change without notice.



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