



CONTROL ACCELERATION CONVERTERS

# VPI

VPI-218-K; VPI-217-K; VPE-157-K

The reference converters VPI are designed to convert a vibration acceleration into a proportional electric charge. Together with secondary devices, they can be used as part of vibration converter monitoring systems.

The housing of the VPE vibration sensor is made of stainless steel. The sensing element is a piezoelectric bimorph made by the means of diffusion welding. Electrical characteristics of the sensing element are thermally stabilized.



| Parameters   | VPI-218-K     | VPI-217-K           | VPE-157-K |
|--|---------------|---------------------|-----------|
| Sensitivity, pC/(m/s <sup>2</sup> ) (± 2%)                     | 0.5           | 1/1/1               | -         |
| Sensitivity, μA/(m/s <sup>2</sup> ) (± 2%)                     | -             | -                   | 10        |
| Operating range, m/s <sup>2</sup>                              | 8000          | 4000                | 150       |
| Shock limit, m/s <sup>2</sup>                                  | 10000         | 10000               | -         |
| Amplitude nonlinearity, %                                      |               | ±1                  |           |
| Operating frequency range, Hz                                  |               |                     |           |
| ±10%   | 1-14000       | 1-6000              | 1-3000    |
| ±3 dB  | -             | 0.5-10000           | -         |
| Installation resonance frequency, kHz                          | 40            | 22                  | 9         |
| Transverse resonance frequency, kHz                            | 40            | 22                  | 9         |
| Transverse Sensitivity, %                                      |               | ± 3                 |           |
| Insulation resistance in normal conditions, not less than, Ohm |               | 1 * 10 <sup>8</sup> | -         |
| Weight without cable, gm                                       | 50            | 100                 | 120       |
| Dimensions, mm   | 30x20x25      | 21x40x48            | 28x44x50  |
| Case Material  | titanium      | stainless steel     | titanium  |
| Sensing element  | piezoelectric |                     |           |
| Connector  | OCCP-50       | PC-4                |           |
| Mounting   | M5            | hole Ø 5.5          | M5        |

