ACCELERATION CONVERTERS

VPI-103-Q1; VPI-103-Q2



PIEZOSENSOR[®]

VPI converters are designed to convert a vibration acceleration into a proportional electrical charge.

Together with secondary devices, they can be used as part of vibration monitoring and vibration diagnostic systems of the power plants state, elements of rotating power equipment, oil pumping and gas compression stations, and other industrial facilities.

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-103-Q1	VPI-103-Q2	
Sensitivity, pC/(m/s ²), (± 5%)	1	2	
Operating range, m/s ²	4000	3000	
Shock limit, m/s ²	10000	10000	
Amplitude nonlinearity, %	± 2		
Frequency range, Hz ±10% ±3 dB	1-6000 0.5-10000	1-5000 0.5-10000	
Installation resonance frequency, kHz	22	20	
Transverse resonance frequency, kHz	22	20	
Transverse Sensitivity, %		± 5	
Insulation resistance in normal conditions, not less than, Ohm	1 * 10 °		
Temperature range, °C	-40 ÷ 250		
Temperature coefficient , %/ °C	0.05		
Weight without cable, gm	60		
Dimensions, mm	22x37x64		
Case Material	stainless steel		
Sensing element	piezoelectric		
Mounting	3 holes Ø 4.5		
Cable length , m	0.3 ÷ 5		

