



ACCELERATION CONVERTERS

VPE-080



UA-TR.001

VPE converters are designed to convert a vibration acceleration into a proportional electrical signal.

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	VPE -080-T (N)
Sensitivity, $\text{mkA}/(\text{m}/\text{c}^2)$ ($\text{mB}/(\text{m}/\text{c}^2)$), ($\pm 5\%$)	10
Operating range, m/s^2	150 (300)
Amplitude nonlinearity, %	± 2
Amplitude-frequency characteristic from 10 to 1000 Hz, %	± 5
Installation resonance frequency, kHz	20
Transverse resonance frequency, kHz	20
Transverse Sensitivity, %	± 5
Temperature range, °C	$-40 \div 250$
Temperature coefficient, $\%/^{\circ}\text{C}$	0.05
Vibration converter consumption current, mA	$3 \div 4$
Dimensions, mm:	
- vibration converter	55x35x20
- remote electronic unit	$\varnothing 22 \times 65$
Weight without cable, gm	150
Case Material	stainless steel
Sensing element	piezoelectric
Mounting	4 holes $\varnothing 5.5$

