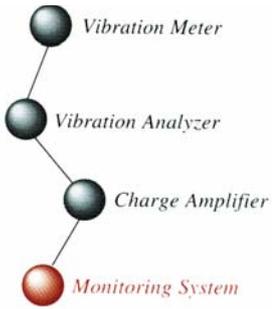


# Vibro-converter Model-2501



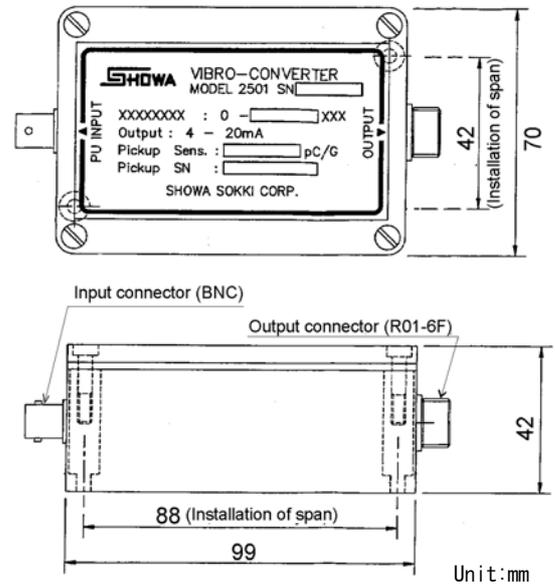
Stationary type vibration converter for monitoring vibrations of rotating machines and controlling trend of vibrations. Model-2501 serves to convert vibrating acceleration, velocity and displacement values into 4 to 20 mA signals.



- Compact piezoelectric sensor suitable for measuring application such as high temperature and high vibration level is selectable.
- 4 to 20mA output corresponding to vibration values is adjustable within a certain range.
- Ac output is available for waveform analysis using a FFT analyzer.
- This unit is easily connectable to a recorder, indicator or data collector is a remote location.

## SPECIFICATIONS

Maximum charge input:  $\pm 1,000\text{pC}$   
 Maximum input capacity:  $10,000\text{pF}$   
 Acceleration measurement (Measured value for detector  $50\text{pC/G}$ )  
     Measuring range: Any value is adjustable to maximum output of  $20\text{mA}$  within the range of  $20\text{m/s}^2$  to  $100\text{m/s}^2$  or  $2\text{G}$  to  $10\text{G}$ .  
     Resolution:  $0.1\text{m/s}^2$  or  $0.01\text{G}$   
     Frequency range:  $3\text{Hz} \sim 10\text{KHz}$  ( $-3\text{dB}$ ),  $5\text{Hz} \sim 8\text{KHz}$  ( $-1\text{dB}$ ),  $10\text{Hz} \sim 5\text{KHz}$  ( $\pm 0.5\text{dB}$ )  
 Low-pass filter: IN  $\dots$   $1\text{KHz}$  cut-off ( $-3\text{dB}$ ), Any frequency is optionally available (within range of  $50\text{Hz}$  to  $5\text{KHz}$ ).  
     OUT  $\dots$   $10\text{KHz}$  cut-off ( $-3\text{dB}$ ), Fixed  
 Velocity measurement (Measured value for detector  $50\text{pC/G}$ )  
     Measuring range: Any value is adjustable to maximum output of  $20\text{mA}$  within the range of  $20\text{mm/s}$  to  $100\text{mm/s}$ .  
     Resolution:  $0.1\text{mm/s}$   
     Frequency range:  $7\text{Hz} \sim 10\text{KHz}$  ( $-3\text{dB}$ ),  $10\text{Hz} \sim 6\text{KHz}$  ( $\pm 1\text{dB}$ )  
 Displacement measurement (Measured value for detector  $50\text{pC/G}$ )  
     Measuring range: Any value is adjustable to maximum output of  $20\text{mA}$  within the range of  $0.2\text{mmP-P}$  to  $1\text{mmP-P}$ .  
     Resolution:  $0.001\text{mmP-P}$  ( $1\mu\text{m}$ )  
     Frequency range:  $8\text{Hz} \sim 10\text{KHz}$  ( $-3\text{dB}$ ),  $10\text{Hz} \sim 700\text{KHz}$  ( $\pm 1\text{dB}$ )  
 DC output:  $4 \sim 20\text{mA}$ , Load resistance  $\dots$   $300\Omega$ ,  
     Detection  $\dots$  AVE-PEAK  
     Up to  $1/10$  of full scale is adjustable to  $20\text{mA}$  with zero span.  
 Control. AC output:  $\pm 2\text{V}$  full scale (fixed with full scale that is determined according to pick-up sensitivity)  
 Accuracy:  $5\%$  or less ( $80\text{Hz}$ ,  $1\text{G}$ , sine wave, normal temp)  
 Linearity:  $1\%$  or less  
 Diving power:  $\text{DC}11\text{V} \sim 26\text{V}$ ,  $30\text{mA}$   
 Temp. & humidity range: Operation:  $0 \sim 50^\circ\text{C}$ , Storage:  $-20^\circ\text{C} \sim 70^\circ\text{C}$ ,  $90\%$  RH or less  
 Case material: Aluminum alloy (Neoprene packing)  
 Component Device: Converter cable: CA4612-3m (3m)



## OPTION

[Pick up] Piezo-Electric Type  
**MODEL-2300A, MODEL-2304A**, etc.  
 [Insulated Stud] **SI-17**  
 [Pick up cable] Low Noise Cable  
**LNC-3F-1.5** (m), **LNC-1A-3** (m), etc.  
 [Output cable] **CA4612-\*\*\*** (m)  
 [Digital Monitor] **MODEL-2590**



SI-17



The Digital Monitor Model 2590 receives a  $4 \sim 20\text{mA}$  signal from the vibration converter, scales it into a vibration value for digital display and allows the vibration to be

2-high limit position alarm contact output. As an operating power supply for vibration converter is incorporated to make installation easier.

### ■ Specifications

Input signal:	$4 \sim 20\text{mA}$ (Span/Zero fine adjustable)
Power supply for converter:	$+15\text{V}$ , $40\text{mA}$ max.
Alarm setting:	2 high limit positions AL I (HH) and AL II (H)
Alarm relay contact:	Transfer. Rating AC $250\text{V}$ $5\text{A}$ , DC $30\text{V}$ $5\text{A}$ max.
Alarm delay:	Can be set at $0 \sim 99.9$ sec.
As desired	
Power supply:	AC $85 \sim 264\text{V}$ $50/60\text{Hz}$ , $5\text{VA}$ or less
Dimensions and weight:	$96$ (W) $\times$ $48$ (H) $\times$ $90.4$ (D) mm Approx. $300\text{gram}$



Always satisfying needs for Safety and Comfortability.

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