

# TA-25J

### General

The new TA-25J Series servo accelerometer offers improved reduction in self-noise compared to the current model.

With a redesigned electrical circuit and enhancements in performance, this cost-effective servo accelerometer is ideal for seismic observation and vibration measurement.

The TA-25J servo accelerometer maintains the compact & light weight configuration and excellent wide measurement frequency range resolution and high accuracy associated with the TA-25 Series.

### Applications

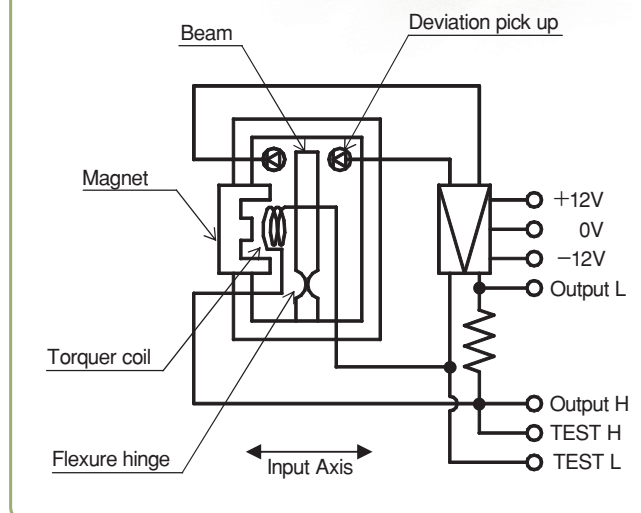
- Seismic observation
- Vibration and micro vibration measurement
- Vibration isolation

### Features

- 1) Frictionless flexure hinge insures stability with no mechanical wear.
- 2) Good linearity and resolution.
- 3) Easy signal processing with high output voltage.
- 4) Simple, robust, and reliable construction.



### System Diagram

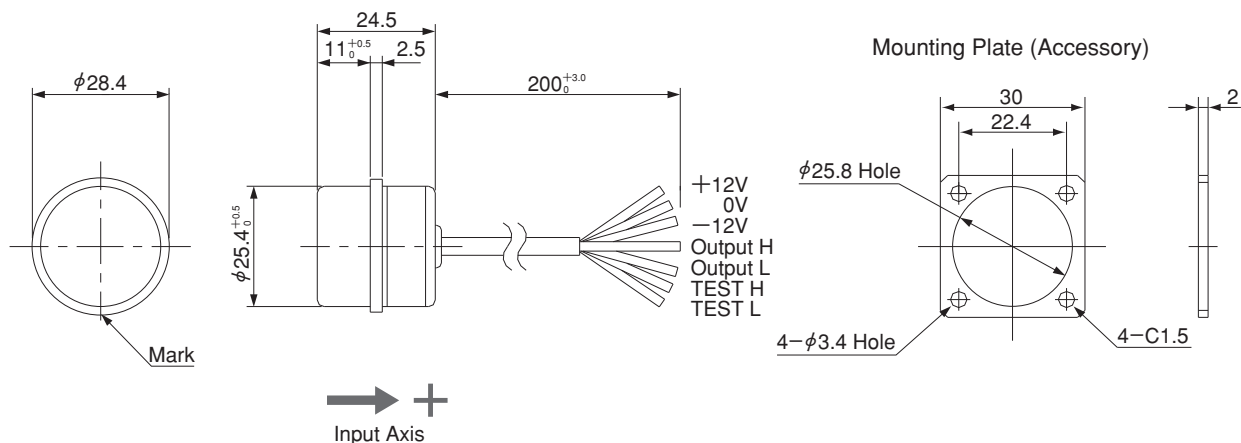


## Specifications

Model	TA-25J-05-10	TA-25J-02-1
Measurement range	$\pm 39.24 \text{m/s}^2$ [ $\pm 4\text{G}$ ]	$\pm 18.62 \text{m/s}^2$ [ $\pm 1.9\text{G}$ ]
Resolution	$9.8 \times 10^{-6} \text{m/s}^2$ (DC) or less [ $1 \mu\text{G}$ ]	
Self-noise (@1~45Hz)	$2.0 \times 10^{-6} \text{m/s}^2/\sqrt{\text{Hz}}$ [ $2.0 \times 10^{-7} \text{G}/\sqrt{\text{Hz}}$ ] Typ.	
Linearity	$\pm 0.1\% \text{F.S}$ or less	
Output sensitivity	$0.194 \text{V}/(\text{m/s}^2)$ [ $1.9 \text{V}/\text{G}$ ] $\pm 5\%$	$0.510 \text{V}/(\text{m/s}^2)$ [ $5.0 \text{V}/\text{G}$ ] $\pm 5\%$
Cross-talk	1 % or less	
Frequency response	450Hz ( $\pm 3\text{dB}$ )	
Bias	$\pm 0.5 \text{m/s}^2$ or less	
Bias temperature coefficient	$\pm 2.94 \times 10^{-3} \text{m/s}^2/\text{C}$ or less	
Temperature range	$-20 \sim +70^\circ\text{C}$ (Storage $-40 \sim +80^\circ\text{C}$ )	
Vibration	Function OK under following frequency, direction and duration conditions: 33.3Hz frequency; 68.6m/s <sup>2</sup> oscillating acceleration applied in X direction for 2 hr, Y direction for 2h, and Z direction for 4h (conforms to JIS A 8101)	
Shock	$980 \text{m/s}^2$ 6ms	
Power supply	$\pm 12 \text{VDC} \sim \pm 13 \text{VDC}$	$\pm 15 \text{VDC} \sim \pm 16 \text{VDC}$
Power consumption	$\pm 25 \text{mA}$ or Less	
Dimensions	$\phi 28.4 \times 24.5 \text{mm}$	
Mass	46g (including cable 10g)	

## Dimensions

unit : mm



Design and specifications are subject to change without prior notice, and without any obligation on the part of the manufacturer.



**CAUTION**

Before operating this equipment, you should first thoroughly read the operator's manual.

**TOKYO KEIKI**

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