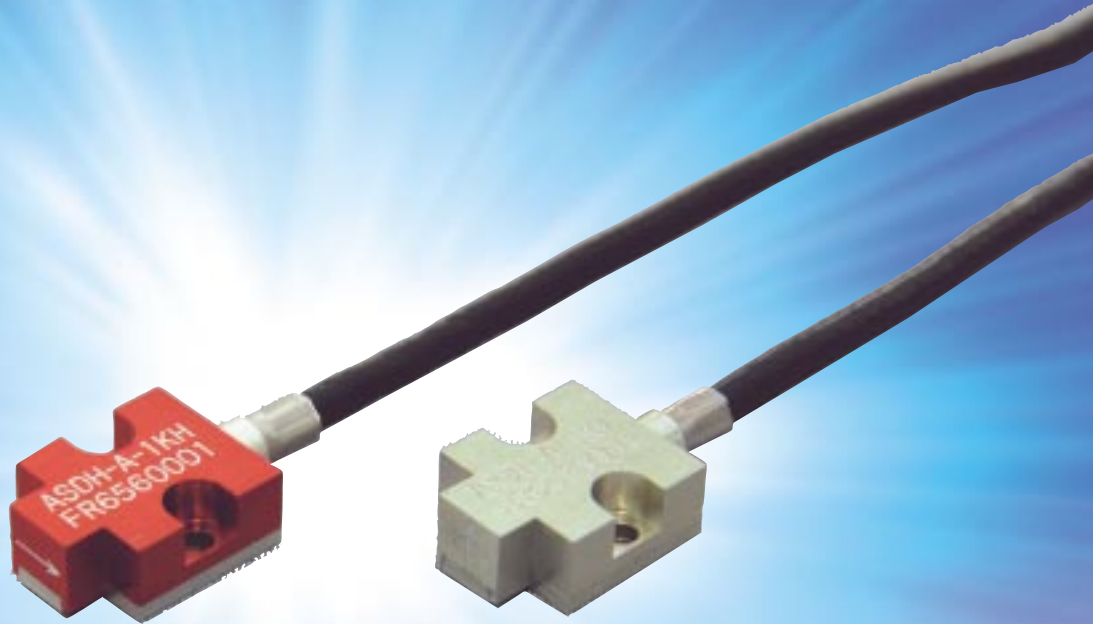


# Small Acceleration Transducers

## For Automotive Crash Safety Tests



# ASDH-A-1KV/H

- ◆ Transverse sensitivity of 1% ensures considerably higher accuracy than KYOWA forerunners.
- ◆ Undamped design ensures minimal influence to the frequency response and phase characteristic.
- ◆ 2 models are available for selection of the sensitive axis, vertical or horizontal to the mounting surface.
- ◆ With applications for triaxial measurement in mind, the centroid of each transducer is put at the top.
- ◆ Rated capacity as high as  $\pm 9807 \text{ m/s}^2$  ( $\pm 1000 \text{ G}$ ).
- ◆ Rated output as high as  $1.2 \text{ mV/V}$  ( $2400 \mu\text{m/m}$ ) or more.

## Specifications

### Sensitive Axis

ASDH-A-1KV: Vertical  
ASDH-A-1KH: Horizontal

### Performance

Rated Capacity:  $\pm 9807 \text{ m/s}^2 (\pm 1000 \text{ G})$   
Nonlinearity: Within  $\pm 0.5\%$  RO  
Hysteresis: Within  $\pm 0.5\%$  RO  
Rated Output:  $1.2 \text{ mV/V} (\pm 2400 \mu\text{m/m})$  or more  
Peak-to-Peak Sensitivity Deviation:  $1\%$  RO or less

### Environmental Capability

Safe Temperature Range:  $-20^\circ$  to  $60^\circ\text{C}$   
Compensated Temperature Range:  $5^\circ$  to  $40^\circ\text{C}$   
Temperature Effect on Zero Balance: Within  $\pm 0.5\%$  RO/ $^\circ\text{C}$   
Temperature Effect on Output: Within  $\pm 0.1\%$ / $^\circ\text{C}$

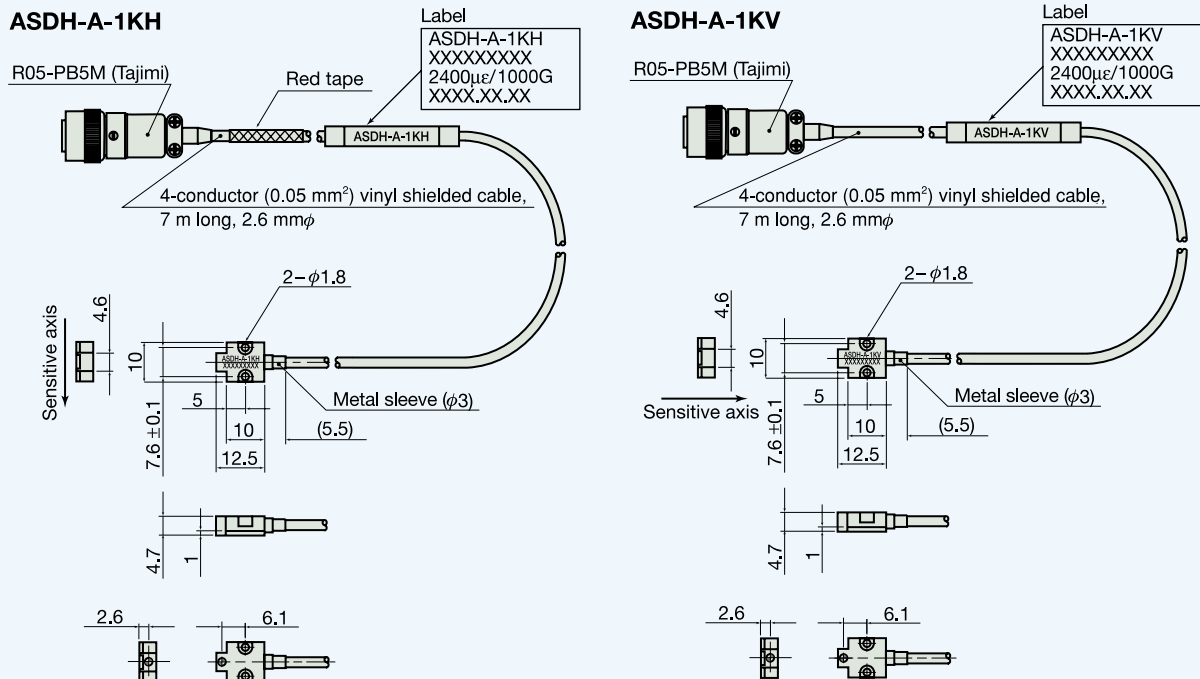
### Electrical Characteristics

Safe Excitation Voltage:  $12 \text{ V AC}$  or DC  
Recommended Excitation Voltage:  $2$  to  $10 \text{ V AC}$  or DC  
Input Resistance:  $0.5$  to  $1.0 \text{ k}\Omega$   
Output Resistance:  $0.5$  to  $1.0 \text{ k}\Omega$   
Cable: 4-conductor ( $0.05 \text{ mm}^2$ ) vinyl shielded cable,  $7 \text{ m}$  long,  $2.6 \text{ mm}\phi$ , terminated with connector plug R05-PB5M

### Mechanical Properties

Safe Overload Rating:  $200\%$   
Frequency Response Range at  $23^\circ\text{C}$ : DC to  $4 \text{ kHz}$  (sensitivity deviation  $\pm 5\%$ )  
Mounted Resonant Frequency:  $23 \text{ kHz}$  or more  
Transverse Sensitivity:  $1\%$  or less  
Weight: Approx.  $85 \text{ g}$  (Mainframe: Approx.  $1.4 \text{ g}$ )

## Dimensions



#### Notes

1. denotes the centroid.
2. Shield wire is not connected to the chassis.



JQA-0821  
JQA-EM4824

Specifications are subject to change without notice for improvement.



#### Safety precautions

Be sure to observe the safety precautions given in the instruction manual, in order to ensure correct and safe operation.

Reliability through integration



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