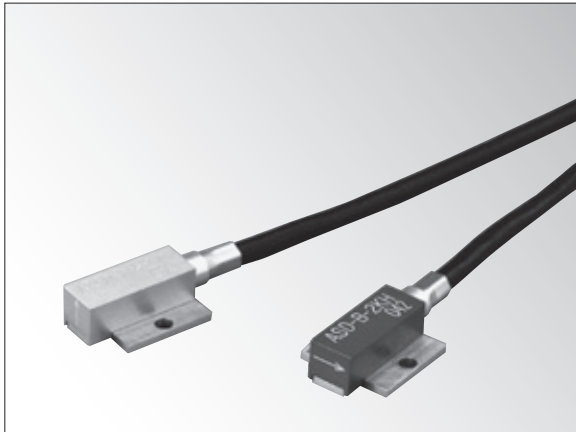


ASD-B

●For Crash Tests ●9807m/s²,19613m/s²

Acceleration Transducer for Crash Test



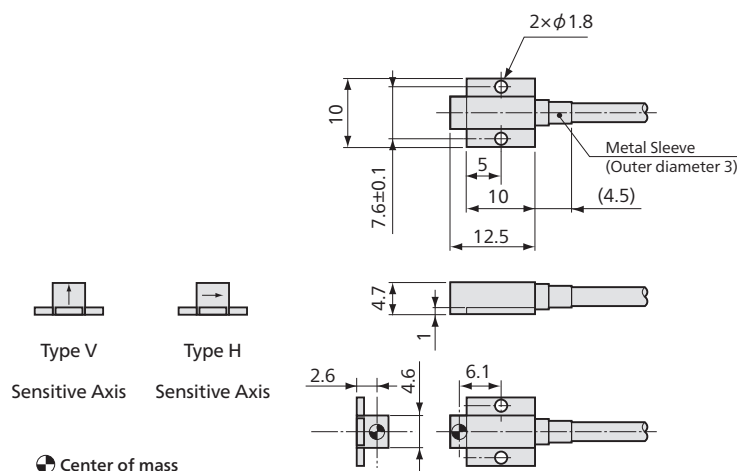
Mountable to dummies and car bodies for crash test

- There are two types: Vertical and horizontal.
- The range of recommended excitation is 2 to 10 V AC or DC, ensuring high output.
- Centroid is set at the tip of mainframe for triaxial configuration of acceleration transducers.
- Undamped design ensures minimal influence to the frequency response and phase characteristics.

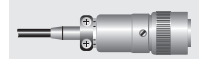
The ASD-B is a compact and lightweight undamped acceleration transducer adopting a sputter strain gage for the sensing element. It is suitable for measurement of acceleration given to a car body or dummy in automotive crash tests.

Considering that 3 units may be used for simultaneous measurement of acceleration in 3 directions. The ASD-B provides the centroid at the tip of mainframe so that 3 units are arranged with their vibration centroids put nearby.

Dimensions



Connector plug
R05-PB5M



Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.5\%$ RO
Hysteresis	Within $\pm 0.5\%$ RO
Rated Output	1.2 mV/V or more
Peak-to-Peak Sensitivity Error	1% RO or less

Environmental Characteristics

Safe Temperature	-20 to 60°C
Compensated Temperature	5 to 40°C
Temperature Effect on Zero	Within $\pm 0.5\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.1\%$ RO

Electrical Characteristics

Safe Excitation	12 V AC or DC
Recommended Excitation	2 to 10 V AC or DC
Input Resistance	0.5 to 1.0 kΩ
Output Resistance	0.5 to 1.0 kΩ
Cable	4-conductor (0.05 mm ²) vinyl shielded cable, 2.6 mm diameter by 7 m long, terminated with a connector plug R05-PB5M (Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads	200%
Frequency Response	DC to 4 kHz at 23°C (Sensitivity deviation $\pm 5\%$)
Installation Resonance Frequency	See table below.
Transverse Sensitivity	3% RO or less
Weight	Approx. 1.0 g

Models	Sensitive Axes	Rated Capacity (Reference)	Installation Resonance Frequency
ASD-B-1KV	Vertical	$\pm 9807 \text{ m/s}^2 (\pm 1000 \text{ G})$	23 kHz or more
ASD-B-1KH	Horizontal	$\pm 9807 \text{ m/s}^2 (\pm 1000 \text{ G})$	23 kHz or more
ASD-B-2KV	Vertical	$\pm 19613 \text{ m/s}^2 (\pm 2000 \text{ G})$	26 kHz or more
ASD-B-2KH	Horizontal	$\pm 19613 \text{ m/s}^2 (\pm 2000 \text{ G})$	26 kHz or more

ASD-B
Recommended
products for
combination



It requires change of the conversion cable or plug.

