



Strain Gage

Load Cell

Pressure
SensorAcceleration
SensorTorque
SensorDisplacement
SensorComponent
Force
SensorAutomotive
SensorCivil
Engineering
Sensor

ASM-A-ID



Semiconductor Acceleration Transducer for Crash Test



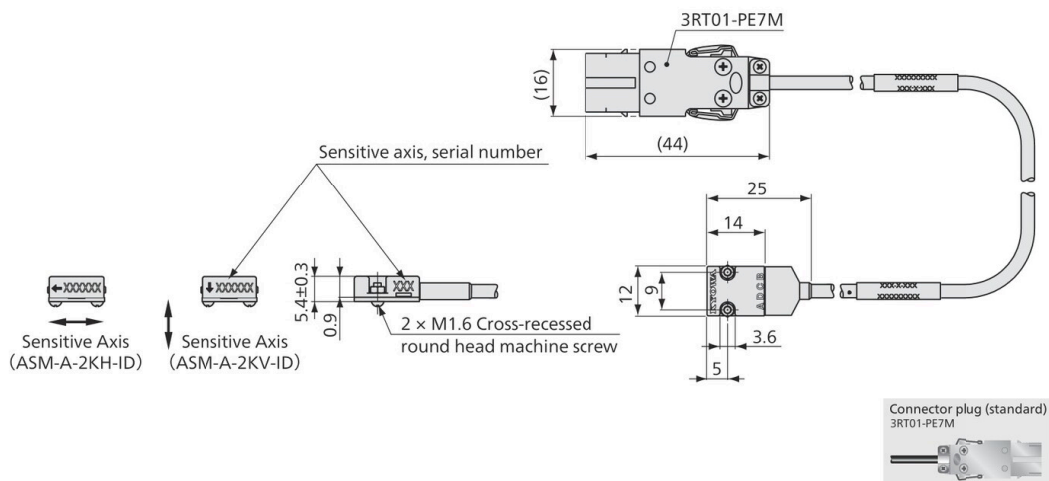
Measurement of acceleration in crash test vehicles

- Rated capacity: $\pm 19613 \text{ m/s}^2$
- High output (rated output 6 mV/V or more)
- Vertical and horizontal sensitive axis available

Compact and lightweight transducers using semiconductor strain gages for sensing parts measure vehicle acceleration during automotive crash testing.

They use no damping oil for minimal effect on frequency and phase characteristics due to temperature.

Dimensions



Specifications

Performance

Rated Capacity	$\pm 19613 \text{ m/s}^2 (\pm 2000 \text{ G})$
Nonlinearity	Within $\pm 1\%$ RO
Hysteresis	Within $\pm 1\%$ RO
Rated Output	6 mV/V or more
Peak-to-peak Sensitivity Error	1.5% RO or less

Environmental Characteristics

Safe Temperature	-20 to 60°C
Compensated Temperature	5 to 40°C
Temperature Effect on Zero	Within $\pm 3\%$ RO
Temperature Effect on Output	-1 to 0%/°C

Electrical Characteristics

Safe Excitation	2 VDC
Recommended Excitation	2 VDC
Input Resistance	120 $\Omega \pm 20\%$
Output Resistance	120 $\Omega \pm 20\%$
Cable	4-conductor (0.05 mm ²) vinyl shielded cable, 3.2 mm diameter by 8 m long, terminated with a connector plug 3RT01-PE7M (Shield wire is not connected to the case.)
	TEDS built

Mechanical Properties

Safe Overloads	150%
Frequency Response	DC to 2.8 kHz (Sensitivity deviation $\pm 5\%$) at 23°C
Installation Resonance Frequency	25 kHz $\pm 30\%$
Transverse Sensitivity	3% RO or less
Weight	Approx. 4 g (Excluding cable)

Models

Model	Sensitive Axis
ASM-A-2KV-ID	Vertical
ASM-A-2KH-ID	Horizontal