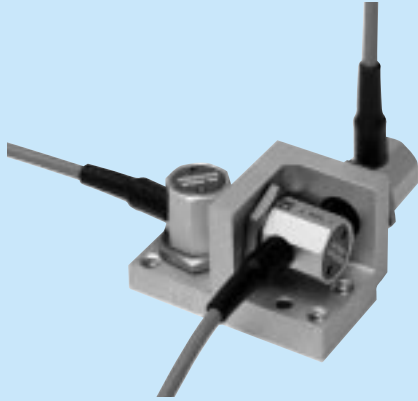


AS-THC

Thorax Triaxial Acceleration Transducers



*TEDS-installed model is also available.
Inquiries are welcome.*

Mounted to the thorax of Hybrid III dummy, the AS-THC detects impact-initiated acceleration in 3 directions of X, Y and Z. It consists of 3 acceleration transducers and a dedicated bracket to direct them to 3 orthogonal axes. The AS-THC is an export controlled product.*

Features

- Bracket with 3 acceleration transducers mounted can easily be mounted to the thorax of a dummy.
- Conforms to Federal Motor Vehicle Safety Standard 208 as a sensor to acquire data of injury criterion.

Composition

- 3 acceleration transducers AS-200HA M40 or AS-500HA M40
- 1 dedicated bracket DC-3A
- 3 dedicated hexagon socket head countersunk screws, M5 x 8

These components are individually available on request.

Specifications

Performance

Rated Capacity (Common to X, Y and Z Directions)

AS-200THC: $\pm 1961 \text{ m/s}^2$ ($\pm 200 \text{ G}$)

AS-500THC: $\pm 4903 \text{ m/s}^2$ ($\pm 500 \text{ G}$)

Nonlinearity: Within $\pm 1\%$ RO

Hysteresis: Within $\pm 1\%$ RO

Rated Output: 0.5 mV/V ($1000 \mu\text{m/m}$) $\pm 20\%$

Environmental Characteristics

Safe Temperature Range: -15 to 65°C

Electrical Characteristics

Safe Excitation Voltage: 6 VAC or DC

Recommended Excitation Voltage: 1 to 3 VAC or DC

Input Resistance: $120 \Omega \pm 10\Omega$

Output Resistance: $120 \Omega \pm 10\Omega$

Cable: 4-conductor (0.08 mm^2) vinyl shielded cable, 3.2 mm diameter by 9 m long, bared at the tip

Mechanical Properties

Safe Overload Rating: 300%

Frequency Respose Range: DC to 180 Hz at 23°C

(sensitivity deviation $+5$ to -10%)

Single unit of AS-200HA M10: DC to 3.5 kHz (sens. dev. $\pm 5\%$)

Single unit of AS-500HA M10: DC to 5 kHz (sens. dev. $\pm 10\%$)

Transverse Sensitivity: $\pm 2\%$

Weight: Approx. 492 g

Acceleration transducer 13.5 g x 3

Cable 135 g x 3

Bracket 46 g

*Export controlled products are strategic commodities to which the Foreign Exchange and Foreign Trade Control Act applies. The necessary legal procedures should therefore be taken with the Government of Japan if these products are to be taken abroad.

Dimensions

