ASHT-A

Simultaneous measurement of acceleration in X, Y and Z directions
98.07 to 9807 m/s²

Triaxial Acceleration Transducer



Compact and lightweight design and simultaneous measurement of accelerations in X, Y, and Z directions

- Measurement from DC is possible
- 3 acceleration transducers are within the same case, enabling measurement in X, Y, and Z axes.
- Minimal mutual interference between each axis, enabling high-accuracy measurement.
- Applicable to the analysis of acceleration in complex vibration phenomena
- Compact & lightweight

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within ±1% RO
Hysteresis	Within ±1% RO
Rated Output	See table below.

Environmental Characteristics

Safe Temperature	-15 to 65°C		
Compensated Temperature	5 to 40°C		
Temperature Effect on Zero	Within ±1% RO/°C		
Temperature Effect on Output	Within ±1% /°C		

Electrical Characteristics

Safe Excitation	6 V AC or DC			
Recommended Excitation	2 V AC or DC			
Input Resistance	See table below.			
Output Resistance	See table below.			
Cable 4-conductor (0.08 mm²) vinyl shielded cable,				
3.2 mm diameter by 5 m long, terminated with a connector plug				
PRC03-12A10-7M, 3 cables				
(Shield wire is not connected to the case.)				

Mechanical Properties

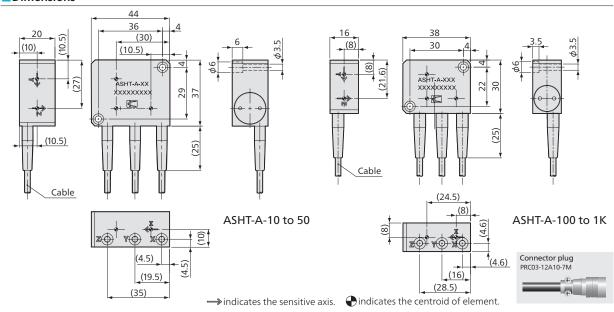
Safe Overloads	300%
Frequency Response	See table below.
Transverse Sensitivity	2% RO or less
Weight	See table below.

Models	Rated Capacity (Reference Value)	Rated Output	Input Resistance	Output Resistance	Frequency Response (At 23°C)	Weight (Approx.)*	
ASHT-A-10	±98.07 m/s² (±10 G)	0.5 mV/V ±25%		120 Ω ±5%	DC to 350 Hz Sensitivity deviation ±5%	95 g	
ASHT-A-20	±196.1 m/s² (±20 G)		120 Ω ±5%		DC to 500 Hz Sensitivity deviation ±5%		
ASHT-A-50	±490.3 m/s² (±50 G)				DC to 1 kHz Sensitivity deviation ±5%		
ASHT-A-100	±980.7 m/s² (±100 G)					DC and 20 Hz to 1.2 kHz Sensitivity deviation ±5%**	
ASHT-A-200	±1961 m/s² (±200 G)			120 Ω ±8.3%	DC and 20 Hz to 2.1 kHz Sensitivity deviation ±5%**	45 g	
ASHT-A-500	±4903 m/s² (±500 G)		120 Ω ±8.3%		DC and 40 Hz to 3 kHz Sensitivity deviation ±10%**		
ASHT-A-1K	±9807 m/s² (±1000 G)				DC and 40 Hz to 5 kHz Sensitivity deviation ±10%**		

 $[\]hbox{$\star* Specification is for single-axis of acceleration sensor before the sensor is integrated in outer case.}$

*Excluding cable

Dimensions





Outline

General

Piezoelectric

Gyro