ASW-A

Waterproof Acceleration Transducers

●Usable Underwater or in Soil ●9.807 to 196.1 m/s²

Waterproof

- TEDS-installed versions can be manufactured. Inquiries are welcome.

ASW-A series acceleration transducers feature a water-tight structure capable of withstanding water pressures of up to 490 kPa (5 kgf/cm²). Small in size, yet the highly reliable design ensures accurate measurement even under harsh operating conditions. Corrosion-resistant version with stainless steel case is also available.

Features

- Withstand water pressures up to 490 kPa
- Corrosion-resistant version with stainless steel case is available.

Specifications

Performance
Rated Capacity: See table below.
Nonlinearity: Within ±1% RO
Hysteresis: Within ±1% RO
Rated Output: 0.5 mV/V (1000 μm/m) or more

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: 122 Ω ±1.6%
Output Resistance: 122 Ω ±1.6%
Cable: 4-conductor (0.08 mm²) chloroprene shielded cable, 4 mm diameter by 5 m long, terminated with connector plug
Underwater application possible through use of KYOWA cable connection kit JB-200A
(Shield wire is connected to mainframe.)

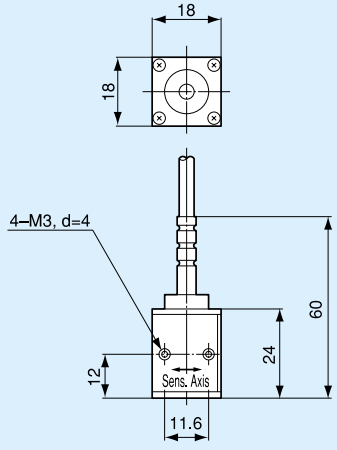
Mechanical Properties
Safe Overload Rating: 300%
Frequency Response Range: See table below.
Resonance Frequency: See table below.
Transverse Sensitivity: ±4%
Damping Ratio: Approx. 0.64 (23°C)
Withstand Water Pressure: 490.3 kPa
Material:
Case: Corrosion-resistant aluminum, anodic acid coating
Weight: Approx. 40 g

For installation, use CC-33A adhesive or optional mount base (shown below).

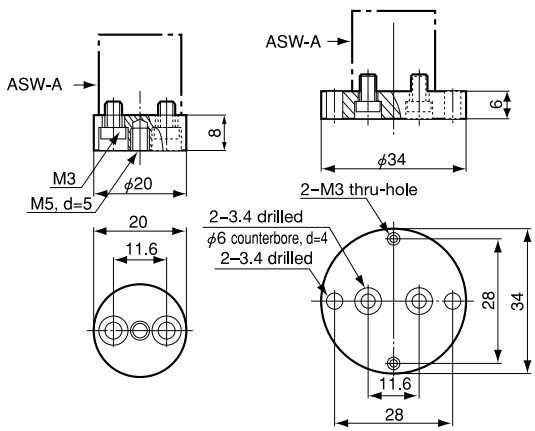
Model	Rated Capacity (Reference Value)	Frequency Response (at 23°C)	Resonance Frequency (App.)
ASW- 1A	±9.807 m/s² (±1 G)	DC to 40 Hz, ±5%	70 Hz
ASW- 2A	±19.61 m/s² (±2 G)	DC to 60 Hz, ±5%	100 Hz
ASW- 5A	±49.03 m/s² (±5 G)	DC to 100 Hz, ±5%	190 Hz
ASW-10A	±98.07 m/s² (±10 G)	DC to 150 Hz, ±5%	320 Hz
ASW-20A	±196.1 m/s² (±20 G)	DC to 250 Hz, ±5%	530 Hz

Notes: 1. Percentage in frequency response column is sensitivity deviation.
2. Resonance frequency measured by mounting to a shaker.

Dimensions



Mount Base



Weight: Approx. 5.3 g
Aluminum
DK-1C

Weight: Approx. 13 g
Aluminum
DK-1D