ASW-A

Waterproof Acceleration Transducer

●Usable Underwater or underground
●9.807 to 196.1 m/s²

*TEDS-installed models are available. Inquiries are welcome.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within ±1% RO
Hysteresis	Within ±1% RO
Rated Output	±0.5 mV/V or more

Environmental Characteristics

Safe Temperature	-15 to 65°C

Electrical Characteristics

Safe Excitation	6 V AC or DC
Recommended Excitation	1 to 3 V AC 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
	PRC03-12A10-7M Underwater application possible by
	using Kyowa's cable connection kit JB-200A
	(Shield wire is connected to the case.)

Mechanical Properties

Safe Overloads	300%
Frequency Response	See table below.
Transverse Sensitivity	4% RO or less
Withstand Water Pressure	490.3 kPa
Material	Case: Corrosion-resistant aluminum,
	anodic acid coating
Weight	Approx. 40 g (Excluding cable)

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

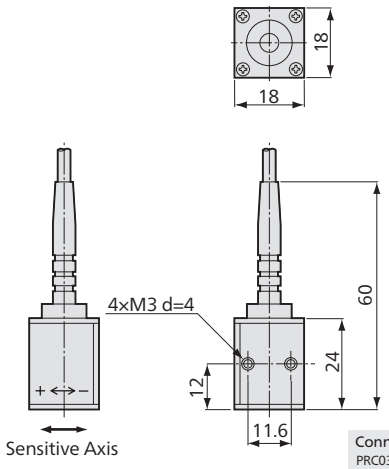
Models	Rated Capacity (Reference Value)	Frequency Response (At 23°C)
ASW- 1A	±9.807 m/s² (±1 G)	DC to 40 Hz ±5%
ASW- 2A	±19.61 m/s² (±2 G)	DC to 60 Hz ±5%
ASW- 5A	±49.03 m/s² (±5 G)	DC to 100 Hz ±5%
ASW-10A	±98.07 m/s² (±10 G)	DC to 150 Hz ±5%
ASW-20A	±196.1 m/s² (±20 G)	DC to 250 Hz ±5%

Note: The acceleration transducer is subject to a constant acceleration in the direction of gravity, therefore measurement is restricted, taking into account this vertical movement (9.807 m/s²).
For the ASW-1A, if sensitivity for vertical acceleration is set in line with the direction of gravity, then the rated capacity will be exceeded in the + direction. As long as the safe overload rating is not exceeded, there will be no damage, but characteristics will be outside the guaranteed range.

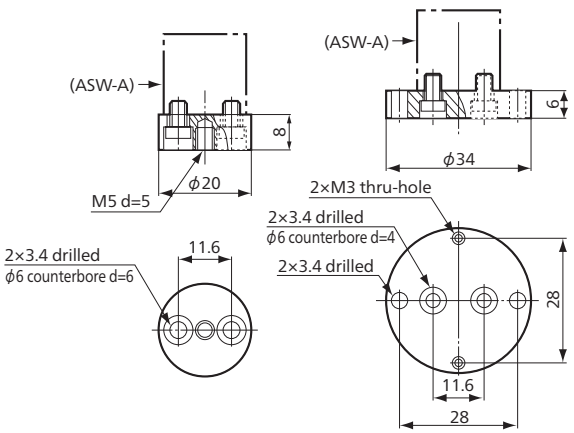
Waterproof Structure to Withstand against Water Pressures up to 490 kPa. Corrosion-Resistant Model with Stainless Steel

ASW -A series are waterproof acceleration transducers to withstand against water pressures up to 490 kPa. Even small-sized these acceleration transducers ensure reliable measurements under harsh operating environments. In addition, corrosion-resistant version with stainless steel case is also available.

■Dimensions



■Mount Base



DK-1C
Weight: Approx. 5.3 g
Aluminum

DK-1D
Weight: Approx. 13 g
Aluminum

●Dynamic measurement

ASW-A Recommended products for combination
Strain Amplifier DPM-900 Series → 3-5
Signal Conditioner CDV-900A → 3-9
Compact Recording System EDX-10 series → 3-49
Sensor Interface PCD-400A → 3-77