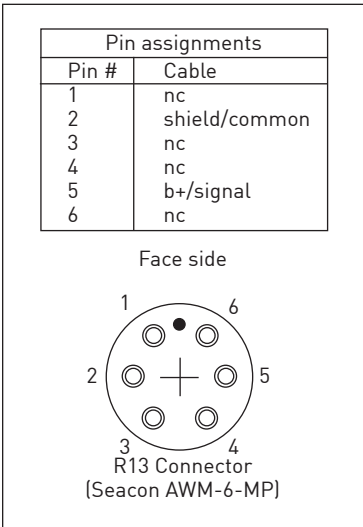
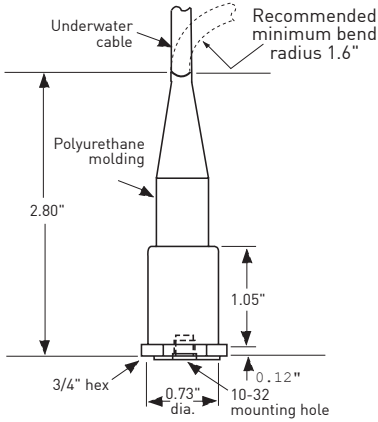


# Model 746 Underwater accelerometer



**Features**

- High sensitivity
- Wide frequency range
- High pressure rating
- Ground isolated-eliminates ground loops
- Reverse wiring protection



**Dynamic**

Sensitivity, ±5%, 25°C.....	100 mV/g
Acceleration range <sup>1</sup> .....	50 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
±1 dB .....	2 - 8,000 Hz
±3 dB .....	1 - 15,000 Hz
Resonance frequency,	
mounted, nominal .....	30 kHz
Transverse sensitivity, max.....	5% of axial
Temperature response:	
-50°C.....	-10%
+80°C.....	+4%

**Electrical**

Power requirement: voltage source .....	18 - 30 VDC
current regulating diode <sup>1</sup> .....	2 - 10 mA
Electrical noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz .....	50 µg
Spectral	
10 Hz.....	10 µg/√Hz
100 Hz.....	0.8 µg/√Hz
1000 Hz.....	0.2 µg/√Hz
Output impedance, max. ....	100 Ω
Bias output voltage.....	10, ±2 VDC
Grounding.....	isolated

**Environmental**

Hydrostatic pressure.....	650 psi
Temperature range .....	-50 to 80°C
Vibration limit.....	500 g peak
Shock limit .....	5,000 g peak
Base strain sensitivity .....	0.005 g/µstrain

**Physical**

Dynamic weight .....	45 grams
Case material.....	titanium
Mounting .....	10 - 32 tapped hole
Integral cabling .....	J6, 10 ft., coaxial, water blocked, polyurethane jacket, 30 pF/ft

Notes: <sup>1</sup>To minimize the possibility of signal distortion when driving long cables with high vibration signals, 24 to 30 VDC powering is recommended. The higher level constant current source should be used when driving long cables (please consult Wilcoxon customer service).

Options: Customer specified cable length, connectors, sensitivity, filtering.

Accessories supplied: SF1 mounting stud; calibration data

Accessories available: Magnetic mounting bases, cementing studs, power supplies,

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