

# Underwater accelerometer

## 746

### SPECIFICATIONS

<b>Sensitivity, <math>\pm 5\%</math>, 25°C</b>		100 mV/g
<b>Acceleration range<sup>1</sup></b>		80 g peak
<b>Amplitude nonlinearity</b>		1%
<b>Frequency response:</b>	$\pm 1$ dB	2 - 8,000 Hz
	$\pm 3$ dB	1 - 15,000 Hz
<b>Resonance frequency, mounted, nominal</b>		30 kHz
<b>Transverse sensitivity, max</b>		5% of axial
<b>Temperature response:</b>	-50°C	-10%
	+80°C	+4%
<b>Power requirement:</b>		
Voltage source		18 - 30 VDC
Current regulating diode <sup>1</sup>		2 - 10 mA
<b>Electrical noise, equiv. g, nominal:</b>		
Broadband	2.5 Hz to 25 kHz	50 $\mu$ g
Spectral	10 Hz	10 $\mu$ g/ $\sqrt{\text{Hz}}$
	100 Hz	0.8 $\mu$ g/ $\sqrt{\text{Hz}}$
	1,000 Hz	0.2 $\mu$ g/ $\sqrt{\text{Hz}}$
<b>Output impedance, max</b>		100 $\Omega$
<b>Bias output voltage</b>		10, $\pm 2$ VDC
<b>Grounding</b>		isolated
<b>Hydrostatic pressure</b>		650 psi
<b>Temperature range</b>		-50° to +80°C
<b>Vibration limit</b>		500 g peak
<b>Shock limit</b>		5,000 g peak
<b>Base strain sensitivity</b>		0.005 g/ $\mu$ strain
<b>Dynamic weight</b>		45 grams
<b>Case material</b>		titanium
<b>Mounting</b>		10-32 tapped hole
<b>Integral cabling</b>		J6, 10 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.

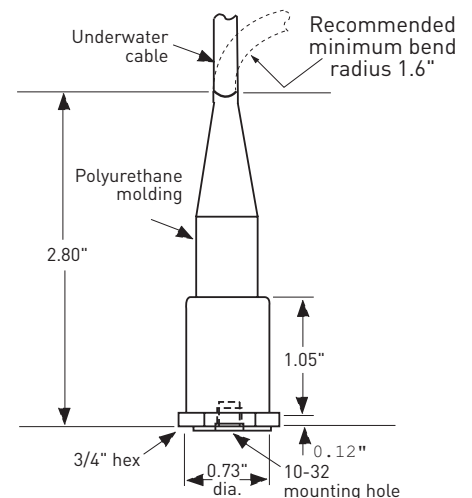
**Accessories supplied:** SF1 mounting stud; calibration data

Pin assignments		Face side
Pin #	Cable	
1	NC	
2	shield/common	
3	NC	
4	NC	
5	B+/signal	
6	NC	
		R13 Connector (Seacon AWM-6-MP)



### Key features

- High pressure rating
- Wide frequency range
- Manufactured in ISO 9001 facility



Connections	
Function	Connector
power/signal	center
common	shield

Note: Due to continuous process improvement, specifications are subject to change without notice.  
This document is cleared for public release.