



# Model 754 Miniature underwater accelerometer

### Dynamic

Sensitivity, ±1.5 dB, 25°C .....	10 mV/g
Acceleration range <sup>1</sup> .....	250 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
±1 dB .....	10 - 15,000 Hz
±3 dB .....	2 - 25,000 Hz
Resonance frequency, mounted, nominal.....	60 kHz
Transverse sensitivity, max.....	10% of axial
Temperature response.....	see graph

### Electrical

Power requirement: voltage source .....	18-30 VDC
current regulating diode <sup>1</sup> .....	2-5 mA
Electrical noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz.....	300 µg
Spectral	
10 Hz.....	50 µg/√Hz
100 Hz.....	4.0 µg/√Hz
1,000 Hz.....	1.5 µg/√Hz
10,000 Hz.....	1.0 µg/√Hz
Output impedance, max .....	200 Ω
Bias output voltage, nominal.....	8, ±1.5 VDC
Grounding.....	case isolated, internally shielded

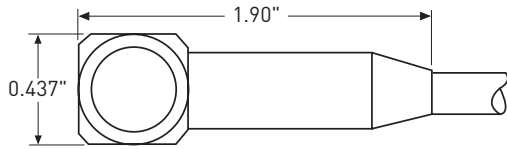
### Environmental

Hydrostatic pressure, max .....	650 psi
Temperature range .....	-20 to 90°C
Vibration limit.....	500 g peak
Shock limit .....	5000 g peak
Base strain sensitivity .....	0.01 g/µstrain

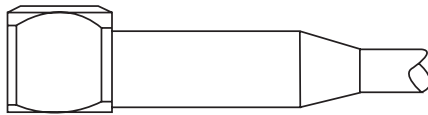
### Physical

Dynamic weight .....	4 grams
Case material.....	titanium
Mounting .....	adhesive
Integral cabling .....	J6, 10 ft, coaxial polyurethane jacket, 30 pF/ft

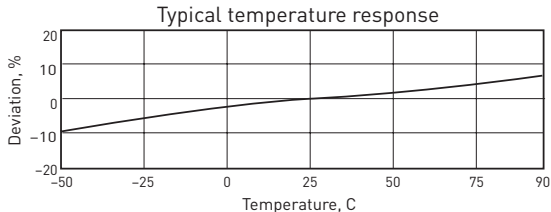
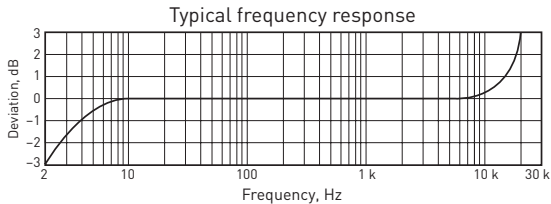
Notes: <sup>1</sup> To minimize the possibility of signal distortion when driving long cables with high vibration signals, 24 to 30 VDC powering is recommended. The higher level constant current source should be used when driving long cables (please consult Wilcoxon customer service).



Top view



Side view



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