



VSM797S™

Low Frequency Piezoelectric Accelerometer

GENERAL SPECIFICATIONS

Operation (@ 24°C [75°F])

• Sensitivity	500mV/g ± 5%
• Measuring range	10 g peak
• Amplitude nonlinearity	1%
• Bandwidth	0.4 to 1600 Hz (± 10%) 0.2 to 3700 Hz (± 3 dB)
• Resonance frequency	16 KHz nominal
• Transverse sensitivity (20 Hz, 5 g)	< 5%
• Sensitivity deviation vs temperature	- 10 % at - 55 °C [- 67 °F] - 3 % at 0 °C [32 °F] + 5 % at 90 °C [194 °F]
• Residual noise	25 µg RMS
• Output impedance	50 Ω nominal
• Output bias voltage	9 to 12 Vdc
• Grounding	Case isolated, internally shielded
• Isolation (case to shield)	100 MΩ minimum

Power Requirements

• Power source	Constant current source supply (ICP® transmission mode)
Voltage	22 to 28 Vdc
Constant current	2 to 10 mA dc
• Reverse polarity protection	Built-in

Connection

• Connector type	4-pin M12 male
• Maximum cable length	300 m [984 ft] (up to 1000 Hz)

Environmental

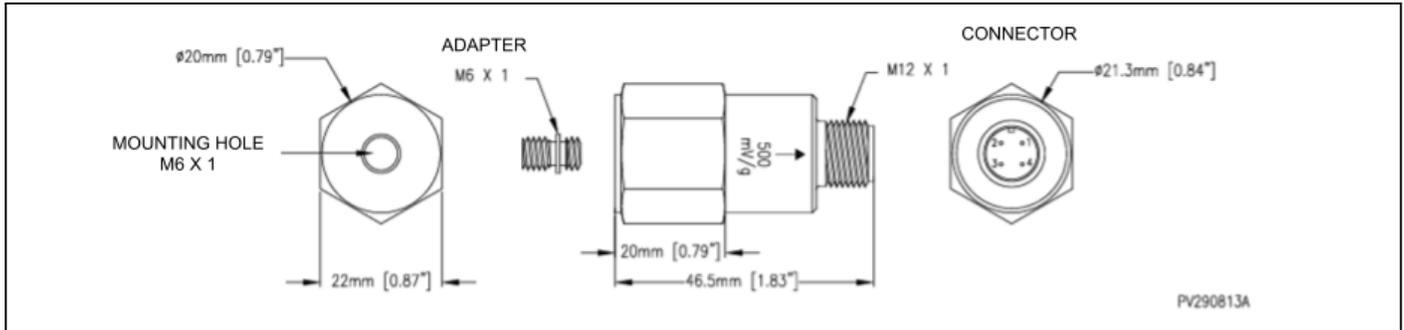
• Temperature range	-55 °C to 90 °C [-67 °F to 194 °F]
• Acceleration limit	500 g peak
• Shock limit	5000 g peak

Physical Characteristics

• Probe body	316L Stainless steel
• Weight	95 g [3.4 oz]
• Mounting	Threaded mounting hole (M6x1 adaptor supplied)



DIMENSIONS



M12 CONNECTOR PINOUT

The following table shows the pin assignment for the A-coded, M12 male connector on the signal conditioner. The signal cable must be assembled as follows:

	M12 Connector Pin	Color Code	Designation	Specifications
	1	Brown	Not Used	
	2	White	Not Used	
	3	Blue	Common	0 V
	4	Black	Voltage Output	Vbias +/-5 Vpeak

TRANSIT / STORAGE GENERAL CONDITIONS

Specifications valid only in original VibroSystM factory packaging.

- Transit / Short term storage (< 3 months) -20 to 60°C [-4 to 140°F], up to 95% RH, non-condensing
- Long term storage 0 to 35°C [32 to 95°F], up to 75% RH, non-condensing

PRODUCT INFORMATION

Product Number	Description
VSM-797S	VSM797S Piezoelectric Accelerometer (500 mV/g)