



# FOA-200

## FIBER OPTIC ACCELEROMETER - DUAL AXIS

### GENERAL SPECIFICATIONS

#### Operation (both axis)

• Sensitivity	100 mV/g $\pm 5\%$
• Measuring range	0 to 40 g peak
• Bandwidth	10 to 1000 Hz (-3 dB)
• Voltage output	6 Vdc $\pm 5\%$ bias, $\pm 4$ Vac
• Sensitivity deviation vs temperature	
Class A	$\pm 10\%$ max. @ 105°C [221°F]
Class F	$\pm 10\%$ max. @ 155°C [311°F]
• Maximum shock acceleration	1000 g half sine, 1 ms duration
• Resonance frequency	> 2 kHz
• Transverse sensitivity	< 5% respecting sensitive axis
• Residual noise	Typical 8 mV <sub>RMS</sub> , max. 27 mV <sub>RMS</sub>

#### Power Requirements

• Voltage	24 Vdc $\pm 20\%$
• Consumption	80 mA max.

#### Connection

• Connector type	4-pin M12 male
• Maximum cable length	350 m [1150 ft]

#### Environmental

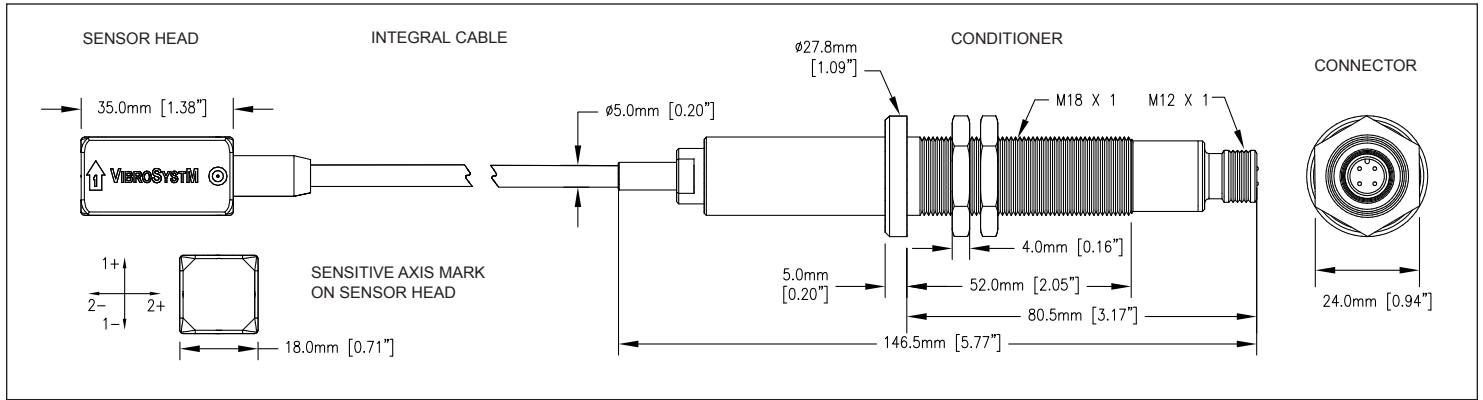
• Temperature range	
Operating	
Sensor head (Class A)	-40 to 105°C [-40 to 221°F]
Sensor head (Class F)	-40 to 155°C [-40 to 311°F]
Conditioner	0 to 70°C [32 to 158°F]
Non-destructive	
Sensor head	-50 to 200°C [-58 to 392°F]
Storage	-20 to 85°C [-4 to 185°F]
• Humidity	Up to 95% non-condensing
• Electrical insulation (head vs conditioner)	
At 25°C [77°F] & 25% humidity	Up to 3 kV/mm
• Electrical & magnetic field	No effect (head only)

#### Physical characteristics

• Sensor head	Non-conductive materials
• Integral cable	
Material	Fiber optics / PTFE jacket
Length	10 m [33 ft]
Minimum bending radius	80 mm [3.15 in.]
• Conditioner body	Nickel-plated brass



## DIMENSIONS



## PRODUCT IDENTIFICATION

Product Number	Description
VSM-FOA200-10A	FOA-200 Dual-Axis Fiber Optic Accelerometer complete with 10m integral fiber optic cable and signal conditioner (Class A 105°C)
VSM-FOA100-10F	FOA-200 Dual-Axis Fiber Optic Accelerometer complete with 10m integral fiber optic cable and signal conditioner (Class F 155°C)