

RMS peak value output accelerometer

Description

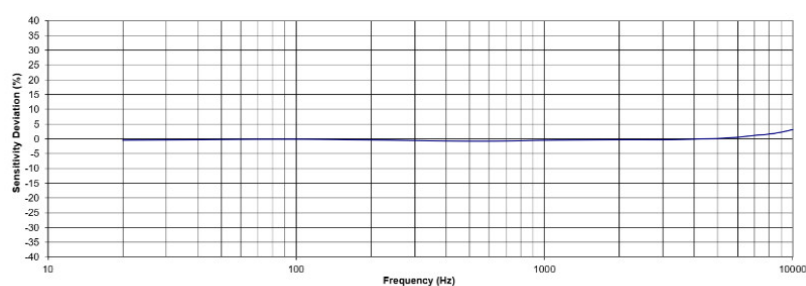
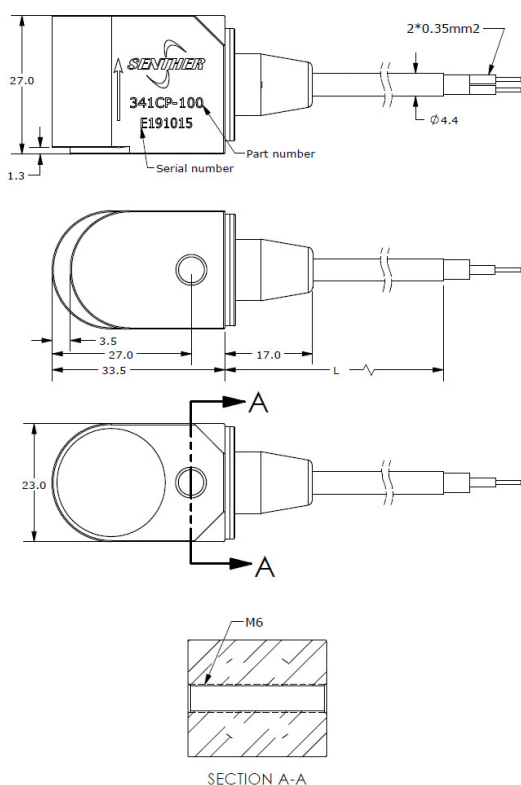
Model 341CP is a 4~20mA output signal vibration sensor. loop current can carry signal through long cable while avoiding the signal loss and interference. 341CP feature with a shear mode piezoelectrical basis sensor which exhibits excellent output stability over time. The quality piezo crystal perform an outstanding signal-to-noise ratio. The accelerometer incorporates an internal circuit in a two-wire system which transmits the vibration output through the same cable that supplies the voltage power. Polarity inversion protection for the amplify circuit is inherent in the circuit design. The accelerometer offer rugged, laser welded, stainless steel housing with durable military style connectors. Electrical case isolation, hermetic sealing, RF, EMI, ESD, and overload protection all ensure tolerance against environmental influence and mishandling. All variations provide reliable measurements and long-term stability. 341CP has a M6 thread holes for screw mounting on the test object.

Features

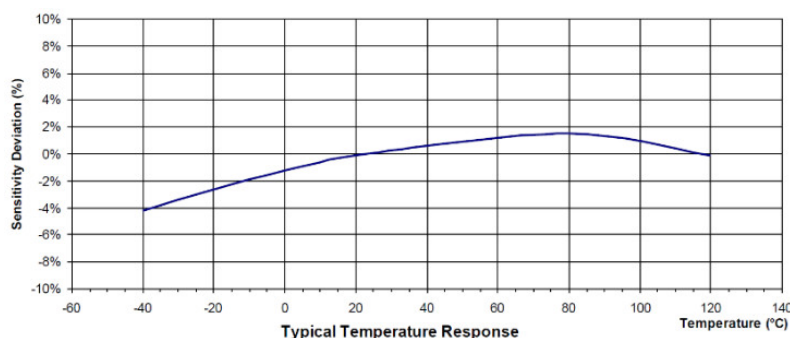
- 4~20mA output signal
- Internally shielded
- Corrosion resistant
- Hermetic seal
- Case isolated
- Acceleration RMS peak

Application

- Bearing monitoring
- Gearbox detection
- Industrial applications
- Wind mill machine



Typical Frequency Response



Typical Temperature Response

Specification

Typical at +24°C (+75°F), 18Vdc and 100Hz, unless otherwise stated.

Dash Number (g)型号	341CP-100	341CP-500	
Acceleration Range 量程	100	500	g, Peak
FSO 满量程 $\pm 10\%$ 25°C	16	16	mA
Frequency Response 频响 $\pm 10\%$	3-5000	3-5000	Hz
Resonant Frequency 谐振频率	32	32	kHz
Transverse Sensitivity 横向灵敏度	<5	<5	%
Temperature Response, 温度相应 -55 to +125°C	± 10	± 10	%
Non-Linearity 非线性	± 1	± 1	%FSO
Shock Limit 冲击极限	5000	5000	g
Warm-up Time 上电时间	<2	<2	second
Weight (Cable Excluded) 重量 (不含线缆)	110	110	Gram

Specifications	Standard	Units
Bias Current 偏置电流 $\pm 10\%$	4	mA
Supply Voltage 供电电压	18 to 30	Vdc
Output Impedance 输出阻抗	<100	Ω
防雷: TB/T 3074-2003 A 类性能	满足	
电磁兼容: GBT/T 24338.5-20009A 浪涌 B 级, 其他 A 级	满足	
Operating Temperature 工作温度	-40 to +85°C	°C
Humidity 密封性能	IP67	
Case Material 外壳材料	316L SSL	
Sensing Element 敏感元件	Piezo Ceramic 压电陶瓷	

Accessories

Calibration certificate included.

Part Number	Description	Availability
PM0333	M6x35 Hex head screw	Included
MB0004	Magnet mounting adaptor	Optional
IN-13	Loop current signal conditioner	Optional
IN-91	Portable vibration analyzer	Optional
IN-SDG	8 channels data acquisition system	Optional

Measurement configuration

Sensor	Signal conditioner	BNC cable	Data acquisition	Computer
				

Ordering information

341	CP	-	100	-	5
Model	Output signal	-	Range	-	Integrated cable length
341	CP= Acceleration RMS peak value	-	100=100g 500=500g	-	5=5 meter 10=10 meter



Senther reserves the right to make changes to any products or technology herein to improve reliability, function or design. Senther does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights nor the rights of others.