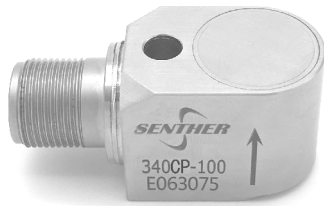


## RMS peak value output accelerometer



### Description

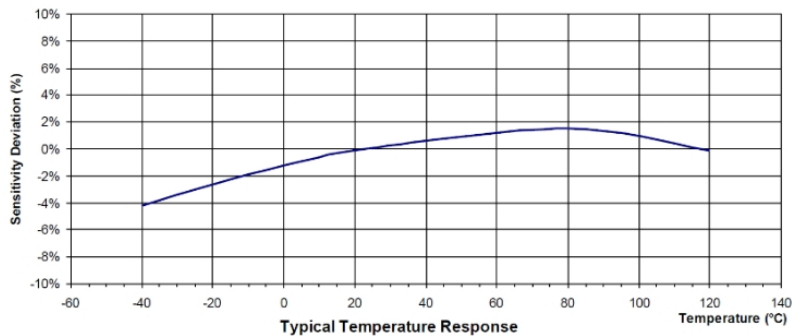
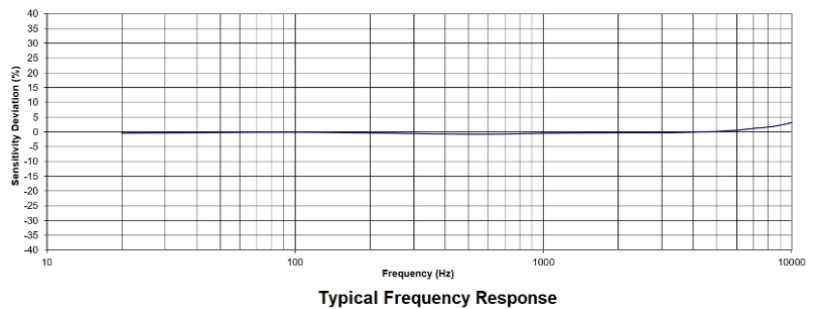
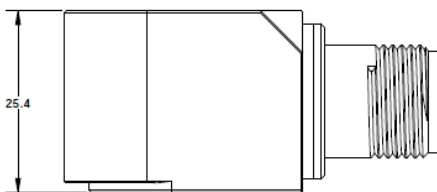
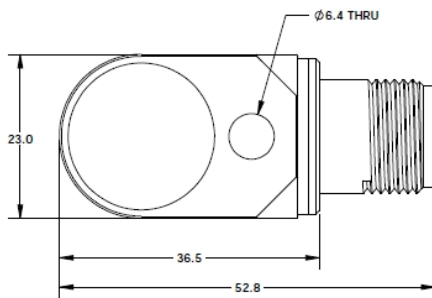
Model 340CP is a 4~20mA output signal vibration sensor. Loop current can carry signal through long cable while avoiding the signal loss and interference. 340CP features a shear mode piezoelectrical basis sensor which exhibits excellent output stability over time. The quality piezo crystal performs an 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 offers 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. 340CP has a  $\varnothing 6$  through hole for screw mounting on the test object.

### Features

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

### Application

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



## Specification

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

| Dash Number (g)型号                      | 340CP-100 | 340CP-500 |         |
|--|-----------|-----------|---------|
| Acceleration Range 量程                  | 100       | 500       | g, Peak |
| FSO 满量程 ±10% 25°C                      | 16        | 16        | mA      |
| Frequency Response 频响±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    |

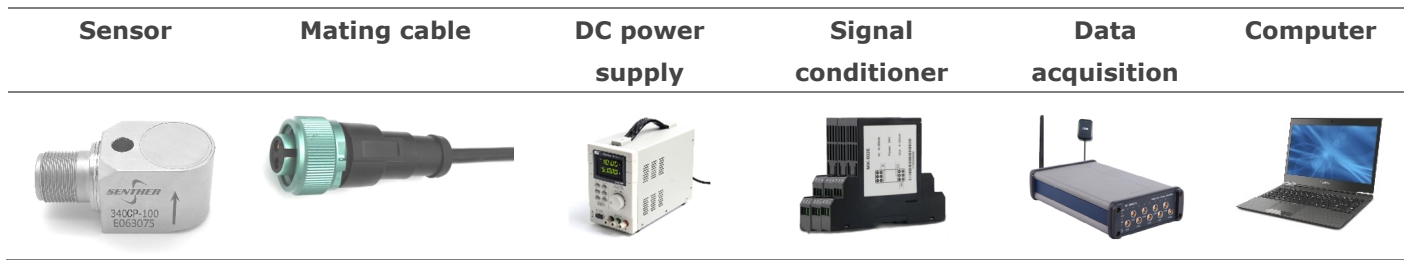
| Items                                     | Standard           | Units |
|---|--------------------|-------|
| Bias Current 偏置电流 ±10%                    | 4                  | mA    |
| Supply Voltage 供电电压                       | 18 to 30           | Vdc   |
| Output Impedance 输出阻抗                     | <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       |
|-------------|--|--------------------|
| PM0118      | ¼-28x1¼ hex head mounting screw                        | One screw included |
| PM0329      | M6x30 hex head mounting screw                          |                    |
| MB0004      | Magnet mounting adaptor                                | Optional           |
| 16A-10      | 10 meter mating cable with MIL-C-5015 connector        | Optional           |
| 16A-10-B    | 10 meter mating cable with MIL-C-5015 to BNC connector | Optional           |
| IN-13       | Loop current signal conditioner                        | Optional           |
| IN-91       | Portable vibration analyzer                            | Optional           |
| IN-3062     | 8 channels data acquisition system                     | Optional           |

## Measurement configuration



## Ordering information

|              |                                 |   |                      |   |  |
|--------------|---------------------------------|---|----------------------|---|--|
| <b>340</b>   | <b>CP</b>                       | - | <b>100</b>           | - | <b>B</b>   |
| <b>Model</b> | Output signal                   | - | Range                | - | Mounting stud  |
| <b>340</b>   | CP= Acceleration RMS peak value | - | 100=100g<br>500=500g | - | A= 1/4-28 mounting screw<br>B= M6 mounting screw<br>C*=Special |



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