



CZ-043水密三轴低频振动传感器

CZ-043 the watertight axial low frequency vibration sensor

1.工作原理:

CA-YZ-123C(A)-20水密三轴高频振动传感器是 内装信号调节器的压阻式振动传感器。压阻式振动 敏感元件设计为整体硅结构,由带多根梁的硅框架 支撑一块经微细加工而成的硅质量块。当硅框架受 振动作用,由于倾性力硅块相对于框架运动时造成 聚次内的应力变化,从而使梁内的压敏电阻阻值发生 变化,通过电桥转换为电压输出。

2.特点:

传感器具有灵敏度高、温度漂移小、零点输出稳 定、频带宽等特点

3.应用范围:

可对运动物体三个方向振动状态进行定量测量,广泛应用于航空、航天、机械、车辆、舰船等方面的冲击测量。

1.Working principle:

Watertight triaxial low frequency vibration sensor is piezoresistive type vibration sensor with built-in signal regulator. Its sensing element is designed with whole silicon structure, which is a piece of processed silicon block supporting by silicon framework with many beams. When silicon frame subjected to vibration, stress variety make the value of piezoresistive change in the beam cased by inertia force silicon block relative to the inertial frame motion, Thus, the voltage conversion can be achieved by bridge.

2. Characteristic:

Sensor has high sensitivity, low temperature drift, zero output stability, wide frequency band, etc.

3. Application range:

Quantitative measure vibration state of moving object in three directions, it is widely used in shock measurement in aviation, aerospace, machinery, vehicles, ships and other aspects.