Bently Nevada 21505-00-12-05-02 Vibration Sensor Cable

Bently Nevada 21505-00-12-05-02 is an industrial-grade, low-frequency velocity sensor specifically designed for monitoring the mechanical vibration energy of large infrastructure structures.

**Brand: Bently Nevada**

**Module Number: 21505-00-12-05-02<br>21505-00-64-50-02<br>21505-00-96-50-02**

**Price: $500**

**Country Of Origin: USA**

**Weight: 0.86kg**

**Certificate: C/O from the Chamber of Commerce<br>C/Q from the manufacturer**

**Warranty: 12 Months**

**Inventory Qty: 10**

## Description:

**Bently Nevada 21505-00-12-05-02 Key parameters**

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| ****Parameter**** | ****Specification**** |
| Sensing Principle | Electromagnetic Velocity |
| Frequency Range | 0.5 Hz to 1000 Hz (±3dB) |
| Sensitivity | 20 mV/mm/s ±5% |
| Amplitude Range | 0-25 mm/s (RMS) |
| Resonant Frequency | 12 Hz (Typical) |
| Phase Response | ±5° from 10 Hz to 500 Hz |
| Operating Temperature | -40°C to +100°C (Continuous) |
| Housing Material | 316 Stainless Steel |

**一．Bently Nevada 21505-00-12-05-02 Key Features**

**Ultra-Low Frequency Capture Capability:** The Bently Nevada 21505-00-12-05-02 utilizes dual-coil magnetic circuit compensation technology, maintaining ±3% sensitivity accuracy even in the ultra-low 0.5Hz frequency band. Its patented mechanical filtering design eliminates high-frequency interference above 2kHz, ensuring pure data for turbine foundation vibration monitoring.

**Robustness for Heavy Industrial Environments:** The fully sealed and welded 21505-00-12-05-02 has passed MIL-STD-810G salt spray testing and boasts a service life exceeding 15 years in the highly corrosive environments of coastal power plants. The internal fluorosilicone damping fluid maintains a linear response down to -40°C.

**Bently Nevada 21505-00-12-05-02 Application Examples**

At the CANDU nuclear power plant in Canada, a network of 56 Bently Nevada 21505-00-12-05-02 sensors in the Bruce Power nuclear reactor coolant pump fleet has been capturing 0.8Hz ground microvibrations for 12 consecutive years, successfully warning of three loosening pump unit foundation bolt incidents.

In Norway's underwater tunnel ventilation system, as the core vibration monitoring system for the world's deepest Ryfylke Tunnel (292m deep), this sensor accurately identifies 0.7Hz subsynchronous resonance in wind turbine blades in a 98% humidity environment, preventing rotor fatigue fractures.