

### Wilcoxon Research Vibration Product Training

### Accelerometer Products and Specifications



### Accelerometer Selection Considerations



- Machine Speed
- Max/Min Vibration Level
- Full Frequency Range
- Size/Weight Limitations
- Temperature Range
- Chemical Environment
- Electrical Environment
- Future Sensing Needs





# Standard Sensors & New Products

#### **Coming Soon**

TM Series Micro-Mini Accelerometers





SNAP<sup>TM</sup> The most compact low priced sensor in the industry.



787A Low Cost, Low Profile Accelerometer



732A High Frequency Accelerometer



786A General Purpose Accelerometer



799LF & 799M Low Frequency Accelerometer

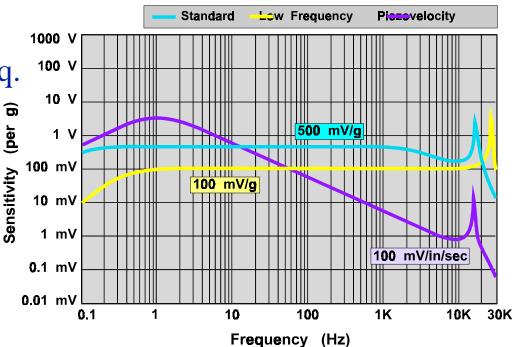


731A Ultra-Low Frequency Accelerometer



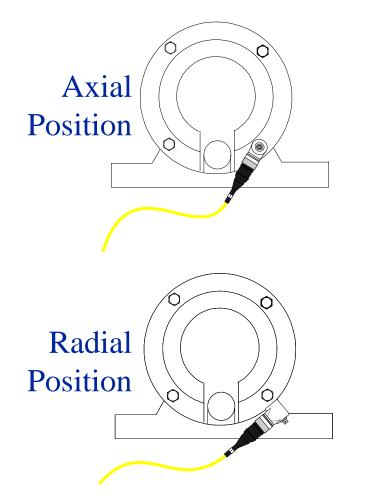
### **Dynamic Selection**

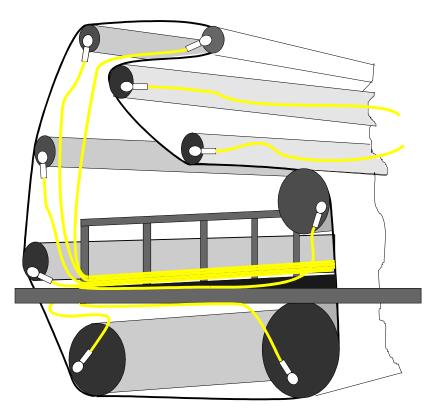
- **793/797/786A/787A** 
  - Accelerometers
    - 100 mV/g
    - Wide Frequency Range
- 793L, 797L, 799LF Low Freq.
  - 500 mV/g
  - Very Low Noise
- 793V/797V Velocity
  - High Output
  - HF Attenuation
- 732A/732AT High Freq.
  - 10 mV/g
  - Very High Frequencies





#### 797 in Paper Machine Applications



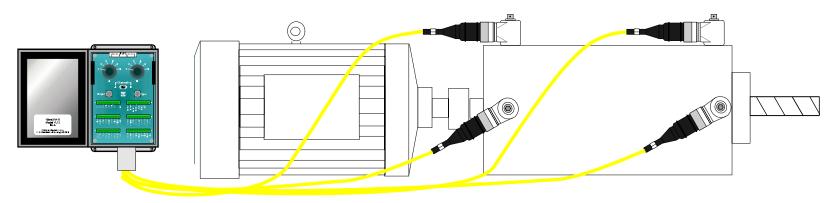


Route cables inside of felt for inner rolls; outside of felt for outer rolls



#### 797 in Machine Tool Applications

## Full box spindle installation with cables routed into a switch box



# Low profile sensors are used to clear splash guards



### Low Frequency Applications

- Low Frequency
  - < 10 Hz (600 cpm)
    - Low Speed Machine Tools
    - Cooling Towers
    - Paper Machine Rolls
    - Yankee Dryers
    - Hydro-Turbines





Very Low Frequency

- < 1 Hz (60 cpm)
  - Slow Speed Agitators
  - Repetative Gear Tooth Faults
  - Pump Surge Conditions
  - Building / Bridge Motion
  - Earthquake Studies







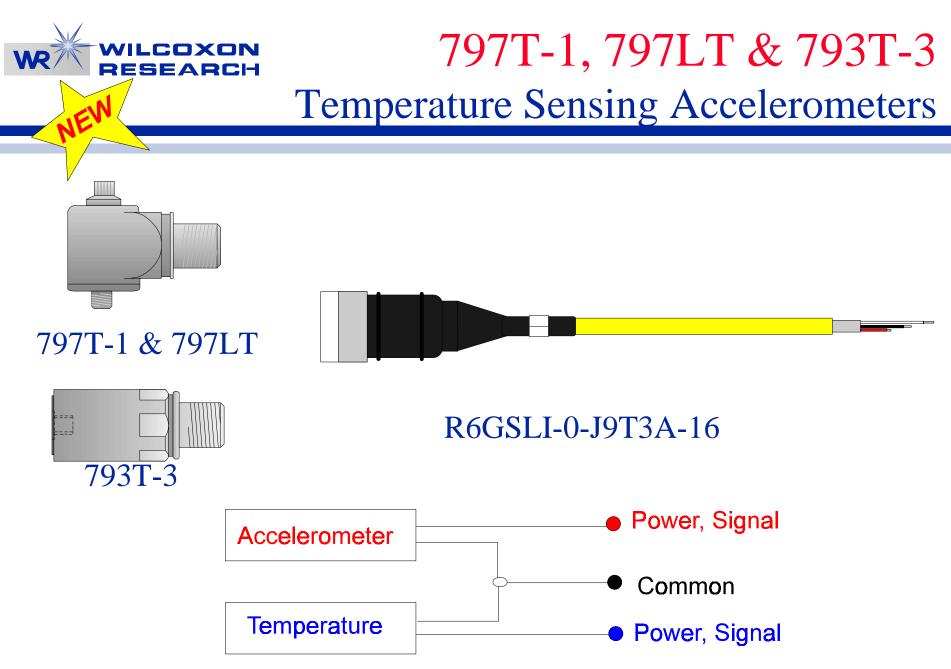
### 799LF and 799M

"The Industrial Low Frequency Accelerometers"

#### 799LF provides standardized 500 mV/g sensitivity 799M provides 1000 mV/g sensitivity to overcome analyzer noise.



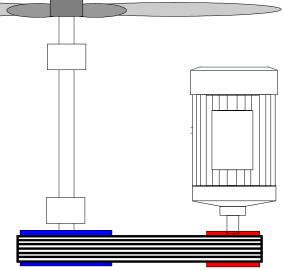
- Low Noise / Low Frequency
- Fast Turn-on Time for use with Multiplexed Systems and Manual Switch Boxes
- Fast shock recovery for use with magnetic mounting pads
- High Frequency Attenuation and Overload recovery circuitry for distortion-free measurements
- Electromagnetic radiation shielding and rejection circuitry for use near high-field equipment
- Low bias voltage for use with most portable data collectors





#### Dynamic Force => Vibration Static Force => Heat

797T-1



Applications

& 793T-3

#### Belted Drives Lubrication Condition Process Temperature Changes Heating / Cooling Equipment monitoring