



# VIB Low Frequency Vibration sensor

## Technical Data

- ⊕ Power Supply no active operation mode inner ground VIB78MWW-39 outer ground core
- ⊕ Output max. 3 – 4 VSS
- ⊕ Measure Sensitivity at 5 kHz  $26 \pm 8$  mV / g
- ⊕ Temperature Range -10 to +70 0C
- ⊕ Ground Isolation  $> 10$  M $\Omega$
- ⊕ Overload Shock 2500 g (0,5 ms puls)
- ⊕ Rmin = 15 mm
- ⊕ Sensor Protection Type IP 66, resistant to industrial climate, oil and cooling lubricant
- ⊕ Amplifier Protection Type IP 68, resistant to industrial climate, oil and cooling lubricant
- ⊕ Installed in conjunction with MWW3 amplifier

## Typical applications

- ⊕ Tool breakage, especially with high spanner count
- ⊕ Tool wear

Because it measures in lower frequency band than KSS sensor, therefore less sensitive to spanner interference

However, more sensitive to interfering bearing noises.



**Installation note:** Needs flat surface with good contact to machine to work well



## Strengths and limitations

### Strengths:

- ⊕ Can be mounted farther from machining process, as low frequency waves transmit further
- ⊕ Insensitive to electrical interference
- ⊕ Not as sensitive to installation variations

### Weaknesses:

- ⊕ Sensitive to mechanical interference from bearings
  - ⊙ Can be filtered out by hand with MWW3 amplifier
- ⊕ Can influence it's own measurement through own mass and resonance



**General take-away; Good for high spanner count machining processes with quiet bearings, stay away from loose bearing applications**