

Wireless Vibration Sensor

WVS-200

Code: 600-10818

Key features

- Built-in sensing elements
 - MEMS accelerometer
 - Temperature sensor
- Wireless Mesh network
- Battery operated
- Protection class IP67
- Easy to instal



WVS-200 is an industrial wireless vibration sensor for mechanical condition monitoring. It has built-in MEMS-accelerometer and temperature sensor. WVS-200 provides a cost-efficient monitoring solution for non-critical machinery or as an alternative for route-based condition monitoring.

Sensor is IP67 classified and has long-life non-rechargeable battery. Battery life depends on the installation location and measurements settings. Estimated battery life with two raw signal measurements per day is 3-5 years.

The sensors communicate via wireless mesh network to a gateway (router). Upon installation, mesh network automatically establishes so that the data transmission power and thus sensor battery life are optimized.

WVS-200 is connected to the Valmet DNA online condition monitoring system where signal analysis calculations are performed. Information is stored and analyzed in the same user interface than all the other wireless and wired measurements.

WVS-200 is suitable for monitoring most of the general rotating machinery in rotating speeds above 600 rpm in e.g. the following industries:

- Pulp and Paper
- Mining and mineral industry
- Power generation
- Steel industry



Technical specifications

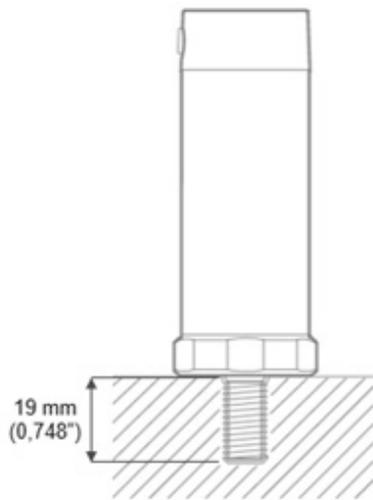
WVS-200 sensor

| | | |
|-------------------------------|------------------------|--|
| Vibration | Sensing element design | Micro-electro-mechanical system (MEMS) |
| | Acceleration range | ± 2/4/8/16 G peak, configurable |
| | Frequency range | 10...6300 Hz (±3 dB) |
| | A/D conversion | 16 bits |
| Temperature | Measurement range | -40...+105 °C |
| | Resolution | 0.1 °C |
| | Accuracy | ± 0.3 °C |
| | Repeatability | ± 0.1 °C |
| Wireless communication | Communication network | 2.4 Ghz Wirepas Mesh |
| | Range | Up to 50 m with line of sight |
| Electrical | Internal battery | Non-rechargeable LI-SOCl ₂ 3.6 V |
| | Battery life | Up to 5 years (depending on temperature, sensor network layout/distances and measurement settings) |
| Environmental | Ambient temperature | -40...+70 °C |
| | Storage temperature | +30 °C maximum |
| | Protection class | IP67 |
| Physical | Weight | 129 g |
| | Dimensions | 28 x 78.5 mm |
| | Case Material | 316 Stainless steel case, PE HD cap |
| | Mounting | Integral M8 mounting screw, 8 Nm mounting torque |

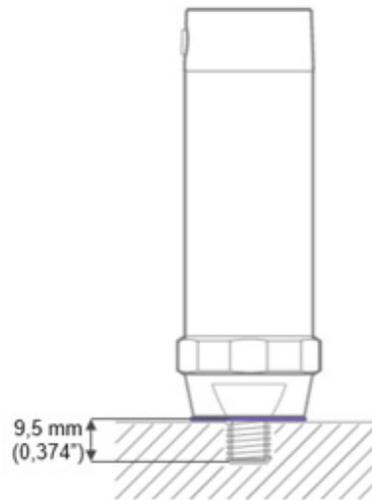
Gateway in protective enclosure

| | | |
|----------------------|-----------------------|---|
| Electrical | Power supply | 85-264 VAC |
| | Frequency range | 47-440 Hz |
| | Power consumption | 30 VA max |
| Environmental | Ambient temperature | -20...+50 °C |
| | Storage temperature | -40...+85 °C |
| | Protection class | IP67 |
| | Relative humidity | 20-90 %, non-condensing |
| Physical | Weight | 867 g with EU power cord |
| | Dimensions | 180 x 130 x 81 (excluding cable seal clamps) |
| | Integrated power cord | IP44, length 1.5 m, EURO type F ungrounded |
| | Case material | Polycarbonate, TPE gasket |

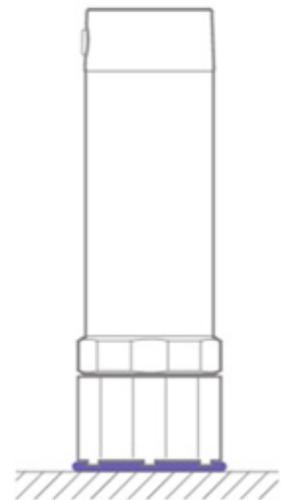
WVS-200 sensor mounting



With sensor integral
mounting screw



With mounting nut
adapter (600-10820)



With magnetic
mounting adapter
(600-10821) and glue

Product codes

WVS-200 Wireless Vibration Sensor

Code: 600-10818

WVS-200 Gateway

Code: 600-10819

Mounting nut adapter

Code: 600-10820

Magnetic mounting adapter

Code: 600-10821