

## 2D-Tower Vibration Sensor KS22-U



DMT Sensor KS22-U

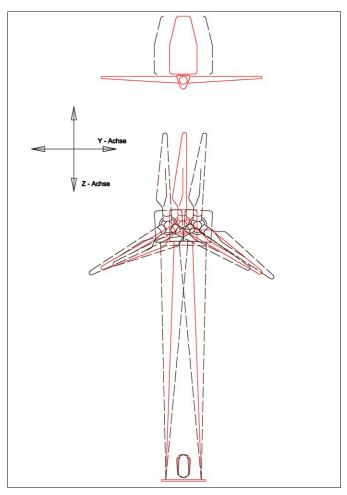
The sensor measures the vibrations of the wind turbine tower. The purpose of the measurement is to monitor and record the operating conditions.

# The KS22-U which is integrated into the control system signals:

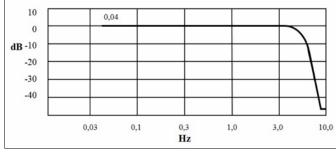
- Tower vibrations
- Blade resonances
- Unbalances
- Overstressing

## Measured-value aquisition:

- 2 axes simultaneously
- Vibration acceleration



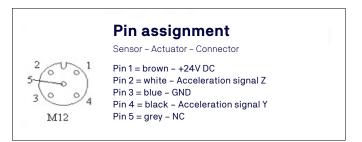
Vibration of a Wind Turbine Tower



Frequency response KS22-U

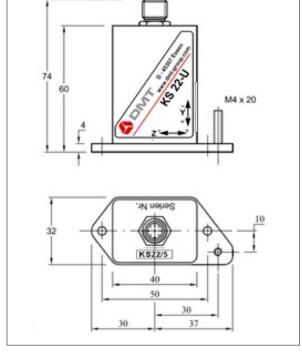
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| Technical Data                                       |                        |           |
|--|------------------------|-----------|
| Measuring axes                                       | 2                      | x/y       |
| Sensor constant                                      | 1                      | V/m/s²    |
| Measuring range                                      | ± 3                    | m/s²      |
| Supply consumption                                   | 18-26 (temporarily 30) | Volt DC   |
| Power consumption                                    | 10                     | mA        |
| Frequency range                                      | 0,01 5                 | Hz        |
| Attenuation at 10 Hz                                 | >20                    | dB        |
| Chebyshev filter ( fourth order)                     | 0,5                    | dB ripple |
| Analog output / Zero position<br>Output range        | 5 ±0,1<br>5 ± 3        | V         |
| Setting time   | 30 ±                   | seconds   |
| Weight (without cable)                               | 282                    | gram      |
| Connection Type: Connector SACC-E-M12MS-5CON-PG9/0,5 | Axial<br>1671111       | Phoenix   |
| Temperature range                                    | -40° / +65°            | °C        |
| Degree of protection                                 | 66                     | IP        |
| Output resistance                                    | 100                    | Ω         |
| Dimensions   | see drawing            |           |
| Housing material                                     | V2A high-grade steel   |           |



### Note:

Subjecting the sensor housing to mechanical stress can lead to malfunctions and invalidate the warranty. Do not drop the sensor and protect from severe impact,



Dimension drawing: We reserve the right to make changes in the interest of technical development.

#### **DMT GmbH & Co. KG** Machine Diagnosis &

static charge and overload.

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Our products are subject to the WEEE directive.
DMT has committed itself to take back all electrical and electronic components sold and to dispose of them professionally.
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