

WindSafe® 2D-Tower Vibration Sensor KS22-U



DMT Sensor KS22-U

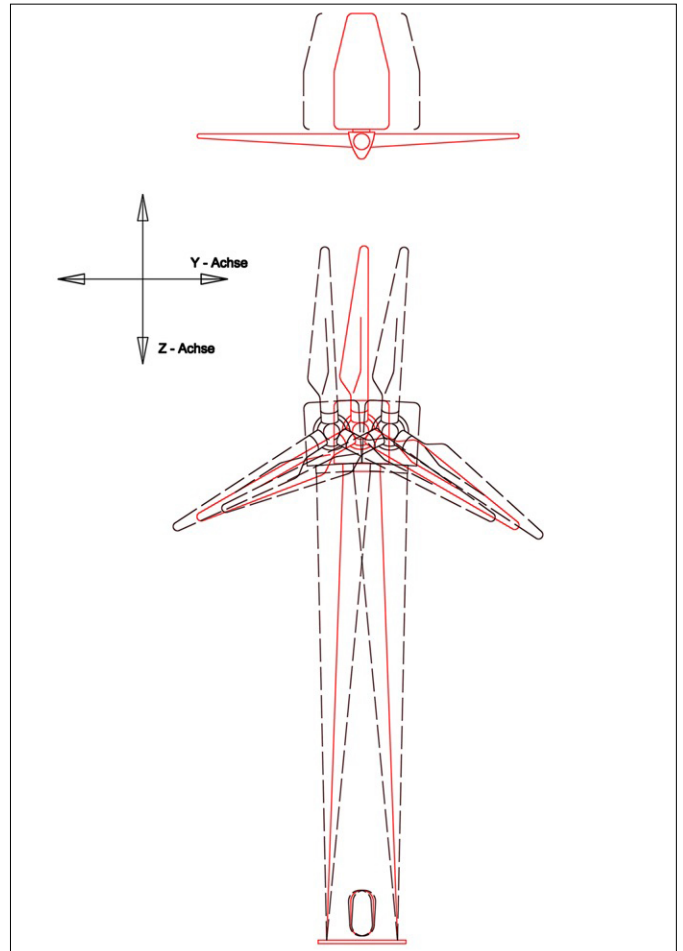
The sensor measures the vibrations of the wind turbine tower. The purpose of the measurement is to monitor and record the operating conditions.

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

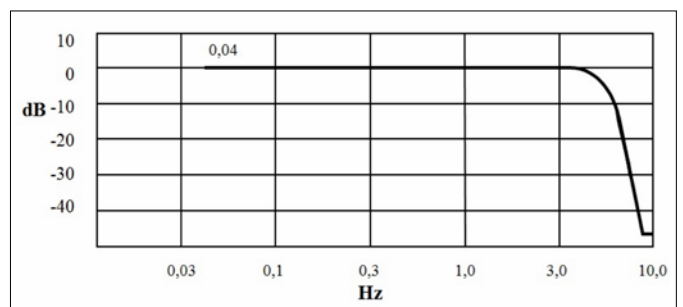
- Tower vibrations
- Blade resonances
- Unbalances
- Overstressing

Measured-value acquisition:

- 2 axes simultaneously
- Vibration acceleration



Vibration of a Wind Turbine Tower



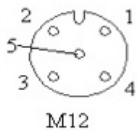
Frequency response KS22-U

Technical Data

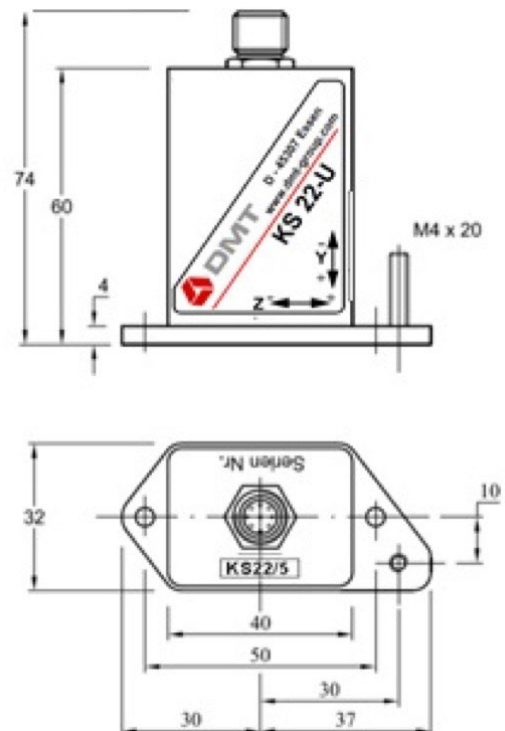
Measuring axes	2	x/y
Sensor constant	1	V/m/s ²
Measuring range	± 3	m/s ²
Supply consumption	18-26 (temporarily 30)	Volt DC
Power consumption	10	mA
Frequency range	0,01 ... 5	Hz
Attenuation at 10 Hz	>20	dB
Chebyshev filter (fourth order)	0,5	dB ripple
Analog output / Zero position Output range	5 ±0,1 5 ± 3	V V
Setting time	30 ±	seconds
Weight (without cable)	282	gram
Connection Type: Connector SACC-E-M12MS-5CON-PG9/0,5	Axial 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	

Pin assignment

Sensor - Actuator - Connector



Pin 1 = brown - +24V DC
 Pin 2 = white - Acceleration signal Z
 Pin 3 = blue - GND
 Pin 4 = black - Acceleration signal Y
 Pin 5 = grey - NC



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, static charge and overload.

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