

WindSafe® 2D-Turmschwingungssensor KS22

The sensor measures the vibrations of the wind-energy converter (WEC) tower. The purpose of this measurement is to monitor and record the operating conditions.

The KS22 which is integrated into the control system signals:

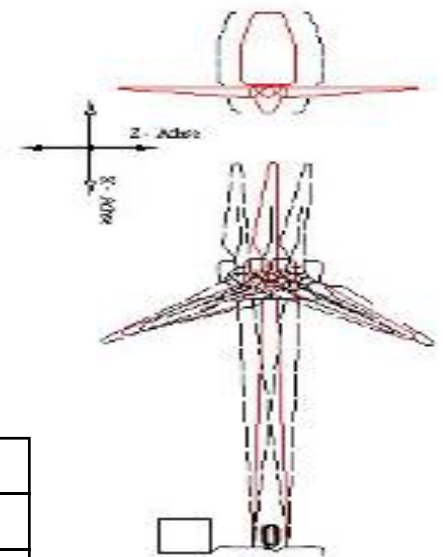
- tower vibrations
- blade resonances
- unbalances
- overstressing

Measured-value acquisition:

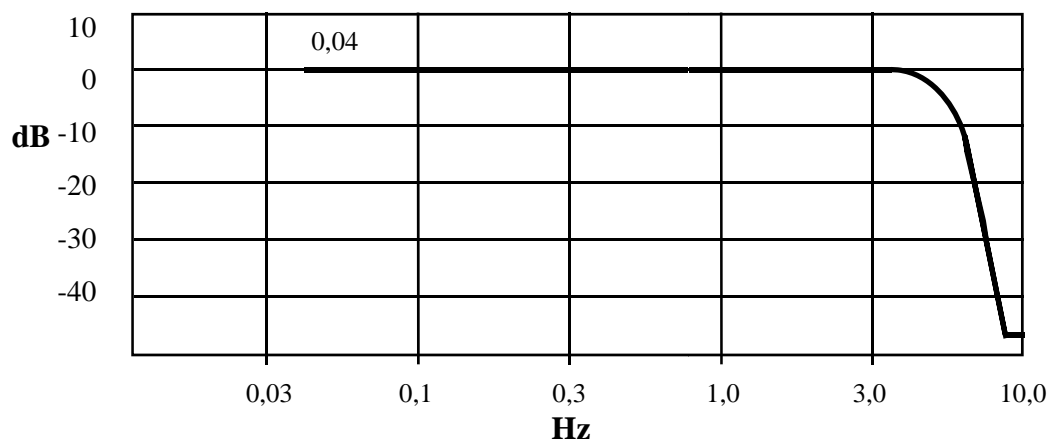
- 2 axes (x, y) simultaneously
- vibration acceleration



DMT Sensor KS22

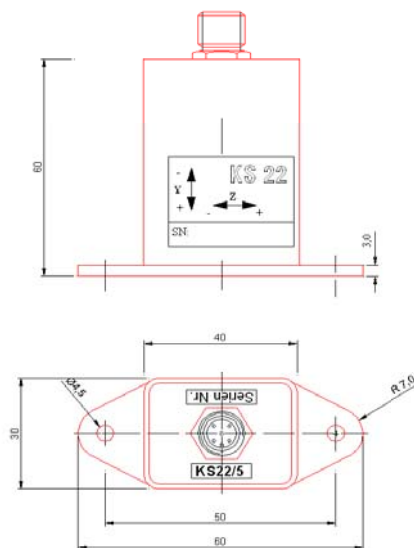


Frequenzgang KS 22



Technical Data / Dimensioned Drawing

Measuring axes	2	m/s ²
Sensor constant	1	V/m/s ²
Measuring range	± 3	m/s ²
Supply voltage	18-26 (kurzz. 30)	V 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 at Level	5 ±0,1	V
Output range	5 ± 3	V
Weight (without cable)	282	gr
Connection Type: Connector SACC-E-M12MS-5CON-PG9/0,5	Axial 1671111	Phoenix
Temperature range	-40° / +65°	°Celsius
Degree of protection	66	IP
Output resistance	100	Ω
Dimensions Housing material	See drawing V2A high-grade steel	



Notes:

A mechanical processing of the sensor housing can lead to malfunctions and the guarantee excludes.

Not dropping and protecting from rough concussions, static chargings and overload sensor. .

Steckerbelegung

Sensor - Aktor - Stecker	
1	Pin 1 = braun - +24V DC
2	Pin 2 = weiss - Beschleunigungssignal Z
3	Pin 3 = blau - GND
4	Pin 4 = schwarz - Beschleunigungssignal Y
5	Pin 5 = grau - NC

Pin assignment

Sensor - Actuator – Connector
 Pin 1 = brown - +42V DC
 Pin 2 = white - Acceleration signal Z
 Pin 3 = blue – GND
 Pin 4 = black - Acceleration signal Y
 Pin 5 = grey - NC

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