

Engineering Performance

# 2D-Tower Vibration Sensor KS22-Ig

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-Ig which is integrated into the control system signals:

- Tower vibrations
- Blade resonances
- Unbalances
- Overstressing

### Measured-value aquisition:

- 2 axes simultaneously
- Vibration acceleration
- Output signal: current
- Separate ground connection



Frequency response KS22-Ig

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DMT Sensor KS22-Ig



Vibration of a Wind Turbine Tower

### TUVNORDGROUP

Technical Data		
Measuring axes	2	y/z
Sensor constant	1,6	mA/(m/s²)
Measuring range	± 5	m/s²
Supply consumption	20-30 (temporarily 33)	Volt DC
Power consumption	<80	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	12 ± 0,05 4 20	mA mA
Setting time	30 ±	seconds
Weight (without cable)	282	gram
Connection Type: Connector SACC-E-M12MS-8CON-PG9/0,5	Axial 1554571	Phoenix
Temperature range	-40° / +65°	°C
Degree of protection	66	IP
Output resistance	500	Ώ
Dimensions	See drawing	
Housing material	V2A high-grade steel	

Actuator - Connector = Y-axis + Pin 1 = Y-axis -Pin 2 Pin 3 = Z-axis + Pin 4 = Z-axis -Pin 5-7 = GND = 24V DC Pin 8 M12

### 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.





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

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