





The transducer CHB 1101 is an external dual direction low frequency accelerometer intended for use with the PCH 1026 mk2 wind turbine and structual vibration monitor. The external dual direction accelerometer is used for advanced nacelle monitoring with distributed pick-up points. A separate cable with integrated D-Sub and M12 connector makes installation and connection to the vibration monitor very easy.

#### **Easy installation**

The CHB 1101 has a build in memory chip, where factory information is stored: serial number, type number, sensitivity and self test parameters. When the CHB 1101 is connected, the monitor will read the information from the memory chip and automatically adapt to the specific transducer settings. This means accelerometers can be interchanged freely without having to change parameters manually.

Every 30 seconds the monitor reads the chip in order to verify that the accelerometer is still connected and indentified.

After power-on the monitor will settle for 20 seconds. The settling time after disconnecting/connecting a CHB 1101 is 3 sec. During settling the PCH 1026 Mk2 will perform a Self-Test of both internal and external accelerometers.

## Self-Test

The monitor will issue a System-Error on Self-Test fail or if an accelerometer is disconnected. The accelerometer must be assigned in the PCH 1026 vibration monitor setup for this function.



CHB 1101 Dual direction accelerometer





# **Technical specifications** Low frequency accelerometer CHB 1101

Compatibility

Housing Mounting

Options

Cable/Connector

## **Technical specifications**

Sensor type	Capacitive accelerometer
Directions	Perpendicular directions X, Y
Sensitivity	$300 \text{ mV/g} = 30.6 \text{ mV/m/s}^2$
Measuring parameter	Acceleration (m/s <sup>2</sup> )
Dynamic range	± 6 g, peak
Frequency range	0.1 – 100 Hz (-1dB)
Temperature	Operation -30 to + 60 °C,
	Storage -40 to + 85 °C

B3.5



## CHB 1101 Accelerometer

Is an optional feature in the PCH 1026 Mk2 Wind Turbine & Structural Vibration Monitor.

#### Other optional features for PCH 1026

- **TFD** Tower Frequency Detection, Data sheet CHF 1115.
- **SSD** Safety Shock Detection, according to Germanischer Lloyd Guidelines 2003 chapter 2.3.2.5 and 2.3.2.6. Data sheet CHF 1133.
- Basic drive train monitoring incl. FFT analysis. Data sheet CHF 1115.
- External sensor, single direction, CHB 1102. Data sheet CHF 1041.

PCH 1026 Vibration Monitor with CHB 1101

PCH Engineering A/S reserves the right to change all specifications and accessories listed in this sheet without notice. CHF 1040-UK12

8 m PUR cable with M 12 connector and D-Sub, 9 pole Stainless steel type 1.4305 3 of M4 x 25 Hexagon socket screws (option, not included) Cable length up to 18 m Frequency range up to 1000 Hz

PCH 1026 Mk2, with input option for CHB 1101



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