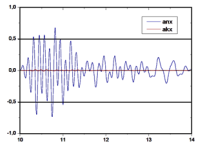


# PRODUCT INFORMATION

## CHB 1102/1115/1117/1128 Low frequency accelerometer



The transducer series CHB 1102/1115/1117/1128 is an external single direction low frequency accelerometer intended for the use with PCH 1026 wind turbine and structural vibration monitor. The external single 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.

### Uses

The CHB 1100-series is used together with the PCH 1026 wind turbine and structural vibration monitor for advanced nacelle monitoring. Examples are monitoring of low frequency torsional vibrations between the gear box output and the generator. Furthermore, the CHB accelerometer is suitable for basic gear mesh monitoring of the gear box up to 1000 Hz.

### Easy installation

The CHB accelerometer has a built in memory chip, where factory information is stored: serial number, type number, sensitivity and self test parameters. When the accelerometer is connected, the monitor will read the information from the memory chip and automatically adapt to the specific transducer settings. This means the 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 identified.

After power-on the monitor will settle for 20 seconds. The settling time after disconnecting/connecting a CHB accelerometer is 3 sec. During settling the PCH 1026 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 1102 Single direction accelerometer



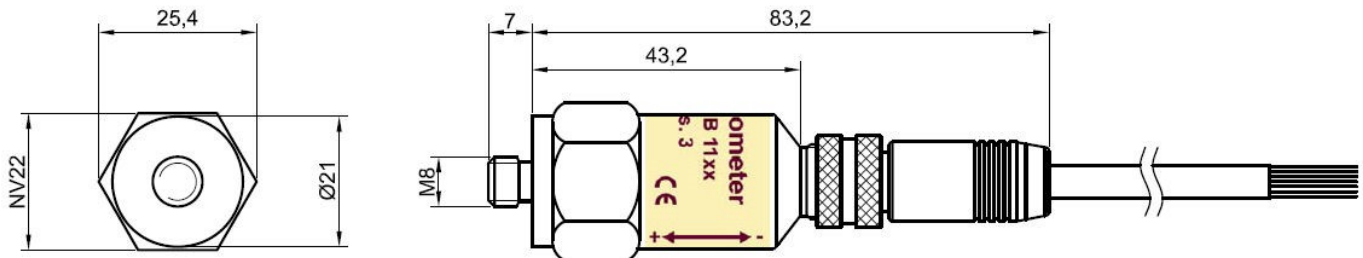
# Technical specifications

## CHB 1102/1115/1117/1128 Low frequency accelerometer

### Technical specifications

Sensor type	Capacitive accelerometer	Cable/Connector	5 m PUR cable with M12 connector and D-Sub, 9 pole
Directions	One direction, axial	Housing	Stainless steel type 1.4305
Measuring parameter	Acceleration (m/s <sup>2</sup> )	Mounting	Threaded stud M8 mm, Mounting torque: 6 Nm.
Temperature	Operation -30 to + 60 °C, Storage -40 to + 85 °C	Options	Cable length up to 30 m
Compatibility	PCH 1026 Mk2, with input option for CHB accelerometers		

	CHB 1102	CHB 1115	CHB 1117	CHB 1128
Dynamic range	± 6 g, peak	± 18 g, peak	± 6 g, peak	± 18 g, peak
Frequency range	0.1 - 200 Hz	0.1 - 200 Hz	0.1 - 1000 Hz	0.1 - 1000 Hz
Sensitivity	300 mV/g 30.6 mV/m/s <sup>2</sup>	100 mV/g 10.2 mV/m/s <sup>2</sup>	300 mV/g 30.6 mV/m/s <sup>2</sup>	100 mV/g 10.2 mV/m/s <sup>2</sup>



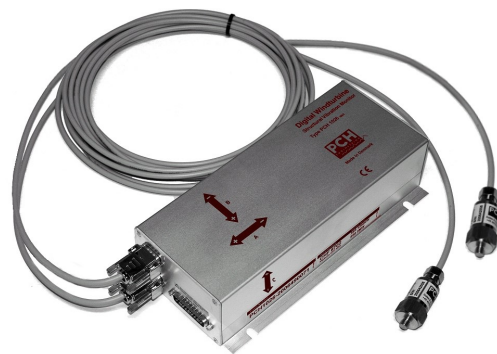
CHO 1153 rev. 01

### CHB 1102/1115/1117/1128 Accelerometer, Ver. 3

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**, dual direction CHB 1101. Data sheet CHF 1040.



PCH 1026 Vibration Monitor with 2 of CHB 1102

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

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