

**Number :** ZTDB0000.DOC  
**Index:** A  
**Prepared:** 03.11.2008 / ZB  
**Inspected:** 14.08.2009 / RR  
**Released:** 14.08.2009 / RR  
**Changed:**

## Technical Data Sheet



### Acceleration sensor (measurement direction uniaxial)

Integrated acceleration sensor for vibration and rolling bearing condition monitoring.

### Installation position of the acceleration sensor in the spindle

External sensor version	Integrated sensor version	Sensor dimensions	Sensor connector

German	English
Kabellänge: 2.500 <sup>+/- 50%</sup> bzw. Sonderlänge	Cable length: 2.500 <sup>+/- 50%</sup> or special length

<b>Sensor element</b>	Piezoelectric acceleration sensor (PZT/shear)									
<b>Sensitivity</b>	100mV/g +/- 10%									
<b>Resolution</b>	0.001 g									
<b>Effective range</b>	Max. 50 g									
<b>Shock loading</b>	Max. 5,000 g									
<b>Frequency range</b>	0.5 – 10000 Hz +/-3 dB (5000 – 50000 Hz for spike energy measurement)									
	<table border="1"> <thead> <tr> <th style="text-align: center;">German</th> <th style="text-align: center;">English</th> </tr> </thead> <tbody> <tr> <td>Empfindlichkeit [dB]</td> <td>Sensitivity [dB]</td> </tr> <tr> <td>Empfindlichkeitsabweichung [dB]</td> <td>Difference of sensibility [dB]</td> </tr> <tr> <td>Frequenz [Hz]</td> <td>Frequency [Hz]</td> </tr> </tbody> </table>	German	English	Empfindlichkeit [dB]	Sensitivity [dB]	Empfindlichkeitsabweichung [dB]	Difference of sensibility [dB]	Frequenz [Hz]	Frequency [Hz]	
German	English									
Empfindlichkeit [dB]	Sensitivity [dB]									
Empfindlichkeitsabweichung [dB]	Difference of sensibility [dB]									
Frequenz [Hz]	Frequency [Hz]									
<b>Resonant frequency</b>	> 25 kHz									
<b>Operating temp.</b>	-40 – +120°C									
<b>Power supply</b>	ICP interface 18 – 28 VDC; 2 – 10 mA									

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<b>Connecting cable</b>	2-core shielded, FEP (Teflon) insulation, cross-section per wire 0.06 mm <sup>2</sup> Diameter over cable insulation approx. 2.7 mm			
<b>Cable connector</b>	4 pin round connector M12	<b>Pin assignme</b>	<b>Pin</b>	<b>Function</b>
			White	Signal
			Brown	Earth
			Metal	Shield

<b>Changes:</b>	
Index:	Change: