

# Limit Switches (Windenergy)

## Questionnaire

### Yaw Movement

#### A Mechanical Data

- A1 Number of turns of the nacelle:  
(left and right) \_\_\_\_\_
- A2 Number of teeth of ring gear for Yaw \_\_\_\_\_ Module: \_\_\_\_\_
- A3 Number of teeth of pinion wheel for limit switch: \_\_\_\_\_ Module: \_\_\_\_\_
- A4 Number of contacts: \_\_\_\_\_
- A5 Mode of operation of contacts:  
(f.e. pre stop left, pre stop right, etc.)
- { S1 \_\_\_\_\_  
 S2 \_\_\_\_\_  
 S3 \_\_\_\_\_  
 S4 \_\_\_\_\_
- A6 Speed of nacelle: \_\_\_\_\_ [rev./min]
- A7 Type of connection:  
(f.e. Execution with plug, incl. cabling and plugs, etc.) \_\_\_\_\_
- A8 Preadjusted with delivery?  yes  no

#### B Sensor System

(Normally sensor should be provided by customer and will be assembled in factory site of Stromag / If sensor is recommended by customer, please send encoder data sheets.)

- B1 Application with position feedback?  yes (including the sensor system)  
 no
- B2 Which type of sensor system?  
 Potentiometer (analog signal)  
 Incremental Encoder (impuls signal, two channels A&B for detection of direction)
- B2.1 Required Precision: \_\_\_\_\_ [°/rev.]
- |  |                   |                                    |                                     |                                |
|--|-------------------|------------------------------------|-------------------------------------|--------------------------------|
| <input type="checkbox"/> Absolut feedback: | Analogical system | <input type="checkbox"/> 4-20 mA   | <input type="checkbox"/> 0-20 mA    | <input type="checkbox"/> 0-10V |
|  | Digital system    | <input type="checkbox"/> multiturn | <input type="checkbox"/> singleturn |                                |
- B3 Power supply voltage: \_\_\_\_\_ [V]
- B4 Special Technical data of encoding system? \_\_\_\_\_

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## Questionnaire

### Pitch Control

A1	Hydraulical Pitch Control system ---> <u>no</u> geared cam limit switch														
<b>B Mechanical Data</b>															
B1	Electrical Pitch Control System?	_____													
B2	Direct Pitch drive unit or tooth belt drive unit?	_____													
B3	Turning angle of rotorblade: (normally between 0° and 90°)	_____													
B4	No. of contacts:	_____													
B5	No. of teeth of pinion wheel for Pitch Control:	_____	Module: _____												
	<u>Or</u> No. of usable revolution on shaft of Limit Switch:	_____													
B6	Mode of operation of contacts:	<table style="border: none;"> <tr> <td style="font-size: 3em; vertical-align: middle;">}</td> <td>S1</td> <td>_____</td> </tr> <tr> <td style="font-size: 3em; vertical-align: middle;">}</td> <td>S2</td> <td>_____</td> </tr> <tr> <td style="font-size: 3em; vertical-align: middle;">}</td> <td>S3</td> <td>_____</td> </tr> <tr> <td style="font-size: 3em; vertical-align: middle;">}</td> <td>S4</td> <td>_____</td> </tr> </table>		}	S1	_____	}	S2	_____	}	S3	_____	}	S4	_____
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}	S2	_____													
}	S3	_____													
}	S4	_____													
<b>C Sensor System</b>															
(Normally sensor should be provided by customer and will be assembled in factory site of Stromag / If sensor is recommended by customer, please send encoder data sheets.)															
C1	Application with position feedback?	<input type="checkbox"/> yes (including the sensor system) <input type="checkbox"/> no													
C2	Which type of sensor system?	<input type="checkbox"/> Potentiometer (analog signal) <input type="checkbox"/> Incremental Encoder (impuls signal, two channels A&B for detection of direction)													
C2.1	Required Precision:	_____ [°/rev.]													
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C3	Power supply voltage:	_____ [V]													
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