

# Type Approval Certificate



This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. **75 956 - 09 HH**

Company **PAJ Systemtechnik  
Grundtvigs Allé 163  
6400 Sonderborg, DENMARK**

Product Description **Water in Oil Monitor**

Type **WIO200**

Environmental Category **D, EMC 2**

Technical Data /  
Range of Application **Sensor which measures water content in lubrication oils on ship engine  
Condition Monitoring Component (according to GL I-1-17, Section 2, D.2.)  
WIO Sensor system nr: A01-110-0100-00  
Consists of:  
- WIO Sensor nr: A01-110-0101-00  
- Terminal Box nr: A01-110-0102-00  
- Sensor cables 2 pcs. Order nr: A01-110-0103-00  
The technical specification is shown on page 2.  
Software Version 111197-810 Rev 1.00**

Test Standard **Guidelines for the Performance of Type Approvals Chapter 2, Edition 2003**

Documents **Test report : 2009-02260 EMC, 2009-01456, 2009-01456R2LM, 2009-02373  
111197-900 WIO Sensor Specifications Rev.1.00, Datasheet 111197-902 Rev.1.00  
Software Questionnaire according to requirement class 3, dated 28.09.2009**

Remarks **Rules GL I-1-17 to be observed for Condition Monitoring (CM). Alarm settings have to be specified by engine manufacturer if sensor is used for CM.**

Valid until **2014-11-29**

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File No. **I.A.10**

**Hamburg, 2009-11-30**

Type Approval Symbol



**Germanischer Lloyd**

*J. Wittburg*  
Jürgen Wittburg

*M. Rinkel*  
Marco Rinkel

This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".

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## Technical Specification:

Measuring range: 0,01 to 1,00 aw water content.  
Accuracy:  $\pm 0,03$  aw for the range 0...1 aw water content  
Resolution: Minimum 0,01 aw water content.  
Analogue output: 4 to 20 mA (galvanic isolated) 0,01 to 1 aw water content linear  
Max. Load (analogue outp.) < 500Ohm  
Alarm indications. Alarm indication via 2 x Alarm relays (NC).  
Media for measurement: Lubrication oil: Grade SAE 30/TBN 5-10  
Service temperature of media: 10 to 60 °C.  
Pressure range: 0 to 10 bar

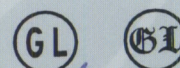
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**Germanischer Lloyd**

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Jürgen Wittburg

A handwritten signature in blue ink, appearing to read 'i.A. R'.

Marco Rinkel

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