



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:  issue No.:

Status:

Date of Issue:  Page 1 of 3

Applicant: **GeDi Technik GmbH**  
Ringeldorfer Str.10  
45968 Gladbeck  
Germany

Electrical Apparatus: **Position Transducer type WMS-1-\*\*-\*\*\*\*-\*\*-\***  
*Optional accessory:*

Type of Protection: **Intrinsic Safety**

Marking: **Ex ib I Mb**


*Approved for issue on behalf of the IECEx  
Certification Body:*

Dr. R. Jockers

*Position:*

Head of Certification Body

*Signature:  
(for printed version)*

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01.12.2008

*Date:*

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**DEKRA EXAM GmbH**  
Dinnendahlstrasse 9  
44809 Bochum  
Germany

 **DEKRA**  
DEKRA EXAM GmbH



# IECEX Certificate of Conformity

Certificate No.: IECEx BVS 08.0021

Date of Issue: 2008-12-01

Issue No.: 0

Page 2 of 3

Manufacturer: **GeDi Technik GmbH**  
Ringeldorfer Str.10  
45968 Gladbeck  
Germany

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

**IEC 60079-0 : 2007-10** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition: 5

**IEC 60079-11 : 2006** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition: 5

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

Test Report:

[DE/BVS/ExTR08.0027/00](#)

Quality Assessment Report:  
[DE/BVS/QAR08.0007/00](#)



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Page 3 of 3

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

#### Description

The Position Transducer type WMS-1- \*\* - \*\*\*\* - \*\* - \* is an IS supplied apparatus comprising a tubular stainless steel enclosure.

One end of the enclosure is fitted with a cable gland for the permanently connected cable for IS circuits, the other end is extended with a stainless steel tube of various length containing the sensor wire.

The Position Transducer comes with two versions with regard to IS signal output:

- opto isolator (frequency signal)
- analogue voltage output and open collector

Printed circuit boards of electronic circuitry are embedded in casting compound inside the enclosure.

The intrinsically safe circuits (supply, voltage signal or frequency signal respectively) are led out of the enclosure by means of a permanently connected multiwire cable (standard length 3 m).

#### Type Code and Ratings

See Annex

### CONDITIONS OF CERTIFICATION: NO

Certificate No.: **IECEX BVS 08.0021**  
**Annex**  
 Page 1 of 1

### Type Code

Position Transducer	type WMS-1- ** - **** - ** - *
Designation	
Enclosure	
Flange	= FL
Thread 3/4 "	= Ge
Length range (mm)	
Output signal	
Voltage	= SP
Frequency (5 to 15 Hz)	= Fr
Frequency (15 to 5 Hz)	= Fr
Features (not relevant to Ex application)	

### Ratings

Parameters	Supply circuit	Signal output circuits	
		0.5 V to 4.5 V ) <sup>1</sup>	5 to 15 Hz / ) <sup>2</sup> 15 to 5 Hz
Level of protection	Ex ib I	Ex ib I	Ex ib I
Voltage U <sub>i</sub>	DC 13 V	DC 17 V	DC 17 V
Current I <sub>i</sub>	N / A	N / A	N / A
Power P <sub>i</sub>	N / A	N / A	N / A
Effective internal capacitance C <sub>i</sub>	12 nF + 0.3 nF/m	0.3 nF/m	0.3 nF/m
Effective internal inductance L <sub>i</sub>	35 µH	negligible	negligible
Voltage U <sub>o</sub>	N / A	DC 6.51 V	N / A
Current I <sub>o</sub>	N / A	10 mA	N / A
Power P <sub>o</sub>	N / A	16 mW	N / A
Max. external capacitance C <sub>o</sub>	N / A	570 µF	N / A
Max. external inductance L <sub>i</sub>	N / A	4.66 H	N / A
Max. inductance- / resistance ratio L <sub>o</sub> (R <sub>o</sub> )	N / A	30.4 mH/Ω	N / A
Characteristics	N / A	linear	N / A
Connection facilities (permanently connected multiwire cable)	(+) brown, (-) white	green (Analogue signal), yellow (Collector)	yellow (Collector), green (Emitter)
Remark: ) <sup>1</sup> analogue voltage output and open collector output; common ground with supply circuit ) <sup>2</sup> galvanically separated from the supply circuit N / A = not applicable			