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

Certificate No.:	IECEx TUN 05.0006 issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2006-09-21**	Page 1 of 3

Applicant: **FAFNIR GmbH**
Bahrenfelder Str. 19
D-22765 Hamburg
Germany

Electrical Apparatus: **Measuring Transmitter for Tank Level Measuring Devices**
Optional accessory: **type VP-1, VP-2 and VP-4**

Type of Protection: **Intrinsic Safety "ia"**

Marking: **[Ex ia IIC] T6**

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature:
(for printed version)

Date: 2006-09-21

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.

Certificate issued by:

TÜV NORD CERT GmbH & Co. KG
Am TUV1
D-30519 Hannover
Germany

TÜV NORD

IECEx Certificate of Conformity

Certificate No.: IECEx TUN 05.0006

Date of Issue: **2006-09-21** Issue No.: **0**

Schedule

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

The measuring transmitter is an associated apparatus which is used for the transmission of electrical signals of up to eight sensors from the hazardous explosive area to the non hazardous explosive area. It is designed as a module of a tank level measuring system.
The measuring transmitter for tank level measuring divices is manufactured in variations: type VP-1 (maximal 8 sensors), type VP-2 (maximal 2 sensors) and type VP-4 (maximal 4 sensors).

Supply circuit (terminals L, N and SL) resp.
- alternating voltage: 230 V ± 10 %; about 2 VA, Um = 253 V
- alternating voltage: 115 V ± 10 %; about 2 VA, Um = 126,5 V
- alternating voltage: 24 V ± 10 %; about 2 VA, Um = 33 V

Sensor circuit(s) (terminals 1A, 1B, 1+ and 1- resp., 2A, 2B, 2+ and 2- resp., 3A, 3B, 3+ and 3- resp., 4A, 4B, 4+ and 4- resp., 5A, 5B, 5+ and 5- resp., 6A, 6B, 6+ and 6- resp., 7A, 7B, 7+ and 7- resp., 8A, 8B, 8+ and 8-)
in type of protection „Intrinsic Safety" Ex ia IIC
maximum values: U_0 = 14,3 V
I_0 = 28 mA
P_0 = 98 mW
characteristic line: linear
The effective internal inductances and capacitances are negligibly small.
maximum effective external inductance: 40 mH
maximum effective external capacitance: 0,68 µF

Measuring- and control circuits U_{max} = 100 V, U_m = 100 V

The intrinsically sensor circuits are safely galvanically separated from the supply circuit (terminals L, N, SL) up to a peak crest value of the voltage of 375 V and from the measuring- and control circuits (connector S1) up to a peak crest value of the voltage of 190 V.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx TUN 05.0006

Date of Issue: **2006-09-21** Issue No.: **0**

Manufacturer: **FAFNIR GmbH**
Bahrenfelder Str. 19
D-22765 Hamburg
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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

*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

IECEx ATR:
DE/TUN/06/337415-1

File Reference:
98/PX31280
01YEX144312
02YEX170887