Translation

(1) # EU-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**

(3) **Certificate Number** **TÜV 00 ATEX 1656 X** **issue:** 00

(4) for the product: Overfill Prevention Sensor type 81 D-Ex ... and type 83 UV-...
Level Detector type LS 300 ...
High-Level Sensor type SEPARIX-T ...

(5) of the manufacturer: **FAFNIR GmbH**

(6) Address: Schnackenburgallee 149 c, 22525 Hamburg, Germany

Order number: 8000488168

Date of issue: 2018-09-11

(7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in the confidential ATEX Assessment Report No. 18 203 228654.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 + A11:2013 **EN 60079-11:2012** **EN 60079-26:2015**

except in respect of those requirements listed at item 18 of the schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the schedule to this certificate.

11) This EU-Type Examination Certificate relates only to the design, and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the product shall include the following:

See item 15 of the schedule

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body

Roder

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(13) **SCHEDULE**

(14) **EU-Type Examination Certificate No. TÜV 00 ATEX 1656 X issue 00**

(15) Description of product

The sensors are intrinsically safe equipment that can be used in a potentially explosive area and are used to detect a limit level. The overfill prevention sensors (OPS) serve as part of an overfill prevention. The level detector is used as part of an overfill protection, dry run protection or filling control. The high-level sensor is used to detect backwater within a light liquid separator.

In the future, the sensors may also be manufactured in accordance with the test documents listed in the ATEX test report. The changes affect the addition of new types. Furthermore, the equipment was assessed according to the latest standards.

The marking is as follows:

Type 81 D-Ex resp. 83 UV-... resp. LS 300 ... resp. SEPARIX-T ...

⟨Ex⟩ II 1 G Ex ia IIC T4 Ga resp.
II 1/2 G Ex ia IIC T4 Ga/Gb

Type 81 D-Ex U resp. LS 300 ...U...

⟨Ex⟩ II 1/2 G Ex ia IIC T4 Ga/Gb

Type LS 300 ... C

⟨Ex⟩ II 1 G Ex ia IIB T4 Ga resp.
II 1/2 G Ex ia IIB T4 Ga/Gb

Type designation:

Type 81 D-Ex ...:	
81 D-Ex	OPS made of stainless steel
81 D-Ex U	OPS additionally with overvoltage protection
Type 83 UV-...:	
83 UV-A	Stainless steel OPS with junction box and wall fitting
83 UV-C	Stainless steel OPS with permanently connected cable and wall fitting
83 UV-SCR	Brass OPS with permanently connected cable, reed contact / float and wall fitting
83 UV-SR	Brass OPS with reed contact / float
83 UV-SV	Brass OPS with variably adjustable junction box
83 UV-SVR	Brass OPS with variably adjustable junction box and reed contact / float
Type LS 300 ... (only Ex relevant designations):	
LS 300	Level detector without process connection, test connection and overvoltage protection as well as normal medium temperature range
LS 300 E...	Level detector with screw-in unit
LS 300 F...	Level detector with flange
LS 300 ...P...	Level detector with test connection and without check valve
LS 300 ...PR...	Level detector with test connection and with check valve
LS 300 ...U...	Level detector with overvoltage protection
LS 300 ...H...	Level detector for high medium temperature range
LS 300 ...HH...	Level detector for the highest medium temperature range

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LS 300 ...L...	Level detector for low medium temperature range
LS 300 ... C	Level detector with plastic coating
LS 300 ... Duo	Double level detector
LS 300 ... Steck	Level detector with plug connection
LS 300 ... Tantal	Level detector with at least sensor element made of tantalum
LS 300 ... Trio	Triple level detector
Type SEPARIX-T ...:	
SEPARIX-T H	High-level sensor with sensor tube made of stainless steel for aggressive media
SEPARIX-T L Plus	High-level sensor with sensor tube made of stainless steel for non-aggressive media

Technical data:

Signal- and power circuit — in type of protection "Intrinsic Safety" Ex ia IIC/IIB
only for the connection to a certified intrinsically safe circuit
Maximum values: U_i = 30 V
I_i = 200 mA
P_i = 1 W
L_i negligibly small
C_i negligibly small

The types LS 300 ... C with plastic coating are only for gas group IIB allowed.

Permissible ambient temperature range:

The ambient temperature range is -40 °C to +110 °C. When using a sensor with overvoltage protection, the maximum temperature is +90 °C.

When used in areas requiring category 1 or 1/2, the following applies:

The process pressure for the media must be between 0.8 bar and 1.1 bar where explosive vapour-air mixtures are present. If no explosive mixtures are present, the equipment may also be operated outside this area according to the manufacturer's specification.

All further data are valid unchanged.

(16) Drawings and documents are listed in the ATEX Assessment Report No. 18 203 228654

(17) Specific Conditions for Use

1. Overfill prevention sensors and level detectors with overvoltage protection do not comply with the dielectric strength requirements according to EN 60079-11, clause 6.3.13. When performing an insulation test on the intrinsically safe circuit, the device must be disconnected.
2. When using the integrated overvoltage protection, integration into the equipotential bonding is required.

(18) Essential Health and Safety Requirements

no additional ones

- End of Certificate -