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 04 ATEX 2492 X issue: 00

(4) for the product: Hydrostatic filling level measuring device type hydrocont Ex.B...

(5) of the manufacturer: ACS CONTROL SYSTEM GmbH

(6) Address: Lauterbachstraße 57

84307 Eggenfelden

Germany

Order number: 8000472246

Date of issue: 2017-05-22

(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. 17 203 200614.

(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:

(Ex) II 2 G Ex ib IIC T4 Gb II 1/2 G Ex ia IIC T4 Ga/Gb

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 Deputy head of the notified body

Roder

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This certificate may only be reproduced without any change, schedule included.

P17-F-011 Rev. 01/04.16



(13) SCHEDULE

(14) EU-Type Examination Certificate No. TÜV 04 ATEX 2492 X issue 00

(15) Description of product

The hydrostatic filling level measuring device type hydrocont Ex.B... is used for the filling level measurement of pumpable media in basins, deep wells or tanks.

The connection housing of the devices resp. the wall mounted housing may be installed in hazardous explosive areas that require apparatus of category 2.

The sensor resp. the sensor with carrying cable may be installed in hazardous explosive areas that require apparatus of category 1.

The intrinsically safe Pt100 circuit and the intrinsically safe supply and signal circuit are safe galvanically separated.

Type code:

Hydrocont Ex.B...

Instead of points letters or numbers to be inserted in the full designation, indicating the different versions.

0: ATEX II 1/2 G Ex ia IIC T4 Ga/Gb 1: ATEX II 2 G Ex ib IIC T4 Gb

Electrical data: Supply and Signal circuit (Cable connection,

terminals)

in type of protection Intrinsic Safety Ex ia IIC

only for the connection to a certified intrinsically safe circuit

with following maximum values:

 $U_i = 30 \text{ V}$ $I_i = 140 \text{ mA}$ $P_i = 0.9 \text{ W}$

The effective internal capacitance C_i: 4 nF

The effective internal capacity to earth potential C_i: 5nF

The effective internal inductance L_i: 0.11 mH

Pt100 circuit (Cable connection

or

terminals)

in type of protection Intrinsic Safety Ex ia IIC

only for the connection to a certified intrinsically safe circuit

with following maximum values:

 $U_i = 5.9 \text{ V}$ $I_i = 39 \text{ mA}$ $P_i = 163 \text{ mW}$

The effective internal capacitances C_i and the effective internal

inductances Li are negligibly small.

The installation of a transmitter according to EU-Type Examination Certificate TÜV 02 ATEX 1924 X or of another separately certified transmitter in the wall mounted housing is permissible.

The details of the respective EU-Type Examination Certificate have to be observed.



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In addition to the above stated values also the capacitances and inductances of the connection line (length L) have to be taken into consideration.

without venting tube

 $L_c = L \times 0.65 \, \mu H/m$

 $C_c = L \times 120 \text{ pF/m (wire/wire)}$ $C_c = L \times 160 \text{ pF/m (wire/shield)}$

with venting tube

 $L_c = L \times 1 \mu H/m$

 $C_c = L \times 45 \text{ pF/m (wire/wire)}$ $C_c = L \times 105 \text{ pF/m (wire/shield)}$

Thermal data:

The maximum permissible temperatures at the components of the device in dependence of the category have to be taken from the following table:

category	maximum permissible temperatures			
	sensor	sensor with carrying cable	sensor connection housing	wall mounted housing
1	60°C	60°C		
2	85°C	70°C	85°C	70°C
			connection housing with cable: 70°C	

- (16) Drawings and documents are listed in the ATEX Assessment Report No. 17 203 200614
- (17) Specific Conditions for Use
- 1. The sensor of the hydrostatic filling level measuring device type hydrocont Ex.B... may be operated in explosion hazardous areas that require apparatus of category 1 only if atmospheric conditions exist (temperature from -20°C to 60°C, pressure from -0.8 bar to 1.1 bar).

For explosion hazardous areas that require apparatus of category 2 the permissible temperatures have to be taken from the table.

The supply and signal circuits as well as the Pt100-circuits may be connected to intrinsically safe circuits of the protection level ib. The marking of the device in this case is II 2 G Ex ib IIC T4.

The permissible operation pressures and temperatures for none-explosive gas mixtures have to be taken from the manufacturer specifications (operation instruction).

- 2. At the chargeable plastic parts of the hydrostatic filling level measuring device type hydrocont Ex.B... there is a danger of ignition by electrostatic discharges. The operator has to ascertain the suitability of this equipment for his use (Observe warning label of the manufacturer).
- 3. At possible risks by pendulum or vibration the hydrostatic filling level measuring devices type hydrocont Ex.B... in the execution with carrying cable have to be secured effectively against these dangers.
- 4. At devices with integrated surge protection unit the intrinsically safe supply and signal circuit is connected with earth potential for safety reasons. Potential equalization has to exist in the complete course of the erection of the intrinsically safe circuit.



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(18) Essential Health and Safety Requirements No additional ones

- End of Certificate -