



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 25 ATEX 403790 X** **Issue:** 00
(4) for the product: Hydrostatic filling level transmitter type HP4*C* resp. type B4*C*
(5) of the manufacturer: **ACS Control-System GmbH**
(6) Address: Lauterbachstraße 57
 84307 Eggenfelden
 Germany
Order number: 8003088377
Date of issue: See date of signature

(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. 25 203 403790.

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

EN IEC 60079-0:2018/AC:2020-02

EN 60079-11:2012

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 "**Thermal data**" for details

TÜV NORD CERT GmbH, Am TÜV 1, 45307 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

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(13) **SCHEDULE**

(14) **EU-Type Examination Certificate No. TÜV 25 ATEX 403790 X**

Issue 00

(15) **Description of product:**

The hydrostatic filling level transmitter type HP4*C* resp. type B4*C* is used to measure levels in liquids.

Type code:

Slim style with enclosure diameter 22mm and extension cable:

HP4*CX*****X0****-*****: Zone 0, Without overvoltage protection

HP4*CZ*****X0****-*****: Zone 1, Without overvoltage protection

HP4*CZ*****A0****-*****: Zone 1, With overvoltage protection

Robust style with enclosure diameter 40mm and extension cable:

B4*CX*****X0****-*****: Zone 0, Without overvoltage protection

B4*CZ*****X0****-*****: Zone 1, Without overvoltage protection

B4*CZ*****A0****-*****: Zone 1, With overvoltage protection

The detailed configuration is in accordance with the operating instructions.

Electrical data:

Supply and signal circuit
(Cable connection: +Li, -Li
PE/PA shielding)

In type of protection intrinsic safety Ex ia IIC resp. IIC
Only for connection to certified intrinsically safe circuits.

Maximum values:

$U_i = 30 \text{ V}$

$I_i = 300 \text{ mA}$

$P_i = 900 \text{ mW}$

For earthed variants (HP4*C*, with and without overvoltage protection and B4*C*, with overvoltage protection):

Effective internal capacitance $C_i = 1.3 \text{ nF} + 200 \text{ pF/m} \times L^*$

Effective internal inductance $L_i = 5 \text{ } \mu\text{H} + 6.5 \text{ } \mu\text{H/m (wire-shield)} \times L^*$

L^* : The length of the cable connection has to not exceed 60 m

For non-earthed variants (B4*C*, without overvoltage protection):

Effective internal capacitance $C_i = 1.3 \text{ nF} + 200 \text{ pF/m} \times L^*$

Effective internal inductance $L_i = 5 \text{ } \mu\text{H} + 2.5 \text{ } \mu\text{H/m (wire-wire)} \times L^*$

L^* : The length of the cable connection has to not exceed 150 m

The supply and signal circuit are galvanically connected to each other.

Thermal data:

For applications that require EPL Ga or Gb devices, the permissible ambient temperature range on the electronics housing is identical to the permissible medium temperature range on the sensor and is given in the following table depending on the temperature class:

Marking	Ambient temperature range resp. Medium temperature range
II 1 G Ex ia IIC T6 Ga II 2 G Ex ib IIC T6 Gb	-20 °C ... +42 °C
II 1 G Ex ia IIC T5 Ga II 2 G Ex ib IIC T5 Gb	-20 °C ... +57 °C
II 1 G Ex ia IIC T4...T1 Ga II 2 G Ex ib IIC T4...T1 Gb	-20 °C ... +70 °C

For applications that require EPL Da or Db devices, the permissible ambient temperature range on the electronics housing is identical to the permissible medium temperature range on the sensor and is given in the following table depending on the surface temperature:

Marking	Ambient temperature range resp. Medium temperature range
II 1 D Ex ia IIIC T ₂₀₀ 100°C Da	-20 °C ... +35 °C
II 1 D Ex ia IIIC T ₂₀₀ 120°C Da	-20 °C ... +55 °C
II 2 D Ex ib IIIC T80°C Db	-20 °C ... +42 °C
II 2 D Ex ib IIIC T95°C Db	-20 °C ... +57 °C
II 2 D Ex ib IIIC T108°C Db	-20 °C ... +70 °C

(16) Drawings and documents are listed in the ATEX Assessment Report No. 25 203 403790

(17) **Specific Conditions for Use:**

1. The ambient temperature range depending on temperature class resp. surface temperature is to be taken from the operating instructions.
2. Metallic process connection parts have to be included in the local potential equalization.
3. For the hydrostatic filling level transmitter type HP4*C* (with and without overvoltage protection) and for type B4*C* (with overvoltage protection), the intrinsically safe supply is connected to the earth potential. Potential equalization has to exist in the entire area of the installation of the intrinsically safe circuit.

(18) **Essential Health and Safety Requirements:**

No additional ones.

- End of EU-Type Examination Certificate -