

Translation
(1) **EU-Type Examination Certificate**

TÜV NORD

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



(3) Certificate Number TÜV 18 ATEX 217855 X issue: 00

(4) for the product: Process transmitter
IPT-2*-1/2*-*****-A/H/S/P/F/R/T*-*****S*Z*-***-** and
CPT-2*-1/2*-*****-A/H/S/P/F/R/T*-*****-*****-***-**

(5) of the manufacturer: WIKA Alexander Wiegand SE & Co. KG

(6) Address: Alexander-Wiegand-Straße 30
63911 Klingenberg
Germany

Order number: 8000482265

Date of issue: 2018-05-24

- (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 217855.
- (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:

II 1 G resp. II 1/2 G resp. II 2 G Ex ia IIC T6...T1 Ga resp. Ga/Gb resp. 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 head of the notified body

Beder

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(13) SCHEDULE

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(15) Description of product

The process transmitters type IPT-2*-1/2*-*****-A/H/S/P/F/R/T*-*****-***S*Z**-*-* and type CPT-2*-1/2*-*****-A/H/S/P/F/R/T*-*****-*****-***-* are used for pressure and filling level measurement in explosion hazardous areas.

A display and adjustment module AB-MODUL.WIKA can be installed within the equipment with following options:

X without

A installed

F without, cover with display window

B installed on the side

K installed, with Bluetooth, magnetic pen operation

U installed, with Bluetooth, battery, magnetic pen operation

L installed on the side, with Bluetooth, magnetic pen operation

S installed on the side, with Bluetooth, battery, magnetic pen operation

Type code

IPT-2*-1/2*-*****-A/H/S/P/F/R/T*-*****-***S*Z**-*-* and

CPT-2*-1/2*-*****-A/H/S/P/F/R/T*-*****-*****-***-*

Electrical data

Version with single chamber housing A, K, V or 8, IPT-2*-1/2*, CPT-2*-1/2* with selected output signal IPT-2* or CPT-2*-*-A/K/V/8****-A/H/S*-*****-*****-***-*, A (4 ... 20 mA), H (4 ... 20 mA/HART) or S (4 ... 20 mA/HART with SIL qualification)**

Supply and signal circuit:

In ignition protection type intrinsic safety Ex ia IIC/IIB

(terminals 1[+], 2[-] in the "Ex-i"

Only for connection to a certified, intrinsically safe circuit.

electronics compartment or plug connection)

Maximum values:

$U_i = 30 \text{ V}$

$I_i = 131 \text{ mA}$

$P_i = 983 \text{ mW}$

The effective internal capacitance C_i is negligibly small.

In the version with permanently mounted connection cable, $C_{i \text{ wire/wire}} = 150 \text{ pF/m}$ and $C_{i \text{ wire/screen}} = 270 \text{ pF/m}$ must be taken into account.

The effective inner inductance L_i is $L_i \leq 5 \mu\text{H}$. In the version with permanently mounted connection cable, $L_i = 0.62 \mu\text{H/m}$ must also be taken into account.

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Version with double chamber housing D, W or R, IPT-2*-*1/2*, CPT-2*-*1/2* with selected output signal IPT-2* or CPT-2*-*1/2*-D/W/R**-A/H/S*-*1/2*-****-*****-****-*, A (4 ... 20 mA), H (4 ... 20 mA/HART) or S (4 ... 20 mA/HART with SIL qualification)**

Power supply and signal circuit: (terminal 1[+], 2[-] in the "Ex-i" connection compartment)

In ignition protection type intrinsic safety Ex ia IIC/IIB
Only for connection to a certified, intrinsically safe circuit.
Maximum values:

$$U_i = 30 \text{ V}$$

$$I_i = 131 \text{ mA}$$

$$P_i = 983 \text{ mW}$$

The effective internal capacitance C_i is negligibly small.

In the version with permanently mounted connection cable, $C_{i \text{ wire/wire}} = 150 \text{ pF/m}$ and $C_{i \text{ wire/screen}} = 270 \text{ pF/m}$ must be taken into account.

The effective inner inductance L_i with the double chamber version is $L_i \leq 10 \text{ }\mu\text{H}$. In the version with permanently mounted connection cable, $L_i = 0.62 \text{ }\mu\text{H/m}$ must also be taken into account.

IPT-2*-*1/2*, CPT-2*-*1/2*selected output signal IPT-2* or CPT-2*-*1/2*-D/W/R**-A/H/S*-*1/2*-****-*****-****-*, A (4 ... 20 mA), H (4 ... 20 mA/HART) or S (4 ... 20 mA/HART with SIL qualification)**

Indicating and adjustment circuit: (terminals 5, 6, 7, 8)1)2)3)

In ignition protection type intrinsic safety Ex ia IIC
For connection to the intrinsically safe circuit of the corresponding external display and adjustment unit DI-PT-E* or for connection of a IPT-2* or CPT-2* with selected output signal CPT-2* or IPT-2*-*1/2*-D/W/R****-A/H/S*-*1/2*-****-*****-****-*, R or T for differential pressure measurement.

The rules for the interconnection of intrinsically safe circuits between IPT-2*-*1/2*, CPT-2*-*1/2* and the external display and adjustment unit DI-PT-E* or IPT-2* or CPT-2* with selected output signal IPT-2* or CPT-2*-*1/2*-D/W/R****-A/H/S*-*1/2*-****-*****-****-*, R or T are fulfilled, provided that the total inductance and total capacitance of the connection cable between IPT-2*-*1/2*, CPT-2*-*1/2* and the external display and adjustment unit DI-PT-E* or IPT-2* or CPT-2* with selected output signal CPT-2* or IPT-2*-*1/2*-D/W/R****-A/H/S*-*1/2*-****-*****-****-*, R or T $L_{\text{cable}} = 330 \text{ }\mu\text{H}$ and $C_{\text{cable}} = 1.98 \text{ }\mu\text{F}$ are not exceeded.

When using the delivered connection cable between IPT-2*-*1/2*, CPT-2*-*1/2* and the external display and adjustment unit DI-PT-E* or IPT-2* or CPT-2* with selected output signal CPT-2* or IPT-2*-*1/2*-D/W/R****-A/H/S*-*1/2*-****-*****-****-*, R or T, the following listed cable inductances L_i and cable capacitances C_i must be taken into account.

$$L_i = 0.62 \text{ }\mu\text{H/m}$$

$$C_{i \text{ wire/wire}} = 150 \text{ pF/m}$$

$$C_{i \text{ wire/screen}} = 270 \text{ pF/m}$$

1) In the "Ex-i" electronics compartment with IPT-2* or CPT-2*-*1/2*-D/W/R****-A/H/S*-*1/2*-****-*****-****-*, K/V/8****-****-

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*****_*****_***_** in version with single chamber housing A, K, V or 8.
 2) In the "Ex-i" connection compartment with IPT-2* or CPT-2*_***-D/ W/R*****_**_*****_*****_***_** in version with double chamber housing D, W or R.
 3) Additional plug connection with IPT-2* or CPT-2*_***-D/ W/R*****_**_*****_ *****_***_** in version with double chamber housing D, W, R and housing version/protection P, IPT-2* or CPT-2*_***-D/W/RP***_**-*****_ *****_***_** (with M12 x 1 for DI-PT-E*).

Intrinsically safe circuit for the display and adjustment module

Version with single chamber housing A, K, V or 8, IPT-2*_*I/2*, CPT-2*_*I/2* with selected output signal IPT-2* or IPT-2*_*-A/K/V/8*****-A/H/S*_******_*****_***_**, A (4 ... 20 mA),**

H (4 ... 20 mA/HART) or S (4 ... 20 mA/HART with SIL qualification)

Circuit for the display and adjustment module: (spring contacts in the "Ex-i" electronics compartment)

In ignition protection type intrinsic safety Ex ia IIC
 Only for connection to the display and adjustment module DI-PT-A.

Version with double chamber housing D, W or R, IPT-2*_*I/2*, CPT-2*_*I/2* with selected output signal IPT-2* or IPT-2*_*-D/W/R*****-A/H/S*_******_*****_***_**, A (4 ... 20 mA),**

H (4 ... 20 mA/HART) or S (4 ... 20 mA/HART with SIL qualification)

Circuit for the display and adjustment module: (spring contacts in the "Ex-i" connection compartment) or

In ignition protection type intrinsic safety Ex ia IIC
 Only for connection to the display and adjustment module DI-PT-A.

Circuit for the display and adjustment module: (spring contacts in the "Ex-i" electronics compartment)

In ignition protection type intrinsic safety Ex ia IIC
 Only for connection to the display and adjustment module DI-PT-A.

In the double chamber version, the display and adjustment module DI-PT-A must only be equipped in the connection compartment, if there is no external display and adjustment unit DI-PT-E* or IPT-E* or CPT-E* with selected output signal IPT-2* or CPT-2*_***_*****- R/T*_******_*****_***_**, R, T connected.

Version with double chamber housing D, W or R with housing version/protection P (with M12 x 1 for DI-PT-E), IPT-2*_*I/2*, CPT-2*_*I/2* with selected output signal CPT-2* or IPT-2*_*-D/W/R*****-A/H/S*_******_*****_***_**, A (4 ... 20 mA), H (4 ... 20 mA/HART) or**

S (4 ... 20 mA/ HART with SIL qualification)

Circuit for the display and adjustment module: (spring contacts in the "Ex-i" connection compartment)

In ignition protection type intrinsic safety Ex ia IIC
 Only for connection to the display and adjustment module DI-PT-A.

In the double chamber version, the display and adjustment module DI-PT-A must only be equipped in the connection compartment, if there is no external display and adjustment unit DI-PT-E* or IPT-E* or CPT-E* with selected output signal IPT-2* or CPT-2*_***_*****- R/T*_******_*****_***_**, R, T connected.

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Version with single chamber housing A, K, V or 8, IPT-2*-*I/2*, CPT-2*-*I/2* with selected output signal IPT-2* or CPT-2*-*A/K/V/8**-P/F*-*P (Profibus PA), F (Foundation Fieldbus)**

Supply and signal circuit:
(terminals 1[+], 2[-] in the
"Ex-i" electronics
compartment or plug
connection)

In ignition protection type intrinsic safety Ex ia IIC/IIB
Only for connection to a certified, intrinsically safe circuit.

Maximum values:

$$U_i = 17.5 \text{ V}$$

$$I_i = 500 \text{ mA}$$

$$P_i = 5.5 \text{ W}$$

The instrument is suitable for connection to a Fieldbus system according to the FISCO model (EN 60079-11), e.g. Profibus PA.

or

$$U_i = 24 \text{ V}$$

$$I_i = 250 \text{ mA}$$

$$P_i = 1.2 \text{ W}$$

The effective internal capacitance C_i is negligibly small.

In the version with permanently mounted connection cable,

$C_{i \text{ wire/wire}} = 150 \text{ pF/m}$ and $C_{i \text{ wire/screen}} = 270 \text{ pF/m}$ must be taken into account.

The effective internal inductance L_i is negligibly small.

In the version with fix mounted connection cable, $L_i = 0.62 \text{ } \mu\text{H/m}$ must be taken into consideration.

Version with double chamber housing D, W or R, IPT-2*-*I/2*, CPT-2*-*I/2* with selected outout signal CPT-2* or IPT-2*-*A/K/V/8**-P/F*-*P (Profibus PA), F (Foundation Fieldbus)**

Power supply and signal
circuit: (terminal 1[+], 2[-] in
the "Ex-i" connection
compartment)

In ignition protection type intrinsic safety Ex ia IIC/IIB for
instruments of category 1G or 1/2G and Ex ia IIC/IIB resp.
Ex ib IIC/IIB for instruments of category 2G.

Only for connection to a certified, intrinsically safe circuit.

Maximum values:

$$U_i = 17.5 \text{ V}$$

$$I_i = 500 \text{ mA}$$

$$P_i = 5.5 \text{ W}$$

The instrument is suitable for connection to a Fieldbus system according to the FISCO model (EN 60079-11), e.g. Profibus PA. or

$$U_i = 24 \text{ V}$$

$$I_i = 250 \text{ mA}$$

$$P_i = 1.2 \text{ W}$$

The effective internal capacitance C_i is negligibly small.

In the version with permanently mounted connection cable, $C_{i \text{ wire/wire}} = 150 \text{ pF/m}$ and $C_{i \text{ wire/screen}} = 270 \text{ pF/m}$ must be taken into account.

The effective internal inductance is $L_i \leq 5 \text{ } \mu\text{H}$.

In the version with fix mounted connection cable, also $L_i = 0.62 \text{ } \mu\text{H/m}$ must be taken into consideration.

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**IPT-2*-*1/2*, CPT-2*-*1/2* with selected output signal IPT-2* or CPT-2*-*-*-*-* P/F*-*-*-*-*
*****_***_**, P (Profibus PA), F (Foundation Fieldbus)**

Indicating and adjustment
circuit: (terminals 5, 6, 7,
8)4)5)6)

In ignition protection type intrinsic safety Ex ia IIC
For connection to the intrinsically safe circuit of the
corresponding external display and adjustment unit DI-
PT-E* or for connection of a IPT-2* or CPT-2* with
selected output signal IPT-2* or CPT-2*-*-*-*-* R/T*
*****_*****_***_**, R or T for differential pressure
measurement.

The rules for the interconnection of intrinsically safe cir-
cuits between IPT-2*-*1/2*, CPT-2*-*1/2* and the external
display and adjustment unit DI-PT-E* or IPT-2* or CPT-
2* with selected output signal IPT-2* or CPT-2*-*-*-*-*
R/T*_*_*_*_*_*_*_*_*_*_*_*_*_**, R or T are fulfilled, provided that
the total inductance and total capacitance of the
connection cable between IPT-2*-*1/2*, CPT-2*-*1/2* and
the external display and adjustment unit DI-PT-E* or IPT-
2* or CPT-2* with selected output signal IPT-2* or CPT-
2* with selected output signal IPT-2* or CPT-2*-*-*-*-*
R/T*_*_*_*_*_*_*_*_*_*_*_*_*_** R or T $L_{\text{cable}} = 330 \mu\text{H}$ and C_{cable}
 $= 1.98 \mu\text{F}$ are not exceeded.

When using the delivered connection cable between
IPT-2*-*1/2*, CPT-2*-*1/2* and the external display and
adjustment unit DI-PT-E* or IPT-2* or CPT-2* with se-
lected output signal IPT-2* or CPT-2* or IPT-2*-*-*-*-*
R/T*_*_*_*_*_*_*_*_*_*_*_*_*_**, R or T, the following listed cable
inductances L_i and cable capacitances C_i must be taken
into account.

$L_i = 0.62 \mu\text{H/m}$

$C_{i \text{ wire/wire}} = 150 \text{ pF/m}$

$C_{i \text{ wire/screen}} = 270 \text{ pF/m}$

4) In the "Ex-i" electronics compartment with IPT-2* or
CPT-2*-*-*-* A/ K/V/8*****_***_** in version
with single chamber housing A, K, V or 8.

5) In the "Ex-i" connection compartment with IPT-2* or
CPT-2*-*-*-* D/ W/R*****_***_** in version
with double chamber housing D, W or R.

6) Additional plug connection with IPT-2* or CPT-2*-*-*-*
D/ W/R*****_***_** in version with double
chamber housing D, W, R and housing
version/protection P CPT-2* or IPT-2*-*-*-* D/W/RP*****_***_**
*****_*****_***_**, (with M12 x 1 for DI-PT-E*).

Intrinsically safe circuit for the display and adjustment module

**Version with single chamber housing A, K, V or 8, IPT-2*-*1/2*, CPT-2*-*1/2* with selected
output signal IPT-2* or CPT-2*-*-*-* A/K/V/8*****_P/F*_*_*_*_*_*_*_*_*_*_*_*_*_**, P (Profibus PA),
F (Foundation Fieldbus)**

Circuit for the display and
adjustment module: (spring contacts
in the "Ex-i" electronics
compartment)

In ignition protection type intrinsic safety Ex ia IIC
Only for connection to the display and adjustment
module DI-PT-A.

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Version with double chamber housing D, W or R, IPT-2*-*/2*, CPT-2*-*/2* with selected output signal CPT-2* or IPT-2*-*-D/W/R****-P/F*-*****-*****-***-**, P (Profibus PA), F (Foundation Fieldbus)**

Circuit for the display and adjustment module: (spring contacts in the "Ex-i" connection compartment)

In ignition protection type intrinsic safety Ex ia IIC
Only for connection to the display and adjustment module DI-PT-A.

or

Circuit for the display and adjustment module: (spring contacts in the "Ex-i" electronics compartment)

In ignition protection type intrinsic safety Ex ia IIC
Only for connection to the display and adjustment module DI-PT-A.

In the double chamber version, the display and adjustment module DI-PT-A must only be equipped in the connection compartment, if there is no external display and adjustment unit DI-PT-E* or IPT-E* or CPT-E* with selected output signal CPT-2* or IPT-2*-***-*****- R/T*-*****-*****-***-**, R, T connected.

Version with double chamber housing D, W or R with housing version/protection P (with M12 x 1 for DI-PT-E*), IPT-2*-*/2*, CPT-2*-*/2* with selected output signal CPT-2* or IPT-2*-*-D/W/RP***-A/H/S*-*****-*****-***-**, A (4 ... 20 mA), H (4 ... 20 mA/HART) or S (4 ... 20 mA/HART with SIL qualification)**

Circuit for the display and adjustment module: (spring contacts in the "Ex-i" connection compartment)

In ignition protection type intrinsic safety Ex ia IIC
Only for connection to the display and adjustment module DI-PT-A.

In the double chamber version, the display and adjustment module DI-PT-A must only be equipped in the connection compartment, if there is no external display and adjustment unit DI-PT-E* or IPT-E* or CPT-E* with selected output signal CPT-2* or IPT-2*-***-*****- R/T*-*****-*****-***-**, R, T connected.

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Only version single chamber housing, IPT-2*¹/₂*, CPT-2*¹/₂* with selected output signal CPT-2* or IPT-2*^{*}-A/K/V/8^{****}-R/T*^{*****}-^{*****}-^{*****}-^{*****}, R or T**

Power supply and signal circuit: (terminals 5, 6, 7, 8 in the electronics compartment)

In ignition protection type intrinsic safety Ex ia IIC
For connection to the intrinsically safe circuit of a IPT-2*¹/₂*, CPT-2*¹/₂* with selected output signal CPT-2* or IPT-2*^{***}-^{*****}-H/S/P/F*^{*****}-^{*****}-^{*****}-^{*****}, H, S, P, F for differential pressure measurement.

The rules for the interconnection of intrinsically safe circuits between IPT-2* or CPT-2* with selected output signal CPT-2* or IPT-2*^{***}-^{*****}-R/T*^{*****}-^{*****}-^{*****}-^{*****}, R or T and the IPT-2*¹/₂*, CPT-2*¹/₂* with electronics H, S, P or F are fulfilled, provided that the total inductance and total capacitance of the connection cable between IPT-2*¹/₂*, CPT-2*¹/₂* and IPT-2* or CPT-2* with selected output signal CPT-2* or IPT-2*^{***}-^{*****}-R/T*^{*****}-^{*****}-^{*****}-^{*****}, R or T $L_{\text{cable}} = 330 \mu\text{H}$ and $C_{\text{cable}} = 2.00 \mu\text{F}$ are not exceeded.

When using the delivered connection cable between IPT-2*¹/₂*, CPT-2*¹/₂* and the external display and adjustment unit DI-PT-E* or IPT-2* or CPT-2* with electronics R or T, the following listed cable inductances L_i and cable capacitances C_i must be taken into account.

$L_i = 0.62 \mu\text{H/m}$

$C_{i \text{ wire/wire}} = 150 \text{ pF/m}$

$C_{i \text{ wire/screen}} = 270 \text{ pF/m}$

IPT-2*¹/₂*, CPT-2*¹/₂*selected output signal CPT-2* or IPT-2*^{*}-^{*****}B-H/S*^{*****}-^{*****}-^{*****}-^{*****},
^{***}-^{***}, H (4 ... 20 mA/HART) or S (4 ... 20 mA/HART with SIL qualification) and with supplementary electronics (B)**

Supply and signal circuit I: (terminals 1[+], 2[-] in the "Ex-i" terminal compartment or plug connection)

In ignition protection type intrinsic safety Ex ia IIC/IIB
Only for connection to a certified, intrinsically safe circuit.

Maximum values:

$U_i = 30 \text{ V}$

$I_i = 131 \text{ mA}$

$P_i = 983 \text{ mW}$

The effective internal capacitance C_i is negligibly small.

In the version with permanently mounted connection cable, $C_{i \text{ wire/wire}} = 150 \text{ pF/m}$ and $C_{i \text{ wire/screen}} = 270 \text{ pF/m}$ must be taken into account.

The effective inner inductance L_i is $L_i \leq 5 \mu\text{H}$. In the version with permanently mounted connection cable, $L_i = 0.62 \mu\text{H/m}$ must also be taken into account.

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Power supply and signal circuit II: (terminal 7[+], 8[-] in the "Ex-i" terminal compartment)

In ignition protection type intrinsic safety Ex ia IIC/IIB
Only for connection to a certified, intrinsically safe circuit.

Maximum values:

$$U_i = 30 \text{ V}$$

$$I_i = 131 \text{ mA}$$

$$P_i = 983 \text{ mW}$$

The effective internal capacitance C_i is negligibly small.
In the version with permanently mounted connection cable, $C_{i \text{ wire/wire}} = 150 \text{ pF/m}$ and $C_{i \text{ wire/screen}} = 270 \text{ pF/m}$ must be taken into account.

The effective inner inductance L_i is $L_i \leq 5 \text{ } \mu\text{H}$. In the version with permanently mounted connection cable, $L_i = 0.62 \text{ } \mu\text{H/m}$ must also be taken into account.

Display and adjustment circuit: (plug connection of the double chamber housing)

In ignition protection type intrinsic safety Ex ia IIC
For connection to the intrinsically safe circuit of the corresponding external display and adjustment unit DI-PT-E*.

The rules for the interconnection of intrinsically safe circuits between IPT-2*-*I/2*, CPT-2*-*I/2* and the external display and adjustment unit DI-PT-E* are fulfilled, provided that the total inductance and total capacity of the connection cable between IPT-2*-*I/2*, CPT-2*-*I/2* and the external display and adjustment unit DI-PT-E* $L_{\text{cable}} = 330 \text{ } \mu\text{H}$ and $C_{\text{cable}} = 1.98 \text{ } \mu\text{F}$ is not exceeded.

When using the delivered connection cable between IPT-2*-*I/2*, CPT-2*-*I/2* and the external display and adjustment unit DI-PT-E*, the following listed cable inductances L_i and cable capacitances C_i must be taken into account.

$$L_i = 0.62 \text{ } \mu\text{H/m}$$

$$C_{i \text{ wire/wire}} = 150 \text{ pF/m}$$

$$C_{i \text{ wire/screen}} = 270 \text{ pF/m}$$

Circuit for the display and adjustment module: (spring contacts in the "Ex-i" electronics compartment)

In ignition protection type intrinsic safety Ex ia IIC
Only for connection to the display and adjustment module DI-PT-A.

IPT-2*-*I/2*, CPT-2*-*I/2* Version with separate cable outlet (all electronics)

Circuit between sensor unit and external electronics (terminal 1 - yellow, terminal 2 - white, terminal 3 - red, terminal 4 - black)

In ignition protection type intrinsic safety Ex ia IIC
With IPT-2*-*I/2*, CPT-2*-*I/2* in the version with fix mounted cable on the sensor unit and external electronics, the supplied cable between the external housing and the sensor unit must not exceed a length of 180 m.

The intrinsically safe circuits are electrically separated from parts which can be grounded.

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The metallic parts of IPT-2*-1/2*, CPT-2*-1/2* are electrically connected with the earth terminals. For applications requiring equipment of type EPL Ga or EPL Ga/Gb, the intrinsically safe power supply and signal circuit must correspond to protection class ia.

Thermal data:

If the process transmitters are used in explosion hazardous areas for EPL Ga applications, the permissible temperature range in the area of the electronics/at the measuring sensor dependent on the temperature class has to be taken from the following table:

Temperature class	Ambient temperature range (electronics) and medium temperature range (measuring sensor)
T6	-20 °C ... +23 °C
T5	-20 °C ... +60 °C
T4	-20 °C ... +60 °C
T3	-20 °C ... +60 °C
T2	-20 °C ... +60 °C
T1	-20 °C ... +60 °C

The measuring sensors and the electronics are allowed to be operated in an explosion hazardous area for EPL Ga applications, only if atmospheric conditions exist (pressure from 0.8 bar to 1.1 bar).

If no explosion hazardous atmospheres exist, the permissible operating temperatures and pressures have to be taken from the manufacturer's data (manual).

For the max. permissible ambient and medium temperature ranges, the EN 1127-1:2011, section 6.4.2 was considered.

If the process transmitters are used in explosion hazardous areas for EPL Ga/Gb applications, the permissible temperature range in the area of the electronics/at the measuring sensor dependent on the temperature class has to be taken from the following table:

Temperature class	Ambient temperature range (electronics, zone 1)	Medium temperature range (measuring sensor, zone 0)
T6	-50 °C ... +39 °C	-20°C ... +23 °C
T5	-50 °C ... +70 °C	-20°C ... +60 °C
T4	-50 °C ... +70 °C	-20°C ... +60 °C
T3	-50 °C ... +70 °C	-20°C ... +60 °C
T2	-50 °C ... +70 °C	-20°C ... +60 °C
T1	-50 °C ... +70 °C	-20°C ... +60 °C

The measuring sensors are allowed to be operated in an explosion hazardous area for EPL Ga applications, only if atmospheric conditions exist (pressure from 0.8 bar to 1.1 bar).

If no explosion hazardous atmospheres exist, the permissible operating temperatures and pressures have to be taken from the manufacturer's data (manual).

If the measuring sensors are operated at higher medium temperatures as listed in the a.m. table, measures have to be taken, that the danger of ignition caused by hot surfaces is excluded. The max. permissible temperature at the electronics/housing must not exceed the values as mentioned in the a.m. table.

For the max. permissible medium temperature ranges, the EN 1127-1:2011, section 6.4.2 was considered.

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If the process transmitters are used in explosion hazardous areas for EPL Gb applications, the permissible temperature range in the area of the electronics/at the measuring sensor dependent on the temperature class has to be taken from the following table:

Temperature class	Ambient temperature range (electronics) and medium temperature range (measuring sensor)
T6	-50 °C ... +39 °C
T5	-50 °C ... +70 °C
T4	-50 °C ... +70 °C
T3	-50 °C ... +70 °C
T2	-50 °C ... +70 °C
T1	-50 °C ... +70 °C

If the measuring sensors are operated at higher medium temperatures as listed in the a.m. table, measures have to be taken, that the danger of ignition caused by hot surfaces is excluded. The max. permissible temperature at the electronics/housing must not exceed the values as mentioned in the a.m. table.

If no explosion hazardous atmospheres exist, the permissible operating temperatures and pressures have to be taken from the manufacturer's data (manual).

The ambient temperature derating at process temperatures up to +150 °C and up to +200 °C has to be taken from the manual of the manufacturer.

(16) Drawings and documents are listed in the ATEX Assessment Report No. 18 203 217855

(17) Specific Conditions for Use

- At the plastic parts of the process transmitter type IPT-2*-*1/2* and CPT-2*-*1/2* there is a danger of ignition by electrostatic discharge.
Observe manual of the manufacturer and warning label.
- For EPL Ga resp. EPL Ga/Gb applications, at the metallic parts of the process transmitter type IPT-2*-*1/2* and CPT-2*-*1/2* made of light metal there is a danger of ignition by impact or friction.
Observe manual of the manufacturer.
- For EPL Ga resp. EPL Ga/Gb applications and at risks by pendulum or vibration the respective parts of the process transmitter type IPT-2*-*1/2* and CPT-2*-*1/2* have to be secured effectively against these dangers. Observe manual of the manufacturer.
- For EPL Ga/Gb applications, the medium tangent materials of the process transmitter type IPT-2*-*1/2* and CPT-2*-*1/2* have to be resistant to the media. Observe manual of the manufacturer.
- For the execution with separate housing of the process transmitter type IPT-2*-*1/2* and CPT-2*-*1/2*, potential equalization has to exist in the complete course of the erection of the connecting cable between the electronics housing and the measuring sensor housing.

(18) Essential Health and Safety Requirements

No additional ones

- End of Certificate -