

## Instruction Manual Sensors TA10 / TA Di for explosive atmospheres



### Apparatus

Thermal flow sensors TA



Sensors TA10 / TA Di for explosive atmospheres are simple electrical apparatus for measuring the flow velocity and temperature of air and gases if connected to intrinsically safe apparatus with type of protection **Ex ib**. They are for use in areas in which an explosive gas atmosphere is likely to occur in normal operation occasionally.

All Höntzsch thermal flow sensors for explosive atmospheres for measuring the flow velocity  $v$  and temperature  $t$ .



### 1. Safety Precautions

Please read this Instruction Manual carefully before initial operation!  
Non-compliance can cause an explosion.

Sensors TA10 / TA Di for explosive atmospheres connected to an intrinsically safe apparatus that could be used in category 2G may be used only in areas in which an explosive gas atmosphere is likely to occur in normal operation occasionally (zone 1).

The simple electrical apparatus TA10-Ex / TA Di-Ex with electrical peak values  $U_i \leq 10$  V,  $I_i \leq 100$  mA,  $P_i \leq 100$  mW may only be used in areas in which the ambient temperature for temperature classes T4 +130 °C, T3, T2 and T1 +140 °C, is not exceeded.

Sensors may be used only in areas in which the specified permissible overpressure is not exceeded.

Sensors for applications in pressurized pipelines are to be inserted or retracted in depressurized conditions only. Non-observance can result in serious harm to personnel.

Sensors TA10 / TA Di for explosive atmospheres may be connected to intrinsically safe apparatus which do not exceed the ratings in 2.1.

## 2. Technical Data

EC type examination certificate: **IBExU16ATEX1126 X**

Marking



Explosion protection: **Ex ib IIC T4 Gb**

X: There are certain special factors to be observed for applications in explosive atmospheres (see under 1)

### 2.1 Elektrical Data

Operation range concerning safety specifications:

$U_i \leq 10 \text{ V}$ ,  $I_i \leq 100 \text{ mA}$ ,  $P_i \leq 100 \text{ mW}$ ,  $L_i = 0$ ,  $C_i = 0$



## 3. Installation

The current European Specifications for Assembly, the recognised standards of good practice, User Information TA probes and this Instruction Manual apply.

Refer to the currently valid regulations to ensure localized potential equalization.

For TA sensors, connection for potential equalization is either on the probe guide piece or with a standard grounding clamp on the probe shaft.



## 4. Cleaning / Maintenance

Sensors should be cleaned at regular intervals (see User Information TA Probes).

Any other maintenance or repair work is to be carried out solely by Höntzsch GmbH & Co. KG.

**Declaration of conformity, Declaration of Incorporation**

We, Höntzsch GmbH & Co. KG  
Gottlieb-Daimler-Str. 37  
D-71334 Waiblingen

bearing sole responsibility, hereby declare that the product

**Instrument for flow measurement  
TA-EX**

**with EU-Type-Examination certificate IBExU16ATEX1126 X**

referred to by this declaration is in conformity with the following standards or normative documents:

<b>Provisions of the directive</b>	<b>No. and date of issue of the standards</b>
<b>2014/34/EU:</b> Equipment and protective systems for use in potentially explosive atmospheres	EN 60079-0: 2018 EN 60079-11: 2012
<b>2014/30/EU:</b> Electromagnetic compatibility	EN 61000-6-4: 2007 + A1: 2011 EN 61000-6-2: 2006 + Ber1: 2011
<b>2014/68/EU:</b> Pressure equipment directive	

One or more of the standards referred to in the EU type examination certificate have been replaced by new versions. We declare that we are also in agreement with these new versions.



Waiblingen, 25.06.2021

Jürgen Lempp / Managing Director

**Höntzsch GmbH & Co. KG**  
Gottlieb-Daimler-Straße 37  
D-71334 Waiblingen  
Tel: +49 7151 / 17 16-0  
E-Mail: info@hoentzsch.com  
Internet: www.hoentzsch.com

Subject to alteration