



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX BAS 10.0103X** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2010-12-07** Page 1 of 3

Applicant: **Druck Limited**  
Fir Tree Lane  
Groby  
Leicestershire  
LE6 0FH  
United Kingdom

Electrical Apparatus: **UNIK 5000 Pressure Sensor**  
Optional accessory:

Type of Protection: **Intrinsic safety and dust protection by enclosure**

Marking: **Ex ia I Ma (-40°C ≤ Ta ≤ +80°C)**  
**Ex ia IIC T5 Ga (-40°C ≤ Ta ≤ +80°C)**  
**Ex ta IIIC T135°C Da IP64 (-40°C ≤ Ta ≤ +80°C)**

Approved for issue on behalf of the IECEx  
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:  
(for printed version)

P. Dickson  
7/12/10

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**Baseefa**  
**Rockhead Business Park**  
**Staden Lane**  
**Buxton**  
**Derbyshire**  
**SK17 9RZ**  
**United Kingdom**





# IECEX Certificate of Conformity

Certificate No.: IECEx BAS 10.0103X

Date of Issue: 2010-12-07

Issue No.: 0

Page 2 of 3

Manufacturer: **Druck Limited**  
Fir Tree Lane  
Groby  
Leicestershire  
LE6 0FH  
**United Kingdom**

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

<b>IEC 60079-0 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-0 : 2007-10</b> Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
<b>IEC 60079-11 : 2006</b> Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-31 : 2008</b> Edition: 1	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

Test Report:

[GB/BAS/ExTR10.0224/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0059/02](#)



# IECEX Certificate of Conformity

Certificate No.: IECEx BAS 10.0103X

Date of Issue: 2010-12-07

Issue No.: 0

Page 3 of 3

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The UNIK5000 Pressure Sensor is designed to measure the pressure of a process fluid and output an electrical signal proportional to the pressure applied. There are three main product variants in the series; PMP; PDCR; and PTX; each with a range of different electrical connection and electrical output signal options.

The main body of the pressure sensor is made from stainless steel and/or Hastelloy. Some variants may be fitted with an optional depth cone to protect the diaphragm of the pressure sensing element. Within the enclosure, the conditioning electronics are partially encapsulated. Gauge versions are provided with a vent that is either via a vent tube within the integral cable; vents into the mating connector; or vents from the body of the enclosure via a PTFE filter port.

Electrical connections are either made via an integral cable or a connector.

### CONDITIONS OF CERTIFICATION: YES as shown below:

1. Do not rub non-metallic parts with a dry cloth or install in a high velocity dust laden atmosphere. \*\*
2. PMP versions will not pass the 500Vrms dielectric strength test and so this must be taken into account during installation.

\*\*Relates only to Group I and IIC versions with non-metallic external surfaces or parts of external surfaces.



The terminal parameters for the Group I & IIC versions of this equipment are as follows:

PMP Version	PDCR Version (Passive)	PDCR Version (Linearised)	PTX Version
$U_i = 16 \text{ V}$	$U_i = 24 \text{ V}$	$U_i = 24 \text{ V}$	$U_i = 28 \text{ V}$
$I_i = 299 \text{ mA}$	$I_i = 261 \text{ mA}$	$I_i = 261 \text{ mA}$	$I_i = 180 \text{ mA}$
$P_i = 1 \text{ W}$	$P_i = 1 \text{ W}$	$P_i = 1 \text{ W}$	$P_i = 0.7 \text{ W}$
$C_i = 367.4\text{nF} + \textcircled{1}$	$C_i = 3.3\text{nF} + \textcircled{2}$	$C_i = 14.3\text{nF} + \textcircled{3}$	$C_i = 63.8\text{nF} + \textcircled{4}$
$L_i = 0 + \textcircled{1}$	$L_i = 0 + \textcircled{2}$	$L_i = 0 + \textcircled{3}$	$L_i = 0 + \textcircled{4}$

Note:

The Group I and IIC versions must be powered from a resistance limited source where  $I_o = U_o / R_i$ .

- ① Up to 250 m of cable at 320pF/m and 1.2μH/m, or up to 92nF and 300μH of cable capacitance and inductance.
- ② Up to 380 m of cable at 320pF/m and 1.2μH/m, or up to 121nF and 456μH of cable capacitance and inductance.
- ③ Up to 345 m of cable at 320pF/m and 1.2μH/m, or up to 110nF and 414μH of cable capacitance and inductance.
- ④ Up to 192 m of cable at 100pF/m and 1.2μH/m, or up to 19nF and 230μH of cable capacitance and inductance.

The terminal parameters for the Group IIIC versions of this equipment are as follows:

Model	Rated Voltage
PMP Version	= 16 V
PDCR Version (Passive)	= 12 V
PDCR Version (Linearised)	= 12 V
PTX Version	= 28 V