1 # EC - TYPE EXAMINATION CERTIFICATE

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3 EC - Type Examination Certificate Number: **Baseefa10ATEX0204X – Issue 1**

4 Equipment or Protective System: **UNIK 5000 Pressure Sensor**

5 Manufacturer: **Druck Limited**

6 Address: **Fir Tree Lane, Groby, Leicester, LE6 0FH, UK**

7 This re-issued certificate extends EC – Type Examination Certificate No. Baseefa10ATEX0204 to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to

8 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR10.0224/02**

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

EN 60079-0:2009 EN 60079-11:2007 EN 50303: 2000

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 equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC – TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include the following :

See Schedule

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

Baseefa Customer Reference No. **0312**

Project File No. **10/0356**

his certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa

Re-issued 5 December 2011

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Registered in England No. 4305578. Registered address as above.

13 **Schedule**

14 **Certificate Number Baseefa10ATEX0203U – Issue 1**

15 Description of Equipment or Protective System

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.

Ⓔx I M1 Ex ia I Ma (-40°C ≤ Ta ≤ +80°C)
Ⓔx II 1G Ex ia IIC T5 Ga (-40°C ≤ Ta ≤ +80°C)

The terminal parameters are as follows:

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

Note:
The equipment 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.

16 Report Number

GB/BAS/ExTR10.0224/01

17 Special Conditions for Safe Use

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.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
X-A3-0402	1 to 7	2	12 May 2011	UNIK 5000 Apparatus Assembly – IS (Baseefa)

See also all drawings associated with the Component certificate: Baseefa10ATEX0203U

These drawings are associated and held with IECEx BAS 10.0103X.

20 Certificate History

Certificate No.	Date	Comments
Baseefa10ATEX0204X	30 November 2010	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0: 2009, EN 60079-11: 2007, EN 50303: 2000 and EN 60079-31: 2009 is documented in Test Report No. GB/BAS/ExTR10.0224/00.
Baseefa10ATEX0204X Issue 1	21 September 2011	Removal of the dust protection code ⟨Ex⟩ II 1D Ex ta IIIC T111°C Da IP64 (-40°C ≤ Ta ≤ +80°C). The amended report is GB/BAS/ExTR10.0224/01.
Baseefa10ATEX0204X Issue 1: Re-issued.	5 December 2011	Removal of the dust protection code ⟨Ex⟩ II 1D Ex ta IIIC T111°C Da IP64 (-40°C ≤ Ta ≤ +80°C). The amended report is GB/BAS/ExTR10.0224/02.
For drawings applicable to each issue, see original of that issue.		