

- 1 **TYPE EXAMINATION CERTIFICATE**
- 2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**  
**Directive 2014/34/EU**
- 3 Type Examination Certificate Number: **Baseefa17ATEX0069X**
- 4 Product: **HS-100IC3 Series Accelerometer**
- 5 Manufacturer: **Hansford Sensors Ltd**
- 6 Address: **Artisan, Hillbottom Road, Sands Industrial Estate, Bucks, HP12 4HJ**
- 7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 SGS Baseefa 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 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.
- The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR17.0094/00**
- 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**
- 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 of Use specified in the schedule to this certificate.
- 11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured.
- 12 The marking of the product shall include the following :
- ⊕ II 3 G Ex ic IIC T4 Gc -55°C ≤ Ta ≤ +110°C**

SGS Baseefa Customer Reference No. **5943**

Project File No. **16/0596**

This document is issued by the Company subject to its General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and the Supplementary Terms and Conditions accessible at <http://www.sgs.com/SGSBaseefa/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

**SGS Baseefa Limited**

Rockhead Business Park, Staden Lane,  
Buxton, Derbyshire SK17 9RZ

Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601

e-mail [baseefa@sgs.com](mailto:baseefa@sgs.com) web site [www.sgs.co.uk/baseefa](http://www.sgs.co.uk/baseefa)

Registered in England No. 4305578.

Registered address: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN

*RS Sinclair*

R S SINCLAIR *RS SINCLAIR*  
TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number Baseefa17ATEX0069X**

15 **Description of Product**

The HS-100IC3 Series Accelerometer is designed to measure acceleration, shock or vibration by converting the signal generated by the compression of a Piezo Electric Crystal by a given seismic mass and outputting a broadband ac signal to the monitoring equipment.

The accelerometer comprises a piezo electric crystal connected to a signal conditioning board all contained within a fully welded stainless steel enclosure.

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

The equipment has the following terminal parameters:

Connector Only		10m of cable		92m of cable	
Ui =	25.2V	Ui =	25.2V	Ui =	25.2V
Ii =	146mA	Ii =	146mA	Ii =	146mA
Pi =	0.92W	Pi =	0.92W	Pi =	0.92W
Ci =	1.0nF	Ci =	9.9nF	Ci =	83nF
Li =	0μH	Li =	7.1μH	Li =	66μH

16 **Report Number**

GB/BAS/ExTR17.0094/00

17 **Specific Conditions of Use**

- When fitted with an integral cable, the flying lead terminations must be afforded a degree of protection of at least IP20.

18 **Essential Health and Safety Requirements**

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

**Clause** **Subject**

- 1.4.1 External effects  
1.4.2 Aggressive substances, etc.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
M06-067A	1-6	A	04/04/17	General Arrangement and Product information for Category 3, Group II accelerometers.
P02-003	1	B	07.06.07	AC PCB Component Layout
P03-003	1	B	12.06.07	Inner Module PCB Circuit
HS-100IC3	1	A	24/04/17	HS-100IC3 Schematic
M06-002-A	1	A	15/06/07	Zener Diode Arrangement

These drawings are common to, and held with, IECEx BAS 17.0054X.