



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 10ATEX1350** Issue: **0**

4 Equipment: **Series 50 Exd Flameproof Head**

5 Applicant: **Status Instruments Limited**

6 Address: **Green Lane Business Park
Tewkesbury
Gloucestershire
GL20 8DE
UK**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.


9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:


EN 60079-0:2006 EN 60079-1:2007 EN 61241-0:2006 EN 61241-1:2004
IEC 60079-0:2007 (used for guidance in respect of marking)

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment 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. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

Either:  II 2 GD
Ex d IIC T6 Gb T_{amb} +55°C
Ex t IIIC T85°C Db IP68 T_{amb} +55°C

Or:  II 2 GD
Ex d IIC T5 Gb T_{amb} +70°C
Ex t IIIC T100°C Db IP68 T_{amb} +70°C

Or:  II 2 GD
Ex d IIC T4 Gb T_{amb} +105°C
Ex t IIIC T135°C Db IP68 T_{amb} +105°C

Or:  II 2 GD
Ex d IIC T3 Gb T_{amb} +170°C
Ex t IIIC T200°C Db IP68 T_{amb} +170°C

D R Stubbings BA MIET
Certification Manager

Project Number 23820
C. Index 13

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 10ATEX1350
Issue 0

13 DESCRIPTION OF EQUIPMENT

The Series 50 Ex d Flameproof Head is a general purpose enclosure intended for use with temperature measuring equipment typically in the form of thermocouples or platinum resistance thermometers. It may also be fitted with a pair of float switch assemblies and used as a liquid level probe. It is of cylindrical shape and has a two-part construction with a threaded lid screwing into the main base assembly. The lid comes in three variants, two low cap variants and a high cap variant. The high cap variant and one of the low cap variants has a toughened soda lime glass window, this is retained by means of a ceramic cement, 'Autostic FC', and a threaded locking ring. This window allows a loop powered display in the high cap variant and a temperature indicator in the low cap variant to be viewed. The base comes in three variants, either one side-threaded cable entry point with one entry on the bottom consisting of a cylindrical and a threaded joint, two side-threaded cable entry points with one entry on the bottom consisting of a cylindrical and a threaded joint or two side-threaded cable entry points only. All cable entry points are intended to be used with suitably dimensioned and certified cable entry components, the cable entry threadforms may be either M20 x 1.5 or 1/2" NPT.

Variants

Type No.	Base Entry Options		Lid Size	Window Option
Type 50	1 Side Entry	1 Bottom Entry	Low Cap	N/A
Type 50	1 Side Entry	1 Bottom Entry	High Cap	YES
Type 51	2 Side Entries	1 Bottom Entry	Low Cap	N/A
Type 51	2 Side Entries	1 Bottom Entry	High Cap	YES
Type 52	2 Side Entries	-	Low Cap	N/A
Type 52	2 Side Entries	-	High Cap	YES

Variation 1 - This variation introduced the following change:

- i. The unit was allowed to be used as a liquid level probe by including float assemblies on the probe to operate magnetic switches located inside.

Variation 2 - This variation introduced the following changes:

- i. The introduction of an alternative screw cap cover for Type 50, 51 and 52 sensors, this cover is manufactured in either aluminium alloy or stainless steel and has the option to be fitted with a visual indicator feature incorporating a new visual indicator assembly, as shown on drawing HBS/13/6053.
- ii. The recognition of the following changes to the Type 50 and 51 bodies:
 - The introduction of two internal M6 x 12 blind holes.
 - The two existing internal tapped M4 holes to be machined to a maximum depth of 10 mm.
- iii. The introduction of alternative 1/2" NPT threaded cable entries within Type 51 Exd head body.
- iv. The recognition of minor modifications to drawing numbers HBS/13/3660 and HBS/13/6053; these changes are administrative and do not affect the aspects of the product that are relevant to explosion safety.



SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 10ATEX1350
Issue 0

Variation 3 - This variation introduced the following change:

- i. Following appropriate re-assessment to demonstrate compliance with the requirements of the latest standards, the documents originally listed in section 9, EN 50014:1997, EN 50018:1994 and EN 50281-1-1:1998, were replaced by those currently listed, the markings in section 12 were updated accordingly and the equipment description was modified taking into account changes in Variations.

Variation 4 - This variation introduced the following change:

- i. The introduction of an Outside Air Temperature Sensor, the Description of the Equipment is modified to reflect this change.

Variation 5 - This variation introduced the following changes:

- i. The machining details were changed to include an internal mounting bracket.
- ii. A dual entry head with both cables entries on the same side was recognised.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	09 December 2010	R23820A/00	The release of prime certificate incorporating Variations 1 to 5 inclusive..

14.3 Certificate number Sira 00ATEX1029 Issue 5

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

Certificate Annexe

Certificate Number: Sira 10ATEX1350
Equipment: Series 50 Exd Flameproof Head
Applicant: Status Instruments Limited



Issue 0

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
HBS/0/01145	1 of 1	A	26 Nov 10	Series 50 Head Label

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