



1 **TYPE EXAMINATION CERTIFICATE**

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

3 Type Examination Certificate Number: Sira 03ATEX4184

4 Equipment: Hyzone 2 Valve Position Indicator

5 Applicant: Hytork International Ltd

6 Address: Eastern Avenue
Gloucester
GL4 3BZ
UK

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

8 Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential report number R53A9968A, R53A10788A and R53A10493A.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 50021:1999
EN 50281-1-1:1998

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 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 equipment shall include the following:



II 3 G D
EEx nC IIC T6

Project Number 53A9968
Date 7 July 2003
Re-issued 13 February 2004
C. Index: 12

D R Stubbings BA MIEE
Certification Manager

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SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER:

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Re-issued 13 February 2004 to include additional reports.

13 DESCRIPTION OF EQUIPMENT

The Hyzone 2 Valve Position Indicator comprises a two part plastic enclosure with a neoprene or nitrile gasket.

The body is formed from machined nylon resin and the "see through" cover from moulded polycarbonate. Incorporated into these are two, single pole microswitches that are Type E1V3CS manufactured by Sala-Burgess Gateshead Limited, approved by BAS01ATEX2358U and coded EEx d IIC. These switches are terminated inside the enclosure using two separate approved terminal strips. The Weidmuller Type MK 3 terminal strips are approved by Sira 01ATEX3248U or BAS99ATEX2124U and coded EEx e II. With the two microswitches fitted, these take the form of one eight-way strip and one four way strip opposite.

The enclosure can be provided with up to three gland entries, although two is normal. These entries are threaded to suit various standard electrical thread forms. A mechanical indicator that rotates inside the outer cover provides local visual indication. The switch striker cams are driven by a stainless steel drive shaft with optional external drive connections.

The equipment is rated at 5 A, 250 V a.c., protection is provided by enclosed break microswitches and by the creepage and clearance requirements being satisfied by the construction of the equipment.

14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Sheet	Rev.	Date	Title
	ATHI0002	1 of 1	A	13 June 03	General Arrangement – External Views
	ATHI0003	1 of 1	A	17 June 03	General Arrangement - Internals
	ATHI0051	1 of 1	A	13 June 03	Microswitch Sub-Base Assembly
	ATHI0102	1 of 1	B	09 Feb 04	Certification Plate

14.2 Report No. R53A9968A, R53A10788A and R53A10493A

15 SPECIAL CONDITIONS FOR SAFE USE

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in Report No. R53A9968A, R53A10788A and R53A10493A.

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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 Type Examination Certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.
- 17.3 This certificate relies on the following previously certified products. When used as part of the Hyzone 2 Valve Position Indicator, the key attributes listed in the table below shall still be maintained by their original certificate.

Product	Certificate number	Key attributes
Type MK 3 terminal strips	Sira 01ATEX3248U or BAS99ATEX2124U	EEx e II
Type E1V3CS Microswitch	BAS01ATEX2358U	EEx d IIC

- 17.4 The wired terminals and microswitches shall be subjected to an electric strength test, between unshorted terminals and each other and between the wired terminals and earth of 1500 V rms (1000V + 2 x 250V) for at least 60 s and no more than 63 s as required by clause 9.1 of EN 50021: 1999.

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