



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: Sira 04ATEX2187

4 Equipment: LR02-IS-L\*\* Float Switch

5 Applicant: Triton Controls Limited

6 Address: Unit 2  
Randolph Industrial Estate  
Evenwood  
Bishop Auckland  
Co. Durham  
DL14 9SJ  
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 confidential report number R52A10739A.

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 50014:1997 + Amendments 1 & 2  
EN 50020:2002

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:

 II 2 G  
EEx ia IIC T6 (-20°C ≤ T<sub>a</sub> ≤ +70°C)

D R Stubbings BA MIEE  
Certification Manager

Project Number 52A10739  
Date 16 July 2004  
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## SCHEDULE

### EC TYPE-EXAMINATION CERTIFICATE

Sira 04ATEX2187

#### 13 DESCRIPTION OF EQUIPMENT

The LR02-IS-L\*\*M Float Switch (where \*\* denotes any length of cable up to 20 m  $\pm$  5%) is designed to provide a voltage free contact that is activated by the position of the float switch. It comprises a float chamber, an integral cable and a stabilising weight. The float chamber houses a low-voltage, low-current, single pole, double throw, micro-switch that is totally sealed within a closed cell polyurethane foam insert. This micro switch is activated by a metallic, rolling ball. The stabilising weight is fixed to the integral cable approximately 120mm from the float chamber. The weight cover and the outer enclosure of the float chamber are both made from Hypalon CSP synthetic rubber. The integral cable is coated in vulcanised synthetic rubber. The LR02-IS-L\*\*M Float Switch has the following safety parameters:

$$\begin{aligned}U_i &= 30 \text{ V} \\I_i &= 100 \text{ mA} \\C_i &= 0 \\L_i &= 0\end{aligned}$$

LR02-IS-L05M 5m  $\pm$  5% Cable length  
LR02-IS-L10M 10m  $\pm$  5% Cable length  
LR02-IS-L20M 20m  $\pm$  5% Cable length  
LR02-IS-L\*\*M (where \*\* denotes any length of cable up to 20m  $\pm$  5%)

#### 14 DESCRIPTIVE DOCUMENTS

14.1 Drawing No.	Sheet	Rev.	Date	Description
LR02-IS-A001	1 of 1	1	02 Jul 00	LR02-IS Assembly
LR02-IS-A001	1 of 1	1	02 Jul 02	LR02-IS Parts List
LR01-C0XX	1 of 1	3	27 Oct 01	Float Chamber (Bottom)
LR01-C007	1 of 1	2	27 Oct 01	Float Chamber (Top)
LR01-C005	1 of 1	1	03 Jan 97	Weight
LR01-C018	1 of 1	2	27 Oct 01	Weight cover
LR01-C019	1 of 1	2	27 Oct 01	Weight cover
LR02-IS-C001	1 of 1	1	09 Jun 04	Certification Label
CB07-CPE	1 of 1	4	20 Apr 00	Cable details
LR05 B001 A	1 of 1	4	11 Nov 02	Internal Assembly
LR05 B001 B	1 of 1	4	11 Nov 02	Internal Assembly
LR02-B-INS	1 of 1	1	18 Nov 99	Insert

14.2 Report No. R52A10739A

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

None

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**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 Report No. R52A10739A.

**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.
- 17.3 The length of the integral cable must not exceed 20m  $\pm$  5%.

Date 16 July 2004

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