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EC TYPE-EXAMINATION CERTIFICATE

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

3 Certificate Number: Sira 07ATEX2221 Issue: 1

4 Equipment: SELB, DELB, DELP and CLC Load Cells

5 Applicant: Elite Transducers Limited

6 Address: 6 Zephyr House

Calleva Park Aldermaston Berkshire RG7 8JN

UK

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 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 61241-0: 2006 EN 60079-11: 2007 EN 61241-1:2004

EN 60079-26: 2004

- 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:

 $\langle \epsilon_{x} \rangle$

II 1GD Ex ia IIC T6 Ex tD A20 IP68 T85°C $(-20^{\circ}\text{C} \leq \text{T}_a \leq +60^{\circ}\text{C})$

Project Number 52A18137 C. Index 13

This certificate and its schedules may only be reproduced in its entirety and without change. C Ellaby Certification Officer

Sira Certification Service

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SCHEDULE

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13 **DESCRIPTION OF EQUIPMENT**

The SELB, DELP and CLC Load Cells are designed to be fitted into equipment such as weighing machines to measure the load applied to them. The load cells comprise a stainless steel block, fitted within recesses in this block are either one or two strain gauge arrangements, optional nickel resistors, terminal boards and amplifier PCBs. The electrical devices are encapsulated and sealed within the block by a welded stainless steel cover. An integral cable with a maximum length of 30 m permits connection to the load cell. An alternative version permits the amplifier board to be fully encapsulated in a steel enclosure that may be fitted external to the load cell. The following versions of the load cell are permitted and all have the safety description specified below:

Model	Description	Type	Description	Amplifier	Safety
					description
SELB	Single Ended Load Beam	RO	Rationalised Output	No	Ui = 28 V
SELB	Single Ended Load Beam	RI	Rationalised Input	No	Pi = 1.3 W
DELB	Double Ended Load Beam	RO	Rationalised Output	No	$Ci = 0.04 \mu F$
DELB	Double Ended Load Beam	RI	Rationalised Input	No	Li = 284 μH
DELP	Double Ended Load Pin	EGW	Externally Gauged, Welded	No	
DELP	Double Ended Load Pin	IGP	Internally Gauged, Potted	No	
DELP	Double Ended Load Pin	IGP	Internally Gauged, Potted	Yes	
CLC	Compression Load Cell	RO	Rationalised Output	No	
CLC	Compression Load Cell	RO	Rationalised Output	Yes	

Each model may vary, within defined limits, in size and shape to cover a variety load capacities. Additional, mechanical attachments may be added to create loading assemblies.

Variation 1 - This variation introduced the following changes:

- i. An alternative version of the DELP-IGP-AMP Load Cell was recognised, this device has a plug connector in place of the integral cable and is designated the DELP-IGP-AMP-C Load Cell.
- ii. The use of an alternative cable was permitted, this cable may be used with all versions of the Load Cells.

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14 **DESCRIPTIVE DOCUMENTS**

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	4 January 2008	R52L16503A	The release of the prime certificate.
1	1 May 2008	R52A18137B	The introduction of Variation 1.

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.

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