


**CERTIFICATE OF TYPE APPROVAL**

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

|                            |   |
|----------------------------|---|
| <b>Manufacturer</b>        | Daniamant Limited   |
| <b>Address</b>             | Unit 3, Admiral Park<br>Airport Service Road<br>Portsmouth<br>Hampshire, PO3 5RQ<br>United Kingdom (UK) |
| <b>Product Type</b>        | LIFEBUOY LIGHTS   |
| <b>Product Description</b> | Lifebuoy Light – Type: "L160" and "Hansson L160"  |
| <b>Specified Standards</b> | IMO Resolution MSC.81 (70) Part 1 amended by Resolution MSC.226(82)<br>ISO 24408 (2005)                 |

The attached Design Appraisal Document forms part of this certificate.  
This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

|                 |                  |             |   |
|-----------------|------------------|-------------|---|
| Date of issue   | 11 February 2010 | Expiry date | 25 August 2014  |
| Certificate No. | SAS S090155/M2   | Signed      | <br>Lloyd's Register EMEA<br>London Office |
| Sheet No        | 1 of 3           | Name        | L. Thomas<br>Surveyor to Lloyd's Register EMEA<br>A Member of the Lloyd's Register Group  |

**Note:**

**This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register of any modification or changes to the equipment in order to obtain a valid certificate.**

\*Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.\*

**DESIGN APPRAISAL DOCUMENT**

|                  |   |
|------------------|---|
| Date             | Quote this reference on all future communications |
| 11 February 2010 | LDSS/TA/SFS/LT                                    |

**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S090155/M2**

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

**EXAMINED DOCUMENTATION**

Technical File No TF012 Revision No 3

**TEST REPORTS**

Engineering Report No.09-03a "DANIAMANT L160, L161, L162 and L163 Evaluation and test report for SOLAS witnessed by TUV product Service Ltd." issued on 06.08.2009.

Engineering Report No.09-10, Evaluation and Test Report (optional alternative battery type "CR123A"), Issue 1, dated 20.10.2009.

**CONDITIONS OF CERTIFICATION**

1. Detailed operation, installation and necessary maintenance instructions are to be provided with each light.
2. Each light is to be marked in accordance with the LSA Code Regulations I/1.2.2.9 and 1.2.3, the serial number and identification of the manufacturer.
3. The arrangements and installation of the lifebuoy light on board are not part of this design appraisal or certificate and are to be to the satisfaction of the Surveyors attending on board.
4. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
5. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5.
6. Production items are to be manufactured in accordance with a quality control procedure and records kept as required by MSC.81 (70) Part 2, Paragraph 1.2 and ISO 24408 (2005). Production tests are to be conducted to ensure compliance with SOLAS Chapter III Regulation 5. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that administration.
7. Should a change of Place of Production from that stated below be required, i.e. where the final stages of manufacture/assembly/testing of this product takes place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.

|                                   |
|-----------------------------------|
| Page<br>3 of 3                    |
| Document number<br>SAS S090155/M2 |
| Issue number<br>1                 |

### DESIGN APPRAISAL DOCUMENT

CERTIFIED COPY

|                          |   |
|--------------------------|---|
| Date<br>11 February 2010 | Quote this reference on all future communications<br>LDSS/TA/SFS/LT |
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#### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S090155/M2

**NOTE:** The lifebuoy lights L160 and Hanson L160 are approved for use with battery types CR 2/3A or CR123A.

#### PLACE OF PRODUCTION

Daniamant ApS  
Industrivej 24C  
3550 Slangerup  
Denmark

Daniamant Limited  
Unit 3, The Admiral Park  
Airport Service Road  
Hilsea  
Portsmouth  
Hants, PO3 5RQ  
United Kingdom



L. Thomas  
Surveyor  
Statutory Fire & Safety  
London Design Support Services  
Lloyd's Register EMEA

#### Supplementary Type Approval Terms and Conditions

*This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).*