

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.

Manufacturer Daniamant Limited

Address Unit 3, The Admiral Park
Airport Service Road
Hilsea
Portsmouth
Hampshire, PO3 5RQ
United Kingdom (UK)

Product Type LIFERAFT/SURVIVAL CRAFT LIGHTS

Product Description Manually controlled flashing position indicating lights for survival craft -
Type: "Rescue-Master 2B, Rescue-Master 3B and Rescue-Master 12V"

Specified Standards IMO Resolution MSC.81 (70), Part 1 amended by Resolution MSC.226 (82)
and MSC.200(80)

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 22 November 2011

Expiry date 21 November 2016

Certificate No. SAS S110118

Signed



Sheet No 1 of 3

Name

L. Thomas
Surveyor to Lloyd's Register EMEA
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 22 November 2011	Quote this reference on all future communications LDSO/TA/SFS/LT
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S110118

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

<u>Plan/Doc No.</u>	<u>Revision</u>	<u>Title or Description</u>
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TF-DK-07	01	Technical File
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Installation and Maintenance Instructions, Rescue Master 2B/ Rescue Master 3B, Issue 01 (D0095)
 Instruction 12V Version 01/20080314.

TEST REPORTS

Force Institute, test report No: 117524/m1445-527, dated 06-09-1999.
 Temperature cycling and light output test, Force Institute, File No 110984/m1445-481.b, dated 18-03-1999.
 Temperature cycling and light output test, Force Institute, File No. 123175/m1445-575 rev.1, dated 29-09-1999. (5.3v battery)
 Light output test, Force Institute, File No m1445-184090, dated 15-08-2002. (12 v)
 Fire test report, Danish Institute of Fire technology, File No F10719, dated 19-04-1999.
 Measurement of Chromaticity, test report No: DANAK-KAP724037-1304, dated 04-05-1999.
 Vibration test, test report No: K251078, dated 03-06-1999.

CONDITIONS OF CERTIFICATION

1. The "Rescue Master 12V" position indicating lamp is to be connected to the drafts 12V electrical system. The survival craft is to have a fuel tank capacity for 12 hours of operation.
2. The battery/light unit must be replaced on or before the expiry date marked on its labels. The date of expiry shall not exceed 50% of the service life of the battery as established by the battery manufacturer.
3. Each light is to be marked with the information required by the LSA Code Regulation 1.2.2.9.
4. Detailed fitting, operation and disposal instructions are to be provided to each purchaser of the subject lights.
5. The arrangements and installation of the lights on survival crafts are not part of this design appraisal or certificate and are to be to the satisfaction of the Surveyors attending on board.
6. Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take 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.

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7. 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.
8. 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.
9. Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take 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.

PLACE OF PRODUCTION

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

Daniamant ApS
Industrivej 24C
3550 Slangerup
Denmark




L. Thomas
Senior Surveyor
Statutory Fire & Safety
London Design Support Office
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).