



Lloyd's
Register

Transport
Canada
Safety and Security




CERTIFICATE OF TYPE APPROVAL ISSUED ON BEHALF OF TRANSPORT CANADA

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations with regards to 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 when authorised by Transport Canada 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)
Type	POSITION INDICATING LIGHTS FOR LIFE-SAVING APPLIANCES : FOR LIFEBUOYS
Description	Self-activated light for use on lifebuoys - Type: "L160, Hansson L160 and A160 Apollo"
Specified Standard	TP 14475E IMO Resolution MSC 81(70) Part 1 as amended

**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	23 October 2017	Expiry date	22 October 2022
Certificate No.	LRTC 0000177	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 Group Limited, 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'. Lloyd's Register 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 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.



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DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
23 October 2017	SOUTSO/SFS/TA/LT/WP27423868

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LRTC 0000177

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 6, September 2017
Installation and Maintenance Instruction, Daniamant Version, 62-127-001N, Issue 05 (C6495)
Installation and Maintenance Instruction, Hansson Version, 62-139, Issue 02 (C6327)
Installation and Maintenance Instruction, Apollo Version, 62-146, Issue 03 (C6395)

TEST REPORTS

Test Report No.14-05 "L160, L161, L162 and L163 Life test" dated April 24th 2014, witnessed by TUV product Service Ltd. Test Report No.75925967 report 01, issue 1 "Temperature cycling test, Luminous intensity test, Chromaticity test, vibration test" dated June 2014, witnessed by TUV product Service Ltd. Evaluation and test report as per MSC 81(70), dated 09-03A, dated 06/08/2009.
Microbiological test report, report no J-5036, dated 15/10/2013
Alternative cell Able CR123A cell and Able CR17505 test report No 09-10, dated 20/10/2009

CONDITIONS OF CERTIFICATION

1. Maximum installation height: 76 m
2. Lights powered by batteries shall be marked with a means of determining their age or the date by which they are to be replaced Each light is to be marked with the information required by the LSA Code Regulation 1.2.2.9 and 1.2.3
3. For compliance with SOLAS Regulation III/35 and III/36 fully detailed operations and maintenance manuals shall be supplied with each light
4. The arrangements and installation of the lights on board are not part of this design appraisal or certificate and are to be to the satisfaction of the Surveyors attending on board
5. 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
6. 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
7. 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. 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
8. 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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DESIGN APPRAISAL DOCUMENT

Date 23 October 2017	Quote this reference on all future communications SOUTSO/SFS/TA/LT/WP27423868
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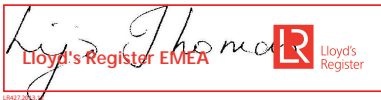
ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LRTC 0000177

9. All instructions or markings that accompany life-saving appliances or are printed directly on the appliances must be in both English and French, as per Canadian procedures for approval of life-saving appliances and fire safety systems, equipment and products document no. TP 14612E (05/2011) paragraph 2.2.1.3. However independent signage can be accepted in lieu of the instructions or marking required in paragraph 2.2.1.3 if it is in both English and French, highly visible (size, colour, posting location), water and weather proof and posted at each muster station and where the appliance is stored

PLACES OF PRODUCTION

Daniamant Ltd
Unit 3, The Admiral Park
Airport Service Road, Hilsea
Portsmouth
Hampshire
PO3 5RQ, UK

Daniamant A/S
Industrivej 24 C
3550 Slangerup
Denmark



Lijo Thomas
Senior Specialist
Statutory Fire & Safety
Southampton Technical Support Office, Marine & Offshore
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).