



Certificate No:
TAE00004RB

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)
RB2-RL1, RB2-RL1 (RFD) and RB2-RL1 (DSB)

Issued to

Daniamant Ltd
Portsmouth, Hampshire, United Kingdom

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

This certificate is recognized by Transport Canada.

Vibration class	A
Degree of protection	IP67
Temp. class	NA
Voltage (V)	3
Suitable for Hazardous areas	No

Issued at **Høvik** on **2023-05-23**

for **DNV**

This Certificate is valid until **2028-05-22**.

DNV local unit: **Denmark CMC**

Approval Engineer: **Marcin Tobiasz**

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Frederik Tore Elter
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Liferaft internal lights -Type RB2-RL1, RB2-RL1 (RFD) and RB2-RL1 (DSB)

Application/Limitation

For compliance with SOLAS Regulation III/35 and III/36, fully detailed operations and maintenance manuals shall be supplied with each light.

Type Approval documentation

Certification in accordance with Class Programme DNV-CP-0338, September 2021.

Technical file doc. No. TF009, revision 03

Installation and Maintenance Instruction 58-7010-PAT Issue 11, (C6495)

Test report No	Title	Date
08-09	Life test, Light output test	2008-03-26
14-09b	Life test	2014-06-17
TM-2-1998	Temperature cycling test and Light output test	1998-06-04
75917538, Report 01 Issue 1	Environmental testing of Life raft Lights	2012-04
75925967, Report 01 Issue 1	Temperature cycling test, Luminous intensity test, Chromatic test, Vibration test and rain and water tightness test	2014-06
TM-16-99	Chromatic test, rain and water tightness test, Switch arrangement test, Solar radiation test, Oil resistant test and Fire test	1999-06-22
TM-47-90	Temperature cycling test, Performance test, Light output test, Two meter drop test, Vibration test and Water tightness test	1991-01-07
Env/18262	Moulded growth test	2002-09-11

Tests carried out

-IMO Resolution MSC.81(70), part 1, as amended
 -IEC 60945:2002 incl. IEC 60945 Corr. 1 (2008)

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Procedures for Approval of Life-Saving Appliances, Fire Safety Systems, Equipment and Products (TP14612)", DNV confirms that the product listed in this certificate is in accordance with Transport Canada's requirements.

Marking of product

To be marked with information requested by the LSA Code Paragraph 1.2.2.9 and 1.2.3

- Manufacturer name
- Type identification
- Serial or Lot number
- Date of expiry*
- TAE00004RB (DNV approval)

* The expiring date shall be marked in accordance with the LSA Code, item 1.2.3 as amended by IMO Res. MSC 48(66).

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation



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- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Assessment to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE