

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:**That the Position indicating lights for life-saving appliances: (c) for lifejackets**

with type designation(s)
MR3, WR3, WR3-1, WR3-2

Issued to

**Daniamant A/S
Slangerup, Denmark**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2019/1397**,
item No. MED/1.2c. SOLAS 74 as amended, Regulation III/4, III/7, III/22, III/26, III/32, III/34 & X/3, LSA Code, 2000 HSC Code 8

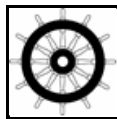
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-10-10**.

Issued at **Hamburg** on **2019-10-11**

DNV GL local station:
Denmark CMC

Approval Engineer:
Nicolay Horn



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-009905-1**
Certificate No: **MEDB000060F**

Product description

Position-indication flashing lights for life jackets – Type MR3, WR3, WR3-1 and WR3-2

Application/Limitation

Lights powered by batteries shall be marked with means of determining their age or the date by which they are to be replaced.

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

Type Examination documentation

Technical File – TF-DK-17, rev 04

Installation and Maintenance Instruction for Dan MR3 lifejacket light, MR3-Instruction Issue 08 (D0685)

Installation and Maintenance Instruction for Dan WR3 lifejacket light, WR3 Instruction Issue 09 (D0685)

Installation and Maintenance Instruction for Dan WR3-1 lifejacket light, WR3-1 Instruction Issue 08 (D0685)

Installation and Maintenance Instruction for Dan WR3-2 lifejacket light, WR3-2 Instruction Issue 07 (D0685)

Test reports:

Report No	Title	Date
12-2010	Evaluation and Test Report for Lifejackets lights DANM3, MR3, W3 and WR3	2010-12-23
12-DK04	DAN W3-1, W3-2, WR3-2 and WR3-1 Automatic Lifjacket Light Evaluation and Test Report	2012-05-01
15256, 15256-2	Mould grow test	2010-12-22
DANAK-19/11871	Type testing of M3	2012-02-17
DANAK-1911204	Type testing of M2, M3 rint2, Rext and L6	2010-12-22
DANAK-19/1309511204	Type testing of M2, M3	2013-05-15
DANAK-19/15427	Vibration test of Daniamant lights	2015-07-02
DELTA-L102765-4624	Determination of (x,y) Chromatic Colour Coordinates and determination of luminous lights distribution from life saving device	2015-09-18
DELTA-L102765-4592	Determination of (x,y) Chromatic Colour Coordinates and determination of luminous lights distribution from life saving device	2015-07-03
75927471	Temperature cycling and vibration testing of M3 and W3	2014-12-08
01-2015	Evaluation and Test Report	2015-07-22

Tests carried out

-IMO Resolution MSC.81(70), part 1, as amended.

-IEC 60945:2002 incl. IEC 60945 corr. 1 (2008)

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
- USCG Approval Number: USCG 161.112/EC0098/ MEDB000060F

END OF CERTIFICATE