

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MEDB000060K Revision No:

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV 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) M4-A and W4-A, version 1 and 2

Issued to

Daniamant A/S Slangerup, Denmark

is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2020/1170,

item No. MED/1.2c. SOLAS 74 as amended, Regulation III/4, III/7, III/22, III/26, 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 2021-04-12

DNV local station: **Denmark CMC**

Approval Engineer: **Nicolay Horn**

for **DNV SE**

Head of Notified Body

Christine Mydlak-Roeder **Notified Body** No.: 0098

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, and amended by Decision No 1/2018 dated February 18th, 2019.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the productionsurveillance module (Ď, 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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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.



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Job Id: **344.1-009909-2** Certificate No: **MEDB000060K**

Revision No: 1

Product description

Position-indication lights for life jackets - Type M4-A version 1, W4-A version 1, M4-A version 2, W4-A version 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

Daniamant Technical file TF-DK-20, M4-A and W4-A Lifejackets Light – Revision 01 Installation and Maintenance Instruction for Dan M4-A and W4-A lifejacket light, Issue 04 (D0647)

Test reports:

Report No	Title	Date
TPN 20/142	Daniamant report "W4 light cell performance test results"	2020-10-21
M33172	DTU light measuring report	2020-10-22
20 DK01	Incremental difference of the already approved version of the M4/W4A light	2020-11-11
4-2015	Evaluation and Test Report for Lifejackets lights M4-A and W4-A	2015-04-19
Appendix to 4-2015	Evaluation and Test Report for Lifejackets lights M4-A and W4-A	
DELTA-L102798- 4719	Determination of (x,y) colour coordinates and determination of luminous light distribution emitted from lifesaving device	2016-03-21

Tests carried out

- -IMO Resolution MSC.81(70), part 1, as amended by Resolution MSC.200(80), Resolution MSC 226(82) and Resolution MSC.323(89)
- -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/ MEDB000060K

END OF CERTIFICATE

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