

## EC Type-Examination (Module B)

Directive for Marine Equipment

Certificate No.: **DK-0200-MarED-204 version 6**

Issued by FORCE Certification A/S - EC-notified body number 0200

This is to certify that:

FORCE Certification A/S did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the Life Saving Appliance requirements of Marine Equipment Directive (MED) 2014/90/EU, as amended, last amended by Regulative 2017/306/EU subject to any conditions in the schedule attached hereto.

Applicant and Manufacturer: **Alcares ApS  
Rugmarken 10  
3650 Ølstykke  
Denmark**

Identification of Marine Equipment:  
Item: **MED/1.2c**  
Product Type: **Position-indicating lights for life-saving appliances**  
Product Designation: **Jack ARH  
Jack ARH-AIk**

Specified Standard:  
(Tested in accordance with): **LSA code MSC.48(66) adopted on 4 June 1996 and MSC.81(70)  
adopted on 11<sup>th</sup> December 1998**

Amendments to LSA code:

MSC.207(81) adopted on 18 May 2006

MSC.218(82) adopted on 8 December 2006

Amendments to testing methods:

MSC.200(80) adopted on 13 May 2005

MSC.226(82) adopted on 8 December 2006

MSC.323(89) adopted on 20 May 2011

The examined samples are found to fulfil the requirements stated in:

The International Testing Standard IMO Res. MSC.81(70) and the applicable reg. SOLAS 74 as amended, where the relevant requirements are specified in the amendment to The Directive, item MED/1.2c

Documentation for observance of relevant requirements stated in ANNEX II (Module B) of the Directive and the basis for the type examination are described in the appendix to this certificate.

*This certificate will remain valid unless cancelled or revoked, provided the conditions in the attached appendix are complied with and the equipment remains satisfactory in service.*

*The certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the notified body named on this certificate.*

*Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be reapproved prior to it/they being placed on board vessels to which the amended regulations or standards apply.*

*This new version of EC-Type Examination Certificate DK-0200-MarED-204 version 5 dated 2016-08-29 is issued due to the implementation of the new Marine Equipment Directive.*

FORCE Certification A/S task No.: 117-24664


FORCE Certification A/S ID No.: 02150

Date of issue: 2017-02-22

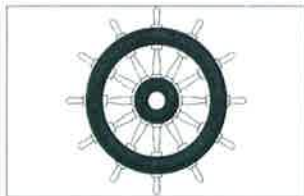
Date of expiry: 2022-02-22



Niels Jørgen Sibbernsen  
Certification Manager



Philippa Weirup Osted  
Examiner



The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity may only be issued when the production/product assessment module (D, E or F), ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

Extracts from this EC Type-Examination Certificate may only be reproduced with a written permission from FORCE Certification A/S

# Appendix to EC Type-Examination Certificate

Directive for Marine Equipment

Certificate No.: DK-0200-MarED-204 version 6  
Issued by FORCE Certification A/S - EC-notified body number 0200

Applicant and  
Manufacturer: **Alcares ApS**  
**Rugmarken 10**  
**3650 Ølstykke**  
**Denmark**

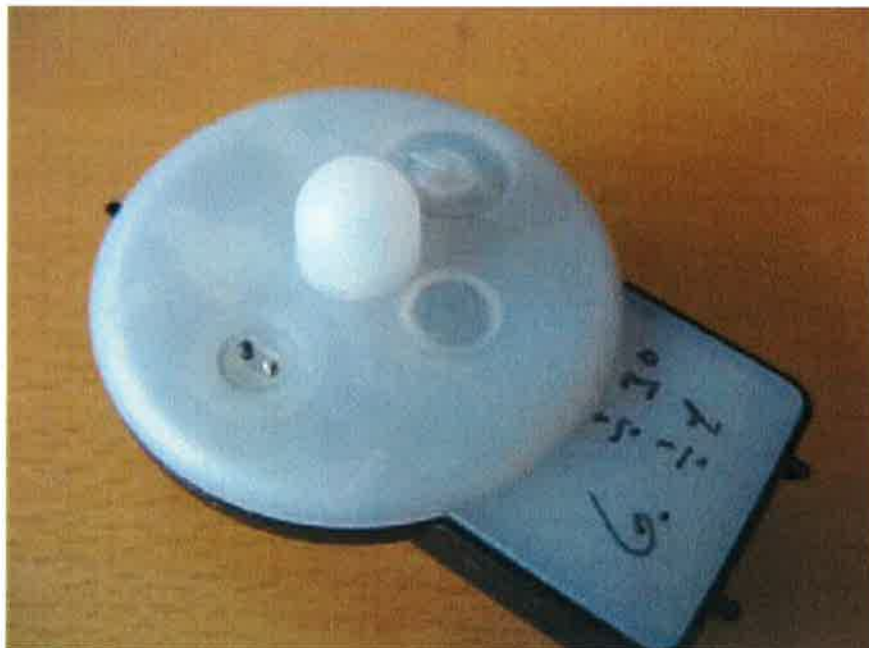
Identification of Marine Equipment:

Item: **MED/1.2c**

Product Type: **Position-indicating lights for life-saving appliances**

Product Designation: **Jack ARH**  
**Jack ARH-Alk**

Design:



"Jack ARH"

# Appendix to EC Type-Examination Certificate

Directive for Marine Equipment



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Issued by FORCE Certification A/S - EC-notified body number 0200

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## History:

| Issue/change:   | Document:                | Date:      |
|---|--------------------------|------------|
| - Original certificate  | DK-0200-MarED-204 ver. 1 | 2012-09-10 |
| - Separate material list  | DK-0200-MarED-204 ver. 2 | 2012-09-14 |
| - Update of certificate – 7 <sup>th</sup> amendment, use of alternative battery and separated "List of materials" | DK-0200-MarED-204 ver. 3 | 2013-09-30 |
| - Alternative batteries   | DK-0200-MarED-204 ver. 4 | 2016-07-04 |
| - Address corrected   | DK-0200-MarED-204 ver. 5 | 2016-08-29 |
| - Update due to the implementation of new Marine Equipment Directive and new expiry date                          | DK-0200-MarED-204 ver. 6 | 2017-02-22 |

# Appendix to EC Type-Examination Certificate

Directive for Marine Equipment



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## Documentation for observance of the relevant requirements:

| Test House  | File No.           | Testing/Inspection of:   |
|---|--------------------|--|
| FORCE Technology                                    | 111-33003          | Type Testing of Jack MRH*  |
| FORCE Technology                                    | 112-30014.a        | Temperature cycle Jack ARH + Jack ARH+ALK  |
| DELTA - Danish Electronics,<br>Lights and Acoustics | DELTA-L102372-3738 | Light Test, Chromaticity Test and Drop Test of Jack MRH  |
| DELTA - Danish Electronics,<br>Lights and Acoustics | DELTA-A506584      | Vibration Test – The vibration test was performed on a similar type –<br>RAFT, Jack A and Jack M |
| DELTA - Danish Electronics,<br>Lights and Acoustics | DELTA-L102542-3956 | Light Test of Jack ARH-ALK   |
| DELTA - Danish Electronics,<br>Lights and Acoustics | DELTA-L102542-3957 | Light Test of Jack ARH   |
| FORCE Technology                                    | 110-26415.d        | Supplementary testing of the use of alternative battery (Jack A-ALK)                             |
| DELTA - Danish Electronics,<br>Lights and Acoustics | DELTA-L102253-3433 | Supplementary testing of the use of alternative battery (Jack A-ALK)                             |
| FORCE Technology                                    | 110-34454          | Use of alternative batteries:  |
| DELTA - Danish Electronics,<br>Lights and Acoustics | DELTA-L102372-3525 | Supplementary testing of the use of Kendal alkaline battery                                      |
| DELTA - Danish Electronics,<br>Lights and Acoustics | DELTA-L102372-3524 | Supplementary testing of the use of lithium battery from Great Powers                            |
| DELTA - Danish Electronics,<br>Lights and Acoustics | DELTA-L102798-4783 | Supplementary testing of the use of Varta battery on type identical light                        |
| FORCE Technology                                    | 116-26028.b        | Supplementary testing of the use of Varta battery on type identical light                        |

### Partial conclusion:

The device designated "Jack ARH" and "Jack ARH-ALK" is found to fulfil the requirements in The International Testing Standard IMO Res. MSC.81(70) and the applicable reg. SOLAS 74 as amended, where the relevant requirements are specified in the amendment to The Directive, item MED/1.2c as well as the requirements in ANNEX II (Module B) of the Directive.

The following documentation was available:

Description of quality management system:  
User Manual and marking:  
List of materials/manufacturers used for  
manufacturing the device:  
Technical documentation:

Module D certificate - DK-0200-MarED-QA-132/10  
FORCE Technology report 111-33003  
"List of Materials for DK-0200-MarED-204" valid on the date  
of production.  
- Drawings  
- Specification of battery  
- Specification of print circuit

### **Conclusion**

Based on the above mentioned attestation it can be concluded that the position indicating light designated, "Jack ARH" and "Jack ARH-ALK" meets the conditions of EC type-examination in accordance with the Marine Equipment Directive (MED) 2014/90/EU as amended, last amended by Regulative 2017/306/EU (1st Amendment).

FORCE Certification A/S task No.: 117-24664

Date: 2017-02-22

A blue ink signature of Philippa Weirup Osted, written in a cursive style.

Philippa Weirup Osted  
Examiner