

Marine & Offshore

Certificate number: 34573/B0 MED

File number: NAV0/47678/1

Item number: MED/6.1

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2018/773 of 15 May 2018

This certificate is issued to:

Den Haan Rotterdam B.V.

Capelle aan de IJssel - NETHERLANDS

for the type of product

NAVIGATION LIGHTS

Type: DHR60 series

Requirements:

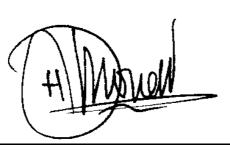
COLREG Annex I/14.
IMO Resolution A.694(17).
IMO Resolution MSC.253(83).
EN 14744 (2005) AC(2006).
IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate will expire on: 12 Dec 2023

For Bureau Veritas Marine & Offshore Notified Body 2690,

At BV GRONINGEN, on 12 Dec 2018, John Mondt





This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark 🔘) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Navigation lights type: DHR60 series			
Туре	Min. Visibility	Led Colour	Article Code
Sector Lights	•		
Starboard	2 NM	Green	60.01.00.00
Port Light	2 NM	Red	60.02.00.00
Masthead	5 NM	White	60.03.00.00
Stern	2 NM	White	60.04.00.00
Towing	2 NM	Yellow	60.04.09.00
All-round Lights			
White	2 NM	White	60.06.00.00
Manoeuvring	5 NM	White	60.06.10.00
Red	2 NM	Red	60.07.00.00
Red & White	2 NM	Red / White	60.07.06.00
Red & Green	2 NM	Red / Green	60.07.08.00
Green	2 NM	Green	60.08.00.00
Yellow	2 NM	Yellow	60.09.00.00
Blue	1 NM	Blue	60.10.00.00

2. DOCUMENTS AND DRAWINGS:

In accordance with the manufacturer's drawings and documents, at latest and at any subsequent issue endorsed by Bureau Veritas:

2.1 - Drawings:

- 2.1.1 No. 130410 DHR Technical Document DHR60 Navigation Light. Den Haan Rotterdam B.V. Fascinatio Boulevard 1182 2909 VA Capelle aan den IJssel The Netherlands. Dated 10-04-2013.
- 2.2 RENEWAL & MODIFICATION CERTIFICATE DHR60 document submitted to Bureau Veritas on 30/10/2018.
- 2.3 Product Risk Assessment dated 03/12/2018.

3. TEST REPORTS:

- 3.1 No. 130117 CE-test EMC Test Report. CE-test Qualified Testing B.V. Kiotoweg 363 3047 BG Rotterdam The Netherlands. Witnessed by Bureau Veritas Local Surveyor. Dated 17-01-2013.
- 3.2 No. 130103 Sebert Mechanical and Temperature Test Report. Dry Heat. Sebert Trillingstechniek B.V. Wegen Land 18 2661 DB Bergschenhoek The Netherlands. Witnessed by Bureau Veritas Local Surveyor. Dated 03-01-2013.
- 3.3 No. 130103 Sebert Mechanical and Temperature Test Report. Vibrational & Mechanical Shock. Sebert Trillingstechniek B.V. Wegen Land 18 2661 DB Bergschenhoek The Netherlands. Witnessed by Bureau Veritas Local Surveyor. Dated 03-01-2013.
- 3.4 No. 130109 DEKRA Corrosion and IP Test Report. DEKRA Certification B.V. Utrechtseweg 310 6812 AR Arnhem The Netherlands. Witnessed by Bureau Veritas Local Surveyor. Dated 09-01-2013.
- 3.5 No. 130103 Sebert Mechanical and Temperature Test Report. Low Temperature. Sebert Trillingstechniek B.V. Wegen Land 18 2661 DB Bergschenhoek The Netherlands. Witnessed by Bureau Veritas Local Surveyor. Dated 03-01-2013.
- 3.6 No. 130424 DHR Photometric and Colorimetric Test Report. Metaalwarenfabriek Den Haan Rotterdam B.V. Fascinatio Boulevard 1182 2909 VA Capelle aan den IJssel The Netherlands. Witnessed by Bureau Veritas Local Surveyor. Dated April 24th 2013.
- 3.7 No. 130423 DHR Calibration Certificates and Reports. Metaalwarenfabriek Den Haan Rotterdam B.V. Fascinato Boulevard 1182-2909VA Capelle a/d Ijssel The Netherlands. Dated April 23th 2013.
- 3.8 No. 130529 DHR Results Temperature Measurements (DHR60 Navigation Lights). Rotterdam, May 29th 2013.

4. APPLICATION / LIMITATION :

- 4.1 For use on board of power driven vessels with a length less than 50 m in length.
- 4.2 For use on board of power driven vessels of unlimited length, as manoeuvring light in compliance with regulation 34(b)iii of COLREG 1972, as amended.
- 4.3 Lifetime Control of Led Navigation Light

Measurements of the navigation light and specifications retrieved from the OEM, show a conformity with the minimum requirements of Colregs at an operational lifetime of 50.000 hrs.

To guarantee a proper use of the LED navigation lights, the manufacturer advises the following:

- 4.3.1 Use the navigation light in combination with a DHR-specified control system, which monitors the status and operational life time of each individual navigation light.
- 4.3.2 Each navigation light needs to undergo a quality check at least every 5 years of use to verify it still meets the requirements of Colregs.
- 4.5 The following component(s) shall comply with the requirements of MED2014/90/EU, as amended, and be wheelmarked:

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- Navigation lights type: DHR60 series
- 4.6 The requirements of ABYC A-16-2016, point 16.9 COLOUR AND PHOTOMETRIC REQUIREMENTS are fulfilled.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D Production Quality Assurance or module E Product Quality Assurance or module F Product Verification of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.
- 5.2 For information concerning the production phase modules, **Den Haan Rotterdam B.V.** has declared the following manufacturing site(s):

Fascinatio Boulevard 1182 2909 VA Capelle aan de IJssel NETHERLANDS

6. MARKING OF PRODUCT:

Reference is made to MED 2014/90/EU chapter 2.

In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS:

- 7.1 It is **Den Haan Rotterdam B.V.**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 This certificate supersedes EC Type Examination Certificate N° 34573/A0 EC issued by the Society on 0709/2013.

*** END OF CERTIFICATE ***