



Marine &amp; Offshore

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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) 2019/1397 of 06 Aug. 2019

This certificate is issued to:

**Den Haan Rotterdam B.V.**  
Capelle aan de IJssel - NETHERLANDS

for the type of product

**NAVIGATION LIGHTS**

DHR "70 N" Series

**Requirements:**

COLREG Annex I/14  
IMO Res. A.694(17)  
IMO Res. MSC.253(83)  
EN 14744:2005 incl. AC:2006  
IEC 60945 (2002) incl. IEC 60945 Corr.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: 21 Nov 2024**

**For Bureau Veritas Marine & Offshore Notified Body 2690,**

At BV GRONINGEN, on 21 Nov 2019,

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.

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

#### " DHR 70 N - SINGLE " Series

Type	Visibility sector	Visibility of light	Model Standard -25 °C – +55 °C	Model "Polar"*** -52 °C – +55 °C
Sidelights Port red	112.5°	3 NM	70.12.00.00	71.12.00.00
Sidelights Starboard green	112.5°	3 NM	70.11.00.00	71.11.00.00
Masthead light White	225°	6 NM	70.13.00.00	71.13.00.00
Sternlight White	135°	3 NM	70.14.00.00	71.14.00.00
Sternlight Red (SUEZ)	135°	3 NM	70.14.17.00	71.14.17.00
All-round lights Green	360°	3 NM	70.18.00.00	71.18.00.00
All-round lights Red	360°	3 NM	70.17.00.00	71.17.00.00
All-round lights White	360°	3 NM	70.16.00.00	71.16.00.00
All-round lights White	360°	5 NM	70.16.10.00	71.16.10.00
Towing light Yellow	135°	3 NM	70.15.00.00	71.15.00.00
All-round lights Yellow	360°	3 NM	70.19.00.00	71.19.00.00

\* Note: as light source shall be used an approved electric bulb type P 28 S of 60 cd in 24V, 115V or 230V.

\*\* Note: The DHR70N Polar is only available in 230V.

#### " DHR 70 N - DUPLEX " Series

Type	Visibility sector	Visibility of light	Model
Sidelights Port red	112.5°	3 NM	70.22.00.00
Sidelights Starboard green	112.5°	3 NM	70.21.00.00
Masthead light White	225°	6 NM	70.23.00.00
Sternlight White	135°	3 NM	70.24.00.00
All-round lights Green	360°	3 NM	70.28.00.00
All-round lights Red	360°	3 NM	70.27.00.00
All-round lights White	360°	3 NM	70.26.00.00
Towing light Yellow	135°	3 NM	70.25.00.00
All-round lights Yellow	360°	3 NM	70.29.00.00
All-round lights Red over Green	360°	3 NM	70.17.18.00
All-round lights Green over Red	360°	3 NM	70.18.17.00
All-round lights White over Red	360°	3 NM	70.16.17.00
All-round lights Red over White	360°	3 NM	70.17.16.00

\* Note: as light source shall be used an approved electric bulb type P 28 S of 60 cd in 24V, 115V or 230V.

Note: The DHR70N Polar includes only single type versions. Duplex navigation lights are not modified for Arctic purposes.

**2. DOCUMENTS AND DRAWINGS :**

According to Manufacturer's specifications filed in NAV 08/47678/03.

**For modification B1 version:****Den Haan Rotterdam:**

- 150416 DHR - Manual DHR70N Polar - Draft V1\_1, dated April 2015.

**For modification C0 version:****Den Haan Rotterdam:**

- Risk Analysis DHR Navigation lights - DHR190917

**3. TEST REPORTS :**

3.1 - Test report N° DHR 70N-001, issued by Den Haan Rotterdam B.V. on 21-01-2001.

3.2 - Test report N° 20096.68.50, issued by KEMA on 26-10-2000.

3.3 - Light intensity and Colour coordinates, Test report dated 25-09-2001.

3.4 - Vertical Luminous Intensity Distribution, dated 09.06.2009.

3.5 - Demonstration in compliance with IMO Res. MSC253(83), dated 03/09/2012.

**For modification B1 version:****Den Haan Rotterdam:**

- Test report DHR70N POLAR No. 2015001 Rev. No. 1, dated 1-6-2015 and witnessed by Bureau Veritas.

- 150119 DHR - Calibration Certificates and Reports, dated Jan 19 2015.

**4. APPLICATION / LIMITATION :**

4.1 - The navigation lights shall be equipped with lamps of an approved type such that their application will result in the same luminous intensity distribution and chromaticity, as the lamp used for the prototype test. Furthermore they shall be compliant with all applicable vibration and shock testing requirements as per EN 14744 as well as all environmental test requirements as per EN 14744.

4.2 - For all seagoing vessels with a length of 20 meter or more.

4.3 - For all seagoing vessels navigating in Arctic regions with a length of more than 20 metres (Model "Polar").

**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:

**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).

In addition, each navigation light shall be marked permanently in a position clearly visible even after installation on board, with the following information:

6.1 - Zero signal direction by a mark on the reference circle lights

6.2 - Range in nautical miles

6.3 - Origin mark (manufacturer's identification mark)

6.4 - Type designation

6.5 - Nominal wattage of the light source in watts, if different values lead to different ranges.

**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 No.11855/B1 EC issued on 13 July 2015 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*