



Marine & Offshore
Division

Certificate number: 11855/B1 EC

File number: NAV 08/47678/03

Annex A1 Item number: A.1/6.1

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

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Notified Body 0062 - MARINE EQUIPMENT DIRECTIVE 96/98/EC

EC TYPE EXAMINATION CERTIFICATE

as per Module B of European Union Council Directive 96/98/EC on marine equipment
as amended by Commission Directive 2013/52/EU

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 Resolution A.694(17), IMO Resolution MSC.253(83)

EN 14744 (2005) incl. AC(2006)

IEC 60945 Ed. 4.0 (2002) + /Corr.1 (2008).

This certificate is issued on behalf of the French Maritime Authorities to attest that BUREAU VERITAS did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Council Directive 96/98/EC of 20 December 1996 as amended.


This certificate will expire on: 29 Sep 2019

For BUREAU VERITAS Notified Body 0062,

At BV GRONINGEN, on 13 Jul 2015,

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 B 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. 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 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 Division 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 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.

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 :

This certificate 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 E "Product Quality Assurance" or F "Product Verification" of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

6. MARKING OF PRODUCT :

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 - Markings as per MED 96/98/EC:

☒ YYYY/XX where YYYY is the number of the Notified Body undertaking surveillance module (when BV, 0062) and where XX are the last two digits of year mark affixed.

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

7. OTHERS :

7.1 This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the Navigation Lights at any time and that **Den Haan Rotterdam B.V., 2909 VA Capelle aan de IJssel - The NETHERLANDS** will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the Navigation Lights and the conditions of this approval.

7.2 - This certificate supersedes EC Type Examination Certificate No.11855/B0 EC issued on 29 Sep 2014 by the Society.

*** END OF CERTIFICATE ***