DNV·GL

TYPE APPROVAL CERTIFICATE

Certificate No:
TALB000000C
Revision No:
1

This is to certify:

That the Rocket parachute flares (pyrotechnics)

with type designation(s)
JHR-4

Issued to
Huahai Marine Signals Manufacturing Co., Ltd.
Haimen, 100, China

is found to comply with
SOLAS 74 as amended, LSA Code as amended. IMO Resolution MSC.81(70) as amended

Application :

Approved for use as Rocket parachute flares (pyrotechnics).

This certificate is recognized by Transport Canada.

Issued at **Hamburg** on **2021-01-27**
This Certificate is valid until **2026-01-26**.
DNV GL local station: **Nantong CMC**

Approval Engineer: **Michael Oberländer**

for **DNV GL**

Jörg Kallies
Head of Section

Job Id: **262.1-020789-3**
Certificate No: **TALB000000C**
Revision No: **1**

Product description
"JHR-4" is a rocket parachute flare, which when fired vertically reaches an altitude of not less than 300 m. At or near the top of its trajectory, the rocket is ejecting a bright red flare with a burning time of not less than 40 seconds and with an average luminous intensity of minimum 30.000 candela.

Application/Limitation
Acceptable lifetime: Expiration date not to exceed 48 months after month of manufacture.

The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. MSC.207(81) and IMO Res. MSC.218(82) and Canadian Lifesaving Appliance Standard TP 14475E, Part I Ch.III.

A statistically adequate sample of the production shall be tested in accordance with IMO Res. MSC.81(70) Part 2, Ch.4.

Type Approval documentation
Certification in accordance with Class Programme DNVGL-CP-0338, September 2018.
Test report from GL Nantong dated from 2013-06-18 to 2013-07-30 and 2013-08-26.
Technical drawings JHR-4-00 to JHR-4-20.

Tests carried out
Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC 81(70) part 1, as amended by IMO Res. MSC.226(82) and IMO Res. MSC.323(89).

Marking of product
The product is to be permanently marked with name and address of manufacturer, type designation, brief instructions or diagrams clearly illustrating the use of the product, month and year of manufacturer, lot number and expiry date.

The instuctions for operating the rocket parachute flare are to be permanently marked directly on its casing and shall be in both English and French, as per "Procedures For Approval of Life-Saving Appliances and Safety Systems, Equipment and Products", TP 14612E [2.2.1.3].

Transport Canada Approval
Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment
DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.