DNV·GL

Certificate No:
MEDB00005RK

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Rocket parachute flares (pyrotechnics)

with type designation(s)
HGS40-30000

Issued to
Ningbo Zhenhua Life-saving Equipment Co., Ltd.
Ningbo, 130, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
item No. MED/1.8. SOLAS 74 as amended, Regulation III/4, III/6, III/34 & X/3, LSA Code and 2000 HSC Code 8

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-10-06**.

Issued at **Hamburg** on **2019-10-07**

DNV GL local station:
Ningbo

Approval Engineer:
Michael Oberländer

Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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Job Id: **344.1-009606-1**
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Product description

"HGS40-30000" is a rocket parachute flare, which when fired vertically reaches an altifude 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

Approved for use as Rocket Parachute Flares (pyrotechnics).

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).

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

Type Examination documentation

The following documentation is basis for the DNV GL approval:

Documents	Date
Drawings: HGS40-30000MX	2018-05-05
Prototype test report by Wuhan Marine Lifesaving Equipment Quality Inspection Center, No.2009066	2009-09-19
Prototype test report No. 2019002 by laboratory of Ningbo Zhenhua Lifesaving Equipment Co.,Ltd. witnessed by DNV GL surveyor	2019-08-26

This certificate is replacing the previous MED certificate 86297-09 HH.

Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70), Part 1, including IMO Res. MSC.200(80) and IMO Res. MSC.226(82).

Marking of product

The product is to be marked with name and address of manufacturer, type designation, date of manufacture, date of expiry, operational restrictions, Mark of Conformity and USCG number.

The product should be provided with brief instructions or diagrams clearly illustrating the use printed on the casing.