

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB0000212**  
Revision No:  
**1**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

## This is to certify:

**That the Rocket parachute flares (pyrotechnics)**

with type designation(s)  
**HGS40-30000**

Issued to

**Qingdao Good Brother Marine Lifesaving Appliances Co. Ltd.**  
**QINGDAO, China**

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2021/1158,

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

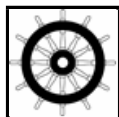
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-01-03**.

Issued at **Høvik** on **2022-01-04**

DNV local station:  
**Qingdao NB & CMC**

Approval Engineer:  
**Tessa Biever**



Notified Body  
No.: **0575**

for **DNV AS**

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**Sverre Olav Bergli**  
**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 United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 2019.



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 AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

**LEGAL DISCLAIMER:** Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

"HGS40-30000"

rocket parachute flares ejecting a red flare on a parachute at 300 m altitude with burning time not less than 40 seconds and with average luminous intensity of minimum 30.000 candela.

Tested with drop height: 18 m.  
Design weight: 400 g.

## Application/Limitation

Approved for use as Rocket parachute flares (pyrotechnics).

Acceptable lifetime: expiration date not to exceed 36 months after month of manufacture.

The liferaft drop test shall be performed when the product is installed in liferafts which have an installation height of more than 18 metres.

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.

Each product is to be supplied with its manual for installation, use and maintenance.

## Type Examination documentation

Test report from tests performed at Qingdao Good Brother Marine Lifesaving Appliances Co. Ltd. Qingdao, China 26<sup>th</sup> April 2006 witnessed by DNV GL Qingdao.

Test report from colour test performed 17<sup>th</sup> October 2006 witnessed by DNV GL Qingdao.

Drawings from manufacturer for HGS40-30000 dated June 2003

## 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 marked with name and address of manufacturer, type designation, date of manufacture, date of expiry, operational restrictions, the MED Mark of Conformity and USCG number if applicable (see first page).

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