

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 Automatically self-righting liferafts

with type designation(s)
HNF-DSR12/15/16/20/25/37

Issued to

Jiangsu Haining Marine Equipment Co., Ltd.
Taizhou, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306**,
item No. MED/1.14. SOLAS 74 as amended, Regulation III/4, III/26, III/34 & X/3, LSA Code, IMO MSC/Circ.809 & 811 and 2000 HSC Code 8

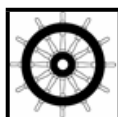
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-06-03**.

Issued at **Hamburg** on **2018-06-04**

DNV GL local station:
Jiangyin

Approval Engineer:
Roland Priebe



Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"HNF-DSR12/15/16/20/25/37" are automatically self-righting, inflatable, davit launched life rafts which can be delivered with SOLAS A or B pack.

Type	Persons 82,5 kg	Weight [kg]		Bollard pull [kN]		Max. stowage height
		SOLAS A	SOLAS B	2 kn	3 kn	
HNF-DSR12	12	140	120	0.65	1.30	36 m
HNF-DSR15	15	165	129	0.75	1.40	36 m
HNF-DSR16	16	174	138	0.80	1.40	36 m
HNF-DSR20	20	202	160	0.85	1.65	36 m
HNF-DSR25	25	255	200	1.10	1.80	36 m
HNF-DSR37	37	370	291	1.20	3.00	36 m

Application/Limitation

- The liferaft shall be packed with a SOLAS A PACK or SOLAS B PACK.
- Gas cylinders shall be of an approved type
- Components in the gas inflation system should be approved according to ISO 15738:2002
- The liferaft is intended to be installed with external weak link and a hydrostatic release unit. Float free arrangement to be checked upon installation on board.
- Production testing shall be carried out according to IMO Res. MSC 81(70) part 2.

HNF-DSR20/25/37 with SOLAS A Pack and HNF-DSR25/37 with SOLAS B pack have a mass above 185 kg and may not be used for positions where side to side transfer is necessary.

The design assessment is based on IMO Res. MSC.48(66)-(LSA Code) Ch. I and IV, as amended by IMO Res. MSC.207(81), IMO Res. MSC.218(82) and IMO Res. MSC.293(87).

Type Examination documentation

This document replaces the previous MED-B 60295-13 HH.

Drawings and design sheets:

Drawing number	Title
-	HNF-DSR12 - Design Sheet
HNF-DSR12-00-01	HNF-DSR12 - General Arrangement
HNF-DSR12-00-02	HNF-DSR12 - Structural Drawing
-	HNF-DSR15 - Design Sheet
HNF-DSR15-00-01	HNF-DSR15 - General Arrangement
HNF-DSR15-00-02	HNF-DSR15 - Structural Drawing
-	HNF-DSR16 - Design Sheet
HNF-DSR16-00-01	HNF-DSR16 - General Arrangement
HNF-DSR16-00-02	HNF-DSR16 - Structural Drawing
-	HNF-DSR20 - Design Sheet
HNF-DSR20-00-01	HNF-DSR20 - General Arrangement
HNF-DSR20-00-02	HNF-DSR20 - Structural Drawing
-	HNF-DSR25 - Design Sheet
HNF-DSR25-00-01	HNF-DSR25 - General Arrangement
HNF-DSR25-00-02	HNF-DSR25 - Structural Drawing
-	HNF-DSR37 - Design Sheet
HNF-DSR37-00-01	HNF-DSR37 - General Arrangement
HNF-DSR37-00-02	HNF-DSR37 - Structural Drawing

Prototype tests: 2012-10-09 until 2012-12-18, witnessed by GL



Job Id: **344.1-008083-1**
Certificate No: **MEDB0000403**

Material Test: Shanghai institute of Rubber Products Testing Center, W(X)2010-202.
Technical file noted with ref. 12-132402 and 13-031248.

Tests carried out

Prototype tests and test reports in accordance with the Recommendation on Testing of Life-Saving Appliances, IMO Res. MSC 81(70) part 1, including IMO Res. MSC 226(82), MSC 295(87) and MSC 323(89), have been witnessed and evaluated and found to be in compliance.

Marking of product

The product is to be indelibly marked with name and address of manufacturer, type designation and date of manufacture. The marking shall comply with the LSA Code (IMO Res. MSC 48(66) item 4.2.6 and 4.2.7.