

TYPE EXAMINATION CERTIFICATE – EC MODULE B

Certificate no.:
MEDB000097J

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

This is to certify: that the Inflatable liferafts

with type designation(s)
FZD-12/15/-16/-20/-25/-30/-35

issued to

Shanghai Fang Zhan fire Technology Co., Ltd.
Shanghai, China

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

Regulation (EU) 2024/1975,

item No. MED/1.12. SOLAS 74 as amended, Regulation III/4, III/13, III/21, III/26, III/31, III/34 & X/3, LSA Code I, V,
IMO Res. MSC.481(102), IMO MSC/Circ.811, IMO MSC.1/Circ.1630 Rev.2 and 2000 HSC Code 8

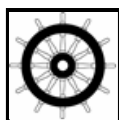
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-05-02**.

Issued at **Hamburg** on **2025-01-02**

DNV local unit:
Shanghai

Approval Engineer:
Michael Oberländer



Notified Body
No.: **0098**

for **DNV SE**

Mydlak-Röder, Christine
Head of Notified Body

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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 USD 300 000.

Product description

The FZD-12/15/16/20/25/30/35 is a davit-launched, inflatable liferaft, available with SOLAS A and SOLAS B pack. All these liferaft designs are complying with the LSA-Code as amended, including MSC.293(87).

Application/Limitation

Max. Stowage Height: 50 m

Type	Persons (82.5 kg each)	Weight [kg]		Required bollard pull [kN]	
		SOLAS A	SOLAS B	(2 kn)	(3kn)
FZD-12	12	137	111	0,55	0,90
FZD-15	15	153	121	0,70	0,95
FZD-16	16	163	129	0,75	0,98
FZD-20	20	188	146	0,95	1,15
FZD-25	25	211	159	1,20	1,65
FZD-30	30	325	245	1,30	1,90
FZD-35	35	340	256	1,40	2,00

- The liferafts 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 15738:2019.
- 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.
- The liferafts are to be serviced annually, provided where in any case this is impracticable, the administration may extend this to a period of 17 months. They shall be serviced at approved service stations which are authorized by the manufacturer.
- Production tests are to be conducted in accordance with IMO Resolution MSC.81(70) Part 2 and recorded by the manufacturer in accordance with the approved Production Quality Assurance system for Module D of the Marine Equipment Directive 2014/90/EC as amended.
- The liferafts which have a mass above 185 kg may not be used for positions where side to side transfer is necessary.

Type Examination documentation

Drawings:

-KHD-12-0000, KHD-15-0000, KHD-16-0000, KHD-20-0000, KHD-25-000, KHD-30-0000, KHD-35-0000

-Operations Manual

Liferaft design is identical to the products of Shanghai Youlong Rubber certified with MEDB000030V Rev.2.

Tests carried out

Prototype tests and test reports in accordance with the Recommendations on Testing of Life-Saving Appliances, IMO Res. MSC.81(70)Part 1, including IMO Res. MSC.218(82), MSC.226(82), MSC.295(87) and MSC.323(89), have been witnessed and found to be in compliance.

Test reports: Germanischer Lloyd Shanghai 80623 SHA of 2003-12-22, 97424 SHA of 2008-07-21, 10993 SHA 09, 11680 SHA 09 and 11653 SHA of 2010-05-14 GL SHA of 2011-07-11 and GL SHA of 2013-11-13.

Additional tests for the inclusion of the sizes KHD-30 and KHD-35 were conducted between 2017-07-17 ~ 2017-08-26 and witnessed by DNV GL Shanghai.

Towing test in accordance with MSC.81(70) Part1, 5.4 dated 2019-02-15 and witnessed by DNV GL.

Evaluation and test report dated 2024-07-30 until 2024-08-16 by DNV Shanghai

Material Tests:

- Shanghai Monitoring and Inspection Center for Rubber Products Quality No. W(X)2012-230
- Wuhan Testing Center of Marine Life-Saving Appliances, No. 2014048 dated 2014-07-04.

Marking of the product

The product is to be indelibly marked with the name and address of the manufacturer, type designation, date of manufacture and the MED Mark of Conformity (see page 1). The marking shall comply with the LSA Code (IMO Res.MSC.48(66)) item 4.2.6.3 and 4.2.7.