

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MEDB00001JE Revision No:

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 Inflatable liferafts

with type designation(s) 6 DK+, 6 DKN, 8 DK+, 10 DK+, 10 DKN, 12 DK+, 16 DK+, 20 DK+, 25 DK+, 35 DK+, 6 DK+S30, 6 DKN S30, 8 DK+S30, 10 DK+S30, 10 DKN S30, 12 DK+S30, 16 DK+S30, 20 DK+S30, 25 DK+S30, 35 DK+S30, 6 DK+E, 8 DK+E, 10 DK+E, 12 DK+E, 16 DK+E, 20 DK+E, 25 DK+E, 35 DK+E

Issued to

Viking Life-Saving Equipment A/S Esbjerg V, Denmark

is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2022/1157, 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, IMO MSC/Circ.811, IMO MSC.1/Circ.1328 and 2000 HSC Code 8

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

This Certificate is valid until 2026-10-17.

Issued at Høvik on 2023-06-27

DNV local unit: Denmark CMC

Approval Engineer: Tessa Biever



Notified Body No.: 0575

for DNV AS

Sverre Olav Bergli 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 AS of any changes to the approved type.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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.



Form code: MED 201.NOR



Job Id: Certificate No: Revision No: 344.1-003284-77 MEDB00001JE 9

Product description

Throw overboard inflatable liferaft with the following type designations:

- 6 DK+, 6 DK+S30, 6 DK+E, 6 DKN, 6 DKN S30
- 8 DK+, 8 DK+S30, 8 DK+E
- 10 DK+, 10 DK+S30, 10 DK+E, 10 DKN, 10 DKN S30
- 12 DK+, 12 DK+S30, 12 DK+E
- 16 DK+, 16 DK+S30, 16 DK+E
- 20 DK+, 20 DK+S30, 20 DK+E
- 25 DK+, 25 DK+S30, 25 DK+E
- 35 DK+, 35 DK+S30, 35 DK+E

Liferaft designs with type designation including S30 comply also with MSC.1/Circ. 1328 (extended service intervals).

Application/Limitation

The liferafts are available with features added on to the existing type approved base raft.

S30: added to type designation e.g., 6 DK+ S30 Liferaft environmentally packed to allow for extended service intervals up to 30 months. The raft is subject to an annual onboard inspection.

N added to type denomination e.g., 6 DKN. The raft is equipped with an improved "stairway" like boarding arrangement. **E:** added to type designation e.g., 6 DK+ E. Environmental packed liferaft prepared for extended service intervals

Notes to below with respect to capacity and installation heights: Container type designation is given as 16-xxxx, and emergency packs SOLAS A or B is given as "A" and "B". Listed liferaft types covers types S30 and E variants. Each size listed covers variations with the same capacity.

Liferaft		Ма	x. drop hei	ght for con	Max. capacity	Weight of liferaft ± 2% [kg]			
type	18	25	36	37	50	60	73	(persons)	
6 DK+	A 0011		B 5000			A 5000		6	78 (SOLAS A-pack) cont. 00XX
6 DK+S30	A 0039								52 (SOLAS B-pack) cont. 00XX
6 DK+E	A 0040								70 (SOLAS A-pack) cont. 50XX
	A 9041 B 0009								59 (SOLAS B-pack) cont. 50XX
	B 0009 B 0011								74 (SOLAS A-pack) cont. 90XX
	B 0040								56 (SOLAS B-pack) cont. 90XX
	B 9040								
	B 9041								
6 DKN 6 DKN S30	B 0022							6	80 (SOLAS B-pack)
8 DK+	A 0039	B 5000	A 5000					8	90 (SOLAS A-pack)
8 DK+S30	A 9042								65 (SOLAS B-pack)
8 DK+E	B 0040								
10 DK+	B 9042 A 9042		A 6100					10	100 (00) 10 1
10 DK+ 10 DK+S30	A 9042 B 9042		B 6100					10	100 (SOLAS A-pack)
10 DK+E	B 0042		D 0100						80 (SOLAS B-pack)
10 DKN	B 0026							10	85 (SOLAS B-pack)
10 DKN S30	B 0020							10	65 (SOLAS B-PACK)
12 DK+	A 9042	B 6100	B 6100			A 6100	B 0021	12	110 (SOLAS A-pack)
12 DK+S30	B 9042								95 (SOLAS B-pack)
12 DK+E									
16 DK+	A 9044		B 5100			A 5100		16	130 (SOLAS A-pack)
16 DK+S30	B 9042								100 (SOLAS B-pack)
16 DK+E									
20 DK+	A 9044		B 6000			A 6000	•	20	153 (SOLAS A-pack)
20 DK+S30	B 9042								110 (SOLAS B-pack)
20 DK+E									
25 DK+	A 9045	B 5100	B 6000			A 5200		25	176 (SOLAS A-pack)
25 DK+S30	B 9045					B 6000			125 (SOLAS B-pack)
25 DK+E				A 5700	D 5400			ļ	
35 DK+ 35 DK+S30				A 5700	B 5400	A 5700		35	281 (SOLAS A-pack)
35 DK+330	Į					ļ			204 (SOLAS B-pack)



MEDB00001JE 9

35 DK+E					1

Towing strain:

Liferaft type	Towing strain 2 knots	Towing strain 3 knots
6 DK+, 6 DK+S30, 6 DK+E	0.45 kN	0.9 kN
6 DKN, 6 DKN S30	0.45 kN	0.9 kN
8 DK+, 8 DK+S30, 8 DK+E	0.45 kN	0.9 kN
10 DK+, 10 DK+S30, 10 DK+E	0.5 kN	1.1 kN
10 DKN, 10 DKN S30	0.5 kN	1.1 kN
12 DK+, 12 DK+S30, 12 DK+E	0.5 kN	1.1 kN
16 DK+, 16 DK+S30, 16 DK+E	0.5 kN	1.2 kN
20 DK+, 20 DK+S30, 20 DK+E	0.5 kN	1.2 kN
25 DK+, 25 DK+S30, 25 DK+E	0.5 kN	1.2 kN
35 DK+, 35 DK+S30, 35 DK+E	1.05 kN	1.8 kN

Applications / limitations continued:

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 15738:2019.

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 design assessment is based on International Life-Saving Appliances (LSA) Code, IMO Res. MSC 48(66) as amended by IMO Res. MSC.218(82) and IMO Res. MSC.293(87).

Production testing shall be carried out according to IMO Res. MSC 81(70) part 2.

With ref. to 'test carried out' the liferafts with type designation including S30 are approved for extended service intervals up to 30 months in accordance with SOLAS Ch. III, Regulation 20.8.3 on the condition that:

- 1. Such extended service intervals has been approved by the ships flag administration.
- The liferafts are checked onboard in accordance with SOLAS Ch. III Regulation 20.8.3.2 at intervals in accordance 2. with SOLAS Ch. III Regulation 20.8.1.1, according to procedures issued by the manufacturer.
- The liferafts shall be serviced at approved servicing stations in accordance with the recommendations in IMO Res. 3. A.761(18) at intervals not exceeding 30 months.

Type Examination documentation

This certificate replaces MEDB00001JE Rev. 8.

Drawings and parts lists as listed below:

Liferaft type	Parts list no.:	Drawing no.
6 DK+, 6 DK+S30, 6 DK+E	43002489.000	43002489.001/002
6 DKN, 6 DKN S30,	43000336.000	43000336.001/002
8 DK+, 8 DK+S30, 8 DK+E	43002490.000	43002490.001/002
10 DK+, 10 DK+S30, 10 DK+E	43002491.000	43002491.001/002
10 DKN, 10 DKN S30	43000335.000	43000335.001/002
12 DK+, 12 DK+S30, 12 DK+E	43002492.000	43002492.001/002/003
16 DK+, 16 DK+S30, 16 DK+E	43002494.000	43002494.001/002/003
20 DK+, 20 DK+S30, 20 DK+E	43002496.000	43002496.001/002/003
25 DK+, 25 DK+S30, 25 DK+E	43002498.000	43002498.001/002/003
35 DK+, 35 DK+S30, 35 DK+E	43002501.000	43002501.001/002/003



Job Id: 344.1 Certificate No: MED Revision No: 9

344.1-003284-77 MEDB00001JE

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.
- Tests and reports in accordance with test requirements listed in MSC.1/Circ.1328 item 5.4.2 -5.4.10 have been witnessed by DNV surveyor and evaluated and found to be in compliance (test report item 5.4.4 dd. 2009-09-01, item 5.4.6 dd. 2009-10-29, item 5.4.7 dd. 2009-10-28, item 5.4.8 5.4.10 dd. 2009-11-02/2009-11-04).
- Tested according to the MarED recommendation for liferaft occupancy weight increase from 75 kg to 82.5 kg: 1027-1029, 1228, 1395, 1451, 1497, 1509, 1534, 1544, 1554, 1581-1587, 1589, 1591-1593, 1595-1603, 1605-1617, 1620, 1622, 1627-1642, 1655-1657 and 1683-1685.
- Test reports and drawings supporting Design Changes, see Appendix 1.

Marking of product

The product is to be indelibly marked with name and address of manufacturer, type designation, dimensions, date of manufacture and the MED Mark of Conformity (see first page).

The marking shall comply with the LSA Code Ch. 4.2.6 and 4.2.7.



Job Id: Revision No:

344.1-003284-77 Certificate No: MEDB00001JE 9

APPENDIX 1:

Design Change no.	Date	Subject	Supporting documentation (test reports witnessed by DNV/ drawings)	
10301	2012-03-09	25 DK+ packed in container 016-5100,	1745-1746	
10304	2012-10-05	SOLAS B	1780, 1781, 1792,1793, 1794	
10314	2013-03-21	35 DKF+ Leafield Serrrvo System to be used on VIKING liferafts	1858, 1859, 1895, 1897	
10315	2013-03-21	Change to Daniamant RL6 combi light	1881~1889	
10316	2013-04-08	Plastic strapping around container, replacing bursting bands	1887, 1888, 1901, 1902, 1903, 1904	
10317	2013-04-05	S30 aluminium pouch variants	1905~1910	
10318 10321	2013-04-15 2013-09-09	Eyelink with rubber socket Gas cylinder for 12 DK+ liferafts	1916, 1917	
10326	2014-03-24	New canopy material (Rivertex 4000 PES PU coated)	1899, 1912, 1803, 1993, 1870, 2015 Material Technical Report 1809 A dated 2012-10-25 from SATRA Technology Centre, UK	
10333	2013-12-10	Liferaft painter system arrangement	1454	
10334	2013-11-28	Entrance design for 4-25 DK+ and 12-25 DKF+	2033, 2034, 2016	
10335	2014-12-11	35 DK+ and 35 DKF+ from 3 to 2 entrances	2120, 2078	
10336	2014-02-27	6 DK+ with SOLAS A-pack to be packed in container type 016-0040	963, 964, 468	
10337	2014-03-02	20DK+ and 20 DK+S30 packed in container type 016-9044	2088, 2089	
10342	2014-09-19	Change to new inflation system Leafield GIST For 35 DK+ and 35 DKF+	1428, 1429, 1432, 1433, 2145~2149	
10345	2014-12-01	Replacing painterline for lifrafts > 25 persons	2168	
10346	2015-02-09	Introduction of triple approved pressure cylinders. TPED/DOT/T		
10352	2015-06-02	6-35 DK+ and 12-35 DKF+ protection for operating head	2170 ~ 2173	
10363	2015-10-27	Updates for Viking Thermal Control Box.	2246, 1658, 1660, 1661, 1663, 1692, 1693	
10364 10411	2015-11-04 2017-09-27	Environmental packed New material numbers for non-return valves displayed on GA drawings	Extended service interval - S30 tests	
10412	2017-11-20	Stowage height 60 m: 35 DK+ /35 DK+S30 / 35DK+E – A pack	2658, 2659	
10420	2018-05-18	Fabric NK300C from ContiTech	2595, 2596, 2667, 2733, 2734, 2673, 2674, 2688, 2682, 2683, 2767, 2768, 2675, 2676, 2677, 2678, 2668, 2669, 2686, 2687, 2692, 2685, 2693, 2684, 2752, 2689, 2690, 2691	
			Additional buoyancy material (NK300C) supported by the following test reports:	
			Prototype test in accordance with IMO Res. MSC.81(70), Part 1: - Weft distortion dated 2017-12-18,	
			- Test report no. 2747: Coating Adhesion dated 2018-04-13	
			 Test report no. 2749: Oil resistance dated 2018-04-13 Test report no. 2750: Blocking 	
			resistance 2018-04-13 - Laboratory Test report no.	
			1530100000 rev.13 dated 2018-03- 05 for NK300C by Contitech	
			Laboratory Northeim, Germany witnessed by DNVGL surveyor - DNV GL verification statement	
			N141GV0D dated 2018-03-15	



 Job Id:
 344.1-003284-77

 Certificate No:
 MEDB00001JE

 Revision No:
 9

10422 2018-05-25 Signal Lamp - in box with spare bulb and 2456, 2458, 2464, 2466 battery 10434 2018-10-08 Alternative hardener Desmodur RFE 2834 (3 x over pressure test) 2828, 2829, 2830, 2831, 2833 (seam strength tests) 2905, 2914, 2915 (3x over pressure test), 2880, 2881, 2882, 2883, 2884, 2885 10437 2018-12-10 Alternative hardener 'Beyond' (seam strength tests) 10443 2019-04-23 Improved painter system for liferafts with 3088, 3087, 2952, 2953 capacity of 26 and more 10438 2019-04-23 Alternative hardener 'TM-93' 2868, 2869, 2870, 2871, 2872, 2873, 2876, 2877, 2878, 2988, 2989, 2990, 3017, 3019 Painter system with alternative hardener 10451 2019-04-23 3085, 3086 'TM-93' and 'Beyond' 10466 2020-05-29 20 DK+ packed in low profile container Test report Nos.: 3365, 3366, 3394, 3395, 3369, 3372 Drawing No.: 3001837 (SAP no. 42000521) 10504 2021-09-13 25 DK+ in container type '6000' - 60 m Test report Nos.: drop height 3582, 3583, 3475, 3476, 3454, 3449 _ Drawing No.: ENG-20082734 10512 Black rubber fabric RBND6 BCR 2022-11-11 Test report Nos.: 4035, 4036, 4058, 4059, 4060, 4061, 4062, 4063, 4065, 4066, 4075, 4076, 4079, 4080, 4081, 4082, 4085, 4086, 4087, 4096, 4097, 4098, 4101, 4102, 4103, 4104 Test report TX772622/2022/PL dated _ 29 September 2022 from SGS, Taoyuan City, Taiwan 10516a 2023-06-12 Test report Nos. 4059, 4087, 4066, 4101, Extended inner tube, long 6-65 persons 4081, 4419, 4420, 4421, 4422 Drawing No. ENG-20118151 Rev.2.