DNV·GL

Certificate No:
TALB0000018

TYPE EXAMINATION CERTIFICATE

This is to certify:

That the Inflatable liferafts

with type designation(s)
Viking liferaft 4 DK+ S30

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

is found to comply with
SOLAS 74 as amended, Regulation III/4, III/21, III/31, III/34. IMO Res. MSC 48(66) - Lifesaving Appliance Code. Tested to IMO Res. MSC 81(70)

Application :

Not for use onboard SOLAS ships. Carrying capacity is only 4 persons and does not fulfil item 4.1.2.1 (not less than 6 persons).

Issued at **Høvik** on **2016-09-26**

for **DNV GL**

This Certificate is valid until **2018-12-31**.
DNV GL local station: **Fredericia**

Approval Engineer: **Tessa Biever**

Petter Langnes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Examination Certificate and not to the approval of equipment/systems installed.

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Product description

4 DK+, inflatable liferaft. The liferaft is available with features added on to the existing type approved base raft:

- 4DK+
- 4 DK+ S30

S30: Liferaft environmentally packed to allow for extended service intervals up to 30 months. The raft is subject to an annual onboard inspection.

Container material:	GRP
Buoyancy tube fabric:	NK205/2 or NK 300 or RNND6
Exterior canopy fabric:	Rivertex collection 200
Interior canopy fabric:	Rivertex collection 100
Insulated floor:	Alu foam Mic-cell

The design assessment is based on IMO Res. MSC.48(66) as amended including IMO Res. MSC.293(87).

Application/Limitation

Stowage height, max:		
Container No.	Emergency Pack	Max. Installation heights
016-0005	SOLAS A	10 Meter
016-0011	SOLAS A or B	10 Meter
016-0009	SOLAS A or B	18 Meter
016-3300	SOLAS B	18 Meter
016-5000	SOLAS A or B	25 Meter
016-3200	SOLAS B	3 Meter
Number of person, max:	4 persons	
Required towing force:	3 knots – 1 kN	

- Not for use onboard SOLAS ships. Carrying capacity is only 4 persons and does not fulfil item 4.1.2.1 (minimum capacity 6 persons).
- 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.

The liferaft is also approved for extended service intervals up to 30 months in accordance with SOLAS Ch. III, Regulation 20.8.3 on the condition that.

- 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 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. A.761(18) at intervals not exceeding 30 months.

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Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.

This certificate replaces LB-477.

Basis for approval:

Viking Conformity Assessment Report, type 4 DK+	2000-08-01
Parts list "Viking 4 DK+" No. 43000393.000 and referred drawings.	2009-12-15
Parts list "Viking 4 DK+" No. 43002363.000 and referred drawings.	2014-05-16
Design Change No. DNV10267 (Fabric RBND6) and related test reports: 1410, 1512, 1215a, 1228, 1413, 1261, 1397, 1398, 1399, 1400,1510, 1405, 1406, 1453, 1454, 1393, 1384, 1385, 1386, 1387, 1398, 1390, 191, 1392,1407, 1408, 1409.	2010-01-14
Design change No. DNV10289 (boarding ramp) and related testreports : 1511,1512,1524,1528,1529,1530,1531,1532	2010-12-09
Design change No. DNV10318 (eyelink container) and related testreports 1916, 1917	2013-04-15
Design change No. DNV10333 (liferaft painter system) and related Testreports 1454	2013-12-10
Design change No. DNV10334 (entrance design) and related testreports 2033,2034,2016	2013-11-28
Design change No. DNV 10344 (fabric change for inflatable compartments) and related testreports 2131,2132, 2133, 2134, 2154, 2155, 2136, 2137, 2156, 1993, 2037, 2038, 2167, 2128, 2139, 2135, 2129, 2130, 2126, 2158, 2127, 2157, 2160, 2138, 2017, 2007, 2008, 2010.	2014-11-20
Design change No. DNV10386 (extended service interval) and related test reports in accordance with IMO MSC.1/Circ 1328: - Test report 1905a – Delta test report DANAK-19/12937 (Vibration , damp heat test 6DK+ S30 iaw IMO MSC.1/Circ 1328 §5.4.2 and §5.4.2) - RD-00043-D-004 (Drop test 6DK+S30 – IMO MSC.1/Circ 1328 §5.4.6) - RD-00043-C-005 (Cold inflation 6DK+S30 – IMO MSC.1/Circ 1328 §5.4.7) - RD-00043-P-008 (Pressure test 6DK+S30 – IMO MSC.1/Circ 1328 §5.4.8) - RD-00043-FS-001 (Floor seam test 6DK+S30 – IMO MSC.1/Circ 1328 §5.4.9) - RD-00043-DI-010 (Detailed inspection 6DK+S30 – IMO MSC.1/Circ 1328 §5.4.10) - Long time field test 6DK+, DNV GL verification statement N1419HKK	2016-07-14 2013-03-22 2009-10-29 2009-10-28 2009-11-04 2009-11-02 2009-10-28 2016-06-08

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), IMO Res. MSC 295(87) and MSC. 323(89), have been witnessed and evaluated and found to be in compliance.
- For extended service interval up to 30 months the required tests have been performed in accordance with IMO MSC.1/Circ 1328.

Marking of product

The marking shall be according to LSA Code, item 1.2.2.9, 4.2.6 and 4.2.7 as amended by IMO Res. MSC 48(66) and marked with "NON-SOLAS".

Periodical assessment

DNV's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Standard for certification No. 1.2 Type Approval Item 4.