

CERTIFICATE OF TYPE APPROVAL

This is to certify that
DNV GL AS, specified as a "person" under the terms of The United Kingdom Merchant Shipping
(Delegation of Type Approval) Regulations 1996, did undertake the relevant type approval procedures of
the equipment identified below which was found to be in accordance with the essential safety
requirements subject to any conditions in the schedule attached.

Equipment
Non-SOLAS Liferaft

with type designation(s)
25 DKR+ and 50 DKR+

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

is found to comply with

Issued by DNV GL AS under the authority given in Merchant Shipping Notice MSN 1735.
The MCA is an Executive Agency of the Department of the Environment, Transport and the Regions.

Høvik, 2018-12-03
for **DNV GL AS**



This Certificate is valid until
2023-12-02

Mårten Schei-Nilsson
Head of Section

Nominated Body authorised by the MCA
DNV GL local office:
Fredericia

Tessa Biever
Surveyor



Job Id: **343.1-000001-3**
Certificate No: **MCALS000002**

Product description

The liferafts 25 DKR+ and 50 DKR+ are NON-SOLAS Open Reversible Inflatable Liferafts, according to the requirements from MCA (MSN 1676 M, Schedule 4 Part 4) and have capacity for resp. 30 and 65 persons. The container material is GRP.

This UK ORL is tested in accordance with 2000 HSC Code, which refers to relevant tests in LSA-code.

Application/Limitation

Item	25 DKR+	50 DKR+
Max.inst. height	18 metres	18 metres
Capacity	30 persons	65 persons
Containers	Drawing no. 16001468, type 016-9042	Drawing no. 42000189, type 016-6000 Drawing no. 16002990, type 016-9045
Towing strain at 2 & 3 knots	0,73 kN / 1,66 kN	1,57 kN / 2,84 kN (with 82.5 kg per person)
GA part list	43002359.000 dated 2013-10-29	43002553.000 dated 2018-08-21

- The inflation system is in compliance with MSN 1676M, IMO Res. 48(66) – LSA Code, IMO Res.MSC.81(70) part 1
- 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 liferafts shall be equipped with an DOT(UK) E Emergency pack.
- Only to be installed on passengerships classes III to VI(A) and certain restricted operation High Speed Craft.

Approval based upon

This certificate replaces MCA-LS-46.

Liferaft 25 DKR+	
Drawings	Date
Parts list no. 43002359.000, »Viking 25 DKR+ MCA» and referred drawings 43002359.001 and 43002359.002.	2013-10-29
Test reports	Date
Visual inspection test no. 1997, witnessed by DNV	2013-10-18
Droptest no. 1689 and 1690, witnessed by DNV	2011-10-18
Jumptest no. 1696, witnessed by DNV	2011-10-24
Weight test	1998-04-24
Towingtest no.1725, witnessed by DNV	2011-11-22
Mooring out test no.1725	2009-07-09
	2009-08-10
Liferaft painter system test no. 1453	2010-04-23
Loading and seating test no. 2002 witnessed by DNV	2013-10-25
Boarding test no. 1635, witnessed by DNV	2011-07-12
Stability test no 2002 witnessed by DNV	2013-10-25
Manoeuvrability test no. 2004, witnessed by DNV	2013-10-25
Swamp test no 1612 witnessed by DMA	1995-10-28
Damage test no. 2005, witnessed by DNV	2013-10-25
Ambient inflation test no. 1999, witnessed by DNV	2013-10-18
Cold inflation test no.2000/2001, witnessed by DNV	2013-10-22
Hot inflation test no. 232a, witnessed by DNV	1998-04-27
Overpressure test no.1947, witnessed by DNV	2013-07-24
Seam Strenght test No. 1413, witnessed by DNV	2010-01-12
Self draining test no. 1562	2011-04-01

Job Id: **343.1-000001-3**
Certificate No: **MCALS0000002**

Liferaft 50 DKR+	
Drawings	Date
Part list no. 43002553.000, "Viking 50 DKR+ MCA" and referred drawings 43002553.001 and 43002553.002	2018.08.21
Test reports	Date
Several Fabric material tests; SGS Taiwan and Danish Technological Institute	2009-11-16 2009-11-26 2009-11-12
MCA certificate of inspection and tests	2000-06-29
Self draining test no. 1562, witnessed by DNV	2011-04-01
Boarding test no. 1638, witnessed by DNV	2011-07-12
Droptest no. 1689 and 1690, witnessed by DNV	2011-10-18
Cold Inflation test no. 1694 & 1695, witnessed by DNV.	2011-10-20
Hot Inflation test no. 1710, witnessed by DNV	1995-05-18
Overpressure test no. 1691, witnessed by DNV.	2011-10-18
Seam Strength test no. 1262 and no. 1413 witnessed by DNV.	2009-08-10 2010-01-12
Towing test no. 1697, witnessed by DNV	2011-10-24
Manoeuvrability test no. 1698, witnessed by DNV	2011-10-24
Loading and seating test no. 1701, witnessed by DNV	2011-10-24
Stability test no. 1702, witnessed by DNV	2011-10-24
Damage test no. 1703, witnessed by DNV	2011-10-24
Jump test no. 1696, witnessed by DNV	2011-10-24
Liferaft Painter System test no. 1453, witnessed by DNV	2010-04-23
Ambient temperature inflation test no. 398, witnessed by DNV	2002-07-24
Detailed inspection, testrapport no. 1705, witnessed by DNV	2011-11-04
Test reports due to new fabric black NK 300C – Continental	
- 3001 (towing test)	2018-12-28
- 2720 (cold inflation test)	2018-03-06
- 2721 (cold inflation test)	2018-03-06
- 2722 (drop test 18 m)	2018-03-08
- 2723 (drop test 18 m)	2018-03-08
- 2724 (hot inflation test)	2018-03-09
- 2767 (ambient test)	2018-05-18

Tests carried out

- Prototype tests in accordance with relevant parts of the Recommendation on Testing of Lifesaving Appliances, IMO Res. MSC.81(70), Part 1, as specified in above mentioned documentation. The testing has been carried out in accordance with IMO Res. MSC 97(73), annex 5 item 7.
- Tests and have been witnessed by DNV surveyor and evaluated and found to be in compliance.

Marking of product

The product is to be indelibly marked with name of manufacturer, type designation, dimensions and date of manufacture. The marking shall be according to MSN 1676M, Scedule 4, part 4.

Product Survey

DNV GL has the right to make check tests on the product at any time.

Note:

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify DNV GL AS of any modification or changes to the equipment in order to obtain a valid certificate.