



TYPE APPROVAL CERTIFICATE No. ELE066114CS/013

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

Description ELECTRIC CABLES

Type LKSM-HF 250 V; LKSM-SHF2 250 V.

Applicant HELKAMA BICA OY

LAKIMIEHENKATU 4 FIN

20780 KAARINA

FINLAND

Manufacturer HELKAMA BICA OY

Place of manufacture LAKIMIEHENKATU 4 FIN

20780 KAARINA

FINLAND

Reference standards RINA Rules for the Classification of Ships, Part C, Chapter 2,

Section 9; RINA Rules for Testing and Certification of Marine Materials and Equipment; IEC 60092-350; IEC 60092-376.

Issued in Genova on April 7, 2015. This Certificate is valid until April 7, 2020

RINA Services S.p.A. Valerio Bonanni

This certificate consists of this page and 1 enclosure



TYPE APPROVAL CERTIFICATE No. ELE066114CS/013 Enclosure - Page 1 of 1 LKSM-HF 250 V LKSM-SHF2 250 V.

Materials/Components

Shipboard communication, control and instrumentation cables, halogen free with low smoke emission, flame retardant.

Rated voltage: 250 V

Type: LKSM-HF 250 V; : LKSM-SHF2 250 V

Marking: Cable type - n X s mm2 - 250 V - +90°C - IEC 60092-376 - IEC 60332-3-22 - HELKAMA - month-year -

lenght marking.

Construction:

conductor: stranded plain or tinned copper (IEC 60228 Class 2)

insulation: XLPE

inner covering: synthetic tape

armour: plain or tinned copper wires braid

sheath: SHF1 or SHF2

Max. conductor temperature: +90°C.

In accordance to rules IEC 60228 cl.2; IEC 60092-350; IEC 60092-351; IEC 60092-376; IEC 60092-359; IEC 60092-360 as applicable; IEC 60332-1-2; IEC 60332-3-22; IEC 60754-1; IEC 60754-2; IEC 601034-1; IEC 61034-2.; RINAMIL Rules.

Technical specification: HBKQ 9 spec.56 dated 29/07/2010, TS/LKSM-HF 250V dated 26/10/2010.

Note/Remarks:

The product is subject to the compliance with RINA Rules and Standards mentioned on the certificates

Type Approval certifies that a rappresentative sample of the products has been found to meet the applicable design criteria

Any modification of change shall not be valid until approval is granted by RINA as a result of due assessment. The present Certificate cancel and supersedes the previous N. ELE438810CS/008.

Other Place of Manufacturing:

a) HELKAMA BICA (SHANGHAI) Co., Ltd.
 Plot 1-2 Minghang Export Processing Zone, Shanghai, 201401 P:R.C.

b) HELKAMA BICA Oy Lasitehtaankatu 12, FI-10960 Hanko, Finland.

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Genova April 7, 2015