



# NIPPON KAIJI KYOKAI

## *Certificate of Type Test*

Certificate No.  
TA12524M

MANUFACTURER: Helkama Bica Oy, Kaarina, Finland

PRPDUCT: 0.6/1kV Halogen free flame retardant power and control cable

TYPE NO.: LKM-HF, LKM-FRHF, LKAM-HF, LKAM-FRHF,  
LKSM-HF, LKSM-FRHF, LKSM-EMC

TYPE TEST NO.: 98T806

PARTICULARS: Refer to the attached sheet

STANDARD: IEC60092-350, IEC60092-351, IEC60092-353, IEC60092-359, IEC60332-1,  
IEC60332-3-22 Cat.A, IEC60228, IEC60682, IEC60754, IEC61034,  
IEC60331 (-FRHF type), IEC61196-1 (-EMC type)

THIS IS TO CERTIFY that the above mentioned product has been approved by  
the NIPPON KAIJI KYOKAI in accordance with the Society's type test requirements  
for electrical equipment and cables.

This certificate is valid until 3 September 2017.

Issued at Tokyo on 4 September 2012.

T. Narisawa  
General Manager  
Machinery Department

Attached sheet to Cert. No.TA12524M

1. LKM-HF, LKSM-HF, LKM-FRHF, LKSM-FRHF

Rated voltage	0.6/1kV (1.2kV)
No. of cores x Conductor size	1 x 1.0 - 300 mm <sup>2</sup> 2 x 1.0 - 95 mm <sup>2</sup> 3 x 1.0 - 240 mm <sup>2</sup> 4 x 1.0 - 240 mm <sup>2</sup> (up to 150 mm <sup>2</sup> in case of -FRHF type) 5 x 1.0 - 70 mm <sup>2</sup> 7 - 37 x 1.0, 1.5, 2.5 mm <sup>2</sup>
Insulation	Halogen free cross-linked polyethylene plastic (HF-XLPE)
Armour	Braided armour of annealed copper wires (LKSM type)
Sheath	Halogen free thermoplastic (SHF1)
Max. rated conductor temperature	90°C

2. LKAM-HF, LKAM-FRHF

Rated voltage	0.6/1kV (1.2kV)
No. of cores x Conductor size	2 - 37 x 1.0, 1.5, 2.5 mm <sup>2</sup>
Insulation	Halogen free cross-linked polyethylene plastic (HF-XLPE)
Screening	Tape of aluminium/polyester with drain wire
Sheath	Halogen free thermoplastic (SHF1)
Max. rated conductor temperature	90°C

3. LKSM-EMC

Design to meet requirements for	enhanced electromagnetic compatibility (EMC) characteristics
Rated voltage	0.6/1kV (1.2kV)
No. of cores x Conductor size	1 x 1.0 - 300 mm <sup>2</sup> 2 x 1.0 - 95 mm <sup>2</sup> 3, 4 x 1.0 - 240 mm <sup>2</sup> 5 x 1.0 - 70 mm <sup>2</sup> 7 - 37 x 1.0, 1.5, 2.5 mm <sup>2</sup>
Insulation	Halogen free cross-linked polyethylene plastic (HF-XLPE)
Armour	Braided armour of annealed copper wires Copper tape under the braid
Sheath	Halogen free thermoplastic (SHF1)
Max. rated conductor temperature	90°C

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