



**TYPE APPROVAL CERTIFICATE**  
No. ELE253523XT/009

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

<i>Description</i>	<b>ELECTRIC CABLES</b>
<i>Type</i>	<b>FMGACH 150/250 V</b>
<i>Applicant</i>	<b>2M KABLO SAN. VE TIC. A.S. GAZIOSMANPASA OSB MAH., 4.CADDE, No.18A Tekirdag 59500 Cerkezkoy TURKEY</b>
<i>Manufacturer</i>	<b>2M KABLO SAN. VE TIC. A.S.</b>
<i>Place of manufacture</i>	<b>GAZIOSMANPASA OSB MAH., 4.CADDE, No.18A Tekirdag 59500 Cerkezkoy TURKEY</b>
<i>Reference standards</i>	<b>IEC 60092-350; IEC 60092-376.</b>

Issued in **ISTANBUL** on **November 10, 2023**. This Certificate is valid until **August 19, 2028**

**Leonard Koroluk**



**RINA Services S.p.A.**

This certificate consists of this page and 1 enclosure



**Leonard Koroluk**  
Marine Surveyor  
RINA Istanbul  
26263



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**FMGACH 150/250 V**

**Materials/Components**

Shipboard instrumentation, control and communication cables, flame retardant, halogen free with low smoke emission, for ships and off-shore units installation.

Rated voltage: 150 / 250 V

Maximum rated conductor temperature: + 85 °C

Type: FMGACH

Marking: 2MKABLO IEC 60092-376 FMGACH n x m x s(mm<sup>2</sup>) 150/250 V IEC 60332-3-22 [METER MARK]

**Construction**

Conductor: Stranded Electrolytic Annealed Copper Class 2

Insulation: HEPR

Individual Separator: PES Tape

Individual Shielding: AL-PES foil (with stranded tinned copper drain wire)

Lay-Up: Shielded pairs and quads are stranded in layers

Screen: Electrolytic Copper Wire Braiding

Outer Sheath: HFFR SHF1

Number of Units: 1, 2, 4 Cross-sectional area of conductors 0,5 and 0,75 mm<sup>2</sup>

Number of Units: 7, 10, 14, 19, 24 Cross-sectional area of conductors 0,75 mm<sup>2</sup>

Reference documents: Technical Specification No: 109-3/2011 (16/03/2012)

Reference Standards: IEC 60092-350; IEC 60092-376; IEC 60332-3-22; IEC 60332-1-2; IEC 60228; IEC 60811; IEC 60754-1; IEC 60754-2; IEC 60092-360, IEC 60684-2; IEC 61034-1/2; IEC60754-1/2

**ISTANBUL 10.08.2018**