



Marine & Offshore
Division

Certificate number: 39398/A1 BV

File number: ACE1/113/11

Product code: 2505I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

UNIKA UNIVERSAL KABLO SANAYI VE TICARET A.S.
TEKIRDAG - TURKEY

for the type of product

INSTRUMENTATION AND COMMUNICATION CABLES
FMGSGO-FR & FMGSGO series
250V

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

IEC 60092-350/351/359 (2008), IEC 60228 (2004), IEC 60332-1-2 (2004), IEC 60332-3-22 Cat.A (2009), IEC 60331-21 (2009), IEC 60754-1/2 (2011), IEC 61034-1/2 (2013).

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 10 Oct 2019

For BUREAU VERITAS,

At BV ISTANBUL, on 09 Dec 2014,

Gurcan Yilmaz



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=ywtzq8bcmu>

BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

FMGSGO series are instrumentation and communication cables for Marine and Offshore applications.

1.1 - Datas:

Rated voltage:	250V
Flame retardant:	IEC 60332-1-2 & IEC 60332-3-22 Cat.A
Fire resistant:	IEC 60331-21 (-FR only)
Low smoke:	IEC 61034-1/2
Halogen free:	IEC 60754-1/2

1.2 - Construction:

Conductor:	Stranded annealed bare or tinned copper wire (Class 2)
Fire resisting layer:	Mica tape (-FR only)
Insulation	XLPE
Inner sheath:	Polyester tape
Screen:	Bare or tinned copper wire braiding
Outer sheath:	SHF2 (Halogen free cross-linked compound)

Note: The construction is in accordance with VG 95218 Part 62.

1.3 - Range:

Type	Number of core	Cross-sect. area (mm ²)
FMGSGO	1 to 16P	0.75
FMGSGO - FR	2P	0.75

2. DOCUMENTS AND DRAWINGS :

FMGSGO provided by the manufacturer

3. TEST REPORTS :

UNIKA:

- Test report N°500/FRM/007 Rev.1, dated 29.Aug.2014.
- Test report N°2014-425, dated 08.Sep.2014.
- Test report N°14-425/3164 & 14-425/3168, dated 29.Aug.2014
- Tests reports dated 29.Aug.2014.
- Tests report N°14575-4144313, dated 13.Nov.2014.

4. APPLICATION / LIMITATION :

BUREAU VERITAS Rules and Regulations for the Classification of Steel Ships.

5. PRODUCTION SURVEY REQUIREMENTS :

- 5.1 - The above cables are to be supplied by **UNIKA UNIVERSAL KABLO SANAYI VE TICARET A.S.** in compliance with the type and the requirements described in this certificate.
- 5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.
- 5.3 - BV product certificate is required.

6. MARKING OF PRODUCT :

The cable shall be marked on the surface outer sheath, in a durable legible and visible manner, with the following information through the length of cable:

- 1) - Voltage grade.
- 2) - Cable symbol and temperature class.
- 3) - Number of conductors and conductor size.
- 4) - Applicable standard(s) to flame retardant and fire resistance if any
- 5) - Manufacturer's name or trade mark.
- 6) - Year of manufacture.

7. OTHERS :

7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **UNIKA UNIVERSAL KABLO SANAYI VE TICARET A.S.**, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 39398/A0 BV issued on 10.10.2014. by the Society.

***** END OF CERTIFICATE *****