

## 2M KABLO COMPANY PROFILE

### INTRODUCTION

2M KABLO was founded and started production 1993 in Istanbul. Since its foundation, low-voltage cables are produced with the brand "2MKAB" and later the audio - video cables are collected under the brand "LOOKAB" and the fire-resistant cables under the brand "FireKab".

Believing in continuous improvement and high customer satisfaction, 2M KABLO has become a well known company in the cable industry over the years. Customers from all over the world from Residential, Public and Industrial Construction, Oil & Gas, Industrial Automation, Fire & Security, Satellite, Broadcasting, Staging and Audio-Video industries has been enjoying the advantages of working with us.

**2MKAB**  
LOW VOLTAGE CABLES

**FireKab**  
FIRE RESISTANT CABLES

**LOOKAB**  
AUDIO / VIDEO CABLES

### ADVANTAGES

- Fast production, high service quality
- Consistent, competent and reliable service and flexibility
- Certified quality
- Wide product range and custom design
- Outstanding references
- Logistical advantages

### EXPORT AND CONTACT POINTS

2M KABLO exports 50% of the production to Europe, Russia and other CIS countries, Middle East, Africa, Pacific and American markets. Due to the success of exports, The Chamber of Commerce of Istanbul gave us the "export success award" in 2009 and The Exporters Association gave us the "2011 Exports honorary List" award in 2012 and 2013.

2M KABLO has a warehouse and sales office in Moscow (since 2005) and the sales points in Turkey are in Istanbul, Ankara, Antalya, Izmir, Bursa and Adana.

**2MKABLO**  
applicable to life...

[www.2mkablo.com](http://www.2mkablo.com)



## QUALITY, PRODUCTION AND THE SYSTEM

### 2M KABLO has following certificates

- ISO 9001:2008 certificates from NAVIGA and LPCB
- Product certificates from TSE, TSEK (most products)
- Product certificates from GOST-R and Russian Fire (most products)
- Product certificates from LPCB (for 3 products)
- Product certificates from VDE (for 1 product and 1 product group)
- Brand Registration certificates
- OHSAS 18001:2007 certificate from NAVIGA
- ISO 14001:2004 Certificate from WCS

2M KABLO uses modern test equipments and has own laboratory to conduct all tests required by the product standards. Some of these tests are corrosive gas measurement and smoke density tests, fire resistance tests (IEC60331, BS6387 CWZ, EN50200, EN 50362, IEC 332-3 etc), UV resistance, oxygen index, oil resistance tests, screening factor, toxic index, cold / hot resistances and other electrical and physical tests.

Since 2004, purchasing, planning, production, sales, warehousing, customer relationship processes are monitored by means of a custom designed ERP software. This brings easier, faster and error-free control and recording for a better total quality control. This software has been further strengthened with the ICRON software which contributes greatly to effective planning and cost management.

For effective traceability and online follow up, the production number is printed on the cable so that every process of production can be checked in detail on a further date. For each production a test report is prepared and sent to our customers too.

In order to increase the quality of customer service, for domestic customers, a free customer hot line is active since 2007. 2M KABLO is committed to respond to customer complaints within 72 hours and a product liability insurance for all products covering up to 20.000.000 Euros is part of the 2M KABLO service.

Since 2010, 2M KABLO started a few projects in order to increase efficiency such as "Lean Production Project" "The 5S activities". OHSAS 18001 studies were completed in 2011 as well. In 2012, 2M KABLO moved to new premises with 25.000 m2 factory area (open and closed).





## SOCIAL RESPONSIBILITY

Being aware that the most important investment is the one on human beings, 2M KABLO has been supplying scholarships to students who are successful yet lack financial sufficiency so that they can continue with their education and become an individual with benefits to the society. Educational and technical materials are donated to primary and technical schools, too. The promotion materials are used especially from UNICEF who helps children in the world for their food, education and protection needs and has activities regarding children`s rights. The production system is set for minimum waste and harm to the environment as well.

## MAIN PRODUCT GROUPS

- Instrumentation Cables (PVC, PVC-LSF, PVC-ö, LSZH (HFFR), Fire Resistant, UV Resistant
- Fire Resistant Cables (IEC, EN, BS, VDE)
- Power Cables/Fire Resistant Power Cables
- Fire Alarm Cables
- Control Cables
- Audio - Video Cables
- Bus Cables
- CCTV Cables
- Data Cables
- Coaxial Cables/HD Cables
- PUR Cables
- Marine and Shipboard Cables
- Railway, Signalization Cables
- Special Cables (Cathodic, Welding, PUR, etc.)
- HFFR and UV Resistant versions available for all types.

## 2MKAB | Instrumentation Cables



Instrumentation cables have a wide range of usage in process control and data processes in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used.

RE-Y(St)Y	RE-2Y(St)H-PiMF / TiMF	RE-2Y(St)H-SWAH
RE-Y(St)Y-PiMF- TiMF	RE-2Y(St)H-SWAH-PiMF/TiMF	
RE-Y(St)YSWAY	RE-2Y(St)H-SWBH	
RE-Y(St)YSWAY-PiMF/TiMF	RE-2Y(St)H-SWBH-PiMF/TiMF	
RE-Y(St)YSWB	RD-Y(St)Y...Bd	
RE-Y(St)YSWB-PiMF/TiMF	RE-Y(St)Yv	
RE-Y(St)Y(ö)	FireKab RE-2G(St)H...CI	
RE-Y(St)Y(ö)-PiMF / TiMF	FireKab RE-2G(St)H-PiMF/TiMF...CI	
RE-Y(St)YSWAY(ö)	FireKab RE-2X(St)H...CI	
RE-Y(St)YSWAY(ö)-PiMF/TiMF	FireKab RE-2X(St)H-PiMF/TiMF...CI	
RE-Y(St)YSWB(ö)	FireKab RE-3G(St)H(ö)...CI	
RE-Y(St)YSWB(ö)-PiMF/TiMF	FireKab RE-3G(St)H(ö)-PiMF/TiMF...CI	
RE-2Y(St)H	Halogen free, fire resistant, oil resistant, PAS 5308 and 0,6 / 1kV versions also available	

## 2MKAB | Control Cables



Control cables are used for electronic control systems of computer or audio systems; communication devices; electronic circuits; measurement devices; industrial machines and office equipments. According to application the screening materials, coverage rates and sheath material differs.

LIYY	LIHCH	LIY(St)Y-TP	LIH(St)CH-TP	YSLY-JZ
LIHH	LIYCY-TP	LIH(St)H-TP	LIYCY-CY	HSLH-JZ
LIYY-TP	LIHCH-TP	LIY(St)CY	LI2YCY-PiMF	YSLYCY-JZ
LIHH-TP	LIY(St)Y	LIH(St)CH	LIY11Y	HSLHCH-JZ
LIYCY	LIH(St)H	LIY(St)CY-TP	LIY11Y	2MPUR-JZ
				2MPUR C-JZ



## FireKab | Fire Resistant Cables



These cables are used for the fire alarm systems, power supply/control of the equipment that must function during fire, emergency lighting, the equipment for evacuation and follow up and warning systems in intelligent or semi-intelligent building where a dense human population or valuable goods are found such as; hospitals, cinemas, theatres, schools, shopping centers, airports, factories etc. FireKab products have a low smoke density, are halogen free and they don't emit poisonous and corrosive gases.

FireKab LIHH FE180 PH90

FireKab LIH(St)H FE180 PH90

FireKab LIH(St)CH FE180 PH90

FireKab LIHCH FE180 PH90

FireKab JE-H(St)H...Bd FE180 PH120

FireKab JE-H(St)H...Bd FE180 E30-E90 PH120

FireKab JE-H(St)HSWBH...Bd FE180 PH120

FireKab NGF FE180 PH30 (CU/SI/OSCR/LSZH)

FireKab SIHF FE180 PH90

FireKab NS07 FE180 PH90 (CU/SI/LSZH)

FireKab LIHH-TP FE180 PH90

FireKab LIH(St)H-TP FE180 PH90

FireKab LIH(St)CH-TP FE180 PH90

FireKab LIHCH-TP FE180 PH90

FireKab BMK-SH FE180 PH120

FireKab COAX FE180 PH90

FireKab DATA FE180 PH90

FireKab SC180 FE180

FireKab LC500 FE180

0,6 / 1kV versions also available

## 2MKAB | Bus Cables



Bus cables are used in industrial applications and automations devices. They are flexible and provide fast data transmission speed.

PROFIBUS L2

PROFIBUS CAN

INSTABUS EIB-PVC

PROFIBUS L2 OUTDOOR

PROFIBUS PA

INSTABUS EIB-LSZH

RPROFIBUS L2 FLEX

PROFIBUS PA-PiMF / SWB

FIELD BUS CABLES

## LOOKAB | Audio and Video Cables



Audio-Video cables are specially designed cables for usage in music studios, stages, tv or radio broadcasting studios, Theatre, concert, auditorium halls and stadiums, etc. According to application the screening materials, coverage rates and sheath material differs.

Balanced and unbalanced mic. cables / Halogen free balanced mic. cables

Twin cables

Balanced installation cables / Halogen free balanced installation cables

Star quad mic. cables

Digital AES/EBU cables / Halogen free Digital AES / EBU cables

Twinax coax. loudspeaker cables

Digital multicore AES / EBU cables

Analog multicore cables / Halogen free analog multicore cables

Analog / Digital / HDTV / SDI Video cables

Multi-video cables

RGB cables / Halogen free RGB cables

TRIAx / TRIFLEX cables

Fire Resistant speaker cables

## 2MKAB | Coaxial Cables



Coaxial cables are used as distribution cable in the CATV, CCTV, cable TV, satellite systems and wireless/data communication systems. According to application the screening materials, coverage rates and sheath material differs.

RG 59 / 4 F

RG 6 / 4 FHF

RG 11 / 6 FHF

RG 62 A / U SWA

RG 59 / 6 F

RG 6 / 6 F

RG 214 / U

RG 6 / 4 F HD

RG 59 / 4 FHF

RG 6 / 6 FHF

RG 223 / U

RG 59 / 4 F HD

RG 59 / 6 FHF

RG 11 / 4 F

RG 58 A / U

RG 6 / 4 FA SAT-1

RG 11 / 4 FHF

RG 62 A / U Indoor

RG 6 / 4 F

RG 11 / 6 F

RG 62 A / U Outdoor



## 2MKAB | Composite and CCTV Cables



Composite cables are used when different types and cross sections of cables must be used at one device. The cable is designed according to applications where transmission of video, audio, power, alarm, reference signals etc. may be required at the same time.

### CCTV CABLES

DUAL RG 6/4 FA & 2x1.50 mm<sup>2</sup> + 2x0.50mm<sup>2</sup>

DUAL RG 59/4 FA & 4x0.50mm

SPECIAL COMPOSITE CABLES

2MCOM HFFR Nurse Call cables

## 2MKAB | Telephone Cables and Fire Alarm Cables



Telephone and fire alarm cables have similar cable constructions and are used either in subscriber and switchboard systems, voice communication or fire alarm systems.

PDV	HBAPH-K
PDV-K	VBAPV
PDAPV	HBAPH
PDAPV-K	J-H(St)H...Lg
HBH-K	J-H(St)H...Bd
VBV	J-H(St)Y...Bd
HBH	J-Y(St)Y...Lg
VBV-K	JE-H(St)H...Bd
VBAPV-K	

## 2MKAB | Data Transmissions Cables



Data Cables are used in offices, residence buildings, management or R&D departments of businesses, etc. for the data transmission system that work up to. 155Mbit/s and also for RS232 - 422 - 485 systems. According to application; shielding, screening usage and the sheath material differs.

RS 485 CABLES

RS 232 CABLES

RS 422 CABLES

LOAD CELL CABLES

EIA / TIA 232-422-485

## 2MKAB | Marine Cables



We manufacture halogen free, fire resistant, low smoke and flame retardant various types of marine and shipboard cables. Our cables provide high quality and safe and easy installation in different environments. We have certifications from different authorities such as Rina and others.

## 2MKAB | Power Cables



We manufacture low voltage wires and power cables up to 1Kv. The types cover armoured, unarmoured. Halogen free, flame retardant, heat and cold resistant, oil resistant, **fire resistant** made with mica tape and or silicone insulation type of cables. These wires and cables are made according to international standards such as VDE, BS 6387, TSE, GOST, UCRA, NF.

Our factory capable of manufacturing these with PVC, XLPE, HFFR, PE, SILICONE, PUR, EPR, NBR and many other special compounds and materials.

## 2MKAB | Railway Cables



We manufacture railway signalling cables, heater cables, balise cables and rolling stock cables according to local railway authority specifications TCDD and European standards. Signalling cables includes also copper taped cables with k reduction factor.



## FACTORY



## PRODUCTION SITE



## CERTIFICATES



### Quality System

NAVIGA ISO 9001: 2008

LPCB ISO 9001: 2008

NAVIGA OHSAS 18001: 2007

WCS ISO 14001:2004

### FireKab Fire Resistant Cables

LPCB (BS 6387 C W Z and EN 50200 for our product FireKab BMK-SH FE 180 PH120)

LPCB (EN 50200 PH120 for our product FireKab JE-H(St)H...Bd FE 180 E30-E90 PH120)

LPCB (EN 50200 PH30 for our product FireKab NGF FE180 PH30)

VDE (for our product FireKab JE-H(St)H... Bd FE180 PH120)

### Russian GOST-R

For most of our products

### Russian Fire

For most of our products

### Ukr Sepro

For Control Cables, Fire Resistant Cables, Instrumentation Cables

### Marine & Shipboard Cables

RINA



## LABORATORY TESTS

### Electrical and Electronical Tests;

- Conductor Resistance Measurement
- Insulation Resistance Test
- High Voltage Test
- Capacitance, Inductance, Resistance Measurements
- Unbalanced Capacitance Measurements
- Impedance, Attenuation, Return Loss , Insertion Loss Measurements
- Transfer Impedance Measurement
- Screening Attenuation Measurement
- Spark Test



### Flame Tests (with and without circuit integrity);

- Circuit Integrity (IEC 60331, EN 50200/EN 50362, BS 6387 C-W-Z)
- Flame Propagation Tests (IEC 60332-1, IEC 60332-3-22/23/24 CAT A, B,C)
- Smoke Density Test



## Mechanical Tests;

- Tensile Strength & Elongation at Break
- Aging Tests
- Determination of Density
- Shrinkage
- Tests at Low Temperatures
- Hotset Tests
- Heat Shock
- Pressure Test at High Temperature
- Flexibility Test
- Thermal Stability
- UV Resistance
- Durability of Ink Printing

## Chemical Tests;

- Water Absorption Test
- Mineral Oil Immersion Tests
- Loss of Mass Test
- Determination of the Amount of the Halogen Acid Gas
- Toxicity Index Measurement
- Hydrocarbon Resistance Test
- Fuel Resistance Tests
- Limited Oxygen Index
- Temperature Oxygen Index

