

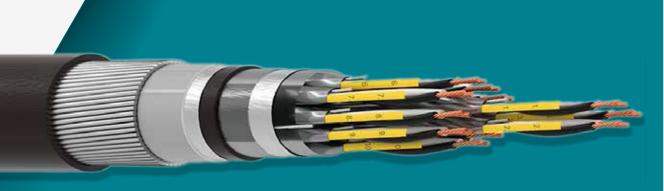
Family Croci is an Italian family devoted for tradition to the production of high tech special cables under the famous Brand Ramcro. The quality of the cables, the exceptional ratio quality at right price, the flexibility of production even under specific requests by the Client, made Ramcro Special Cables famous and used all over the world. Today, after decades of success and experiences, we can really say that Ramcro is in the very heart of great jobs, everywhere a great cable is needed.

FCINCIO IN NUMBERS

Ramcro was founded in 1979, as family Company pro-ducing Special Cables. Family Croci owns 100% of Ramcro S.p.a.; In more than 40 years Ramcro expanded success-fully its presences in more than 50 Countries, in few dif-ferent cable segments: Oil & Gas / Fire / Signal & Control I BMS Optic cables

Ramcro production capacity is **5.500** km/month and **66.000** km/year

3.000 sqm of warehouse,
allowing outstanding flexibility in delivery,
with also 750 sqm of offices and
1.300 sqm for Laboratory.



ramcro in the Very HEART OF GREAT JOBS.

WHY CHOOSE ramcro

Ramcro solves any kind of technical issue on special cables area, assuring your complete satisfaction thanks to our outstanding knowhow and superior Italian Quality, together with maximum flexibility and tay-lor-made solutions. Ramcro's approach improved the efficiency of hundreds of iconic Projects all over the world.



RAMCRO IN THE VERY



VISION

To be an internationally reputed brand that delivers world-class products and services in terms of their quality and the technology used, to ensure 100% consumer satisfaction.

TECHNOLOGY

Our state of the art Manufacturing facilities include latest plant and machineries.



† † † † †

LEADERSHIP

Our team share a passionate commitment for a common purpose, where anything is possible.

TRUST

Ramcro S.p.A in More then 40 years, built trust through relentless efforts, innovations, quality control, and customer service & satisfaction.



HEART OF THE GREAT JOB



INNOVATION

We invest in research and innovation, at the same time maximizing sales, products, and operations.

RESPONSIBILITY

We believe, to build brands that people trust, one must focus not only on today but also future.





SUSTAINABILITY

Ramcro S.p.A. has always been committed to the research and supply of products and services with the least possible environmental impact throughout their life cycle and carefully evaluates all aspects of the production chain, from design to production and up to disposal methods.

The goal is to create a system capable of promoting the growth of a market and a **culture** more attentive to **environmental and social** needs and capable of assessing not only the aspects related to the product and to the service provided but even at the actual costs for the entire community.



Ramcro's commitment to pursuing these objectives takes the form of a series of initiatives, which have been implemented for some time, which include:

- Autonomous electricity production through a photovoltaic system, started more than 12 years ago, allows us to self-produce more than 40 % of the total used electricity.
- Reprocess of 100% waste plastic materials and 100 % recycling of metallic waste used in cable processing.
- Procurement process aimed at favoring **energy-efficient** products and services, if possible, from production processes with low environmental impact.
- The adoption of practices for the **efficiency of the consumption of energy** resources.
- · Closed circuit industrial water system to minimize water consumption.
- The constant search for solutions to improve environmental and energy performance.
- All the used packing materials are fully recyclable
- Monitoring of the CO2 produced along the entire production chain aimed at the constant reduction of the indices.
- Maximum attention to the sustainability of the finished product in the design process.



ramcro in the Very HEART OF GREAT JOBS.

LPCB for UNI EN ISO 9001 & BRITISH STANDARD RINA for UNI EN 14001 & UNI EN ISO 45001

TUV Rheinland for Solar Cables

TUV for RETIE (South America Area)

Foundation
Fieldbus KNXEIB Cables

UL for Instrumentation Control & Alarm Cables Supply

CERTIFIED















OUR LAB

Ramcro laboratory provides any certificates of tests run following major international specifications and it is working following ISO 17025 and it is Ready to be recognized.

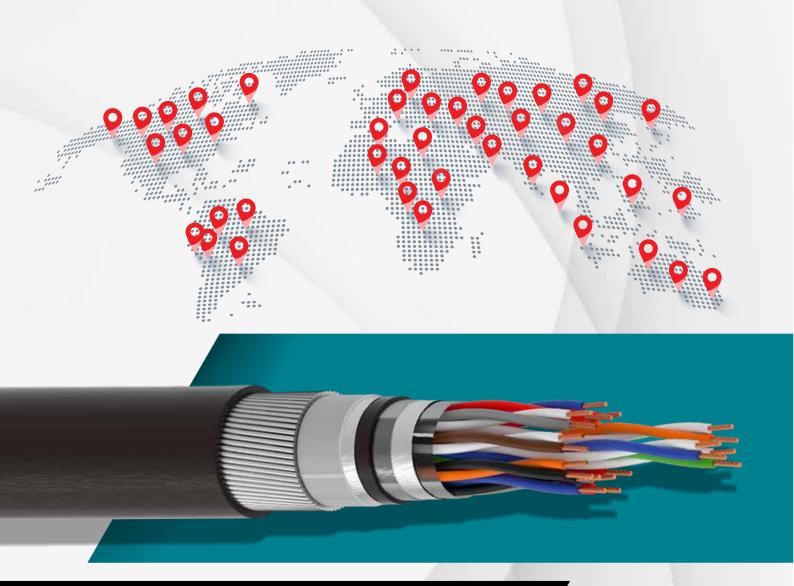


Ramcro is currently main cable supplier in more than

500 international projects.

Ramcro cables perfectly work everyday in more than

50 countries .



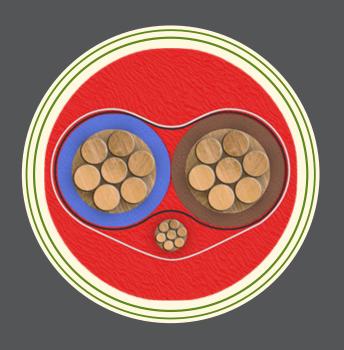
Famcro IN THE VERY HEART OF GREAT JOBS.

IN THE VERY HEART

Our Cables live their long life out of the sight, inside walls, tunnels, iron and tubes. Ramcro cables are inside, in the very heart of great jobs.



RAMCRO IN THE VERY

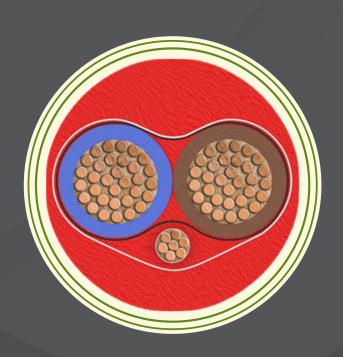


AUDIO, VIDEO and CONTROL

Ramcro complete gamma for Audio, Video and Control.

BMS

To provide the solutions for exchange and storage of information to keep efficient, on top performing, a complete gamma to solve every type of building installation.

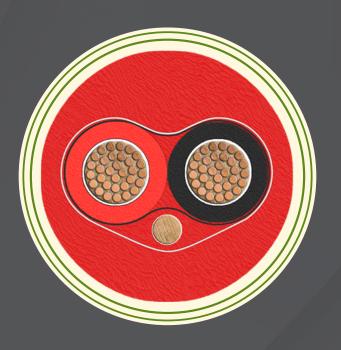


FIBER OPTICALS

The new technology of data transmission. Ramcro complete gamma showing the new solutions for connections and fast transmission.



HEART OF THE GREAT JOB

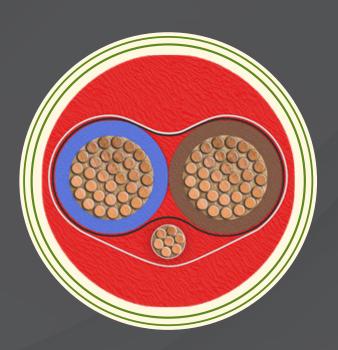


FIRE RESISTANT

Used for fire resistant and circuit integrity. Essentially to prevent life from smoke and noxious fumes and where sensitive equipment maybe damage by forming gases.

INSTRUMENTS

Designed to connect electrical instrument circuits and provide communication services in and around process plant.



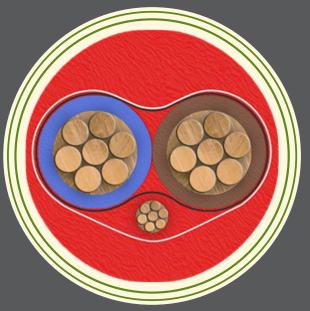
FIRE ALARM

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. Doesn't spread flame to the top of the tray in the vertical-tray flame UL 1685 and for FPLR Ul1666.

Scan here to download Catalogue



ALARM & VIDEO

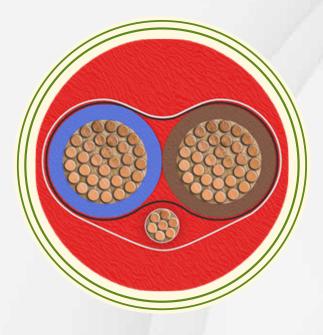


Cable Features: A complete assortment of special cables suited for alarm systems, audio and video systems, certified and granted as higher quality cables.



These cables are used for power supply and control signal transmission in mechanical engineering for tooling machinery, for production line and transport equipment, as well as industrial installation. They meet the requirements of the EEC directive concerning electromagnetic compatibility (EMC), and ensure interference-free transmission providing protection against external pulses





BMS

To provide the solutions for exchange and storage of information to keep efficient, on top and performing, a complete gamma to solve every type of building installation: Industrial use, CCTV, Intrusion and access, CATV Systems, Audio and video systems, Residential.

CABLE FEATURES:

Exchanging and stor-aging information data in a performing and efficient way. The right special cables for building sector.

CHARACTERISTICS:

- Referred mainly to building projects applications
- They allow to install and make operative all main device related to:
 - Automation
 - Conditioning and Heating
 - Audio, Video and Signals transmissiont
 - Industrial Sites



Scan here to download Catalogue



Famcro IN THE VERY HEART OF GREAT JOBS.

FIRE RESISTANT



FIRE RESISTANT

Used for fire resistant and circuit integrity. Essentially to prevent life from smoke and noxious fumes and where sensitive equipment maybe damage by forming gases.

CABLE FEATURES:

In case of fire risk or to maintain circuits integrity, the Ramcro Fire special cables prevent smoke risks and other collateral problems to sensitive equipments, avoiding damage from gases. Ramcro Fire cables are produced according with all m'or international standards.

Product range under sub-brand RAMFIRECRO-F3 Manufactured according to:

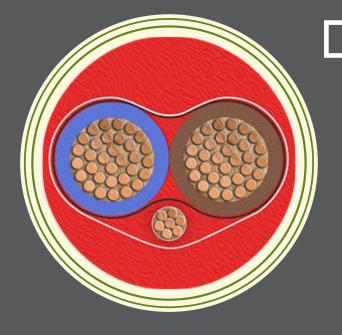
- International Electro-tecnical Commission IEC 60331-21
- British Standard BS 6387 Cat. C-W-Z
- British Standard BS 7629
- European Norms EN 50200

Fire Performance Classification:

- Basic Type: IEC 60331-21
- Standard Type: BS 6387 Cat. C-W-Z and BS 7629
- Enhanced Type: EN 50200 PHI20 BS 8434-2



OIL & G



INSTRUMENTS

Designed to connect electrical instrument circuits and provide communication services in and around process plant.

Cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone.

Product range under sub-brand RAMCROIL Manufactured according to:

- European Norms EN 50288-7
- British Standard PAS 5308
- International Electro-tecnical Commission IEC 60502
- Normalisation Française NF M87-202
- Underwriters Laboratories Inc. (UL) UL 13 PLTC



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KNX CABLE —





The future that awaits us is based on a single intelligent control system that integrates and manages, at multiple levels, different subsystems present within the building and governed by each other via bus. The optimization of the performance of the equipment, together with continuous monitoring and energy efficiency, mean that building automation translates into significant savings, guaranteeing very high stan-dards of safety and comfort. The KNX bus system is the world's leading building control and automation system. Born from the merger of the main bus systems, including EIB (European Installation Bus) and KONNEX, KNX is the first globally standardized system for the management of buildings, both residential and commercial. KNX boasts over 150 certified international producers and over 50,000 completed projects and RAMCRO is an active member of this team. Furthermore, KNX constitutes a common and open platform that guarantees the interoperability and inte-roperability of certified devices, regardless of the manufacturer.

FOUNDATION FIELDBUS





FOUNDATIONTM Fieldbus has been driving the digital tran-sformation to smarter plant operations, made popular by terms such as the Industrial Internet of Things (IIoT) and Industry 4.0, for more than two decades. FOUNDATION Fieldbus technology is embedded in millions of intelligent devices and systems and has enabled end users to make better and faster decisions, increase pro-ductivity, reduce costs, and minimize risk while raising the level of awareness of plant ope-rations from instrument tech-nicians all the way to corporate officers.

Foundation Fieldbus allows industrial organizations to unlock the full capabilities of their existing assets. By providing the means to leverage immense amounts of data generated by modern automation systems, the potential uses and benefits are numerous. They range from enhanced data collection and improved remote monitoring, diagnostics and asset management, to reduced configuration and commissioning effort.

Section	N. of elements	Insulation type	Shield	Type of Armour	Type of outer Sheath
AWG 18	From 1 up to 10 pairs	XLPE	IAM/CAM+TCWB	UnArmoured	LSZH
AWG 18	From 1 up to 10 pairs	XLPE	IAM/CAM+TCWB	Steel Wire Armour	LSZH
AWG 18	From 1 up to 10 pairs	XLPE	IAM/CAM+TCWB	UnArmoured	LSZH
AWG 18	From 1 up to 10 pairs	XLPE	IAM/CAM+TCWB	Steel Wire Armour	LSZH

UL CERTIFIED CABLES



Instrumentation, control, alarm and BMS

- UL 13 PLTC Type Instrumentation
- UL1424 FPL, FPLR, FPLP Types Alarm
- UL 444 CM P, CM R, CM, CMG, CM H, CMX Types control

For more information, please contact our commercial division.

EAC CERTIFIED CABLES —



Instrumentation, Control and BMS

- TR/CU 037
- TR/CU 004
- Fire Safety

Armenia, Kazakhstan & Kyrgyzstan Market
For more information, please contact our commercial division.

BUS CABLE

INDUSTRIAL and AUTOMOTIVE

The electrical cables used for fieldbus industrial communications system are specific for industrial use, and are designed to ensure reliable transmission of data and power within a demanding industrial environment. Some of the more common cables used for fieldbus systems include:

- 1. Twisted pair cables made up of two or more conductors twisted together to reduce electromagnetic interference (EMI) and noise. Twisted pair cables are typically used for fieldbus networks such as Profibus, Modbus and Industrial Ethernet.
- 2. Coaxial cables made with a central conductor surrounded by a conductive shield, separated by a layer of insulation. Coaxial cables are used in fieldbus networks such as Devicenet and ControlNet.
- 3. Fiber Optic cables that use light for data transmission, offering high performance in terms of transmission speed, EMI immunity, and long transmission distances. They are commonly used in fieldbus networks such as Profibus-PA, Foundation Fieldbus and Industrial Ethernet.
- 4.Ethernet cables are standard Ethernet cables, used for industrial Ethernet based fieldbus networks such as Modbus TCP, EtherNet/IP and PROFINET. They can be twisted pair or fiber optic cables, depending on the needs of the application.

It is important to select the correct cable type based on the specifications of the fieldbus system, the needs of the application and the industrial environment in which it will be installed, to ensure reliable and stable communication within the industrial automation system. It is advisable to consult the fieldbus system specifications and application requirements to determine the most appropriate electrical cable to use.

SPE CABLE

Single Pair Ethernet (SPE) was developed for one reason only. It was meant to close the last big gap in a TCP/IP oriented network world – the gap between classic IT and sensor technology, which is becoming more and more important.

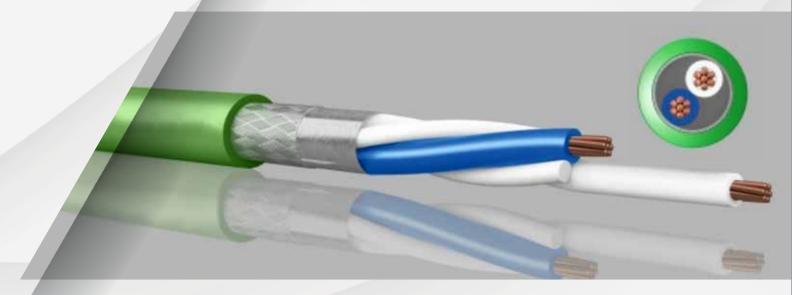
Thus SPE is not a replacement technology for existing cable-bound Ethernet networks as are found almost everywhere in IT. Therefore it is not a matter of replacing four-pair cabling, instead it is a matter of accessibly docking sensor/actuator networks to our IT-networks. For this reason, SPE is also referred to as an "enabler" for IoT and IIoT.

FUTURE AUTOMATION

Single Pair Ethernet (SPE) is the simple answer to the question of what future automation solutions have to look like so that they can be implemented successfully on the market.

This question stirred up three sectors

- 1. Automotive industry
- 2. Industrial automation
- 3. Building automation



All three areas of application require unimpeded access to sensor/actuator networks for the next step in their respective automation solutions. Only in this way can autonomous driving be implemented in a car, a continuous manufacturing process in the industry is implemented in accordance with Industry 4.0, or an intelligent building is achieved in building automation.



RAMCRO can propose solutions for EV charging unit power and flow monitoring. The cable is a combination of power cores and screened data cable offering a solution for quick installation including connection to CTs, eliminating the need to run two separate cables. Suitable for installation in air, clipped to surface, on tray/ladder, embedded in concrete, and for direct burial when mechanical protection is in place.

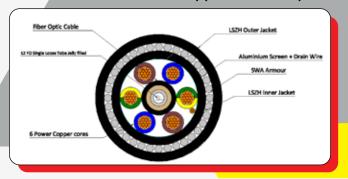




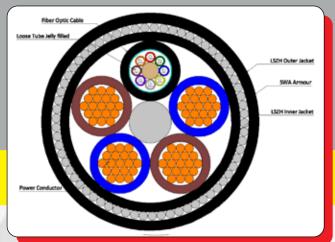
HYBRID FO CABLES

Composite or Hybrid Fiber Optic Cables that have a number of different components laid up within the bundle. These types of cables allow for multiple transmission paths by various components, whether they be metal conductors or fibre optics, and allow the user to have a single cable, therefore reducing the overall cost and lead time for installation.

Branch Composite Cable Shielded Armoured 1x12FO G652D + 6 Power Copper Cores 6 sq.mm



HYBRID CABLE SWA 1x96FO G652D + 4x70mm²



SOLAR CABLE_

The use of these cables is foreseen for the installation of photovoltaic systems eg. in accordance with HD 60364-7-712. Suitable for application on equipment with protective insulation (Protection Class II). They are inherently short-circuit proof and earth fault proof in accordance with HD 60364-5-52. They can also be used for photovoltaic installations e.g. in accordance with HD 60364-7-712. Installations not envisaged by the higher classes and where there is no risk of fire and danger to people and/or things (low-risk single installation).

Suitable for permanent indoor or outdoor use, for free mobile, free hanging, and fixed installations. The installation also in ducts and on ducts, inside or under plaster as well as in equipment.

GAS-STOP CABLES

IEC 60079 is a very detailed standard that contains specific requirements for the design, selection, installation and initial verification of electrical installations in, or associated with, places where explosive atmospheres, when the equipment must also be suitable for other critical environmental conditions, for example the possibility of entry of water and possibility of corrosion. In these cases can be necessary requirements additional protection. The requirements set by the standard apply only in the case of use of the equipment in standard atmospheric conditions, as defined by the IEC EN 60079-0; in the case of different weather conditions it may take additional precautions.

The indications about the cable must be as the follow:

- The cable entry system Shall comply with the IEC 60079-1 indications
 Cable Construction Should be Round
- Cable conforming to Annex E part, inside the IEC/EN 60079-14



RAMCRO S.p.A.

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