

ramcro

special cables



INSTRUMENTATION
CABLES



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ABOUT C

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Ramcro was founded in 1979, as a family Company producing Special Cables. Family Croci owns 100% of Ramcro S.p.a.. In over 42 years Ramcro successfully expanded its presence in different countries and in a few different but important segments: Oil & Gas, Fire, Railway Signal & Control, BMS, and Optical Cables.

Ramcro production capacity is 4.000 Km/Month and 50.000 Km/Year. Production dpt is 18.000 sqm, of which 3.000 sqm on stock, allowing outstanding very high flexibility in delivery, with also 1.300 sqm of offices and 750 sqm for Laboratory.

Ramcro Laboratory provides any certificates of tests run following major international specifications and it is ready to be certified ISO 17025. It is also recognized by the international body as a "Third part Laboratory". Ramcro solves any kind of technical issue in the area of the cable, assuring the Client's satisfaction thanks to high quality and personalized solutions, improving the Client's efficiency and optimizing its processes. Ramcro offers extremely flexible solutions and a complete range of services, even tailor-made, based on outstanding worldwide experience

COMPANY



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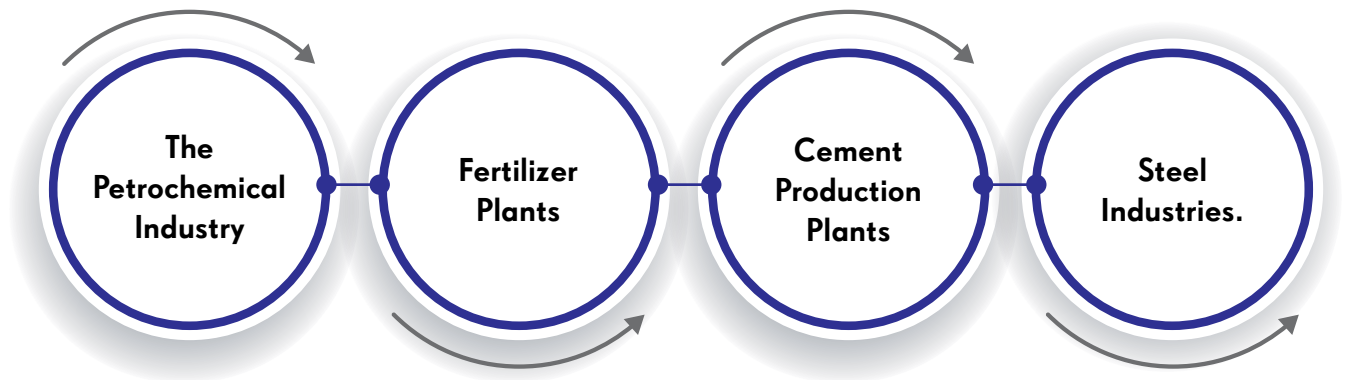


INSTRUMENTATION CABLE

Guide line for Instrumentation Cable Selection Process

An instrumentation cable plays a critical role in various manufacturing and processing projects. It is not easy to observe and control electricity systems and their supplementary processes without this cable. It transmits low-energy signals that you can use to regulate or keep an eye on various crucial functions that rely on electronic circuits.

State-of-the-art wireless transmission mediums have simplified signal broadcasts. People are accustomed to transmitting and receiving information wirelessly. Most of us lack meaningful knowledge on shielded instrument cable because we live in a world where wireless transmissions are trending. This cable transmits signals in electric circuits and is pertinent across various industries, including;

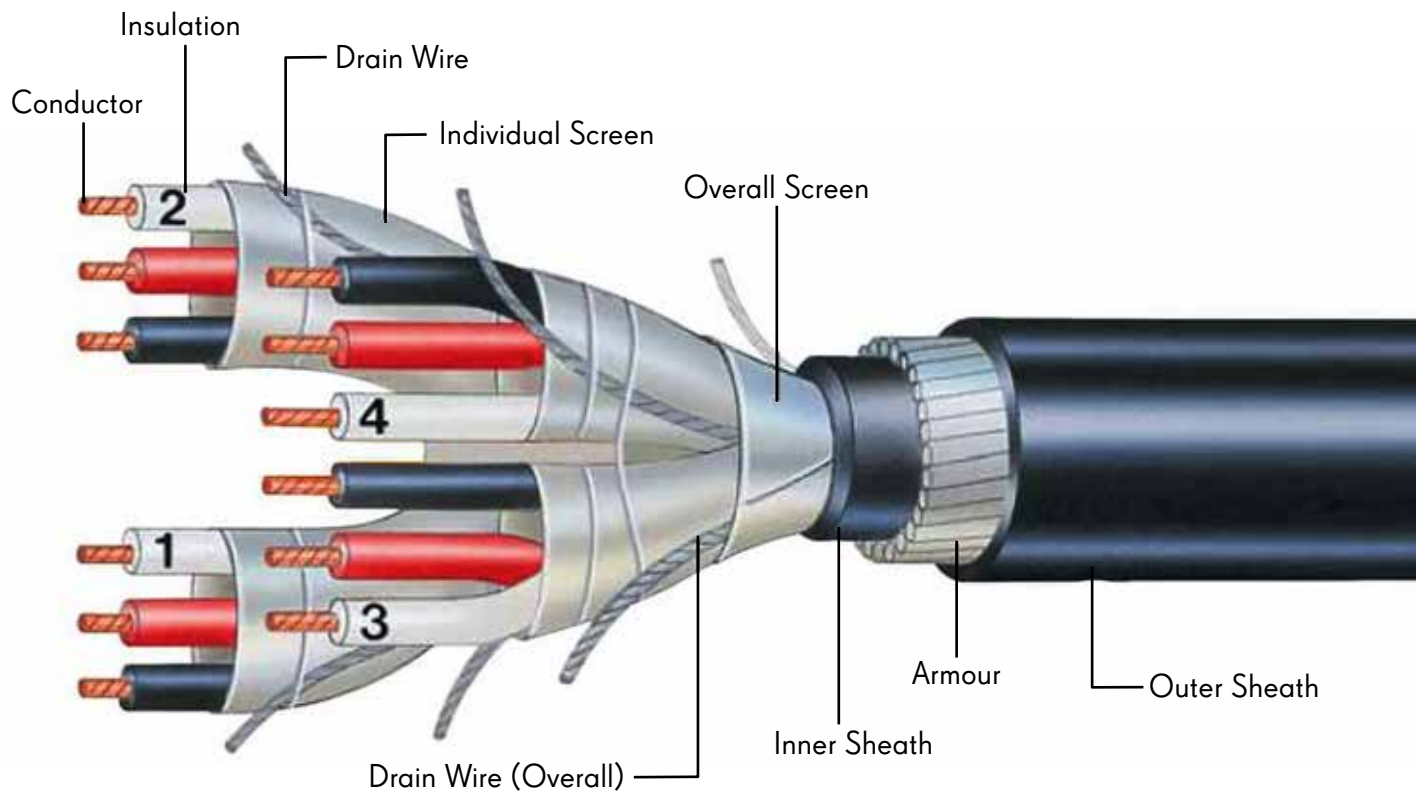


This post provides some meaningful information you ought to know, including types of instrumentation cables. Are you keen to find the best signal-transmitting wire that offers protection against interruption and interference? This is the best place to be.

WHAT IS AN INSTRUMENTATION CABLE?

An instrumentation cable is a cable that consists of several conductors whose purpose is to convey low-energy electric signals. Cables and electrical wires take up a plethora of responsibilities in various industrial applications. For example, they transmit electrical power, signals, or data. Generally, a cable is structured depending on its intended application and is equipped with different forms of protective elements.

Instrumentation cable manufacturers build these cable types to offer adequate shielding against any form of external signal interference. Their core function is to monitor and regulate various electric systems and their associated processes. Essentially, they assist in facilitating the smooth functioning of different industrial processes. It is also crucial to note that these cable types are typically applicable in microprocessor grounded and computer-based instrumented systems.



These cables come in handy in many control and communication applications because they are immune to external interruptions and interferences. They come in handy in process regulation, relay of analog or digital signals, voice transmissions, signal relays, and control circuitry. It would be best to settle for a flexible instrumentation cable due to the nature of its applications. This is the best cable to go for if you desire a signal transmission cable for the process, petrochemical, fertilizer and steel industries.

What Are The Types Of Instrumentation Cables?

Typically, instrumentation cables are applicable in a wide array of industries. They are suited for harsh environments and have outstanding electrical, thermal, and corporeal features. However, they come in different assortments depending on insulation material and mode of shielding. Here is a comprehensive outline of different instrumentation cable types;

(1) PVC instrument cable (individual and overall shielded variants)

As the name suggests, this cable variation comprises a Polyvinyl Chloride (PVC) outer coating. PVC is arguably the most popular thermoplastic insulation material owing to its impeccable features. The material is characteristically resistant to fire, any form of scrape, and moisture. The cable's conductor material is copper, which is known for its top-notch electrical conductivity. More importantly, it meets several essential cable construction standards, including BS-EN-50288.

(2) XLPE instrument cable (individual and overall shielded variants)

The XLPE instrumentation cable is constructed with top-of-the-line thermal and moisture resistant cross-linked polyethylene material. This type of insulation material features strong molecular three-dimensional bond structures. The wire can withstand any form of external adversity, including exposure to UV rays and oil. Like the PVC instrumentation cable, the cable's construction consists of highly flexible stranded copper conductors for maximum electrical conductivity.

Regardless of the instrumentation cable types you opt for. You have to remember that there are different shielding methods. The shielding variations for this type of cable include;

(3) Overall Shielded Pairs/Triads

(4) Individual Shielded Pairs/Triads

What Is The Difference Between Instrumentation Cable And Control Cable?

Most people, especially those that lack electrical cable expertise, confuse an instrumentation-type cable with a control cable. This confusion often arises because control wires belong to the instrumentation cable family. It is important to remember that there are some vital differences between these two cables when shopping for an ideal option.

The core difference between these cables rests in their usage. Control cables are typically helpful in situations that require larger wires that can withstand colossal electrical currents. Unlike KVV cables, instrumentation-type cables have a smaller diameter and have stranded conductors that guarantee maximum flexibility. Consequently, it is advisable to go for a flexible instrumentation cable if you intend to perform wiring applications that require maximum flexibility.

Also, instrumentation cables have shields to stop any electromagnetic interference that might impair their functionality. Generally, there are two types of shielding that cable manufacturers use: foil-type shielding and braid-type shielding. Unlike a control cable whose circuit does not require shielding, a shielded instrumentation cable is vital for all instrumentation applications.

Which Instrumentation Cable Is Ideal For The Chemical And Fertilizer Industry

Apart from the instrumentation cable size, you ought to consider the cable type when selecting an ideal choice. Most people find it challenging to pick out the perfect option for the chemical and fertilizer industry. Typically, cables used in these industries face several hazards. There are two types of instrumentation cables, namely, PVC and XLPE. So, which is the ideal instrument cable option for the chemical and fertilizer industry?

It would be best to use a PVC instrument cable for such environments. Polyvinyl Chloride is a thermoplastic material generated through the polymerization process. This process produces insulation material resistant to flames, fires, repeated abrasions and moisture.

PVC is also known for being lightweight, resistant to corrosion, weathering and chemicals. Consequently, a PVC insulated cable is the ideal option for the Chemical and fertilizer industries. However, you need to check the instrumentation cable specification and ensure that it suits your specific application.

Nyloram (Alternate of Lead Sheathed cable)

- The use of low voltage cables in petrochemical field and refineries, is playing, in recent years, a large share of the market of cables. The use of electrical cables, in a typical petrochemical plant, can reach lengths of up to 4000 km, and these cables must ensure a high efficiency and a resistance to breakage and chemical agents. If these features are not guaranteed, the safety of entire system could be put at risk.
- The main international regulatory bodies have written standards, refer to these types of cables, eliminating the chemical and the mechanical problem introducing the lead covering. Unfortunately this is not enough. What we are experiencing now is a time when the markets are trying to economize and to make an impact as much as possible "clean" on environment, condemning all hazardous substances to a short life.
- Lead is, as we all have learned over years, very strong material, but also very polluting when directly buried, and no long disposable because need to be recycled.
- In this way a number of oil Companies and governments are already demanding lead-free cables for both new projects and upgrades.
- Usually, a lead inner sheath is used as a protection against hydrocarbon (gasoline, diesel fuel and motor oil) and as a moisture barrier.
- The drawback of the lead sheath is mainly its heavy weight and potential health danger.
- Nowadays an alternative exists to get a lighter, healthier cable without loose protection capability.



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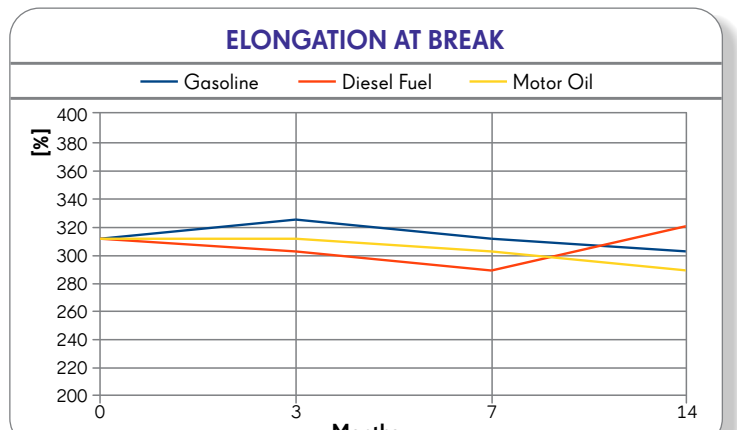
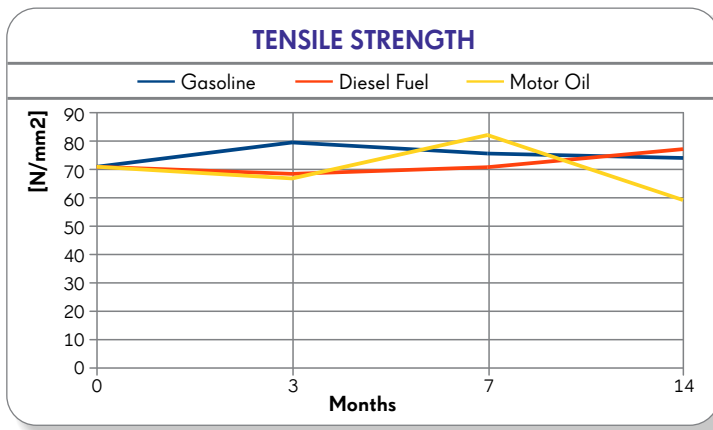
That is possible using a polyamide inner sheath. Polyamide has a good chemical resistance against hydrocarbon (comparable to lead), greater mechanical characteristics (specially against lateral compression (crush)) and less weight.

TESTS:

RAMCRO has conducted tests to verify mechanical behaviour of polyamide after some days of immersion in hydrocarbon. Some samples were immersed into the following fluid

- Gasoline
- Diesel Fuel
- Motor Oil

At interval of 3, 7, 14 months part of the samples were removed from the fluids, a dumbbell specimen was cutted from the polyamide sheath and tested for tensile strength and elongation. The results are shown in the following diagrams:



Conclusions:

As shown, polyamide show good behaviour against hydrocarbons often present in petrochemical plant. As additional protection against water, a moisture barrier is usually used made by an aluminium tape bonded to the inner sheath and with the region of overlap bonded as well.



Cable indications for RAMCROIL VAP-GAS BARRIER Fully Filled in according to IEC 60079-14

- This standard 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, 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.
- This standard replaces the IEC 60079-14: 2010-02 which remains applicable until 02/01/2017 and constitutes a technical revision.

The indications about the cable must be as the follow:

1. THE CABLE ENTRY SYSTEM

Shall comply with the IEC 60079-1 indications

Cable entry device in compliance with IEC 79-1 "Construction and verification test of flameproof enclosures of electrical apparatus" and particular type of cable intended for use with that device.

On condition the cable gland is not certified as part of the equipment but tested and certified as a separate component and the used cable is substantially compact and circular the selection chart above taken from section 10 of EN/ IEC60079- 1 can be used.

2. CABLE CONSTRUCTION

Should be Round

In order to comply with IEC installation standards, cable glands using elastomeric sealing rings as a means of maintaining the Flameproof protection method can only be used if the cable selected is:

"Substantially compact and circular with an extruded bedding, and if any fillers are used they are Non-Hygroscopic"
This is clearly not always the case with cables used in hazardous areas.

But the cable must play a part in the safety of the installation, even in the case of indirect cable entry, when gas migration must be avoided.

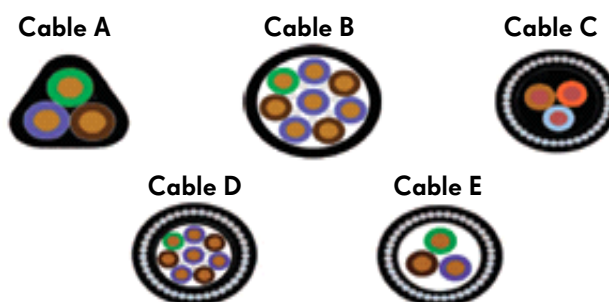
e.g., where cables run across two zones, or indeed from a hazardous area into a safe area.



3. SAMPLE IEC CABLE CONFIGURATIONS

Which type is suitable for use with Flameproof Ex d equipment when a cable gland with an elastomeric sealing ring would be considered?

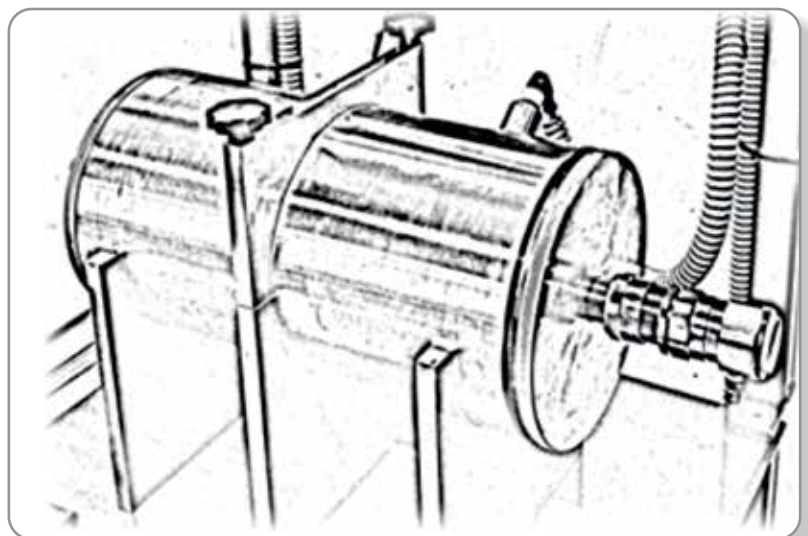
Thermoset, thermosetting or elastomeric cable which is substantially compact and circular, has extruded bedding and fillers, if any, are non-hygroscopic, may utilize flameproof cable entry devices, incorporating a sealing ring selected in accordance with figure 1,



Cable indications for RAMCROIL VAP-GAS BARRIER Fully Filled in according to IEC 60079-14

- Cable A is not suitable to apply a Flameproof sealing ring as this cable is the incorrect shape, and unless the cable is round the sealing ring will not be able to make an effective seal on the cable.
- Cables B, D & E are not suitable to apply a Flameproof sealing ring, as the white areas represent a gap or void in the cable whereby there is either no inner cable sheath, or extruded bedding, or suitable fillers are absent. In this case no protection to the interstices of the cable can be offered by a sealing ring.
- Cable C is the only one of the five sample cables illustrated which could be selected as correctly meeting the IEC 60079-14 criteria, as it has an extruded inner cable bedding and there is no gas migration path between the conductors.
- Equally, if the cable is not adequately filled, and allows the passage of air or gas to flow along the cable length then there would be no protection to the inner part of the cable when an elastomeric sealing ring is used.
- In this case a compound barrier type cable gland is the only safe solution and this is needed to maintain the integrity of the equipment as explained above, and prevent gas migration from equipment to equipment, or hazardous areas to safe areas.
- Now a new addition to the Annex E inside the IEC/EN 60079-14, provides a test method that can confirm the appropriate- ness of the combination cable with strain relief with sealing ring. This appendix describes the verification process cables for tightness to prevent "leakage" of gases between the cores and the eventual transfer of the flame blast through cable.
- The test is carried out on a sample of cable length 0.5 m that attaches to a completely closed and sealed housing volume 5 l (± 2 liters), under conditions of stable ambient temperature. It is believed that the particular pattern satisfied if the initial pressure of 0.3 kPa within housing is reduced by less than 0.15 kPa within 5 s. The housing must be sealed effectively to reduce pressure losses through the casing bands.
- Ex-Agency provided a laboratory for the described test method and has already conducted several tests for the end Users.

Laboratory testing Ex 'd' entries with sealing ring and cable Ex- Area according to Appendix E of the fifth edition of IEC 60079-14.



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EN 50288-7 90 V / 300 V / 500 V

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RE-2Y(St)Y

RAMCRO - EN 50288-7 RE-2Y(St)Y

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Poliiolefin Base FR - PO

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

Pair : ○ ●

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 90/300/500 V |

STANDARD REFERENCES

- EN 50288-7
- EN 60228
- EN 50288-1
- HD 383
- EN 50290-2
- IEC 60331-1
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant

RE-2Y(St)Y - 90V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0150HDADN-RE9 | 1x2x0,50 | 4,4 | 30 | 37,5 |
| MAS0250HDADN-RE9 | 2x2x0,50 | 6,2 | 51 | 37,5 |
| MAS0450HDADN-RE9 | 4x2x0,50 | 7,2 | 80 | 37,5 |
| MAS0650HDADN-RE9 | 6x2x0,50 | 8,5 | 110 | 37,5 |
| MAS0850HDADN-RE9 | 8x2x0,50 | 9,4 | 140 | 37,5 |
| MAS1050HDADN-RE9 | 10x2x0,50 | 10,8 | 173 | 37,5 |
| MAS1250HDADN-RE9 | 12x2x0,50 | 11,2 | 199 | 37,5 |
| MAS1650HDADN-RE9 | 16x2x0,50 | 12,4 | 255 | 37,5 |
| MAS2050HDADN-RE9 | 20x2x0,50 | 14,0 | 313 | 37,5 |
| MAS2450HDADN-RE9 | 24x2x0,50 | 15,4 | 372 | 37,5 |
| MAS0175HDADN-RE9 | 1x2x0,75 | 4,8 | 37 | 25,5 |
| MAS0275HDADN-RE9 | 2x2x0,75 | 6,9 | 65 | 25,5 |
| MAS0475HDADN-RE9 | 4x2x0,75 | 8,0 | 104 | 25,5 |
| MAS0675HDADN-RE9 | 6x2x0,75 | 9,5 | 145 | 25,5 |
| MAS0875HDADN-RE9 | 8x2x0,75 | 10,5 | 185 | 25,5 |
| MAS1075HDADN-RE9 | 10x2x0,75 | 12,2 | 230 | 25,5 |
| MAS1275HDADN-RE9 | 12x2x0,75 | 12,6 | 266 | 25,5 |
| MAS1675HDADN-RE9 | 16x2x0,75 | 14,0 | 342 | 25,5 |
| MAS2075HDADN-RE9 | 20x2x0,75 | 15,8 | 422 | 25,5 |
| MAS2475HDADN-RE9 | 24x2x0,75 | 17,5 | 502 | 25,5 |
| MAS0110HDADN-RE9 | 1x2x1,00 | 5,5 | 47 | 18,8 |
| MAS0210HDADN-RE9 | 2x2x1,00 | 8,0 | 84 | 18,8 |
| MAS0410HDADN-RE9 | 4x2x1,00 | 9,3 | 138 | 18,8 |
| MAS0610HDADN-RE9 | 6x2x1,00 | 11,2 | 196 | 18,8 |
| MAS0810HDADN-RE9 | 8x2x1,00 | 12,4 | 250 | 18,8 |
| MAS1010HDADN-RE9 | 10x2x1,00 | 14,4 | 312 | 18,8 |
| MAS1210HDADN-RE9 | 12x2x1,00 | 14,9 | 360 | 18,8 |
| MAS1610HDADN-RE9 | 16x2x1,00 | 16,7 | 466 | 18,8 |
| MAS2010HDADN-RE9 | 20x2x1,00 | 18,8 | 577 | 18,8 |
| MAS2410HDADN-RE9 | 24x2x1,00 | 20,8 | 688 | 18,8 |
| MAS0115HDADN-RE9 | 1x2x1,50 | 6,1 | 60 | 12,6 |
| MAS0215HDADN-RE9 | 2x2x1,50 | 9,0 | 110 | 12,6 |
| MAS0415HDADN-RE9 | 4x2x1,50 | 10,5 | 185 | 12,6 |
| MAS0615HDADN-RE9 | 6x2x1,50 | 12,7 | 352 | 12,6 |
| MAS0815HDADN-RE9 | 8x2x1,50 | 14,0 | 340 | 12,6 |
| MAS1015HDADN-RE9 | 10x2x1,50 | 16,3 | 425 | 12,6 |
| MAS1215HDADN-RE9 | 12x2x1,50 | 16,9 | 495 | 12,6 |
| MAS1615HDADN-RE9 | 16x2x1,50 | 18,9 | 642 | 12,6 |
| MAS2015HDADN-RE9 | 20x2x1,50 | 21,4 | 797 | 12,6 |
| MAS2415HDADN-RE9 | 24x2x1,50 | 23,7 | 952 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y - 300V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0150HDADN-RE3 | 1x2x0,50 | 4,7 | 32 | 37,5 |
| MAS0250HDADN-RE3 | 2x2x0,50 | 6,6 | 55 | 37,5 |
| MAS0450HDADN-RE3 | 4x2x0,50 | 7,7 | 86 | 37,5 |
| MAS0650HDADN-RE3 | 6x2x0,50 | 9,1 | 120 | 37,5 |
| MAS0850HDADN-RE3 | 8x2x0,50 | 10,1 | 150 | 37,5 |
| MAS1050HDADN-RE3 | 10x2x0,50 | 11,7 | 186 | 37,5 |
| MAS1250HDADN-RE3 | 12x2x0,50 | 12,1 | 212 | 37,5 |
| MAS1650HDADN-RE3 | 16x2x0,50 | 13,4 | 272 | 37,5 |
| MAS2050HDADN-RE3 | 20x2x0,50 | 15,1 | 335 | 37,5 |
| MAS2450HDADN-RE3 | 24x2x0,50 | 16,7 | 399 | 37,5 |
| MAS0175HDADN-RE3 | 1x2x0,75 | 5,1 | 39 | 25,5 |
| MAS0275HDADN-RE3 | 2x2x0,75 | 7,3 | 69 | 25,5 |
| MAS0475HDADN-RE3 | 4x2x0,75 | 8,5 | 110 | 25,5 |
| MAS0675HDADN-RE3 | 6x2x0,75 | 10,2 | 155 | 25,5 |
| MAS0875HDADN-RE3 | 8x2x0,75 | 11,2 | 196 | 25,5 |
| MAS1075HDADN-RE3 | 10x2x0,75 | 13,0 | 244 | 25,5 |
| MAS1275HDADN-RE3 | 12x2x0,75 | 13,5 | 282 | 25,5 |
| MAS1675HDADN-RE3 | 16x2x0,75 | 15,0 | 363 | 25,5 |
| MAS2075HDADN-RE3 | 20x2x0,75 | 17,0 | 448 | 25,5 |
| MAS2475HDADN-RE3 | 24x2x0,75 | 18,8 | 533 | 25,5 |
| MAS0110HDADN-RE3 | 1x2x1,00 | 5,5 | 47 | 18,8 |
| MAS0210HDADN-RE3 | 2x2x1,00 | 8,0 | 84 | 18,8 |
| MAS0410HDADN-RE3 | 4x2x1,00 | 9,3 | 138 | 18,8 |
| MAS0610HDADN-RE3 | 6x2x1,00 | 11,2 | 196 | 18,8 |
| MAS0810HDADN-RE3 | 8x2x1,00 | 12,4 | 250 | 18,8 |
| MAS1010HDADN-RE3 | 10x2x1,00 | 14,4 | 311 | 18,8 |
| MAS1210HDADN-RE3 | 12x2x1,00 | 14,9 | 360 | 18,8 |
| MAS1610HDADN-RE3 | 16x2x1,00 | 16,7 | 466 | 18,8 |
| MAS2010HDADN-RE3 | 20x2x1,00 | 18,8 | 576 | 18,8 |
| MAS2410HDADN-RE3 | 24x2x1,00 | 20,8 | 688 | 18,8 |
| MAS0115HDADN-RE3 | 1x2x1,50 | 6,2 | 60 | 12,6 |
| MAS0215HDADN-RE3 | 2x2x1,50 | 9,1 | 111 | 12,6 |
| MAS0415HDADN-RE3 | 4x2x1,50 | 10,7 | 187 | 12,6 |
| MAS0615HDADN-RE3 | 6x2x1,50 | 12,9 | 269 | 12,6 |
| MAS0815HDADN-RE3 | 8x2x1,50 | 14,3 | 346 | 12,6 |
| MAS1015HDADN-RE3 | 10x2x1,50 | 16,7 | 432 | 12,6 |
| MAS1215HDADN-RE3 | 12x2x1,50 | 17,3 | 502 | 12,6 |
| MAS1615HDADN-RE3 | 16x2x1,50 | 19,3 | 653 | 12,6 |
| MAS2015HDADN-RE3 | 20x2x1,50 | 21,9 | 810 | 12,6 |
| MAS2415HDADN-RE3 | 24x2x1,50 | 24,2 | 968 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm² - 300V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y - 500V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0175HDADN-RE5 | 1x2x0,75 | 5,3 | 40 | 22.5 |
| MAS0275HDADN-RE5 | 2x2x0,75 | 7,6 | 72 | 22.5 |
| MAS0475HDADN-RE5 | 4x2x0,75 | 8,9 | 115 | 22.5 |
| MAS0675HDADN-RE5 | 6x2x0,75 | 10,6 | 162 | 22.5 |
| MAS0875HDADN-RE5 | 8x2x0,75 | 11,8 | 205 | 22.5 |
| MAS1075HDADN-RE5 | 10x2x0,75 | 13,6 | 255 | 22.5 |
| MAS1275HDADN-RE5 | 12x2x0,75 | 14,1 | 294 | 22.5 |
| MAS1675HDADN-RE5 | 16x2x0,75 | 15,8 | 378 | 22.5 |
| MAS2075HDADN-RE5 | 20x2x0,75 | 17,8 | 465 | 22.5 |
| MAS2475HDADN-RE5 | 24x2x0,75 | 19,7 | 556 | 22.5 |
| MAS0110HDADN-RE5 | 1x2x1,00 | 5,7 | 49 | 18.8 |
| MAS0210HDADN-RE5 | 2x2x1,00 | 8,3 | 88 | 18.8 |
| MAS0410HDADN-RE5 | 4x2x1,00 | 9,7 | 143 | 18.8 |
| MAS0610HDADN-RE5 | 6x2x1,00 | 11,7 | 204 | 18.8 |
| MAS0810HDADN-RE5 | 8x2x1,00 | 12,9 | 300 | 18.8 |
| MAS1010HDADN-RE5 | 10x2x1,00 | 15,1 | 324 | 18.8 |
| MAS1210HDADN-RE5 | 12x2x1,00 | 15,6 | 375 | 18.8 |
| MAS1610HDADN-RE5 | 16x2x1,00 | 17,4 | 484 | 18.8 |
| MAS2010HDADN-RE5 | 20x2x1,00 | 19,7 | 600 | 18.8 |
| MAS2410HDADN-RE5 | 24x2x1,00 | 21,8 | 715 | 18.8 |
| MAS0115HDADN-RE5 | 1x2x1,50 | 6,3 | 62 | 12.6 |
| MAS0215HDADN-RE5 | 2x2x1,50 | 9,3 | 114 | 12.6 |
| MAS0415HDADN-RE5 | 4x2x1,50 | 10,9 | 191 | 12.6 |
| MAS0615HDADN-RE5 | 6x2x1,50 | 13,1 | 274 | 12.6 |
| MAS0815HDADN-RE5 | 8x2x1,50 | 14,6 | 351 | 12.6 |
| MAS1015HDADN-RE5 | 10x2x1,50 | 17,0 | 439 | 12.6 |
| MAS1215HDADN-RE5 | 12x2x1,50 | 17,6 | 510 | 12.6 |
| MAS1615HDADN-RE5 | 16x2x1,50 | 19,7 | 663 | 12.6 |
| MAS2015HDADN-RE5 | 20x2x1,50 | 22,2 | 822 | 12.6 |
| MAS2415HDADN-RE5 | 24x2x1,50 | 24,7 | 983 | 12.6 |
| MAS0125HDADN-RE5 | 1x2x2,50 | 7,5 | 89 | 7.7 |
| MAS0225HDADN-RE5 | 2x2x2,50 | 11,2 | 167 | 7.7 |
| MAS0425HDADN-RE5 | 4x2x2,50 | 13,2 | 288 | 7.7 |
| MAS0625HDADN-RE5 | 6x2x2,50 | 16,0 | 418 | 7.7 |
| MAS0825HDADN-RE5 | 8x2x2,50 | 17,8 | 540 | 7.7 |
| MAS1025HDADN-RE5 | 10x2x2,50 | 20,8 | 678 | 7.7 |
| MAS1225HDADN-RE5 | 12x2x2,50 | 21,6 | 791 | 7.7 |
| MAS1625HDADN-RE5 | 16x2x2,50 | 24,2 | 1031 | 7.7 |
| MAS2025HDADN-RE5 | 20x2x2,50 | 27,4 | 1283 | 7.7 |
| MAS2425HDADN-RE5 | 24x2x2,50 | 30,4 | 1536 | 7.7 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm² - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y-Pimf

RAMCRO - EN 50288-7 RE-2Y(St)Y-Pimf

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Poliiolefin Base FR - PO

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- EN 50288-7
- EN 60228
- EN 50288-1
- HD 383
- EN 50290-2
- IEC 60331-1
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 90/300/500 V |

IDENTIFICATION OF CORES

Pair : ○ ● + Yellow Numbered Tapes

RE-2Y(St)Y-Pimf - 90V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0250HDADN-RE9 | 2x2x0,50 | 6,6 | 60 | 37.5 |
| MAC0450HDADN-RE9 | 4x2x0,50 | 7,6 | 95 | 37.5 |
| MAC0650HDADN-RE9 | 6x2x0,50 | 9,1 | 134 | 37.5 |
| MAC0850HDADN-RE9 | 8x2x0,50 | 10,0 | 170 | 37.5 |
| MAC1050HDADN-RE9 | 10x2x0,50 | 11,6 | 211 | 37.5 |
| MAC1250HDADN-RE9 | 12x2x0,50 | 12,0 | 243 | 37.5 |
| MAC1650HDADN-RE9 | 16x2x0,50 | 13,4 | 313 | 37.5 |
| MAC2050HDADN-RE9 | 20x2x0,50 | 15,0 | 386 | 37.5 |
| MAC2450HDADN-RE9 | 24x2x0,50 | 16,6 | 459 | 37.5 |
| MAC0275HDADN-RE9 | 2x2x0,75 | 7,3 | 74 | 25.5 |
| MAC0475HDADN-RE9 | 4x2x0,75 | 8,5 | 119 | 25.5 |
| MAC0675HDADN-RE9 | 6x2x0,75 | 10,1 | 169 | 25.5 |
| MAC0875HDADN-RE9 | 8x2x0,75 | 11,2 | 216 | 25.5 |
| MAC1075HDADN-RE9 | 10x2x0,75 | 13,0 | 269 | 25.5 |
| MAC1275HDADN-RE9 | 12x2x0,75 | 13,4 | 311 | 25.5 |
| MAC1675HDADN-RE9 | 16x2x0,75 | 15,0 | 401 | 25.5 |
| MAC2075HDADN-RE9 | 20x2x0,75 | 16,9 | 496 | 25.5 |
| MAC2475HDADN-RE9 | 24x2x0,75 | 18,7 | 591 | 25.5 |
| MAC0210HDADN-RE9 | 2x2x1,00 | 8,4 | 94 | 18.8 |
| MAC0410HDADN-RE9 | 4x2x1,00 | 9,8 | 156 | 18.8 |
| MAC0610HDADN-RE9 | 6x2x1,00 | 11,8 | 224 | 18.8 |
| MAC0810HDADN-RE9 | 8x2x1,00 | 13,1 | 286 | 18.8 |
| MAC1010HDADN-RE9 | 10x2x1,00 | 15,2 | 357 | 18.8 |
| MAC1210HDADN-RE9 | 12x2x1,00 | 15,8 | 414 | 18.8 |
| MAC1610HDADN-RE9 | 16x2x1,00 | 17,6 | 537 | 18.8 |
| MAC2010HDADN-RE9 | 20x2x1,00 | 19,9 | 665 | 18.8 |
| MAC2410HDADN-RE9 | 24x2x1,00 | 22,0 | 794 | 18.8 |
| MAC0215HDADN-RE9 | 2x2x1,50 | 9,4 | 120 | 12.6 |
| MAC0415HDADN-RE9 | 4x2x1,50 | 11,0 | 203 | 12.6 |
| MAC0615HDADN-RE9 | 6x2x1,50 | 13,2 | 293 | 12.6 |
| MAC0815HDADN-RE9 | 8x2x1,50 | 14,7 | 377 | 12.6 |
| MAC1015HDADN-RE9 | 10x2x1,50 | 17,1 | 472 | 12.6 |
| MAC1215HDADN-RE9 | 12x2x1,50 | 17,8 | 549 | 12.6 |
| MAC1615HDADN-RE9 | 16x2x1,50 | 19,9 | 714 | 12.6 |
| MAC2015HDADN-RE9 | 20x2x1,50 | 22,5 | 886 | 12.6 |
| MAC2415HDADN-RE9 | 24x2x1,50 | 24,9 | 1060 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y - Pimf - 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y-Pimf - 300V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0250HDADN-RE3 | 2x2x0,50 | 7,0 | 65 | 37.5 |
| MAC0450HDADN-RE3 | 4x2x0,50 | 8,1 | 101 | 37.5 |
| MAC0650HDADN-RE3 | 6x2x0,50 | 9,7 | 143 | 37.5 |
| MAC0850HDADN-RE3 | 8x2x0,50 | 10,7 | 180 | 37.5 |
| MAC1050HDADN-RE3 | 10x2x0,50 | 12,5 | 225 | 37.5 |
| MAC1250HDADN-RE3 | 12x2x0,50 | 12,9 | 258 | 37.5 |
| MAC1650HDADN-RE3 | 16x2x0,50 | 14,4 | 332 | 37.5 |
| MAC2050HDADN-RE3 | 20x2x0,50 | 16,2 | 409 | 37.5 |
| MAC2450HDADN-RE3 | 24x2x0,50 | 17,9 | 487 | 37.5 |
| MAC0275HDADN-RE3 | 2x2x0,75 | 7,7 | 78 | 25.5 |
| MAC0475HDADN-RE3 | 4x2x0,75 | 9,0 | 126 | 25.5 |
| MAC0675HDADN-RE3 | 6x2x0,75 | 10,8 | 179 | 25.5 |
| MAC0875HDADN-RE3 | 8x2x0,75 | 11,9 | 227 | 25.5 |
| MAC1075HDADN-RE3 | 10x2x0,75 | 13,8 | 283 | 25.5 |
| MAC1275HDADN-RE3 | 12x2x0,75 | 14,3 | 327 | 25.5 |
| MAC1675HDADN-RE3 | 16x2x0,75 | 16,0 | 422 | 25.5 |
| MAC2075HDADN-RE3 | 20x2x0,75 | 18,0 | 522 | 25.5 |
| MAC2475HDADN-RE3 | 24x2x0,75 | 20,0 | 622 | 25.5 |
| MAC0210HDADN-RE3 | 2x2x1,00 | 8,4 | 94 | 18.8 |
| MAC0410HDADN-RE3 | 4x2x1,00 | 9,8 | 156 | 18.8 |
| MAC0610HDADN-RE3 | 6x2x1,00 | 11,8 | 224 | 18.8 |
| MAC0810HDADN-RE3 | 8x2x1,00 | 13,1 | 286 | 18.8 |
| MAC1010HDADN-RE3 | 10x2x1,00 | 15,2 | 357 | 18.8 |
| MAC1210HDADN-RE3 | 12x2x1,00 | 15,8 | 414 | 18.8 |
| MAC1610HDADN-RE3 | 16x2x1,00 | 17,6 | 537 | 18.8 |
| MAC2010HDADN-RE3 | 20x2x1,00 | 19,9 | 665 | 18.8 |
| MAC2410HDADN-RE3 | 24x2x1,00 | 22,0 | 794 | 18.8 |
| MAC0215HDADN-RE3 | 2x2x1,50 | 9,5 | 122 | 12.6 |
| MAC0415HDADN-RE3 | 4x2x1,50 | 11,2 | 207 | 12.6 |
| MAC0615HDADN-RE3 | 6x2x1,50 | 13,5 | 298 | 12.6 |
| MAC0815HDADN-RE3 | 8x2x1,50 | 15,0 | 383 | 12.6 |
| MAC1015HDADN-RE3 | 10x2x1,50 | 17,5 | 479 | 12.6 |
| MAC1215HDADN-RE3 | 12x2x1,50 | 18,1 | 558 | 12.6 |
| MAC1615HDADN-RE3 | 16x2x1,50 | 20,3 | 725 | 12.6 |
| MAC2015HDADN-RE3 | 20x2x1,50 | 22,9 | 900 | 12.6 |
| MAC2415HDADN-RE3 | 24x2x1,50 | 25,4 | 1076 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y-Pimf - 1x2x2,5 mm² - 300V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y-Pimf - 500V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0275HDADN-RE5 | 2x2x0,75 | 8,0 | 80 | 37.5 |
| MAC0475HDADN-RE5 | 4x2x0,75 | 9,3 | 130 | 37.5 |
| MAC0675HDADN-RE5 | 6x2x0,75 | 11,2 | 185 | 37.5 |
| MAC0875HDADN-RE5 | 8x2x0,75 | 12,4 | 236 | 37.5 |
| MAC1075HDADN-RE5 | 10x2x0,75 | 14,4 | 294 | 37.5 |
| MAC1275HDADN-RE5 | 12x2x0,75 | 14,7 | 335 | 37.5 |
| MAC1675HDADN-RE5 | 16x2x0,75 | 15,0 | 340 | 37.5 |
| MAC2075HDADN-RE5 | 20x2x0,75 | 18,8 | 541 | 37.5 |
| MAC2475HDADN-RE5 | 24x2x0,75 | 20,9 | 645 | 37.5 |
| MAC0210HDADN-RE5 | 2x2x1,00 | 8,7 | 98 | 25.5 |
| MAC0410HDADN-RE5 | 4x2x1,00 | 10,2 | 161 | 25.5 |
| MAC0610HDADN-RE5 | 6x2x1,00 | 12,3 | 232 | 25.5 |
| MAC0810HDADN-RE5 | 8x2x1,00 | 13,6 | 296 | 25.5 |
| MAC1010HDADN-RE5 | 10x2x1,00 | 15,9 | 370 | 25.5 |
| MAC1210HDADN-RE5 | 12x2x1,00 | 16,4 | 429 | 25.5 |
| MAC1610HDADN-RE5 | 16x2x1,00 | 18,4 | 555 | 25.5 |
| MAC2010HDADN-RE5 | 20x2x1,00 | 20,7 | 688 | 25.5 |
| MAC2410HDADN-RE5 | 24x2x1,00 | 23,0 | 821 | 25.5 |
| MAC0215HDADN-RE5 | 2x2x1,50 | 9,7 | 124 | 18.8 |
| MAC0415HDADN-RE5 | 4x2x1,50 | 11,4 | 209 | 18.8 |
| MAC0615HDADN-RE5 | 6x2x1,50 | 13,7 | 302 | 18.8 |
| MAC0815HDADN-RE5 | 8x2x1,50 | 15,2 | 387 | 18.8 |
| MAC1015HDADN-RE5 | 10x2x1,50 | 17,8 | 486 | 18.8 |
| MAC1215HDADN-RE5 | 12x2x1,50 | 18,4 | 564 | 18.8 |
| MAC1615HDADN-RE5 | 16x2x1,50 | 20,6 | 734 | 18.8 |
| MAC2015HDADN-RE5 | 20x2x1,50 | 23,3 | 912 | 18.8 |
| MAC2415HDADN-RE5 | 24x2x1,50 | 25,9 | 1090 | 18.8 |
| MAC0225HDADN-RE5 | 2x2x2,50 | 11,6 | 179 | 12.6 |
| MAC0425HDADN-RE5 | 4x2x2,50 | 13,7 | 310 | 12.6 |
| MAC0625HDADN-RE5 | 6x2x2,50 | 16,6 | 451 | 12.6 |
| MAC0825HDADN-RE5 | 8x2x2,50 | 18,4 | 583 | 12.6 |
| MAC1025HDADN-RE5 | 10x2x2,50 | 21,6 | 731 | 12.6 |
| MAC1225HDADN-RE5 | 12x2x2,50 | 22,4 | 854 | 12.6 |
| MAC1625HDADN-RE5 | 16x2x2,50 | 25,1 | 1115 | 12.6 |
| MAC2025HDADN-RE5 | 20x2x2,50 | 28,4 | 1388 | 12.6 |
| MAC2425HDADN-RE5 | 24x2x2,50 | 31,6 | 1662 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y-Pimf - 1x2x2,5 mm² - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YRY

RAMCRO - EN 50288-7 RE-2Y(St)YRY

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Poliiolefin Base FR - PO

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride FR - PVC

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- EN 50288-7
- EN 60228
- EN 50288-1
- HD 383
- EN 50290-2
- IEC 60331-1
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 90/300/500 V |

IDENTIFICATION OF CORES

Pair : ○ ●

RE-2Y(St)YRY - 90V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAS0150ADADN-RE9 | 1x2x0,50 | 8,8 | 162 | 37,5 |
| MAS0250ADADN-RE9 | 2x2x0,50 | 10,6 | 224 | 37,5 |
| MAS0450ADADN-RE9 | 4x2x0,50 | 11,6 | 276 | 37,5 |
| MAS0650ADADN-RE9 | 6x2x0,50 | 13,1 | 340 | 37,5 |
| MAS0850ADADN-RE9 | 8x2x0,50 | 14,0 | 389 | 37,5 |
| MAS1050ADADN-RE9 | 10x2x0,50 | 15,5 | 460 | 37,5 |
| MAS1250ADADN-RE9 | 12x2x0,50 | 15,9 | 495 | 37,5 |
| MAS1650ADADN-RE9 | 16x2x0,50 | 17,2 | 582 | 37,5 |
| MAS2050ADADN-RE9 | 20x2x0,50 | 18,8 | 680 | 37,5 |
| MAS2450ADADN-RE9 | 24x2x0,50 | 21,1 | 889 | 37,5 |
| MAS0175ADADN-RE9 | 1x2x0,75 | 9,2 | 177 | 25,5 |
| MAS0275ADADN-RE9 | 2x2x0,75 | 11,4 | 255 | 25,5 |
| MAS0475ADADN-RE9 | 4x2x0,75 | 12,5 | 320 | 25,5 |
| MAS0675ADADN-RE9 | 6x2x0,75 | 14,2 | 401 | 25,5 |
| MAS0875ADADN-RE9 | 8x2x0,75 | 15,2 | 465 | 25,5 |
| MAS1075ADADN-RE9 | 10x2x0,75 | 16,9 | 552 | 25,5 |
| MAS1275ADADN-RE9 | 12x2x0,75 | 17,4 | 599 | 25,5 |
| MAS1675ADADN-RE9 | 16x2x0,75 | 18,9 | 712 | 25,5 |
| MAS2075ADADN-RE9 | 20x2x0,75 | 21,5 | 953 | 25,5 |
| MAS2475ADADN-RE9 | 24x2x0,75 | 23,3 | 1088 | 25,5 |
| MAS0110ADADN-RE9 | 1x2x1,00 | 9,9 | 204 | 18,8 |
| MAS0210ADADN-RE9 | 2x2x1,00 | 12,5 | 301 | 18,8 |
| MAS0410ADADN-RE9 | 4x2x1,00 | 13,9 | 387 | 18,8 |
| MAS0610ADADN-RE9 | 6x2x1,00 | 15,9 | 360 | 18,8 |
| MAS0810ADADN-RE9 | 8x2x1,00 | 17,2 | 577 | 18,8 |
| MAS1010ADADN-RE9 | 10x2x1,00 | 19,3 | 691 | 18,8 |
| MAS1210ADADN-RE9 | 12x2x1,00 | 19,8 | 754 | 18,8 |
| MAS1610ADADN-RE9 | 16x2x1,00 | 22,4 | 1025 | 18,8 |
| MAS2010ADADN-RE9 | 20x2x1,00 | 24,7 | 1208 | 18,8 |
| MAS2410ADADN-RE9 | 24x2x1,00 | 26,8 | 1388 | 18,8 |
| MAS0115ADADN-RE9 | 1x2x1,50 | 10,5 | 230 | 12,6 |
| MAS0215ADADN-RE9 | 2x2x1,50 | 13,5 | 350 | 12,6 |
| MAS0415ADADN-RE9 | 4x2x1,50 | 15,2 | 463 | 12,6 |
| MAS0615ADADN-RE9 | 6x2x1,50 | 17,4 | 599 | 12,6 |
| MAS0815ADADN-RE9 | 8x2x1,50 | 18,9 | 709 | 12,6 |
| MAS1015ADADN-RE9 | 10x2x1,50 | 22,1 | 973 | 12,6 |
| MAS1215ADADN-RE9 | 12x2x1,50 | 22,7 | 1062 | 12,6 |
| MAS1615ADADN-RE9 | 16x2x1,50 | 24,8 | 1275 | 12,6 |
| MAS2015ADADN-RE9 | 20x2x1,50 | 27,4 | 1516 | 12,6 |
| MAS2415A DADN-RE9 | 24x2x1,50 | 29,8 | 1752 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YRY - 300V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0150ADADN-RE5 | 1x2x0,50 | 9,0 | 170 | 37,5 |
| MAS0250ADADN-RE5 | 2x2x0,50 | 11,1 | 238 | 37,5 |
| MAS0450ADADN-RE5 | 4x2x0,50 | 12,2 | 293 | 37,5 |
| MAS0650ADADN-RE5 | 6x2x0,50 | 13,7 | 364 | 37,5 |
| MAS0850ADADN-RE5 | 8x2x0,50 | 14,7 | 418 | 37,5 |
| MAS1050ADADN-RE5 | 10x2x0,50 | 16,4 | 494 | 37,5 |
| MAS1250ADADN-RE5 | 12x2x0,50 | 16,8 | 531 | 37,5 |
| MAS1650ADADN-RE5 | 16x2x0,50 | 18,2 | 626 | 37,5 |
| MAS2050ADADN-RE5 | 20x2x0,50 | 20,0 | 734 | 37,5 |
| MAS2450ADADN-RE5 | 24x2x0,50 | 22,4 | 957 | 37,5 |
| MAS0175ADADN-RE5 | 1x2x0,75 | 9,5 | 186 | 25,5 |
| MAS0275ADADN-RE5 | 2x2x0,75 | 11,8 | 269 | 25,5 |
| MAS0475ADADN-RE5 | 4x2x0,75 | 13,1 | 339 | 25,5 |
| MAS0675ADADN-RE5 | 6x2x0,75 | 14,8 | 425 | 25,5 |
| MAS0875ADADN-RE5 | 8x2x0,75 | 15,9 | 494 | 25,5 |
| MAS1075ADADN-RE5 | 10x2x0,75 | 17,8 | 588 | 25,5 |
| MAS1275ADADN-RE5 | 12x2x0,75 | 18,3 | 637 | 25,5 |
| MAS1675ADADN-RE5 | 16x2x0,75 | 20,0 | 759 | 25,5 |
| MAS2075ADADN-RE5 | 20x2x0,75 | 22,7 | 1016 | 25,5 |
| MAS2475ADADN-RE5 | 24x2x0,75 | 24,6 | 1162 | 25,5 |
| MAS0110ADADN-RE5 | 1x2x1,00 | 9,9 | 204 | 18,8 |
| MAS0210ADADN-RE5 | 2x2x1,00 | 12,5 | 301 | 18,8 |
| MAS0410ADADN-RE5 | 4x2x1,00 | 13,9 | 387 | 18,8 |
| MAS0610ADADN-RE5 | 6x2x1,00 | 15,9 | 493 | 18,8 |
| MAS0810ADADN-RE5 | 8x2x1,00 | 17,2 | 577 | 18,8 |
| MAS1010ADADN-RE5 | 10x2x1,00 | 19,3 | 692 | 18,8 |
| MAS1210ADADN-RE5 | 12x2x1,00 | 19,8 | 754 | 18,8 |
| MAS1610ADADN-RE5 | 16x2x1,00 | 22,4 | 1025 | 18,8 |
| MAS2010ADADN-RE5 | 20x2x1,00 | 24,7 | 1208 | 18,8 |
| MAS2410ADADN-RE5 | 24x2x1,00 | 26,8 | 1388 | 18,8 |
| MAS0115ADADN-RE5 | 1x2x1,50 | 10,6 | 234 | 12,6 |
| MAS0215ADADN-RE5 | 2x2x1,50 | 13,7 | 357 | 12,6 |
| MAS0415ADADN-RE5 | 4x2x1,50 | 15,4 | 471 | 12,6 |
| MAS0615ADADN-RE5 | 6x2x1,50 | 17,7 | 610 | 12,6 |
| MAS0815ADADN-RE5 | 8x2x1,50 | 19,2 | 723 | 12,6 |
| MAS1015ADADN-RE5 | 10x2x1,50 | 22,4 | 992 | 12,6 |
| MAS1215ADADN-RE5 | 12x2x1,50 | 23,1 | 1083 | 12,6 |
| MAS1615ADADN-RE5 | 16x2x1,50 | 25,2 | 1301 | 12,6 |
| MAS2015ADADN-RE5 | 20x2x1,50 | 27,9 | 1546 | 12,6 |
| MAS2415ADADN-RE5 | 24x2x1,50 | 30,4 | 1787 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y-Pimf - 1x2x2,5 mm² - 300V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YRY - 500V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Not suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0175HDADN-RE5 | 1x2x0,75 | 9,6 | 192 | 22.5 |
| MAS0275HDADN-RE5 | 2x2x0,75 | 12,1 | 279 | 22.5 |
| MAS0475HDADN-RE5 | 4x2x0,75 | 13,4 | 353 | 22.5 |
| MAS0675HDADN-RE5 | 6x2x0,75 | 15,3 | 444 | 22.5 |
| MAS0875HDADN-RE5 | 8x2x0,75 | 16,5 | 515 | 22.5 |
| MAS1075HDADN-RE5 | 10x2x0,75 | 18,5 | 614 | 22.5 |
| MAS1275HDADN-RE5 | 12x2x0,75 | 19,0 | 666 | 22.5 |
| MAS1675HDADN-RE5 | 16x2x0,75 | 21,4 | 906 | 22.5 |
| MAS2075HDADN-RE5 | 20x2x0,75 | 23,6 | 1062 | 22.5 |
| MAS2475HDADN-RE5 | 24x2x0,75 | 25,6 | 1215 | 22.5 |
| MAS0110HDADN-RE5 | 1x2x1,00 | 10,1 | 210 | 18.8 |
| MAS0210HDADN-RE5 | 2x2x1,00 | 12,9 | 312 | 18.8 |
| MAS0410HDADN-RE5 | 4x2x1,00 | 14,3 | 402 | 18.8 |
| MAS0610HDADN-RE5 | 6x2x1,00 | 16,4 | 512 | 18.8 |
| MAS0810HDADN-RE5 | 8x2x1,00 | 17,7 | 600 | 18.8 |
| MAS1010HDADN-RE5 | 10x2x1,00 | 20,0 | 721 | 18.8 |
| MAS1210HDADN-RE5 | 12x2x1,00 | 21,3 | 898 | 18.8 |
| MAS1610HDADN-RE5 | 16x2x1,00 | 23,2 | 1067 | 18.8 |
| MAS2010HDADN-RE5 | 20x2x1,00 | 25,6 | 1259 | 18.8 |
| MAS2410HDADN-RE5 | 24x2x1,00 | 27,8 | 1447 | 18.8 |
| MAS0115HDADN-RE5 | 1x2x1,50 | 10,7 | 237 | 12.6 |
| MAS0215HDADN-RE5 | 2x2x1,50 | 13,9 | 361 | 12.6 |
| MAS0415HDADN-RE5 | 4x2x1,50 | 15,6 | 478 | 12.6 |
| MAS0615HDADN-RE5 | 6x2x1,50 | 17,9 | 619 | 12.6 |
| MAS0815HDADN-RE5 | 8x2x1,50 | 19,4 | 734 | 12.6 |
| MAS1015HDADN-RE5 | 10x2x1,50 | 22,7 | 1008 | 12.6 |
| MAS1215HDADN-RE5 | 12x2x1,50 | 23,4 | 1099 | 12.6 |
| MAS1615HDADN-RE5 | 16x2x1,50 | 25,6 | 1322 | 12.6 |
| MAS2015HDADN-RE5 | 20x2x1,50 | 28,3 | 1570 | 12.6 |
| MAS2415HDADN-RE5 | 24x2x1,50 | 30,9 | 1816 | 12.6 |
| MAS0125HDADN-RE5 | 1x2x2,50 | 11,9 | 292 | 7.7 |
| MAS0225HDADN-RE5 | 2x2x2,50 | 15,9 | 463 | 7.7 |
| MAS0425HDADN-RE5 | 4x2x2,50 | 18,0 | 634 | 7.7 |
| MAS0625HDADN-RE5 | 6x2x2,50 | 21,7 | 954 | 7.7 |
| MAS0825HDADN-RE5 | 8x2x2,50 | 23,6 | 1135 | 7.7 |
| MAS1025HDADN-RE5 | 10x2x2,50 | 26,8 | 1375 | 7.7 |
| MAS1225HDADN-RE5 | 12x2x2,50 | 27,6 | 1514 | 7.7 |
| MAS1625HDADN-RE5 | 16x2x2,50 | 30,3 | 1846 | 7.7 |
| MAS2025HDADN-RE5 | 20x2x2,50 | 35,3 | 2622 | 7.7 |
| MAS2425HDADN-RE5 | 24x2x2,50 | 38,5 | 3027 | 7.7 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm² - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YRY-Pimf

RAMCRO - EN 50288-7 RE-2Y(St)Y-Pimf

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Poliolefin Base FR - PO

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride FR - PVC

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- EN 50288-7
- EN 60228
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 90/300/500 V |

IDENTIFICATION OF CORES

Pair : ○ ● + Yellow Numbered Tapes

RE-2Y(St)YRY-Pimf - 90V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0250ADADN-RE9 | 2x2x0,50 | 10,9 | 230 | 37,5 |
| MAC0450ADADN-RE9 | 4x2x0,50 | 12,0 | 289 | 37,5 |
| MAC0650ADADN-RE9 | 6x2x0,50 | 13,5 | 361 | 37,5 |
| MAC0850ADADN-RE9 | 8x2x0,50 | 14,5 | 417 | 37,5 |
| MAC1050ADADN-RE9 | 10x2x0,50 | 16,1 | 495 | 37,5 |
| MAC1250ADADN-RE9 | 12x2x0,50 | 16,5 | 537 | 37,5 |
| MAC1650ADADN-RE9 | 16x2x0,50 | 17,9 | 638 | 37,5 |
| MAC2050ADADN-RE9 | 20x2x0,50 | 19,7 | 752 | 37,5 |
| MAC2450ADADN-RE9 | 24x2x0,50 | 22,0 | 974 | 37,5 |
| | | | | |
| MAC0275ADADN-RE9 | 2x2x0,75 | 11,8 | 272 | 25,5 |
| MAC0475ADADN-RE9 | 4x2x0,75 | 13,0 | 347 | 25,5 |
| MAC0675ADADN-RE9 | 6x2x0,75 | 14,8 | 439 | 25,5 |
| MAC0875ADADN-RE9 | 8x2x0,75 | 15,9 | 512 | 25,5 |
| MAC1075ADADN-RE9 | 10x2x0,75 | 17,8 | 611 | 25,5 |
| MAC1275ADADN-RE9 | 12x2x0,75 | 18,3 | 664 | 25,5 |
| MAC1675ADADN-RE9 | 16x2x0,75 | 19,9 | 795 | 25,5 |
| MAC2075ADADN-RE9 | 20x2x0,75 | 22,7 | 1062 | 25,5 |
| MAC2475ADADN-RE9 | 24x2x0,75 | 24,6 | 1217 | 25,5 |
| | | | | |
| MAC0210ADADN-RE9 | 2x2x1,00 | 13,0 | 321 | 18,8 |
| MAC0410ADADN-RE9 | 4x2x1,00 | 14,5 | 418 | 18,8 |
| MAC0610ADADN-RE9 | 6x2x1,00 | 16,6 | 535 | 18,8 |
| MAC0810ADADN-RE9 | 8x2x1,00 | 17,9 | 630 | 18,8 |
| MAC1010ADADN-RE9 | 10x2x1,00 | 20,9 | 868 | 18,8 |
| MAC1210ADADN-RE9 | 12x2x1,00 | 21,5 | 943 | 18,8 |
| MAC1610ADADN-RE9 | 16x2x1,00 | 23,4 | 1126 | 18,8 |
| MAC2010ADADN-RE9 | 20x2x1,00 | 25,8 | 1331 | 18,8 |
| MAC2410ADADN-RE9 | 24x2x1,00 | 28,1 | 1534 | 18,8 |
| | | | | |
| MAC0215ADADN-RE9 | 2x2x1,50 | 14,0 | 370 | 12,6 |
| MAC0415ADADN-RE9 | 4x2x1,50 | 15,7 | 494 | 12,6 |
| MAC0615ADADN-RE9 | 6x2x1,50 | 18,1 | 641 | 12,6 |
| MAC0815ADADN-RE9 | 8x2x1,50 | 19,6 | 763 | 12,6 |
| MAC1015ADADN-RE9 | 10x2x1,50 | 22,9 | 1045 | 12,6 |
| MAC1215ADADN-RE9 | 12x2x1,50 | 23,6 | 1143 | 12,6 |
| MAC1615ADADN-RE9 | 16x2x1,50 | 25,8 | 1378 | 12,6 |
| MAC2015ADADN-RE9 | 20x2x1,50 | 28,6 | 1641 | 12,6 |
| MAC2415HDADN-RE9 | 24x2x1,50 | 31,1 | 1901 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y - Pimf - 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016



RE-2Y(St)YRY-Pimf - 300V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAC0250ADADN-RE3 | 2x2x0,50 | 11,5 | 257 | 37,5 |
| MAC0450ADADN-RE3 | 4x2x0,50 | 12,7 | 321 | 37,5 |
| MAC0650ADADN-RE3 | 6x2x0,50 | 14,4 | 402 | 37,5 |
| MAC0850ADADN-RE3 | 8x2x0,50 | 15,4 | 465 | 37,5 |
| MAC1050ADADN-RE3 | 10x2x0,50 | 17,3 | 553 | 37,5 |
| MAC1250ADADN-RE3 | 12x2x0,50 | 17,7 | 598 | 37,5 |
| MAC1650ADADN-RE3 | 16x2x0,50 | 19,3 | 709 | 37,5 |
| MAC2050ADADN-RE3 | 20x2x0,50 | 21,9 | 951 | 37,5 |
| MAC2450ADADN-RE3 | 24x2x0,50 | 23,7 | 1086 | 37,5 |
| MAC0275ADADN-RE3 | 2x2x0,75 | 12,2 | 287 | 25,5 |
| MAC0475ADADN-RE3 | 4x2x0,75 | 13,6 | 367 | 25,5 |
| MAC0675ADADN-RE3 | 6x2x0,75 | 15,5 | 464 | 25,5 |
| MAC0875ADADN-RE3 | 8x2x0,75 | 16,7 | 541 | 25,5 |
| MAC1075ADADN-RE3 | 10x2x0,75 | 18,7 | 645 | 25,5 |
| MAC1275ADADN-RE3 | 12x2x0,75 | 19,2 | 704 | 25,5 |
| MAC1675ADADN-RE3 | 16x2x0,75 | 21,7 | 958 | 25,5 |
| MAC2075ADADN-RE3 | 20x2x0,75 | 23,9 | 1126 | 25,5 |
| MAC2475ADADN-RE3 | 24x2x0,75 | 25,9 | 1291 | 25,5 |
| MAC0210ADADN-RE3 | 2x2x1,00 | 13,0 | 321 | 18,8 |
| MAC0410ADADN-RE3 | 4x2x1,00 | 14,5 | 418 | 18,8 |
| MAC0610ADADN-RE3 | 6x2x1,00 | 16,6 | 535 | 18,8 |
| MAC0810ADADN-RE3 | 8x2x1,00 | 17,9 | 630 | 18,8 |
| MAC1010ADADN-RE3 | 10x2x1,00 | 20,9 | 868 | 18,8 |
| MAC1210ADADN-RE3 | 12x2x1,00 | 21,5 | 943 | 18,8 |
| MAC1610ADADN-RE3 | 16x2x1,00 | 23,4 | 1126 | 18,8 |
| MAC2010ADADN-RE3 | 20x2x1,00 | 25,8 | 1330 | 18,8 |
| MAC2410ADADN-RE3 | 24x2x1,00 | 28,1 | 1534 | 18,8 |
| MAC0215ADADN-RE3 | 2x2x1,50 | 14,2 | 377 | 12,6 |
| MAC0415ADADN-RE3 | 4x2x1,50 | 15,9 | 502 | 12,6 |
| MAC0615ADADN-RE3 | 6x2x1,50 | 18,4 | 653 | 12,6 |
| MAC0815ADADN-RE3 | 8x2x1,50 | 19,9 | 777 | 12,6 |
| MAC1015ADADN-RE3 | 10x2x1,50 | 23,3 | 1064 | 12,6 |
| MAC1215ADADN-RE3 | 12x2x1,50 | 24,0 | 1164 | 12,6 |
| MAC1615ADADN-RE3 | 16x2x1,50 | 26,2 | 1404 | 12,6 |
| MAC2015ADADN-RE3 | 20x2x1,50 | 29,1 | 1671 | 12,6 |
| MAC2415ADADN-RE3 | 24x2x1,50 | 33,3 | 2320 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)YRY-Pimf - 1x2x2,5 mm² - 300V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:
2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YRY-Pimf - 500V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0275ADADN-RE5 | 2x2x0,75 | 12,6 | 297 | 37.5 |
| MAC0475ADADN-RE5 | 4x2x0,75 | 14,0 | 380 | 37.5 |
| MAC0675ADADN-RE5 | 6x2x0,75 | 16,0 | 482 | 37.5 |
| MAC0875ADADN-RE5 | 8x2x0,75 | 17,2 | 563 | 37.5 |
| MAC1075ADADN-RE5 | 10x2x0,75 | 19,3 | 674 | 37.5 |
| MAC1275ADADN-RE5 | 12x2x0,75 | 19,9 | 733 | 37.5 |
| MAC1675ADADN-RE5 | 16x2x0,75 | 22,5 | 996 | 37.5 |
| MAC2075ADADN-RE5 | 20x2x0,75 | 24,7 | 1172 | 37.5 |
| MAC2475ADADN-RE5 | 24x2x0,75 | 26,9 | 1345 | 37.5 |
| MAC0210ADADN-RE5 | 2x2x1,00 | 13,3 | 332 | 25.5 |
| MAC0410ADADN-RE5 | 4x2x1,00 | 14,9 | 433 | 25.5 |
| MAC0610ADADN-RE5 | 6x2x1,00 | 17,1 | 555 | 25.5 |
| MAC0810ADADN-RE5 | 8x2x1,00 | 18,5 | 654 | 25.5 |
| MAC1010ADADN-RE5 | 10x2x1,00 | 21,6 | 901 | 25.5 |
| MAC1210ADADN-RE5 | 12x2x1,00 | 22,2 | 979 | 25.5 |
| MAC1610ADADN-RE5 | 16x2x1,00 | 24,2 | 1169 | 25.5 |
| MAC2010ADADN-RE5 | 20x2x1,00 | 26,7 | 1383 | 25.5 |
| MAC2410ADADN-RE5 | 24x2x1,00 | 29,1 | 1594 | 25.5 |
| MAC0215ADADN-RE5 | 2x2x1,50 | 14,3 | 382 | 18.8 |
| MAC0415ADADN-RE5 | 4x2x1,50 | 16,1 | 509 | 18.8 |
| MAC0615ADADN-RE5 | 6x2x1,50 | 18,6 | 662 | 18.8 |
| MAC0815ADADN-RE5 | 8x2x1,50 | 20,9 | 898 | 18.8 |
| MAC1015ADADN-RE5 | 10x2x1,50 | 23,6 | 1080 | 18.8 |
| MAC1215ADADN-RE5 | 12x2x1,50 | 24,3 | 1181 | 18.8 |
| MAC1615ADADN-RE5 | 16x2x1,50 | 26,6 | 1424 | 18.8 |
| MAC2015ADADN-RE5 | 20x2x1,50 | 29,5 | 1696 | 18.8 |
| MAC2415ADADN-RE5 | 24x2x1,50 | 33,7 | 2354 | 18.8 |
| MAC0225ADADN-RE5 | 2x2x2,50 | 16,3 | 485 | 12.6 |
| MAC0425ADADN-RE5 | 4x2x2,50 | 18,5 | 669 | 12.6 |
| MAC0625ADADN-RE5 | 6x2x2,50 | 22,4 | 1006 | 12.6 |
| MAC0825ADADN-RE5 | 8x2x2,50 | 24,3 | 1200 | 12.6 |
| MAC1025ADADN-RE5 | 10x2x2,50 | 27,6 | 1456 | 12.6 |
| MAC1225ADADN-RE5 | 12x2x2,50 | 28,5 | 1607 | 12.6 |
| MAC1625ADADN-RE5 | 16x2x2,50 | 31,3 | 1963 | 12.6 |
| MAC2025ADADN-RE5 | 20x2x2,50 | 36,5 | 2780 | 12.6 |
| MAC2425ADADN-RE5 | 24x2x2,50 | 39,8 | 3212 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)YRY-Pimf - 1x2x2,5 mm² - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YMYRY

RAMCRO - EN 50288-7 RE-2Y(St)YMYRY

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Poliiolefin Base FR - PO

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride FR - PVC

Chemical Protection:

Lead Cover

Inner Sheath:

Polyvinyl chloride FR - PVC

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- EN 50288-7
- EN 60228
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

IDENTIFICATION OF CORES

Pair : ○ ●

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 90/300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



RE-2Y(St)YMYRY - 90V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|---------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAS0150ADADN-RE9LC | 1x2x0,50 | 13,8 | 566 | 37,5 |
| MAS0250ADADN-RE9LC | 2x2x0,50 | 15,7 | 710 | 37,5 |
| MAS0450ADADN-RE9LC | 4x2x0,50 | 16,7 | 805 | 37,5 |
| MAS0650ADADN-RE9LC | 6x2x0,50 | 18,1 | 930 | 37,5 |
| MAS0850ADADN-RE9LC | 8x2x0,50 | 19,0 | 1018 | 37,5 |
| MAS1050ADADN-RE9LC | 10x2x0,50 | 21,7 | 1296 | 37,5 |
| MAS1250ADADN-RE9LC | 12x2x0,50 | 22,1 | 1350 | 37,5 |
| MAS1650ADADN-RE9LC | 16x2x0,50 | 23,4 | 1502 | 37,5 |
| MAS2050ADADN-RE9LC | 20x2x0,50 | 25,1 | 1682 | 37,5 |
| MAS2450ADADN-RE9LC | 24x2x0,50 | 26,8 | 1929 | 37,5 |
| MAS0175ADADN-RE9LC | 1x2x0,75 | 14,2 | 602 | 25,5 |
| MAS0275ADADN-RE9LC | 2x2x0,75 | 16,4 | 772 | 25,5 |
| MAS0475ADADN-RE9LC | 4x2x0,75 | 17,6 | 887 | 25,5 |
| MAS0675ADADN-RE9LC | 6x2x0,75 | 19,2 | 1038 | 25,5 |
| MAS0875ADADN-RE9LC | 8x2x0,75 | 21,4 | 1286 | 25,5 |
| MAS1075ADADN-RE9LC | 10x2x0,75 | 23,2 | 1460 | 25,5 |
| MAS1275ADADN-RE9LC | 12x2x0,75 | 23,6 | 1529 | 25,5 |
| MAS1675ADADN-RE9LC | 16x2x0,75 | 25,1 | 1717 | 25,5 |
| MAS2075ADADN-RE9LC | 20x2x0,75 | 27,2 | 2013 | 25,5 |
| MAS2475ADADN-RE9LC | 24x2x0,75 | 29,0 | 2232 | 25,5 |
| MAS0110ADADN-RE9LC | 1x2x1,00 | 15 | 659 | 18,8 |
| MAS0210ADADN-RE9LC | 2x2x1,00 | 17,6 | 868 | 18,8 |
| MAS0410ADADN-RE9LC | 4x2x1,00 | 19,0 | 1015 | 18,8 |
| MAS0610ADADN-RE9LC | 6x2x1,00 | 22,1 | 1350 | 18,8 |
| MAS0810ADADN-RE9LC | 8x2x1,00 | 23,4 | 1497 | 18,8 |
| MAS1010ADADN-RE9LC | 10x2x1,00 | 25,5 | 1717 | 18,8 |
| MAS1210ADADN-RE9LC | 12x2x1,00 | 26,1 | 1806 | 18,8 |
| MAS1610ADADN-RE9LC | 16x2x1,00 | 28,1 | 2128 | 18,8 |
| MAS2010ADADN-RE9LC | 20x2x1,00 | 30,6 | 2505 | 18,8 |
| MAS2410ADADN-RE9LC | 24x2x1,00 | 34,3 | 3189 | 18,8 |
| MAS0115ADADN-RE9LC | 1x2x1,50 | 15,6 | 712 | 12,6 |
| MAS0215ADADN-RE9LC | 2x2x1,50 | 18,6 | 961 | 12,6 |
| MAS0415ADADN-RE9LC | 4x2x1,50 | 21,4 | 1283 | 12,6 |
| MAS0615ADADN-RE9LC | 6x2x1,50 | 23,7 | 1531 | 12,6 |
| MAS0815ADADN-RE9LC | 8x2x1,50 | 25,1 | 1713 | 12,6 |
| MAS1015ADADN-RE9LC | 10x2x1,50 | 27,8 | 2059 | 12,6 |
| MAS1215ADADN-RE9LC | 12x2x1,50 | 28,4 | 2178 | 12,6 |
| MAS1615ADADN-RE9LC | 16x2x1,50 | 30,7 | 2579 | 12,6 |
| MAS2015ADADN-RE9LC | 20x2x1,50 | 34,9 | 3354 | 12,6 |
| MAS2415A DADN-RE9LC | 24x2x1,50 | 38,0 | 3905 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY- 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:
2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YMYRY - 300V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAS0150ADADN-RE3LC | 1x2x0,50 | 14,1 | 586 | 37,5 |
| MAS0250ADADN-RE3LC | 2x2x0,50 | 16,1 | 744 | 37,5 |
| MAS0450ADADN-RE3LC | 4x2x0,50 | 17,2 | 847 | 37,5 |
| MAS0650ADADN-RE3LC | 6x2x0,50 | 18,8 | 983 | 37,5 |
| MAS0850ADADN-RE3LC | 8x2x0,50 | 20,9 | 1216 | 37,5 |
| MAS1050ADADN-RE3LC | 10x2x0,50 | 22,6 | 1375 | 37,5 |
| MAS1250ADADN-RE3LC | 12x2x0,50 | 23,0 | 1433 | 37,5 |
| MAS1650ADADN-RE3LC | 16x2x0,50 | 24,5 | 1599 | 37,5 |
| MAS2050ADADN-RE3LC | 20x2x0,50 | 26,5 | 1868 | 37,5 |
| MAS2450ADADN-RE3LC | 24x2x0,50 | 28,1 | 2062 | 37,5 |
| MAS0175ADADN-RE3LC | 1x2x0,75 | 14,5 | 622 | 25,5 |
| MAS0275ADADN-RE3LC | 2x2x0,75 | 16,9 | 806 | 25,5 |
| MAS0475ADADN-RE3LC | 4x2x0,75 | 18,1 | 929 | 25,5 |
| MAS0675ADADN-RE3LC | 6x2x0,75 | 21,1 | 1229 | 25,5 |
| MAS0875ADADN-RE3LC | 8x2x0,75 | 22,2 | 1353 | 25,5 |
| MAS1075ADADN-RE3LC | 10x2x0,75 | 24,1 | 1540 | 25,5 |
| MAS1275ADADN-RE3LC | 12x2x0,75 | 24,6 | 1614 | 25,5 |
| MAS1675ADADN-RE3LC | 16x2x0,75 | 26,4 | 1890 | 25,5 |
| MAS2075ADADN-RE3LC | 20x2x0,75 | 28,4 | 2134 | 25,5 |
| MAS2475ADADN-RE3LC | 24x2x0,75 | 30,5 | 2457 | 25,5 |
| MAS0110ADADN-RE3LC | 1x2x1,00 | 15,0 | 659 | 18,8 |
| MAS0210ADADN-RE3LC | 2x2x1,00 | 17,6 | 869 | 18,8 |
| MAS0410ADADN-RE3LC | 4x2x1,00 | 19,0 | 1015 | 18,8 |
| MAS0610ADADN-RE3LC | 6x2x1,00 | 22,1 | 1350 | 18,8 |
| MAS0810ADADN-RE3LC | 8x2x1,00 | 23,4 | 1497 | 18,8 |
| MAS1010ADADN-RE3LC | 10x2x1,00 | 25,5 | 1717 | 18,8 |
| MAS1210ADADN-RE3LC | 12x2x1,00 | 26,1 | 1806 | 18,8 |
| MAS1610ADADN-RE3LC | 16x2x1,00 | 28,1 | 2128 | 18,8 |
| MAS2010ADADN-RE3LC | 20x2x1,00 | 30,6 | 2505 | 18,8 |
| MAS2410ADADN-RE3LC | 24x2x1,00 | 34,3 | 3189 | 18,8 |
| MAS0115ADADN-RE3LC | 1x2x1,50 | 15,7 | 720 | 12,6 |
| MAS0215ADADN-RE3LC | 2x2x1,50 | 18,8 | 975 | 12,6 |
| MAS0415ADADN-RE3LC | 4x2x1,50 | 21,6 | 1303 | 12,6 |
| MAS0615ADADN-RE3LC | 6x2x1,50 | 23,9 | 1557 | 12,6 |
| MAS0815ADADN-RE3LC | 8x2x1,50 | 25,4 | 1743 | 12,6 |
| MAS1015ADADN-RE3LC | 10x2x1,50 | 28,1 | 2096 | 12,6 |
| MAS1215ADADN-RE3LC | 12x2x1,50 | 28,8 | 2217 | 12,6 |
| MAS1615ADADN-RE3LC | 16x2x1,50 | 31,1 | 2626 | 12,6 |
| MAS2015ADADN-RE3LC | 20x2x1,50 | 35,8 | 3465 | 12,6 |
| MAS2415ADADN-RE3LC | 24x2x1,50 | 38,5 | 3979 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY- 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR
Class B2ca + BATCH + METER MARKING



RE-2Y(St)YMYRY - 500V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0175HDADN-RE5LC | 1x2x0,75 | 14,7 | 636 | 22.5 |
| MAS0275HDADN-RE5LC | 2x2x0,75 | 17,2 | 829 | 22.5 |
| MAS0475HDADN-RE5LC | 4x2x0,75 | 18,5 | 959 | 22.5 |
| MAS0675HDADN-RE5LC | 6x2x0,75 | 21,5 | 1271 | 22.5 |
| MAS0875HDADN-RE5LC | 8x2x0,75 | 22,7 | 1400 | 22.5 |
| MAS1075HDADN-RE5LC | 10x2x0,75 | 24,7 | 1599 | 22.5 |
| MAS1275HDADN-RE5LC | 12x2x0,75 | 25,2 | 1676 | 22.5 |
| MAS1675HDADN-RE5LC | 16x2x0,75 | 27,1 | 1963 | 22.5 |
| MAS2075HDADN-RE5LC | 20x2x0,75 | 29,3 | 2220 | 22.5 |
| MAS2475HDADN-RE5LC | 24x2x0,75 | 33,1 | 2939 | 22.5 |
| MAS0110HDADN-RE5LC | 1x2x1,00 | 15,2 | 674 | 18.8 |
| MAS0210HDADN-RE5LC | 2x2x1,00 | 17,9 | 894 | 18.8 |
| MAS0410HDADN-RE5LC | 4x2x1,00 | 19,4 | 1047 | 18.8 |
| MAS0610HDADN-RE5LC | 6x2x1,00 | 22,7 | 1395 | 18.8 |
| MAS0810HDADN-RE5LC | 8x2x1,00 | 24,0 | 1548 | 18.8 |
| MAS1010HDADN-RE5LC | 10x2x1,00 | 26,4 | 1853 | 18.8 |
| MAS1210HDADN-RE5LC | 12x2x1,00 | 27,0 | 1948 | 18.8 |
| MAS1610HDADN-RE5LC | 16x2x1,00 | 28,9 | 2207 | 18.8 |
| MAS2010HDADN-RE5LC | 20x2x1,00 | 33,1 | 2983 | 18.8 |
| MAS2410HDADN-RE5LC | 24x2x1,00 | 35,7 | 3362 | 18.8 |
| MAS0115HDADN-RE5LC | 1x2x1,50 | 15,8 | 727 | 12.6 |
| MAS0215HDADN-RE5LC | 2x2x1,50 | 18,9 | 987 | 12.6 |
| MAS0415HDADN-RE5LC | 4x2x1,50 | 21,8 | 1319 | 12.6 |
| MAS0615HDADN-RE5LC | 6x2x1,50 | 24,2 | 1577 | 12.6 |
| MAS0815HDADN-RE5LC | 8x2x1,50 | 25,7 | 1766 | 12.6 |
| MAS1015HDADN-RE5LC | 10x2x1,50 | 28,4 | 2126 | 12.6 |
| MAS1215HDADN-RE5LC | 12x2x1,50 | 29,1 | 2248 | 12.6 |
| MAS1615HDADN-RE5LC | 16x2x1,50 | 33,1 | 3045 | 12.6 |
| MAS2015HDADN-RE5LC | 20x2x1,50 | 36,4 | 3619 | 12.6 |
| MAS2415HDADN-RE5LC | 24x2x1,50 | 39,0 | 4037 | 12.6 |
| MAS0125HDADN-RE5LC | 1x2x2,50 | 17,0 | 835 | 7.7 |
| MAS0225HDADN-RE5LC | 2x2x2,50 | 22,1 | 1320 | 7.7 |
| MAS0425HDADN-RE5LC | 4x2x2,50 | 24,2 | 1596 | 7.7 |
| MAS0625HDADN-RE5LC | 6x2x2,50 | 27,4 | 2024 | 7.7 |
| MAS0825HDADN-RE5LC | 8x2x2,50 | 29,3 | 2294 | 7.7 |
| MAS1025HDADN-RE5LC | 10x2x2,50 | 34,3 | 3175 | 7.7 |
| MAS1225HDADN-RE5LC | 12x2x2,50 | 35,5 | 3415 | 7.7 |
| MAS1625HDADN-RE5LC | 16x2x2,50 | 38,5 | 4033 | 7.7 |
| MAS2025HDADN-RE5LC | 20x2x2,50 | 42,1 | 4753 | 7.7 |
| MAS2425HDADN-RE5LC | 24x2x2,50 | 45,5 | 5479 | 7.7 |

CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY- 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YMYRY-Pimf

RAMCRO - EN 50288-7 RE-2Y(St)Y-Pimf

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Poliolefin Base FR - PO

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride - PVC

Chemical Protection:

Lead Cover

Inner Sheath:

Polyvinyl chloride - PVC

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

Pair : ○ ● + Yellow Numbered Tapes

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 90/300/500 V |

STANDARD REFERENCES

- EN 50288-7
- EN 60228
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



RE-2Y(St)YMYRY-Pimf - 90V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAC0250HDADN-RE9LC | 2x2x0,50 | 16,1 | 749 | 37.5 |
| MAC0450HDADN-RE9LC | 4x2x0,50 | 17,2 | 858 | 37.5 |
| MAC0650HDADN-RE9LC | 6x2x0,50 | 18,8 | 1001 | 37.5 |
| MAC0850HDADN-RE9LC | 8x2x0,50 | 20,9 | 1240 | 37.5 |
| MAC1050HDADN-RE9LC | 10x2x0,50 | 22,6 | 1405 | 37.5 |
| MAC1250HDADN-RE9LC | 12x2x0,50 | 23,0 | 1470 | 37.5 |
| MAC1650HDADN-RE9LC | 16x2x0,50 | 24,4 | 1649 | 37.5 |
| MAC2050HDADN-RE9LC | 20x2x0,50 | 26,4 | 1931 | 37.5 |
| MAC2450HDADN-RE9LC | 24x2x0,50 | 28,1 | 2139 | 37.5 |
| MAC0275HDADN-RE9LC | 2x2x0,75 | 16,9 | 810 | 25.5 |
| MAC0475HDADN-RE9LC | 4x2x0,75 | 18,1 | 940 | 25.5 |
| MAC0675HDADN-RE9LC | 6x2x0,75 | 21,0 | 1246 | 25.5 |
| MAC0875HDADN-RE9LC | 8x2x0,75 | 22,1 | 1376 | 25.5 |
| MAC1075HDADN-RE9LC | 10x2x0,75 | 24,0 | 1571 | 25.5 |
| MAC1275HDADN-RE9LC | 12x2x0,75 | 24,5 | 1650 | 25.5 |
| MAC1675HDADN-RE9LC | 16x2x0,75 | 26,2 | 1865 | 25.5 |
| MAC2075HDADN-RE9LC | 20x2x0,75 | 28,4 | 2195 | 25.5 |
| MAC2475HDADN-RE9LC | 24x2x0,75 | 30,5 | 2531 | 25.5 |
| MAC0210HDADN-RE9LC | 2x2x1,00 | 18,0 | 909 | 18.8 |
| MAC0410HDADN-RE9LC | 4x2x1,00 | 20,0 | 1099 | 18.8 |
| MAC0610HDADN-RE9LC | 6x2x1,00 | 22,8 | 1432 | 18.8 |
| MAC0810HDADN-RE9LC | 8x2x1,00 | 24,1 | 1595 | 18.8 |
| MAC1010HDADN-RE9LC | 10x2x1,00 | 26,6 | 1911 | 18.8 |
| MAC1210HDADN-RE9LC | 12x2x1,00 | 27,2 | 2016 | 18.8 |
| MAC1610HDADN-RE9LC | 16x2x1,00 | 29,1 | 2296 | 18.8 |
| MAC2010HDADN-RE9LC | 20x2x1,00 | 33,3 | 3096 | 18.8 |
| MAC2410HDADN-RE9LC | 24x2x1,00 | 36,2 | 3598 | 18.8 |
| MAC0215HDADN-RE9LC | 2x2x1,50 | 19,0 | 1001 | 12.6 |
| MAC0415HDADN-RE9LC | 4x2x1,50 | 21,9 | 1344 | 12.6 |
| MAC0615HDADN-RE9LC | 6x2x1,50 | 24,3 | 1613 | 12.6 |
| MAC0815HDADN-RE9LC | 8x2x1,50 | 25,8 | 1812 | 12.6 |
| MAC1015HDADN-RE9LC | 10x2x1,50 | 28,6 | 2184 | 12.6 |
| MAC1215HDADN-RE9LC | 12x2x1,50 | 29,3 | 2316 | 12.6 |
| MAC1615HDADN-RE9LC | 16x2x1,50 | 33,3 | 3135 | 12.6 |
| MAC2015HDADN-RE9LC | 20x2x1,50 | 36,7 | 3731 | 12.6 |
| MAC2415HDADN-RE9LC | 24x2x1,50 | 39,3 | 4171 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY- 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:
2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YMYRY-Pimf - 300V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0250HDADN-RE3LC | 2x2x0,50 | 16,6 | 782 | 37.5 |
| MAC0450HDADN-RE3LC | 4x2x0,50 | 17,8 | 900 | 37.5 |
| MAC0650HDADN-RE3LC | 6x2x0,50 | 19,4 | 1053 | 37.5 |
| MAC0850HDADN-RE3LC | 8x2x0,50 | 21,7 | 1306 | 37.5 |
| MAC1050HDADN-RE3LC | 10x2x0,50 | 23,5 | 1484 | 37.5 |
| MAC1250HDADN-RE3LC | 12x2x0,50 | 23,9 | 1554 | 37.5 |
| MAC1650HDADN-RE3LC | 16x2x0,50 | 25,5 | 1747 | 37.5 |
| MAC2050HDADN-RE3LC | 20x2x0,50 | 27,6 | 2049 | 37.5 |
| MAC2450HDADN-RE3LC | 24x2x0,50 | 29,4 | 2273 | 37.5 |
| MAC0275HDADN-RE3LC | 2x2x0,75 | 17,3 | 844 | 25.5 |
| MAC0475HDADN-RE3LC | 4x2x0,75 | 18,6 | 982 | 25.5 |
| MAC0675HDADN-RE3LC | 6x2x0,75 | 21,7 | 1304 | 25.5 |
| MAC0875HDADN-RE3LC | 8x2x0,75 | 22,9 | 1443 | 25.5 |
| MAC1075HDADN-RE3LC | 10x2x0,75 | 24,9 | 1651 | 25.5 |
| MAC1275HDADN-RE3LC | 12x2x0,75 | 25,5 | 1736 | 25.5 |
| MAC1675HDADN-RE3LC | 16x2x0,75 | 27,4 | 2042 | 25.5 |
| MAC2075HDADN-RE3LC | 20x2x0,75 | 29,8 | 2401 | 25.5 |
| MAC2475HDADN-RE3LC | 24x2x0,75 | 33,4 | 3058 | 25.5 |
| MAC0210HDADN-RE3LC | 2x2x1,00 | 18,0 | 909 | 18.8 |
| MAC0410HDADN-RE3LC | 4x2x1,00 | 20,0 | 1099 | 18.8 |
| MAC0610HDADN-RE3LC | 6x2x1,00 | 22,8 | 1432 | 18.8 |
| MAC0810HDADN-RE3LC | 8x2x1,00 | 24,1 | 1595 | 18.8 |
| MAC1010HDADN-RE3LC | 10x2x1,00 | 26,6 | 1911 | 18.8 |
| MAC1210HDADN-RE3LC | 12x2x1,00 | 27,2 | 2016 | 18.8 |
| MAC1610HDADN-RE3LC | 16x2x1,00 | 29,1 | 2296 | 18.8 |
| MAC2010HDADN-RE3LC | 20x2x1,00 | 33,3 | 3096 | 18.8 |
| MAC2410HDADN-RE3LC | 24x2x1,00 | 36,2 | 3599 | 18.8 |
| MAC0215HDADN-RE3LC | 2x2x1,50 | 19,2 | 1016 | 12.6 |
| MAC0415HDADN-RE3LC | 4x2x1,50 | 22,1 | 1364 | 12.6 |
| MAC0615HDADN-RE3LC | 6x2x1,50 | 24,6 | 1638 | 12.6 |
| MAC0815HDADN-RE3LC | 8x2x1,50 | 26,1 | 1842 | 12.6 |
| MAC1015HDADN-RE3LC | 10x2x1,50 | 29,0 | 2221 | 12.6 |
| MAC1215HDADN-RE3LC | 12x2x1,50 | 29,9 | 2440 | 12.6 |
| MAC1615HDADN-RE3LC | 16x2x1,50 | 33,7 | 3189 | 12.6 |
| MAC2015HDADN-RE3LC | 20x2x1,50 | 37,2 | 3795 | 12.6 |
| MAC2415HDADN-RE3LC | 24x2x1,50 | 40,0 | 4360 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY-Pimf - 1x2x2,5 mm² - 300V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)YMYRY-Pimf - 500V

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0275HDADN-RE5LC | 2x2x0,75 | 17,6 | 868 | 37.5 |
| MAC0475HDADN-RE5LC | 4x2x0,75 | 19,0 | 1012 | 37.5 |
| MAC0675HDADN-RE5LC | 6x2x0,75 | 22,2 | 1346 | 37.5 |
| MAC0875HDADN-RE5LC | 8x2x0,75 | 23,4 | 1491 | 37.5 |
| MAC1075HDADN-RE5LC | 10x2x0,75 | 25,4 | 1710 | 37.5 |
| MAC1275HDADN-RE5LC | 12x2x0,75 | 26,1 | 1797 | 37.5 |
| MAC1675HDADN-RE5LC | 16x2x0,75 | 28,2 | 2116 | 37.5 |
| MAC2075HDADN-RE5LC | 20x2x0,75 | 30,7 | 2490 | 37.5 |
| MAC2475HDADN-RE5LC | 24x2x0,75 | 34,4 | 3172 | 37.5 |
| MAC0210HDADN-RE5LC | 2x2x1,00 | 18,4 | 935 | 25.5 |
| MAC0410HDADN-RE5LC | 4x2x1,00 | 21,1 | 1242 | 25.5 |
| MAC0610HDADN-RE5LC | 6x2x1,00 | 23,3 | 1477 | 25.5 |
| MAC0810HDADN-RE5LC | 8x2x1,00 | 24,7 | 1647 | 25.5 |
| MAC1010HDADN-RE5LC | 10x2x1,00 | 27,3 | 1977 | 25.5 |
| MAC1210HDADN-RE5LC | 12x2x1,00 | 27,9 | 2085 | 25.5 |
| MAC1610HDADN-RE5LC | 16x2x1,00 | 30,1 | 2462 | 25.5 |
| MAC2010HDADN-RE5LC | 20x2x1,00 | 34,2 | 3204 | 25.5 |
| MAC2410HDADN-RE5LC | 24x2x1,00 | 37,3 | 3728 | 25.5 |
| MAC0215HDADN-RE5LC | 2x2x1,50 | 19,4 | 1027 | 18.8 |
| MAC0415HDADN-RE5LC | 4x2x1,50 | 22,3 | 1379 | 18.8 |
| MAC0615HDADN-RE5LC | 6x2x1,50 | 24,8 | 1659 | 18.8 |
| MAC0815HDADN-RE5LC | 8x2x1,50 | 26,6 | 1939 | 18.8 |
| MAC1015HDADN-RE5LC | 10x2x1,50 | 29,3 | 2251 | 18.8 |
| MAC1215HDADN-RE5LC | 12x2x1,50 | 30,2 | 2473 | 18.8 |
| MAC1615HDADN-RE5LC | 16x2x1,50 | 34,1 | 3231 | 18.8 |
| MAC2015HDADN-RE5LC | 20x2x1,50 | 37,6 | 3847 | 18.8 |
| MAC2415HDADN-RE5LC | 24x2x1,50 | 40,5 | 4421 | 18.8 |
| MAC0225HDADN-RE5LC | 2x2x2,50 | 22,6 | 1366 | 12.6 |
| MAC0425HDADN-RE5LC | 4x2x2,50 | 24,8 | 1661 | 12.6 |
| MAC0625HDADN-RE5LC | 6x2x2,50 | 28,1 | 2115 | 12.6 |
| MAC0825HDADN-RE5LC | 8x2x2,50 | 30,2 | 2490 | 12.6 |
| MAC1025HDADN-RE5LC | 10x2x2,50 | 35,6 | 3374 | 12.6 |
| MAC1225HDADN-RE5LC | 12x2x2,50 | 36,6 | 3686 | 12.6 |
| MAC1625HDADN-RE5LC | 16x2x2,50 | 39,7 | 4356 | 12.6 |
| MAC2025HDADN-RE5LC | 20x2x2,50 | 43,4 | 5135 | 12.6 |
| MAC2425HDADN-RE5LC | 24x2x2,50 | 47,2 | 5843 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY-Pimf - 1x2x2,5 mm² - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE 2Y(St)Y4YRY - Nylon Cover

RAMCRO - EN 50288-7 RE-Y(St)Y4YRY

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Poliiolefin Base FR - PO

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride FR - PVC

Chemical Protection:

Nylon Cover

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- EN 50288-7
- EN 60228
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

IDENTIFICATION OF CORES

Pair : ○ ●

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 90/300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



RE-2Y(St)Y4YRY - 90V - Nylon Cover

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|---------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAS0150ADADN-RE9NC | 1x2x0,50 | 9,8 | 193 | 37,5 |
| MAS0250ADADN-RE9NC | 2x2x0,50 | 11,7 | 260 | 37,5 |
| MAS0450ADADN-RE9NC | 4x2x0,50 | 12,7 | 314 | 37,5 |
| MAS0650ADADN-RE9NC | 6x2x0,50 | 14,1 | 381 | 37,5 |
| MAS0850ADADN-RE9NC | 8x2x0,50 | 15,0 | 432 | 37,5 |
| MAS1050ADADN-RE9NC | 10x2x0,50 | 16,8 | 515 | 37,5 |
| MAS1250ADADN-RE9NC | 12x2x0,50 | 17,1 | 551 | 37,5 |
| MAS1650ADADN-RE9NC | 16x2x0,50 | 18,5 | 641 | 37,5 |
| MAS2050ADADN-RE9NC | 20x2x0,50 | 20,8 | 853 | 37,5 |
| MAS2450ADADN-RE9NC | 24x2x0,50 | 22,4 | 963 | 37,5 |
| MAS0175ADADN-RE9NC | 1x2x0,75 | 10,2 | 211 | 25,5 |
| MAS0275ADADN-RE9NC | 2x2x0,75 | 12,4 | 292 | 25,5 |
| MAS0475ADADN-RE9NC | 4x2x0,75 | 13,6 | 360 | 25,5 |
| MAS0675ADADN-RE9NC | 6x2x0,75 | 15,2 | 444 | 25,5 |
| MAS0875ADADN-RE9NC | 8x2x0,75 | 16,5 | 519 | 25,5 |
| MAS1075ADADN-RE9NC | 10x2x0,75 | 18,2 | 610 | 25,5 |
| MAS1275ADADN-RE9NC | 12x2x0,75 | 18,7 | 658 | 25,5 |
| MAS1675ADADN-RE9NC | 16x2x0,75 | 20,9 | 885 | 25,5 |
| MAS2075ADADN-RE9NC | 20x2x0,75 | 22,8 | 1028 | 25,5 |
| MAS2475ADADN-RE9NC | 24x2x0,75 | 24,5 | 1168 | 25,5 |
| MAS0110ADADN-RE9NC | 1x2x1,00 | 10,9 | 238 | 18,8 |
| MAS0210ADADN-RE9NC | 2x2x1,00 | 13,6 | 341 | 18,8 |
| MAS0410ADADN-RE9NC | 4x2x1,00 | 15,0 | 430 | 18,8 |
| MAS0610ADADN-RE9NC | 6x2x1,00 | 17,2 | 549 | 18,8 |
| MAS0810ADADN-RE9NC | 8x2x1,00 | 18,4 | 636 | 18,8 |
| MAS1010ADADN-RE9NC | 10x2x1,00 | 21,3 | 868 | 18,8 |
| MAS1210ADADN-RE9NC | 12x2x1,00 | 21,9 | 935 | 18,8 |
| MAS1610ADADN-RE9NC | 16x2x1,00 | 23,7 | 1102 | 18,8 |
| MAS2010ADADN-RE9NC | 20x2x1,00 | 25,9 | 1290 | 18,8 |
| MAS2410ADADN-RE9NC | 24x2x1,00 | 28,3 | 1490 | 18,8 |
| MAS0115ADADN-RE9NC | 1x2x1,50 | 11,6 | 266 | 12,6 |
| MAS0215ADADN-RE9NC | 2x2x1,50 | 14,6 | 392 | 12,6 |
| MAS0415ADADN-RE9NC | 4x2x1,50 | 16,4 | 517 | 12,6 |
| MAS0615ADADN-RE9NC | 6x2x1,50 | 18,7 | 658 | 12,6 |
| MAS0815ADADN-RE9NC | 8x2x1,50 | 20,9 | 882 | 12,6 |
| MAS1015ADADN-RE9NC | 10x2x1,50 | 23,3 | 1049 | 12,6 |
| MAS1215ADADN-RE9NC | 12x2x1,50 | 24,0 | 1140 | 12,6 |
| MAS1615ADADN-RE9NC | 16x2x1,50 | 26,1 | 1359 | 12,6 |
| MAS2015ADADN-RE9NC | 20x2x1,50 | 28,9 | 1620 | 12,6 |
| MAS2415A DADN-RE9NC | 24x2x1,50 | 31,3 | 1863 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y4MYRY- 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:
2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y4YRY - 300V - Nylon Cover

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAS0150ADADN-RE3NC | 1x2x0,50 | 10,1 | 201 | 37,5 |
| MAS0250ADADN-RE3NC | 2x2x0,50 | 12,1 | 274 | 37,5 |
| MAS0450ADADN-RE3NC | 4x2x0,50 | 13,2 | 333 | 37,5 |
| MAS0650ADADN-RE3NC | 6x2x0,50 | 14,8 | 406 | 37,5 |
| MAS0850ADADN-RE3NC | 8x2x0,50 | 16,0 | 471 | 37,5 |
| MAS1050ADADN-RE3NC | 10x2x0,50 | 17,7 | 551 | 37,5 |
| MAS1250ADADN-RE3NC | 12x2x0,50 | 18,1 | 590 | 37,5 |
| MAS1650ADADN-RE3NC | 16x2x0,50 | 19,5 | 688 | 37,5 |
| MAS2050ADADN-RE3NC | 20x2x0,50 | 22,0 | 916 | 37,5 |
| MAS2450ADADN-RE3NC | 24x2x0,50 | 23,7 | 1035 | 37,5 |
| MAS0175ADADN-RE3NC | 1x2x0,75 | 10,5 | 219 | 25,5 |
| MAS0275ADADN-RE3NC | 2x2x0,75 | 12,9 | 307 | 25,5 |
| MAS0475ADADN-RE3NC | 4x2x0,75 | 14,1 | 380 | 25,5 |
| MAS0675ADADN-RE3NC | 6x2x0,75 | 16,1 | 479 | 25,5 |
| MAS0875ADADN-RE3NC | 8x2x0,75 | 17,2 | 550 | 25,5 |
| MAS1075ADADN-RE3NC | 10x2x0,75 | 19,1 | 649 | 25,5 |
| MAS1275ADADN-RE3NC | 12x2x0,75 | 19,6 | 699 | 25,5 |
| MAS1675ADADN-RE3NC | 16x2x0,75 | 22,0 | 941 | 25,5 |
| MAS2075ADADN-RE3NC | 20x2x0,75 | 24,0 | 1094 | 25,5 |
| MAS2475ADADN-RE3NC | 24x2x0,75 | 25,9 | 1244 | 25,5 |
| MAS0110ADADN-RE3NC | 1x2x1,00 | 10,9 | 238 | 18,8 |
| MAS0210ADADN-RE3NC | 2x2x1,00 | 13,6 | 341 | 18,8 |
| MAS0410ADADN-RE3NC | 4x2x1,00 | 15,0 | 430 | 18,8 |
| MAS0610ADADN-RE3NC | 6x2x1,00 | 17,2 | 549 | 18,8 |
| MAS0810ADADN-RE3NC | 8x2x1,00 | 18,4 | 636 | 18,8 |
| MAS1010ADADN-RE3NC | 10x2x1,00 | 21,3 | 868 | 18,8 |
| MAS1210ADADN-RE3NC | 12x2x1,00 | 21,9 | 935 | 18,8 |
| MAS1610ADADN-RE3NC | 16x2x1,00 | 23,7 | 1102 | 18,8 |
| MAS2010ADADN-RE3NC | 20x2x1,00 | 25,9 | 1290 | 18,8 |
| MAS2410ADADN-RE3NC | 24x2x1,00 | 28,3 | 1490 | 18,8 |
| MAS0115ADADN-RE3NC | 1x2x1,50 | 11,7 | 270 | 12,6 |
| MAS0215ADADN-RE3NC | 2x2x1,50 | 14,8 | 399 | 12,6 |
| MAS0415ADADN-RE3NC | 4x2x1,50 | 16,7 | 526 | 12,6 |
| MAS0615ADADN-RE3NC | 6x2x1,50 | 19,0 | 670 | 12,6 |
| MAS0815ADADN-RE3NC | 8x2x1,50 | 21,2 | 899 | 12,6 |
| MAS1015ADADN-RE3NC | 10x2x1,50 | 23,7 | 1069 | 12,6 |
| MAS1215ADADN-RE3NC | 12x2x1,50 | 24,3 | 1161 | 12,6 |
| MAS1615ADADN-RE3NC | 16x2x1,50 | 26,5 | 1385 | 12,6 |
| MAS2015ADADN-RE3NC | 20x2x1,50 | 29,4 | 1652 | 12,6 |
| MAS2415ADADN-RE3NC | 24x2x1,50 | 33,5 | 2286 | 12,6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y4MYRY- 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR
Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y4YRY - 500V - Nylon Cover

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0175HDADN-RE5NC | 1x2x0,75 | 10,7 | 226 | 22.5 |
| MAS0275HDADN-RE5NC | 2x2x0,75 | 13,2 | 318 | 22.5 |
| MAS0475HDADN-RE5NC | 4x2x0,75 | 14,5 | 394 | 22.5 |
| MAS0675HDADN-RE5NC | 6x2x0,75 | 16,6 | 498 | 22.5 |
| MAS0875HDADN-RE5NC | 8x2x0,75 | 17,7 | 572 | 22.5 |
| MAS1075HDADN-RE5NC | 10x2x0,75 | 19,7 | 677 | 22.5 |
| MAS1275HDADN-RE5NC | 12x2x0,75 | 21,0 | 840 | 22.5 |
| MAS1675HDADN-RE5NC | 16x2x0,75 | 22,7 | 981 | 22.5 |
| MAS2075HDADN-RE5NC | 20x2x0,75 | 24,8 | 1142 | 22.5 |
| MAS2475HDADN-RE5NC | 24x2x0,75 | 26,8 | 1300 | 22.5 |
| MAS0110HDADN-RE5NC | 1x2x1,00 | 11,2 | 245 | 18.8 |
| MAS0210HDADN-RE5NC | 2x2x1,00 | 13,9 | 353 | 18.8 |
| MAS0410HDADN-RE5NC | 4x2x1,00 | 15,4 | 445 | 18.8 |
| MAS0610HDADN-RE5NC | 6x2x1,00 | 17,7 | 570 | 18.8 |
| MAS0810HDADN-RE5NC | 8x2x1,00 | 19,0 | 661 | 18.8 |
| MAS1010HDADN-RE5NC | 10x2x1,00 | 22,0 | 903 | 18.8 |
| MAS1210HDADN-RE5NC | 12x2x1,00 | 22,6 | 972 | 18.8 |
| MAS1610HDADN-RE5NC | 16x2x1,00 | 24,5 | 1146 | 18.8 |
| MAS2010HDADN-RE5NC | 20x2x1,00 | 26,9 | 1342 | 18.8 |
| MAS2410HDADN-RE5NC | 24x2x1,00 | 29,3 | 1553 | 18.8 |
| MAS0115HDADN-RE5NC | 1x2x1,50 | 11,8 | 273 | 12.6 |
| MAS0215HDADN-RE5NC | 2x2x1,50 | 14,9 | 404 | 12.6 |
| MAS0415HDADN-RE5NC | 4x2x1,50 | 16,8 | 534 | 12.6 |
| MAS0615HDADN-RE5NC | 6x2x1,50 | 19,2 | 680 | 12.6 |
| MAS0815HDADN-RE5NC | 8x2x1,50 | 21,4 | 912 | 12.6 |
| MAS1015HDADN-RE5NC | 10x2x1,50 | 24,0 | 1086 | 12.6 |
| MAS1215HDADN-RE5NC | 12x2x1,50 | 24,7 | 1179 | 12.6 |
| MAS1615HDADN-RE5NC | 16x2x1,50 | 26,8 | 1406 | 12.6 |
| MAS2015HDADN-RE5NC | 20x2x1,50 | 29,8 | 1677 | 12.6 |
| MAS2415HDADN-RE5NC | 24x2x1,50 | 33,9 | 2321 | 12.6 |
| MAS0125HDADN-RE5NC | 1x2x2,50 | 13,0 | 331 | 7.7 |
| MAS0225HDADN-RE5NC | 2x2x2,50 | 17,2 | 519 | 7.7 |
| MAS0425HDADN-RE5NC | 4x2x2,50 | 19,3 | 696 | 7.7 |
| MAS0625HDADN-RE5NC | 6x2x2,50 | 23,0 | 1030 | 7.7 |
| MAS0825HDADN-RE5NC | 8x2x2,50 | 24,9 | 1215 | 7.7 |
| MAS1025HDADN-RE5NC | 10x2x2,50 | 28,3 | 1478 | 7.7 |
| MAS1225HDADN-RE5NC | 12x2x2,50 | 29,1 | 1620 | 7.7 |
| MAS1625HDADN-RE5NC | 16x2x2,50 | 33,4 | 2343 | 7.7 |
| MAS2025HDADN-RE5NC | 20x2x2,50 | 36,8 | 2763 | 7.7 |
| MAS2425HDADN-RE5NC | 24x2x2,50 | 40,2 | 3198 | 7.7 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y4MYRY- 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y4YRY-Pimf

RAMCRO - EN 50288-7 RE-Y(St)Y4YRY-Pimf

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Poliiolefin Base FR - PO

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride - PVC

Chemical Protection:

Nylon Cover

Inner Sheath:

Polyvinyl chloride - PVC

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

Pair : ○ ● + Yellow Numbered Tapes

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 90/300/500 V |

STANDARD REFERENCES

- EN 50288-7
- EN 60228
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



RE-2Y(St)Y4YRY-Pimf - 90V - Nylon Cover

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAC0250HDADN-RE9NC | 2x2x0,50 | 12,1 | 281 | 37.5 |
| MAC0450HDADN-RE9NC | 4x2x0,50 | 13,2 | 345 | 37.5 |
| MAC0650HDADN-RE9NC | 6x2x0,50 | 14,8 | 425 | 37.5 |
| MAC0850HDADN-RE9NC | 8x2x0,50 | 16,0 | 497 | 37.5 |
| MAC1050HDADN-RE9NC | 10x2x0,50 | 17,6 | 583 | 37.5 |
| MAC1250HDADN-RE9NC | 12x2x0,50 | 18,0 | 629 | 37.5 |
| MAC1650HDADN-RE9NC | 16x2x0,50 | 19,5 | 740 | 37.5 |
| MAC2050HDADN-RE9NC | 20x2x0,50 | 22,0 | 981 | 37.5 |
| MAC2450HDADN-RE9NC | 24x2x0,50 | 23,7 | 1114 | 37.5 |
| MAC0275HDADN-RE9NC | 2x2x0,75 | 12,8 | 312 | 37.5 |
| MAC0475HDADN-RE9NC | 4x2x0,75 | 14,1 | 391 | 37.5 |
| MAC0675HDADN-RE9NC | 6x2x0,75 | 16,1 | 497 | 37.5 |
| MAC0875HDADN-RE9NC | 8x2x0,75 | 17,2 | 575 | 37.5 |
| MAC1075HDADN-RE9NC | 10x2x0,75 | 19,1 | 680 | 37.5 |
| MAC1275HDADN-RE9NC | 12x2x0,75 | 19,6 | 738 | 37.5 |
| MAC1675HDADN-RE9NC | 16x2x0,75 | 21,9 | 991 | 37.5 |
| MAC2075HDADN-RE9NC | 20x2x0,75 | 23,9 | 1157 | 37.5 |
| MAC2475HDADN-RE9NC | 24x2x0,75 | 25,8 | 1321 | 37.5 |
| MAC0210HDADN-RE9NC | 2x2x1,00 | 14,0 | 363 | 25.5 |
| MAC0410HDADN-RE9NC | 4x2x1,00 | 15,5 | 466 | 25.5 |
| MAC0610HDADN-RE9NC | 6x2x1,00 | 17,8 | 600 | 25.5 |
| MAC0810HDADN-RE9NC | 8x2x1,00 | 19,2 | 700 | 25.5 |
| MAC1010HDADN-RE9NC | 10x2x1,00 | 22,2 | 953 | 25.5 |
| MAC1210HDADN-RE9NC | 12x2x1,00 | 22,8 | 1032 | 25.5 |
| MAC1610HDADN-RE9NC | 16x2x1,00 | 24,7 | 1225 | 25.5 |
| MAC2010HDADN-RE9NC | 20x2x1,00 | 27,1 | 1441 | 25.5 |
| MAC2410HDADN-RE9NC | 24x2x1,00 | 29,6 | 1669 | 25.5 |
| MAC0215HDADN-RE9NC | 2x2x1,50 | 15,0 | 415 | 18.8 |
| MAC0415HDADN-RE9NC | 4x2x1,50 | 16,9 | 553 | 18.8 |
| MAC0615HDADN-RE9NC | 6x2x1,50 | 19,4 | 709 | 18.8 |
| MAC0815HDADN-RE9NC | 8x2x1,50 | 21,6 | 951 | 18.8 |
| MAC1015HDADN-RE9NC | 10x2x1,50 | 24,2 | 1135 | 18.8 |
| MAC1215HDADN-RE9NC | 12x2x1,50 | 24,9 | 1237 | 18.8 |
| MAC1615HDADN-RE9NC | 16x2x1,50 | 27,1 | 1483 | 18.8 |
| MAC2015HDADN-RE9NC | 20x2x1,50 | 30,0 | 1772 | 18.8 |
| MAC2415HDADN-RE9NC | 24x2x1,50 | 34,2 | 2439 | 18.8 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y4YRY-Pimf - 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:
2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y4YRY-Pimf - 300V - Nylon Cover

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0250HDADN-RE3NC | 2x2x0,50 | 12,6 | 296 | 37.5 |
| MAC0450HDADN-RE3NC | 4x2x0,50 | 13,8 | 365 | 37.5 |
| MAC0650HDADN-RE3NC | 6x2x0,50 | 15,4 | 450 | 37.5 |
| MAC0850HDADN-RE3NC | 8x2x0,50 | 16,7 | 527 | 37.5 |
| MAC1050HDADN-RE3NC | 10x2x0,50 | 18,5 | 620 | 37.5 |
| MAC1250HDADN-RE3NC | 12x2x0,50 | 19,0 | 668 | 37.5 |
| MAC1650HDADN-RE3NC | 16x2x0,50 | 21,3 | 900 | 37.5 |
| MAC2050HDADN-RE3NC | 20x2x0,50 | 23,2 | 1045 | 37.5 |
| MAC2450HDADN-RE3NC | 24x2x0,50 | 25,0 | 1188 | 37.5 |
| MAC0275HDADN-RE3NC | 2x2x0,75 | 13,3 | 328 | 25.5 |
| MAC0475HDADN-RE3NC | 4x2x0,75 | 14,6 | 412 | 25.5 |
| MAC0675HDADN-RE3NC | 6x2x0,75 | 16,7 | 524 | 25.5 |
| MAC0875HDADN-RE3NC | 8x2x0,75 | 17,9 | 606 | 25.5 |
| MAC1075HDADN-RE3NC | 10x2x0,75 | 20,0 | 718 | 25.5 |
| MAC1275HDADN-RE3NC | 12x2x0,75 | 21,2 | 890 | 25.5 |
| MAC1675HDADN-RE3NC | 16x2x0,75 | 23,0 | 1047 | 25.5 |
| MAC2075HDADN-RE3NC | 20x2x0,75 | 25,2 | 1224 | 25.5 |
| MAC2475HDADN-RE3NC | 24x2x0,75 | 27,2 | 1398 | 25.5 |
| MAC0210HDADN-RE3NC | 2x2x1,00 | 14,0 | 363 | 18.8 |
| MAC0410HDADN-RE3NC | 4x2x1,00 | 15,5 | 466 | 18.8 |
| MAC0610HDADN-RE3NC | 6x2x1,00 | 17,8 | 600 | 18.8 |
| MAC0810HDADN-RE3NC | 8x2x1,00 | 19,2 | 700 | 18.8 |
| MAC1010HDADN-RE3NC | 10x2x1,00 | 22,2 | 953 | 18.8 |
| MAC1210HDADN-RE3NC | 12x2x1,00 | 22,8 | 1032 | 18.8 |
| MAC1610HDADN-RE3NC | 16x2x1,00 | 24,7 | 1225 | 18.8 |
| MAC2010HDADN-RE3NC | 20x2x1,00 | 27,1 | 1441 | 18.8 |
| MAC2410HDADN-RE3NC | 24x2x1,00 | 29,6 | 1669 | 18.8 |
| MAC0215HDADN-RE3NC | 2x2x1,50 | 15,2 | 422 | 12.6 |
| MAC0415HDADN-RE3NC | 4x2x1,50 | 17,2 | 563 | 12.6 |
| MAC0615HDADN-RE3NC | 6x2x1,50 | 19,6 | 722 | 12.6 |
| MAC0815HDADN-RE3NC | 8x2x1,50 | 21,9 | 968 | 12.6 |
| MAC1015HDADN-RE3NC | 10x2x1,50 | 24,6 | 1155 | 12.6 |
| MAC1215HDADN-RE3NC | 12x2x1,50 | 25,2 | 1259 | 12.6 |
| MAC1615HDADN-RE3NC | 16x2x1,50 | 27,7 | 1524 | 12.6 |
| MAC2015HDADN-RE3NC | 20x2x1,50 | 30,5 | 1804 | 12.6 |
| MAC2415HDADN-RE3NC | 24x2x1,50 | 34,8 | 2483 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y4YRY-Pimf - 1x2x2,5 mm² - 300V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



RE-2Y(St)Y4YRY-Pimf - 500V - Nylon Cover

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0275HDADN-RE5NC | 2x2x0,75 | 13,6 | 339 | 37.5 |
| MAC0475HDADN-RE5NC | 4x2x0,75 | 15,0 | 426 | 37.5 |
| MAC0675HDADN-RE5NC | 6x2x0,75 | 17,2 | 543 | 37.5 |
| MAC0875HDADN-RE5NC | 8x2x0,75 | 18,5 | 629 | 37.5 |
| MAC1075HDADN-RE5NC | 10x2x0,75 | 21,4 | 859 | 37.5 |
| MAC1275HDADN-RE5NC | 12x2x0,75 | 21,9 | 924 | 37.5 |
| MAC1675HDADN-RE5NC | 16x2x0,75 | 23,7 | 1088 | 37.5 |
| MAC2075HDADN-RE5NC | 20x2x0,75 | 26,0 | 1273 | 37.5 |
| MAC2475HDADN-RE5NC | 24x2x0,75 | 28,4 | 1469 | 37.5 |
| MAC0210HDADN-RE5NC | 2x2x1,00 | 14,4 | 376 | 25.5 |
| MAC0410HDADN-RE5NC | 4x2x1,00 | 16,1 | 490 | 25.5 |
| MAC0610HDADN-RE5NC | 6x2x1,00 | 18,3 | 621 | 25.5 |
| MAC0810HDADN-RE5NC | 8x2x1,00 | 19,7 | 725 | 25.5 |
| MAC1010HDADN-RE5NC | 10x2x1,00 | 22,8 | 988 | 25.5 |
| MAC1210HDADN-RE5NC | 12x2x1,00 | 23,5 | 1069 | 25.5 |
| MAC1610HDADN-RE5NC | 16x2x1,00 | 25,5 | 1269 | 25.5 |
| MAC2010HDADN-RE5NC | 20x2x1,00 | 28,2 | 1509 | 25.5 |
| MAC2410HDADN-RE5NC | 24x2x1,00 | 30,6 | 1732 | 25.5 |
| MAC0215HDADN-RE5NC | 2x2x1,50 | 15,4 | 427 | 18.8 |
| MAC0415HDADN-RE5NC | 4x2x1,50 | 17,4 | 570 | 18.8 |
| MAC0615HDADN-RE5NC | 6x2x1,50 | 19,9 | 732 | 18.8 |
| MAC0815HDADN-RE5NC | 8x2x1,50 | 22,2 | 981 | 18.8 |
| MAC1015HDADN-RE5NC | 10x2x1,50 | 24,6 | 1172 | 18.8 |
| MAC1215HDADN-RE5NC | 12x2x1,50 | 25,6 | 1277 | 18.8 |
| MAC1615HDADN-RE5NC | 16x2x1,50 | 28,1 | 1545 | 18.8 |
| MAC2015HDADN-RE5NC | 20x2x1,50 | 30,9 | 1830 | 18.8 |
| MAC2415HDADN-RE5NC | 24x2x1,50 | 35,2 | 2519 | 18.8 |
| MAC0225HDADN-RE5NC | 2x2x2,50 | 17,6 | 545 | 12.6 |
| MAC0425HDADN-RE5NC | 4x2x2,50 | 19,8 | 737 | 12.6 |
| MAC0625HDADN-RE5NC | 6x2x2,50 | 23,6 | 1091 | 12.6 |
| MAC0825HDADN-RE5NC | 8x2x2,50 | 25,6 | 1293 | 12.6 |
| MAC1025HDADN-RE5NC | 10x2x2,50 | 29,1 | 1576 | 12.6 |
| MAC1225HDADN-RE5NC | 12x2x2,50 | 30,0 | 1732 | 12.6 |
| MAC1625HDADN-RE5NC | 16x2x2,50 | 34,4 | 2499 | 12.6 |
| MAC2025HDADN-RE5NC | 20x2x2,50 | 37,9 | 2953 | 12.6 |
| MAC2425HDADN-RE5NC | 24x2x2,50 | 41,5 | 3423 | 12.6 |

CABLE PRINTING

RAMCRO - RE-2Y(St)Y4YRY-Pimf - 1x2x2,5 mm² - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



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PAS 5308-1:2009

RAMCRO - PAS 5308-1:2009 PART1 TYPE1



BS 5308 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. Part 1 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyethylene FR - PE acc. to BS 6234

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT1 TY1 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- Fire Resistant Version: Silicon or Mica + XLPE
- SWB or STA armour

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



PAS 5308-1:2009 Part 1 Type 1

PE/CAM/PVC

BS 5308 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. Part 1 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0150HEADX-OIL | 1x2x0,50 | 5,6 | 40 | 37,5 |
| MAS0250HEADX-OIL | 2x2x0,50 | 8,2 | 70 | 37,5 |
| MAS0450HEADX-OIL | 4x2x0,50 | 9,5 | 107 | 37,5 |
| MAS0650HEADX-OIL | 6x2x0,50 | 11,9 | 164 | 37,5 |
| MAS0850HEADX-OIL | 8x2x0,50 | 13,1 | 202 | 37,5 |
| MAS1050HEADX-OIL | 10x2x0,50 | 16,1 | 245 | 37,5 |
| MAS1250HEADX-OIL | 12x2x0,50 | 15,6 | 278 | 37,5 |
| MAS1650HEADX-OIL | 16x2x0,50 | 17,4 | 356 | 37,5 |
| MAS2450HEADX-OIL | 24x2x0,50 | 22,1 | 542 | 37,5 |
| MAS0175HEADX-OIL | 1x2x0,75 | 5,9 | 47 | 25.5 |
| MAS0275HEADX-OIL | 2x2x0,75 | 8,8 | 83 | 25.5 |
| MAS0475HEADX-OIL | 4x2x0,75 | 10,2 | 130 | 25.5 |
| MAS0675HEADX-OIL | 6x2x0,75 | 12,8 | 200 | 25.5 |
| MAS0875HEADX-OIL | 8x2x0,75 | 14,1 | 248 | 25.5 |
| MAS1075HEADX-OIL | 10x2x0,75 | 16,2 | 302 | 25.5 |
| MAS1275HEADX-OIL | 12x2x0,75 | 17 | 354 | 25.5 |
| MAS1675HEADX-OIL | 16x2x0,75 | 19,4 | 477 | 25.5 |
| MAS2475HEADX-OIL | 24x2x0,75 | 23,9 | 676 | 25.5 |
| MAS0110HEADX-OIL | 1x2x1,00 | 6,7 | 58 | 18.8 |
| MAS0210HEADX-OIL | 2x2x1,00 | 10,1 | 105 | 18.8 |
| MAS0410HEADX-OIL | 4x2x1,00 | 12,3 | 186 | 18.8 |
| MAS0610HEADX-OIL | 6x2x1,00 | 14,7 | 257 | 18.8 |
| MAS0810HEADX-OIL | 8x2x1,00 | 16,2 | 322 | 18.8 |
| MAS1010HEADX-OIL | 10x2x1,00 | 19,5 | 434 | 18.8 |
| MAS1210HEADX-OIL | 12x2x1,00 | 20,2 | 495 | 18.8 |
| MAS1610HEADX-OIL | 16x2x1,00 | 22,4 | 623 | 18.8 |
| MAS2410HEADX-OIL | 24x2x1,00 | 27,6 | 889 | 18.8 |
| MAS0115HEADX-OIL | 1x2x1,50 | 6,8 | 67 | 12.6 |
| MAS0215HEADX-OIL | 2x2x1,50 | 10,3 | 122 | 12.6 |
| MAS0415HEADX-OIL | 4x2x1,50 | 12,6 | 221 | 12.6 |
| MAS0615HEADX-OIL | 6x2x1,50 | 15 | 309 | 12.6 |
| MAS0815HEADX-OIL | 8x2x1,50 | 16,8 | 399 | 12.6 |
| MAS1015HEADX-OIL | 10x2x1,50 | 20 | 520 | 12.6 |
| MAS1215HEADX-OIL | 12x2x1,50 | 20,6 | 597 | 12.6 |
| MAS1615HEADX-OIL | 16x2x1,50 | 22,9 | 759 | 12.6 |
| MAS2415HEADX-OIL | 24x2x1,50 | 28,3 | 1092 | 12.6 |
| MAS0125HEADX-OIL | 1x2x2,50 | 7,7 | 90 | 7.7 |
| MAS0225HEADX-OIL | 2x2x2,50 | 12,3 | 187 | 7.7 |
| MAS0425HEADX-OIL | 4x2x2,50 | 14,3 | 312 | 7.7 |
| MAS0625HEADX-OIL | 6x2x2,50 | 17,4 | 451 | 7.7 |
| MAS0825HEADX-OIL | 8x2x2,50 | 19,8 | 605 | 7.7 |
| MAS1025HEADX-OIL | 10x2x2,50 | 22,8 | 743 | 7.7 |
| MAS1225HEADX-OIL | 12x2x2,50 | 23,6 | 861 | 7.7 |
| MAS1625HEADX-OIL | 16x2x2,50 | 26,2 | 1106 | 7.7 |
| MAS2425HEADX-OIL | 24x2x2,50 | 32,8 | 1622 | 7.7 |

RAMCRO - PAS 5308-1:2009 PART1 TYPE1

BS 5308 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. Part 1 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyethylene FR - PE acc. to BS 6234

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT1 TY1 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- Fire Resistant Version: Silicon or Mica + XLPE

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



PAS 5308-1:2009 Part 1 Type 1

PE/IAM/CAM/PVC

BS 5308 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. Part 1 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0250HEADX-OIL | 2x2x0,50 | 8,5 | 83 | 37,5 |
| MAC0450HEADX-OIL | 4x2x0,50 | 9,8 | 131 | 37,5 |
| MAC0650HEADX-OIL | 6x2x0,50 | 12,3 | 201 | 37,5 |
| MAC0850HEADX-OIL | 8x2x0,50 | 13,5 | 250 | 37,5 |
| MAC1050HEADX-OIL | 10x2x0,50 | 15,6 | 305 | 37,5 |
| MAC1250HEADX-OIL | 12x2x0,50 | 16,1 | 350 | 37,5 |
| MAC1650HEADX-OIL | 16x2x0,50 | 18,1 | 454 | 37,5 |
| MAC2450HEADX-OIL | 24x2x0,50 | 22,9 | 685 | 37,5 |
| MAC0275HEADX-OIL | 2x2x0,75 | 9,1 | 96 | 25.5 |
| MAC0475HEADX-OIL | 4x2x0,75 | 10,5 | 154 | 25.5 |
| MAC0675HEADX-OIL | 6x2x0,75 | 13,2 | 236 | 25.5 |
| MAC0875HEADX-OIL | 8x2x0,75 | 14,5 | 296 | 25.5 |
| MAC1075HEADX-OIL | 10x2x0,75 | 17,0 | 371 | 25.5 |
| MAC1275HEADX-OIL | 12x2x0,75 | 17,5 | 427 | 25.5 |
| MAC1675HEADX-OIL | 16x2x0,75 | 20,0 | 574 | 25.5 |
| MAC2475HEADX-OIL | 24x2x0,75 | 24,7 | 820 | 25.5 |
| MAC0210HEADX-OIL | 2x2x1,00 | 10,3 | 116 | 18.8 |
| MAC0410HEADX-OIL | 4x2x1,00 | 12,6 | 214 | 18.8 |
| MAC0610HEADX-OIL | 6x2x1,00 | 15,1 | 298 | 18.8 |
| MAC0810HEADX-OIL | 8x2x1,00 | 16,8 | 384 | 18.8 |
| MAC1010HEADX-OIL | 10x2x1,00 | 20,1 | 502 | 18.8 |
| MAC1210HEADX-OIL | 12x2x1,00 | 20,7 | 576 | 18.8 |
| MAC1610HEADX-OIL | 16x2x1,00 | 23,0 | 730 | 18.8 |
| MAC2410HEADX-OIL | 24x2x1,00 | 28,4 | 1046 | 18.8 |
| MAC0215HEADX-OIL | 2x2x1,50 | 10,5 | 136 | 12.6 |
| MAC0415HEADX-OIL | 4x2x1,50 | 12,9 | 249 | 12.6 |
| MAC0615HEADX-OIL | 6x2x1,50 | 15,4 | 349 | 12.6 |
| MAC0815HEADX-OIL | 8x2x1,50 | 17,2 | 453 | 12.6 |
| MAC1015HEADX-OIL | 10x2x1,50 | 20,5 | 588 | 12.6 |
| MAC1215HEADX-OIL | 12x2x1,50 | 21,2 | 678 | 12.6 |
| MAC1615HEADX-OIL | 16x2x1,50 | 23,5 | 867 | 12.6 |
| MAC2415HEADX-OIL | 24x2x1,50 | 29,1 | 1252 | 12.6 |
| MAC0215HEADX-OIL | 2x2x,50 | 12,6 | 202 | 7.7 |
| MAC0415HEADX-OIL | 4x2x,50 | 14,6 | 339 | 7.7 |
| MAC0615HEADX-OIL | 6x2x,50 | 17,8 | 492 | 7.7 |
| MAC0815HEADX-OIL | 8x2x,50 | 20,2 | 660 | 7.7 |
| MAC1015HEADX-OIL | 10x2x,50 | 23,4 | 812 | 7.7 |
| MAC1215HEADX-OIL | 12x2x,50 | 24,2 | 942 | 7.7 |
| MAC1615HEADX-OIL | 16x2x,50 | 26,9 | 1213 | 7.7 |
| MAC2415HEADX-OIL | 24x2x2,50 | 33,6 | 1782 | 7.7 |

RAMCRO - PAS 5308-1:2009 PART1 TYPE2



BS 5308 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 types and from a variety of transducers such as pressure, proximity or microphone.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyethylene FR - PE acc. to BS 6234

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyethylene - PE

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type 2
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT1 TY2 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | >1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- Fire Resistant Version: Silicon or Mica + XLPE
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



PAS 5308-1:2009 Part 1 Type 2

PE/CAM/PVC/SWA/PVC

BS 5308 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 types and from a variety of transducers such as pressure, proximity or microphone. Part 1 Type 2 cables are designed where a greater degree of mechanical protection is required or where there is direct burial at a suitable depth. Collectively and individually screened pairs are available within the range.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0150AEADX-OIL | 1x2x0,50 | 10,2 | 196 | 37,5 |
| MAS0250AEADX-OIL | 2x2x0,50 | 12,8 | 283 | 37,5 |
| MAS0450AEADX-OIL | 4x2x0,50 | 14,1 | 347 | 37,5 |
| MAS0650AEADX-OIL | 6x2x0,50 | 16,7 | 466 | 37,5 |
| MAS0850AEADX-OIL | 8x2x0,50 | 17,9 | 529 | 37,5 |
| MAS1050AEADX-OIL | 10x2x0,50 | 20,7 | 727 | 37,5 |
| MAS1250AEADX-OIL | 12x2x0,50 | 21,2 | 774 | 37,5 |
| MAS1650AEADX-OIL | 16x2x0,50 | 23,3 | 919 | 37,5 |
| MAS2450AEADX-OIL | 24x2x0,50 | 29,1 | 1410 | 37,5 |
| MAS0175AEADX-OIL | 1x2x0,75 | 10,5 | 211 | 25,5 |
| MAS0275AEADX-OIL | 2x2x0,75 | 13,4 | 309 | 25,5 |
| MAS0475AEADX-OIL | 4x2x0,75 | 15 | 394 | 25,5 |
| MAS0675AEADX-OIL | 6x2x0,75 | 17,6 | 521 | 25,5 |
| MAS0875AEADX-OIL | 8x2x0,75 | 18,9 | 597 | 25,5 |
| MAS1075AEADX-OIL | 10x2x0,75 | 21,9 | 817 | 25,5 |
| MAS1275AEADX-OIL | 12x2x0,75 | 22,9 | 902 | 25,5 |
| MAS1675AEADX-OIL | 16x2x0,75 | 26,2 | 1238 | 25,5 |
| MAS2475AEADX-OIL | 24x2x0,75 | 30,8 | 1607 | 25,5 |
| MAS0110AEADX-OIL | 1x2x1,00 | 11,3 | 238 | 18,8 |
| MAS0210AEADX-OIL | 2x2x1,00 | 14,6 | 357 | 18,8 |
| MAS0410AEADX-OIL | 4x2x1,00 | 17,1 | 497 | 18,8 |
| MAS0610AEADX-OIL | 6x2x1,00 | 20,4 | 729 | 18,8 |
| MAS0810AEADX-OIL | 8x2x1,00 | 21,9 | 836 | 18,8 |
| MAS1010AEADX-OIL | 10x2x1,00 | 26,3 | 1198 | 18,8 |
| MAS1210AEADX-OIL | 12x2x1,00 | 26,9 | 1281 | 18,8 |
| MAS1610AEADX-OIL | 16x2x1,00 | 29,3 | 1501 | 18,8 |
| MAS2410AEADX-OIL | 24x2x1,00 | 35,6 | 2175 | 18,8 |
| MAS0115AEADX-OIL | 1x2x1,50 | 11,4 | 250 | 12,6 |
| MAS0215AEADX-OIL | 2x2x1,50 | 15,1 | 387 | 12,6 |
| MAS0415AEADX-OIL | 4x2x1,50 | 17,4 | 538 | 12,6 |
| MAS0615AEADX-OIL | 6x2x1,50 | 20,7 | 790 | 12,6 |
| MAS0815AEADX-OIL | 8x2x1,50 | 22,6 | 941 | 12,6 |
| MAS1015AEADX-OIL | 10x2x1,50 | 26,8 | 1301 | 12,6 |
| MAS1215AEADX-OIL | 12x2x1,50 | 27,4 | 1401 | 12,6 |
| MAS1615AEADX-OIL | 16x2x1,50 | 29,9 | 1656 | 12,6 |
| MAS2415AEADX-OIL | 24x2x1,50 | 36,3 | 2407 | 12,6 |
| MAS0115AEADX-OIL | 1x2x2,50 | 12,3 | 292 | 7,7 |
| MAS0215AEADX-OIL | 2x2x2,50 | 17,1 | 498 | 7,7 |
| MAS0415AEADX-OIL | 4x2x2,50 | 20,0 | 774 | 7,7 |
| MAS0615AEADX-OIL | 6x2x2,50 | 23,2 | 1010 | 7,7 |
| MAS0815AEADX-OIL | 8x2x2,50 | 26,5 | 1379 | 7,7 |
| MAS1015AEADX-OIL | 10x2x2,50 | 29,8 | 1638 | 7,7 |
| MAS1215AEADX-OIL | 12x2x2,50 | 30,6 | 1784 | 7,7 |
| MAS1615AEADX-OIL | 16x2x2,50 | 34,2 | 2335 | 7,7 |
| MAS2415AEADX-OIL | 24x2x2,50 | 40,9 | 3147 | 7,7 |

RAMCRO - PAS 5308-1:2009 PART1 TYPE2



BS 5308 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 types and from a variety of transducers such as pressure, proximity or microphone. Part 1 Type 2 cables are designed where a greater degree of mechanical protection is required or where there is direct burial at a suitable depth. Collectively and individually screened pairs are available within the range.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyethylene FR - PE acc. to BS 6234

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyethylene - PE

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type 2
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT1 TY2 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- Fire Resistant Version: Silicon or Mica + XLPE
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



PAS 5308-1:2009 Part 1 Type 2

PE/IAM/CAM/PVC/SWA/PVC

BS 5308 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 types and from a variety of transducers such as pressure, proximity or microphone. Part 1 Type 2 cables are designed where a greater degree of mechanical protection is required or where there is direct burial at a suitable depth. Collectively and individually screened pairs are available within the range.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAC0250AEADX-OIL | 2x2x0,50 | 8,5 | 83 | 37,5 |
| MAC0450AEADX-OIL | 4x2x0,50 | 9,8 | 131 | 37,5 |
| MAC0650AEADX-OIL | 6x2x0,50 | 12,3 | 201 | 37,5 |
| MAC0850AEADX-OIL | 8x2x0,50 | 13,5 | 250 | 37,5 |
| MAC1050AEADX-OIL | 10x2x0,50 | 15,6 | 305 | 37,5 |
| MAC1250AEADX-OIL | 12x2x0,50 | 16,1 | 350 | 37,5 |
| MAC1650AEADX-OIL | 16x2x0,50 | 18,1 | 454 | 37,5 |
| MAC2450AEADX-OIL | 24x2x0,50 | 22,9 | 685 | 37,5 |
| MAC0275AEADX-OIL | 2x2x0,75 | 9,1 | 96 | 25.5 |
| MAC0475AEADX-OIL | 4x2x0,75 | 10,5 | 154 | 25.5 |
| MAC0675AEADX-OIL | 6x2x0,75 | 13,2 | 236 | 25.5 |
| MAC0875AEADX-OIL | 8x2x0,75 | 14,5 | 296 | 25.5 |
| MAC1075AEADX-OIL | 10x2x0,75 | 17.0 | 371 | 25.5 |
| MAC1275AEADX-OIL | 12x2x0,75 | 17,5 | 427 | 25.5 |
| MAC1675AEADX-OIL | 16x2x0,75 | 20.0 | 574 | 25.5 |
| MAC2475AEADX-OIL | 24x2x0,75 | 24,7 | 820 | 25.5 |
| MAC0210AEADX-OIL | 2x2x1,00 | 10,3 | 116 | 18.8 |
| MAC0410AEADX-OIL | 4x2x1,00 | 12,6 | 214 | 18.8 |
| MAC0610AEADX-OIL | 6x2x1,00 | 15,1 | 298 | 18.8 |
| MAC0810AEADX-OIL | 8x2x1,00 | 16,8 | 384 | 18.8 |
| MAC1010AEADX-OIL | 10x2x1,00 | 20,1 | 502 | 18.8 |
| MAC1210AEADX-OIL | 12x2x1,00 | 20,7 | 576 | 18.8 |
| MAC1610AEADX-OIL | 16x2x1,00 | 23.0 | 730 | 18.8 |
| MAC2410AEADX-OIL | 24x2x1,00 | 28,4 | 1046 | 18.8 |
| MAC0215AEADX-OIL | 2x2x1,50 | 10,5 | 136 | 12.6 |
| MAC0415AEADX-OIL | 4x2x1,50 | 12,9 | 249 | 12.6 |
| MAC0615AEADX-OIL | 6x2x1,50 | 15,4 | 349 | 12.6 |
| MAC0815AEADX-OIL | 8x2x1,50 | 17,2 | 453 | 12.6 |
| MAC1015AEADX-OIL | 10x2x1,50 | 20,5 | 588 | 12.6 |
| MAC1215AEADX-OIL | 12x2x1,50 | 21,2 | 678 | 12.6 |
| MAC1615AEADX-OIL | 16x2x1,50 | 23,5 | 867 | 12.6 |
| MAC2415AEADX-OIL | 24x2x1,50 | 29,1 | 1252 | 12.6 |
| MAC0215AEADX-OIL | 2x2x,50 | 12,6 | 202 | 7.7 |
| MAC0415AEADX-OIL | 4x2x,50 | 14,6 | 339 | 7.7 |
| MAC0615AEADX-OIL | 6x2x,50 | 17,8 | 492 | 7.7 |
| MAC0815AEADX-OIL | 8x2x,50 | 20,2 | 660 | 7.7 |
| MAC1015AEADX-OIL | 10x2x,50 | 23,4 | 812 | 7.7 |
| MAC1215AEADX-OIL | 12x2x,50 | 24,2 | 942 | 7.7 |
| MAC1615AEADX-OIL | 16x2x,50 | 26,9 | 1213 | 7.7 |
| MAC2415AEADX-OIL | 24x2x2,50 | 33,6 | 1782 | 7.7 |

RAMCRO - PAS 5308-1:2009 PART1 TYPE3

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemicals industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity and microphone. Part 1 Type 3 cables are generally designed where a greater degree of mechanical and chemical protection is required or direct burial at a suitable depth.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyethylene FR - PE acc. to BS 6234

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyethylene FR - PE

Chemical Protection:

Lead Cover

Inner Sheath:

Polyvinyl chloride FR - PVC

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT1 TY3 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type 3
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- Fire Resistant Version: Silicon or Mica + XLPE
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

PAS 5308-1:2009 Part 1 Type 3

PE/CAM/PVC/Pb/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemicals industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity and microphone. Part 1 Type 3 cables are generally designed where a greater degree of mechanical and chemical protection is required or direct burial at a suitable depth.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAS0150AEADX-OILLC | 1x2x0,50 | 15,2 | 648 | 37,5 |
| MAS0250AEADX-OILLC | 2x2x0,50 | 17,8 | 851 | 37,5 |
| MAS0450AEADX-OILLC | 4x2x0,50 | 20,0 | 1079 | 37,5 |
| MAS0650AEADX-OILLC | 6x2x0,50 | 23,0 | 1350 | 37,5 |
| MAS0850AEADX-OILLC | 8x2x0,50 | 24,2 | 1473 | 37,5 |
| MAS1050AEADX-OILLC | 10x2x0,50 | 27,2 | 1880 | 37,5 |
| MAS1250AEADX-OILLC | 12x2x0,50 | 27,7 | 1955 | 37,5 |
| MAS1650AEADX-OILLC | 16x2x0,50 | 29,8 | 2206 | 37,5 |
| MAS2450AEADX-OILLC | 24x2x0,50 | 36,3 | 3248 | 37,5 |
| MAS0175AEADX-OILLC | 1x2x0,75 | 15,5 | 678 | 25,5 |
| MAS0275AEADX-OILLC | 2x2x0,75 | 18,4 | 902 | 25,5 |
| MAS0475AEADX-OILLC | 4x2x0,75 | 21,1 | 1180 | 25,5 |
| MAS0675AEADX-OILLC | 6x2x0,75 | 23,9 | 1451 | 25,5 |
| MAS0875AEADX-OILLC | 8x2x0,75 | 26,1 | 1733 | 25,5 |
| MAS1075AEADX-OILLC | 10x2x0,75 | 28,4 | 2035 | 25,5 |
| MAS1275AEADX-OILLC | 12x2x0,75 | 29,4 | 2165 | 25,5 |
| MAS1675AEADX-OILLC | 16x2x0,75 | 32,0 | 2580 | 25,5 |
| MAS2475AEADX-OILLC | 24x2x0,75 | 38,0 | 3556 | 25,5 |
| MAS0110AEADX-OILLC | 1x2x1,00 | 16,3 | 739 | 18,8 |
| MAS0210AEADX-OILLC | 2x2x1,00 | 20,9 | 1142 | 18,8 |
| MAS0410AEADX-OILLC | 4x2x1,00 | 23,4 | 1402 | 18,8 |
| MAS0610AEADX-OILLC | 6x2x1,00 | 26,7 | 1791 | 18,8 |
| MAS0810AEADX-OILLC | 8x2x1,00 | 28,4 | 2051 | 18,8 |
| MAS1010AEADX-OILLC | 10x2x1,00 | 32,1 | 2546 | 18,8 |
| MAS1210AEADX-OILLC | 12x2x1,00 | 33,6 | 2856 | 18,8 |
| MAS1610AEADX-OILLC | 16x2x1,00 | 36,5 | 3355 | 18,8 |
| MAS2410AEADX-OILLC | 24x2x1,00 | 42,2 | 4280 | 18,8 |
| MAS0115AEADX-OILLC | 1x2x1,50 | 16,4 | 757 | 12,6 |
| MAS0215AEADX-OILLC | 2x2x1,50 | 21,2 | 1177 | 12,6 |
| MAS0415AEADX-OILLC | 4x2x1,50 | 23,7 | 1457 | 12,6 |
| MAS0615AEADX-OILLC | 6x2x1,50 | 27,2 | 1943 | 12,6 |
| MAS0815AEADX-OILLC | 8x2x1,50 | 29,1 | 2192 | 12,6 |
| MAS1015AEADX-OILLC | 10x2x1,50 | 33,4 | 2864 | 12,6 |
| MAS1215AEADX-OILLC | 12x2x1,50 | 34,2 | 3021 | 12,6 |
| MAS1615AEADX-OILLC | 16x2x1,50 | 37,1 | 3545 | 12,6 |
| MAS2415AEADX-OILLC | 24x2x1,50 | 43,1 | 4679 | 12,6 |
| MAS0115AEADX-OILLC | 1x2x2,50 | 17,3 | 838 | 7,7 |
| MAS0215AEADX-OILLC | 2x2x2,50 | 23,4 | 1401 | 7,7 |
| MAS0415AEADX-OILLC | 4x2x2,50 | 26,3 | 1817 | 7,7 |
| MAS0615AEADX-OILLC | 6x2x2,50 | 29,8 | 2294 | 7,7 |
| MAS0815AEADX-OILLC | 8x2x2,50 | 33,2 | 2960 | 7,7 |
| MAS1015AEADX-OILLC | 10x2x2,50 | 37,0 | 3523 | 7,7 |
| MAS1215AEADX-OILLC | 12x2x2,50 | 37,8 | 3718 | 7,7 |
| MAS1615AEADX-OILLC | 16x2x2,50 | 40,8 | 4359 | 7,7 |
| MAS2415AEADX-OILLC | 24x2x2,50 | 48,3 | 5910 | 7,7 |

RAMCRO - PAS 5308-1:2009 PART1 TYPE3

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemicals industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity and microphone. Part 1 Type 3 cables are generally designed where a greater degree of mechanical and chemical protection is required or direct burial at a suitable depth.

CONSTRUCTION

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyethylene FR - PE acc. to BS 6234

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyethylene FR - PE

Chemical Protection:

Lead Cover

Inner Sheath:

Polyvinyl chloride FR - PVC

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride FR - PVC

Colour Outer Sheath:

Blue (IS), Black (NIS)

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT1 TY3 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type 3
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Nylon Cover
- UV Resistant
- Fire Resistant Version: Silicon or Mica + XLPE
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

PAS 5308-1:2009 Part 1 Type 3

PE/IAM/CAM/PVC/Pb/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemicals industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity and microphone. Part 1 Type 3 cables are generally designed where a greater degree of mechanical and chemical protection is required or direct burial at a suitable depth.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAC0250AEADX-OILLC | 2x2x0,50 | 18,1 | 884 | 37,5 |
| MAC0450AEADX-OILLC | 4x2x0,50 | 20,7 | 1159 | 37,5 |
| MAC0650AEADX-OILLC | 6x2x0,50 | 23,4 | 1426 | 37,5 |
| MAC0850AEADX-OILLC | 8x2x0,50 | 24,6 | 1566 | 37,5 |
| MAC1050AEADX-OILLC | 10x2x0,50 | 27,8 | 2000 | 37,5 |
| MAC1250AEADX-OILLC | 12x2x0,50 | 28,3 | 2091 | 37,5 |
| MAC1650AEADX-OILLC | 16x2x0,50 | 30,7 | 2464 | 37,5 |
| MAC2450AEADX-OILLC | 24x2x0,50 | 37,1 | 3508 | 37,5 |
| MAC0275AEADX-OILLC | 2x2x0,75 | 18,7 | 935 | 25,5 |
| MAC0475AEADX-OILLC | 4x2x0,75 | 21,4 | 1234 | 25,5 |
| MAC0675AEADX-OILLC | 6x2x0,75 | 24,3 | 1526 | 25,5 |
| MAC0875AEADX-OILLC | 8x2x0,75 | 26,5 | 1830 | 25,5 |
| MAC1075AEADX-OILLC | 10x2x0,75 | 29,4 | 2196 | 25,5 |
| MAC1275AEADX-OILLC | 12x2x0,75 | 29,9 | 2301 | 25,5 |
| MAC1675AEADX-OILLC | 16x2x0,75 | 33,5 | 2949 | 25,5 |
| MAC2475AEADX-OILLC | 24x2x0,75 | 38,9 | 3816 | 25,5 |
| MAC0210AEADX-OILLC | 2x2x1,00 | 21,2 | 1179 | 18,8 |
| MAC0410AEADX-OILLC | 4x2x1,00 | 23,7 | 1460 | 18,8 |
| MAC0610AEADX-OILLC | 6x2x1,00 | 27,3 | 1948 | 18,8 |
| MAC0810AEADX-OILLC | 8x2x1,00 | 29,2 | 2198 | 18,8 |
| MAC1010AEADX-OILLC | 10x2x1,00 | 33,5 | 2872 | 18,8 |
| MAC1210AEADX-OILLC | 12x2x1,00 | 34,3 | 3030 | 18,8 |
| MAC1610AEADX-OILLC | 16x2x1,00 | 37,2 | 3555 | 18,8 |
| MAC2410AEADX-OILLC | 24x2x1,00 | 43,2 | 4694 | 18,8 |
| MAC0215AEADX-OILLC | 2x2x1,50 | 21,4 | 1213 | 12,6 |
| MAC0415AEADX-OILLC | 4x2x1,50 | 24,0 | 1515 | 12,6 |
| MAC0615AEADX-OILLC | 6x2x1,50 | 27,6 | 2028 | 12,6 |
| MAC0815AEADX-OILLC | 8x2x1,50 | 29,6 | 2298 | 12,6 |
| MAC1015AEADX-OILLC | 10x2x1,50 | 34,1 | 3019 | 12,6 |
| MAC1215AEADX-OILLC | 12x2x1,50 | 34,8 | 3177 | 12,6 |
| MAC1615AEADX-OILLC | 16x2x1,50 | 37,7 | 3744 | 12,6 |
| MAC2415AEADX-OILLC | 24x2x1,50 | 43,9 | 4970 | 12,6 |
| MAC0225AEADX-OILLC | 2x2x,50 | 23,7 | 1439 | 7,7 |
| MAC0425AEADX-OILLC | 4x2x,50 | 26,6 | 1877 | 7,7 |
| MAC0625AEADX-OILLC | 6x2x,50 | 30,2 | 2379 | 7,7 |
| MAC0825AEADX-OILLC | 8x2x,50 | 33,6 | 3042 | 7,7 |
| MAC1025AEADX-OILLC | 10x2x,50 | 37,6 | 3663 | 7,7 |
| MAC1225AEADX-OILLC | 12x2x,50 | 38,4 | 3876 | 7,7 |
| MAC1625AEADX-OILLC | 16x2x,50 | 41,5 | 4561 | 7,7 |
| MAC2425AEADX-OILLC | 24x2x2,50 | 49,4 | 6231 | 7,7 |

ramcro

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A large industrial refinery or chemical plant is shown at sunset. The sky is a mix of orange, pink, and blue. The facility is filled with complex piping, scaffolding, and large cylindrical tanks. Some parts of the plant are illuminated with bright lights, creating a high-contrast scene against the twilight sky. A prominent vertical distillation column is visible on the left side of the frame. The overall atmosphere is one of industrial activity during the 'blue hour'.

PAS 5308-2:2009

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RAMCRO - PAS 5308-2:2009 PART2 TYPE1



BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- PAS 5308-2:2009 Part 2 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT2 TY1 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C




PAS 5308-2:2009 Part 2 Type 1

PVC/CAM/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0150HEAAX-OIL | 1x2x0,50 | 5,6 | 43 | 37,5 |
| MAS0250HEAAX-OIL | 2x2x0,50 | 7,6 | 71 | 37,5 |
| MAS0450HEAAX-OIL | 4x2x0,50 | 9,1 | 117 | 37,5 |
| MAS0650HEAAX-OIL | 6x2x0,50 | 10,8 | 163 | 37,5 |
| MAS0850HEAAX-OIL | 8x2x0,50 | 12,4 | 224 | 37,5 |
| MAS1050HEAAX-OIL | 10x2x0,50 | 14,3 | 273 | 37,5 |
| MAS1250HEAAX-OIL | 12x2x0,50 | 14,8 | 312 | 37,5 |
| MAS1650HEAAX-OIL | 16x2x0,50 | 16,3 | 396 | 37,5 |
| MAS2450HEAAX-OIL | 24x2x0,50 | 20,9 | 611 | 37,5 |
| MAS0175HEAAX-OIL | 1x2x0,75 | 5,9 | 50 | 25,5 |
| MAS0275HEAAX-OIL | 2x2x0,75 | 8,4 | 88 | 25,5 |
| MAS0475HEAAX-OIL | 4x2x0,75 | 9,7 | 142 | 25,5 |
| MAS0675HEAAX-OIL | 6x2x0,75 | 12,2 | 218 | 25,5 |
| MAS0875HEAAX-OIL | 8x2x0,75 | 13,4 | 273 | 25,5 |
| MAS1075HEAAX-OIL | 10x2x0,75 | 15,4 | 334 | 25,5 |
| MAS1275HEAAX-OIL | 12x2x0,75 | 15,9 | 384 | 25,5 |
| MAS1675HEAAX-OIL | 16x2x0,75 | 17,8 | 500 | 25,5 |
| MAS2475HEAAX-OIL | 24x2x0,75 | 22,6 | 754 | 25,5 |
| MAS0110HEAAX-OIL | 1x2x1,00 | 6,7 | 63 | 18,8 |
| MAS0210HEAAX-OIL | 2x2x1,00 | 9,6 | 112 | 18,8 |
| MAS0410HEAAX-OIL | 4x2x1,00 | 11,3 | 191 | 18,8 |
| MAS0610HEAAX-OIL | 6x2x1,00 | 14,0 | 284 | 18,8 |
| MAS0810HEAAX-OIL | 8x2x1,00 | 15,4 | 358 | 18,8 |
| MAS1010HEAAX-OIL | 10x2x1,00 | 17,9 | 449 | 18,8 |
| MAS1210HEAAX-OIL | 12x2x1,00 | 19,1 | 548 | 18,8 |
| MAS1610HEAAX-OIL | 16x2x1,00 | 21,2 | 697 | 18,8 |
| MAS2410HEAAX-OIL | 24x2x1,00 | 26,1 | 1002 | 18,8 |
| MAS0115HEAAX-OIL | 1x2x1,50 | 6,8 | 71 | 12,6 |
| MAS0215HEAAX-OIL | 2x2x1,50 | 9,8 | 129 | 12,6 |
| MAS0415HEAAX-OIL | 4x2x1,50 | 12,0 | 236 | 12,6 |
| MAS0615HEAAX-OIL | 6x2x1,50 | 14,3 | 333 | 12,6 |
| MAS0815HEAAX-OIL | 8x2x1,50 | 15,7 | 423 | 12,6 |
| MAS1015HEAAX-OIL | 10x2x1,50 | 18,4 | 530 | 12,6 |
| MAS1215HEAAX-OIL | 12x2x1,50 | 19,6 | 645 | 12,6 |
| MAS1615HEAAX-OIL | 16x2x1,50 | 21,7 | 826 | 12,6 |
| MAS2415HEAAX-OIL | 24x2x1,50 | 26,8 | 1193 | 12,6 |
| MAS0125HEAAX-OIL | 1x2x2,50 | 7,7 | 96 | 7,7 |
| MAS0225HEAAX-OIL | 2x2x2,50 | 11,3 | 183 | 7,7 |
| MAS0425HEAAX-OIL | 4x2x2,50 | 13,6 | 330 | 7,7 |
| MAS0625HEAAX-OIL | 6x2x2,50 | 16,3 | 471 | 7,7 |
| MAS0825HEAAX-OIL | 8x2x2,50 | 18,2 | 614 | 7,7 |
| MAS1025HEAAX-OIL | 10x2x2,50 | 21,7 | 791 | 7,7 |
| MAS1225HEAAX-OIL | 12x2x2,50 | 22,4 | 920 | 7,7 |
| MAS1625HEAAX-OIL | 16x2x2,50 | 24,8 | 1186 | 7,7 |
| MAS2425HEAAX-OIL | 24x2x2,50 | 30,8 | 1729 | 7,7 |

RAMCRO - PAS 5308-2:2009 PART2 TYPE1



BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyvinyl chloride FR- PVC acc. to EN 50363-3

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- PAS 5308-2:2009 Part 2 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT2 TY1 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



PAS 5308-2:2009 Part 2 Type 1

PVC/IAM/CAM/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAC0250HEAAX-OIL | 2x2x0,50 | 8,1 | 87 | 37,5 |
| MAC0450HEAAX-OIL | 4x2x0,50 | 9,3 | 142 | 37,5 |
| MAC0650HEAAX-OIL | 6x2x0,50 | 11,3 | 205 | 37,5 |
| MAC0850HEAAX-OIL | 8x2x0,50 | 12,9 | 272 | 37,5 |
| MAC1050HEAAX-OIL | 10x2x0,50 | 14,8 | 333 | 37,5 |
| MAC1250HEAAX-OIL | 12x2x0,50 | 15,3 | 384 | 37,5 |
| MAC1650HEAAX-OIL | 16x2x0,50 | 17,1 | 500 | 37,5 |
| MAC2450HEAAX-OIL | 24x2x0,50 | 21,7 | 754 | 37,5 |
| MAC0275HEAAX-OIL | 2x2x0,75 | 8,6 | 101 | 25,5 |
| MAC0475HEAAX-OIL | 4x2x0,75 | 10 | 166 | 25,5 |
| MAC0675HEAAX-OIL | 6x2x0,75 | 12,6 | 255 | 25,5 |
| MAC0875HEAAX-OIL | 8x2x0,75 | 13,8 | 321 | 25,5 |
| MAC1075HEAAX-OIL | 10x2x0,75 | 15,9 | 394 | 25,5 |
| MAC1275HEAAX-OIL | 12x2x0,75 | 16,6 | 465 | 25,5 |
| MAC1675HEAAX-OIL | 16x2x0,75 | 19 | 625 | 25,5 |
| MAC2475HEAAX-OIL | 24x2x0,75 | 23,4 | 898 | 25,5 |
| MAC0210HEAAX-OIL | 2x2x1,00 | 9,8 | 126 | 18,8 |
| MAC0410HEAAX-OIL | 4x2x1,00 | 12 | 231 | 18,8 |
| MAC0610HEAAX-OIL | 6x2x1,00 | 14,3 | 324 | 18,8 |
| MAC0810HEAAX-OIL | 8x2x1,00 | 15,8 | 412 | 18,8 |
| MAC1010HEAAX-OIL | 10x2x1,00 | 19 | 546 | 18,8 |
| MAC1210HEAAX-OIL | 12x2x1,00 | 19,7 | 629 | 18,8 |
| MAC1610HEAAX-OIL | 16x2x1,00 | 21,8 | 804 | 18,8 |
| MAC2410HEAAX-OIL | 24x2x1,00 | 26,9 | 1161 | 18,8 |
| MAC0215HEAAX-OIL | 2x2x1,50 | 10 | 143 | 12,6 |
| MAC0415HEAAX-OIL | 4x2x1,50 | 12,3 | 264 | 12,6 |
| MAC0615HEAAX-OIL | 6x2x1,50 | 14,6 | 373 | 12,6 |
| MAC0815HEAAX-OIL | 8x2x1,50 | 16,1 | 476 | 12,6 |
| MAC1015HEAAX-OIL | 10x2x1,50 | 19,5 | 627 | 12,6 |
| MAC1215HEAAX-OIL | 12x2x1,50 | 20,1 | 726 | 12,6 |
| MAC1615HEAAX-OIL | 16x2x1,50 | 22,3 | 932 | 12,6 |
| MAC2415HEAAX-OIL | 24x2x1,50 | 27,5 | 1352 | 12,6 |
| MAC0215HEAAX-OIL | 2x2x,50 | 12 | 210 | 7,7 |
| MAC0415HEAAX-OIL | 4x2x,50 | 13,9 | 358 | 7,7 |
| MAC0615HEAAX-OIL | 6x2x,50 | 16,9 | 520 | 7,7 |
| MAC0815HEAAX-OIL | 8x2x,50 | 19,2 | 698 | 7,7 |
| MAC1015HEAAX-OIL | 10x2x,50 | 22,1 | 859 | 7,7 |
| MAC1215HEAAX-OIL | 12x2x,50 | 22,9 | 1000 | 7,7 |
| MAC1615HEAAX-OIL | 16x2x,50 | 25,4 | 1293 | 7,7 |
| MAC2415HEAAX-OIL | 24x2x2,50 | 31,7 | 1904 | 7,7 |

RAMCRO - PAS 5308-2:2009 PART2 TYPE2



BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyvinyl chloride FR- PVC acc. to EN 50363-3

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride FR- PVC acc. to EN 50363-3

Colour Outer Sheath:

Blue (IS), Black (NIS)

STANDARD REFERENCES

- PAS 5308-2:2009 Part 2 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT2 TY2 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



IDENTIFICATION OF CORES



In according to PAS 5308-2:2009


PAS 5308-2:2009 Part 2 Type 2

PVC/CAM/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0150AEAAAX-OIL | 1x2x0,50 | 10,2 | 200 | 37,5 |
| MAS0250AEAAAX-OIL | 2x2x0,50 | 12,2 | 271 | 37,5 |
| MAS0450AEAAAX-OIL | 4x2x0,50 | 13,6 | 348 | 37,5 |
| MAS0650AEAAAX-OIL | 6x2x0,50 | 15,5 | 439 | 37,5 |
| MAS0850AEAAAX-OIL | 8x2x0,50 | 17,2 | 537 | 37,5 |
| MAS1050AEAAAX-OIL | 10x2x0,50 | 20 | 733 | 37,5 |
| MAS1250AEAAAX-OIL | 12x2x0,50 | 20,4 | 786 | 37,5 |
| MAS1650AEAAAX-OIL | 16x2x0,50 | 22 | 914 | 37,5 |
| MAS2450AEAAAX-OIL | 24x2x0,50 | 27,7 | 1424 | 37,5 |
| MAS0175AEAAAX-OIL | 1x2x0,75 | 10,5 | 214 | 25,5 |
| MAS0275AEAAAX-OIL | 2x2x0,75 | 13 | 305 | 25,5 |
| MAS0475AEAAAX-OIL | 4x2x0,75 | 14,3 | 388 | 25,5 |
| MAS0675AEAAAX-OIL | 6x2x0,75 | 17 | 525 | 25,5 |
| MAS0875AEAAAX-OIL | 8x2x0,75 | 18,2 | 607 | 25,5 |
| MAS1075AEAAAX-OIL | 10x2x0,75 | 21,1 | 825 | 25,5 |
| MAS1275AEAAAX-OIL | 12x2x0,75 | 21,6 | 891 | 25,5 |
| MAS1675AEAAAX-OIL | 16x2x0,75 | 23,7 | 1073 | 25,5 |
| MAS2475AEAAAX-OIL | 24x2x0,75 | 29,6 | 1641 | 25,5 |
| MAS0110AEAAAX-OIL | 1x2x1,00 | 11,3 | 243 | 18,8 |
| MAS0210AEAAAX-OIL | 2x2x1,00 | 14,1 | 354 | 18,8 |
| MAS0410AEAAAX-OIL | 4x2x1,00 | 16,1 | 480 | 18,8 |
| MAS0610AEAAAX-OIL | 6x2x1,00 | 18,7 | 630 | 18,8 |
| MAS0810AEAAAX-OIL | 8x2x1,00 | 21 | 849 | 18,8 |
| MAS1010AEAAAX-OIL | 10x2x1,00 | 23,8 | 1025 | 18,8 |
| MAS1210AEAAAX-OIL | 12x2x1,00 | 25,9 | 1300 | 18,8 |
| MAS1610AEAAAX-OIL | 16x2x1,00 | 28 | 1519 | 18,8 |
| MAS2410AEAAAX-OIL | 24x2x1,00 | 34,1 | 2226 | 18,8 |
| MAS0115AEAAAX-OIL | 1x2x1,50 | 11,4 | 255 | 12,6 |
| MAS0215AEAAAX-OIL | 2x2x1,50 | 14,4 | 375 | 12,6 |
| MAS0415AEAAAX-OIL | 4x2x1,50 | 16,8 | 539 | 12,6 |
| MAS0615AEAAAX-OIL | 6x2x1,50 | 20 | 793 | 12,6 |
| MAS0815AEAAAX-OIL | 8x2x1,50 | 21,4 | 923 | 12,6 |
| MAS1015AEAAAX-OIL | 10x2x1,50 | 24,2 | 1118 | 12,6 |
| MAS1215AEAAAX-OIL | 12x2x1,50 | 26,4 | 1412 | 12,6 |
| MAS1615AEAAAX-OIL | 16x2x1,50 | 28,5 | 1666 | 12,6 |
| MAS2415AEAAAX-OIL | 24x2x1,50 | 34,7 | 2445 | 12,6 |
| MAS0115AEAAAX-OIL | 1x2x2,50 | 12,3 | 298 | 7,7 |
| MAS0215AEAAAX-OIL | 2x2x2,50 | 16,1 | 471 | 7,7 |
| MAS0415AEAAAX-OIL | 4x2x2,50 | 18,4 | 669 | 7,7 |
| MAS0615AEAAAX-OIL | 6x2x2,50 | 22 | 987 | 7,7 |
| MAS0815AEAAAX-OIL | 8x2x2,50 | 24 | 1196 | 7,7 |
| MAS1015AEAAAX-OIL | 10x2x2,50 | 28,4 | 1629 | 7,7 |
| MAS1215AEAAAX-OIL | 12x2x2,50 | 29,4 | 1799 | 7,7 |
| MAS1615AEAAAX-OIL | 16x2x2,50 | 31,8 | 2152 | 7,7 |
| MAS2415AEAAAX-OIL | 24x2x2,50 | 38,8 | 3149 | 7,7 |

RAMCRO - PAS 5308-2:2009 PART2 TYPE2



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CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Colour Outer Sheath:

Blue (IS), Black (NIS)

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT2 TY2 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

STANDARD REFERENCES

- PAS 5308-2:2009 Part 2 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

PAS 5308-2:2009 Part 2 Type 2

PVC/IAM/CAM/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-----------------|------------------------------|-----------------------|------------------------------|---|
| MAC0250AEAA-OIL | 2x2x0,50 | 12,7 | 298 | 37,5 |
| MAC0450AEAA-OIL | 4x2x0,50 | 13,9 | 380 | 37,5 |
| MAC0650AEAA-OIL | 6x2x0,50 | 16,1 | 494 | 37,5 |
| MAC0850AEAA-OIL | 8x2x0,50 | 17,7 | 595 | 37,5 |
| MAC1050AEAA-OIL | 10x2x0,50 | 20,5 | 808 | 37,5 |
| MAC1250AEAA-OIL | 12x2x0,50 | 21 | 873 | 37,5 |
| MAC1650AEAA-OIL | 16x2x0,50 | 23 | 1053 | 37,5 |
| MAC2450AEAA-OIL | 24x2x0,50 | 28,5 | 1595 | 37,5 |
| MAC0275AEAA-OIL | 2x2x0,75 | 13,2 | 323 | 25,5 |
| MAC0475AEAA-OIL | 4x2x0,75 | 14,6 | 419 | 25,5 |
| MAC0675AEAA-OIL | 6x2x0,75 | 17,4 | 571 | 25,5 |
| MAC0875AEAA-OIL | 8x2x0,75 | 18,6 | 665 | 25,5 |
| MAC1075AEAA-OIL | 10x2x0,75 | 21,6 | 901 | 25,5 |
| MAC1275AEAA-OIL | 12x2x0,75 | 22,5 | 1004 | 25,5 |
| MAC1675AEAA-OIL | 16x2x0,75 | 24,9 | 1233 | 25,5 |
| MAC2475AEAA-OIL | 24x2x0,75 | 30,4 | 1812 | 25,5 |
| MAC0210AEAA-OIL | 2x2x1,00 | 14,4 | 374 | 18,8 |
| MAC0410AEAA-OIL | 4x2x1,00 | 16,8 | 535 | 18,8 |
| MAC0610AEAA-OIL | 6x2x1,00 | 20 | 786 | 18,8 |
| MAC0810AEAA-OIL | 8x2x1,00 | 21,5 | 915 | 18,8 |
| MAC1010AEAA-OIL | 10x2x1,00 | 24,9 | 1154 | 18,8 |
| MAC1210AEAA-OIL | 12x2x1,00 | 26,5 | 1400 | 18,8 |
| MAC1610AEAA-OIL | 16x2x1,00 | 28,6 | 1648 | 18,8 |
| MAC2410AEAA-OIL | 24x2x1,00 | 34,9 | 2418 | 18,8 |
| MAC0215AEAA-OIL | 2x2x1,50 | 14,6 | 395 | 12,6 |
| MAC0415AEAA-OIL | 4x2x1,50 | 17,1 | 574 | 12,6 |
| MAC0615AEAA-OIL | 6x2x1,50 | 20,3 | 844 | 12,6 |
| MAC0815AEAA-OIL | 8x2x1,50 | 21,8 | 990 | 12,6 |
| MAC1015AEAA-OIL | 10x2x1,50 | 26,3 | 1391 | 12,6 |
| MAC1215AEAA-OIL | 12x2x1,50 | 26,9 | 1512 | 12,6 |
| MAC1615AEAA-OIL | 16x2x1,50 | 29,3 | 1809 | 12,6 |
| MAC2415AEAA-OIL | 24x2x1,50 | 35,5 | 2637 | 12,6 |
| MAC0215AEAA-OIL | 2x2x,50 | 16,8 | 512 | 7,7 |
| MAC0415AEAA-OIL | 4x2x,50 | 18,7 | 704 | 7,7 |
| MAC0615AEAA-OIL | 6x2x,50 | 22,8 | 1065 | 7,7 |
| MAC0815AEAA-OIL | 8x2x,50 | 26 | 1451 | 7,7 |
| MAC1015AEAA-OIL | 10x2x,50 | 29,1 | 1731 | 7,7 |
| MAC1215AEAA-OIL | 12x2x,50 | 29,9 | 1899 | 7,7 |
| MAC1615AEAA-OIL | 16x2x,50 | 33,2 | 2472 | 7,7 |
| MAC2415AEAA-OIL | 24x2x2,50 | 39,9 | 3387 | 7,7 |

RAMCRO - PAS 5308-2:2009 PART2 TYPE3

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Chemical Protection:

Lead Cover

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Colour Outer Sheath:

Blue (IS), Black (NIS)

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT2 TY3 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

STANDARD REFERENCES

- PAS 5308-2:2009 Part 2 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

PAS 5308-2:2009 Part 2 Type 3

PVC/CAM/PVC/Pb/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|---------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0150AEAAAX-OILLC | 1x2x0,50 | 15,2 | 652 | 37,5 |
| MAS0250AEAAAX-OILLC | 2x2x0,50 | 17,2 | 813 | 37,5 |
| MAS0450AEAAAX-OILLC | 4x2x0,50 | 18,6 | 953 | 37,5 |
| MAS0650AEAAAX-OILLC | 6x2x0,50 | 21,6 | 1252 | 37,5 |
| MAS0850AEAAAX-OILLC | 8x2x0,50 | 23,5 | 1448 | 37,5 |
| MAS1050AEAAAX-OILLC | 10x2x0,50 | 26,3 | 1775 | 37,5 |
| MAS1250AEAAAX-OILLC | 12x2x0,50 | 26,7 | 1851 | 37,5 |
| MAS1650AEAAAX-OILLC | 16x2x0,50 | 28,5 | 2138 | 37,5 |
| MAS2450AEAAAX-OILLC | 24x2x0,50 | 34,5 | 3062 | 37,5 |
| MAS0175AEAAAX-OILLC | 1x2x0,75 | 15,5 | 682 | 25,5 |
| MAS0275AEAAAX-OILLC | 2x2x0,75 | 18 | 880 | 25,5 |
| MAS0475AEAAAX-OILLC | 4x2x0,75 | 20,2 | 1129 | 25,5 |
| MAS0675AEAAAX-OILLC | 6x2x0,75 | 23,3 | 1423 | 25,5 |
| MAS0875AEAAAX-OILLC | 8x2x0,75 | 24,5 | 1565 | 25,5 |
| MAS1075AEAAAX-OILLC | 10x2x0,75 | 27,6 | 1998 | 25,5 |
| MAS1275AEAAAX-OILLC | 12x2x0,75 | 28,1 | 2091 | 25,5 |
| MAS1675AEAAAX-OILLC | 16x2x0,75 | 30,2 | 2382 | 25,5 |
| MAS2475AEAAAX-OILLC | 24x2x0,75 | 36,8 | 3511 | 25,5 |
| MAS0110AEAAAX-OILLC | 1x2x1,00 | 16,3 | 745 | 18,8 |
| MAS0210AEAAAX-OILLC | 2x2x1,00 | 20 | 1088 | 18,8 |
| MAS0410AEAAAX-OILLC | 4x2x1,00 | 22,4 | 1334 | 18,8 |
| MAS0610AEAAAX-OILLC | 6x2x1,00 | 25,9 | 1759 | 18,8 |
| MAS0810AEAAAX-OILLC | 8x2x1,00 | 27,5 | 2019 | 18,8 |
| MAS1010AEAAAX-OILLC | 10x2x1,00 | 30,3 | 2339 | 18,8 |
| MAS1210AEAAAX-OILLC | 12x2x1,00 | 31,7 | 2628 | 18,8 |
| MAS1610AEAAAX-OILLC | 16x2x1,00 | 34,8 | 3172 | 18,8 |
| MAS2410AEAAAX-OILLC | 24x2x1,00 | 40,7 | 4242 | 18,8 |
| MAS0115AEAAAX-OILLC | 1x2x1,50 | 16,4 | 762 | 12,6 |
| MAS0215AEAAAX-OILLC | 2x2x1,50 | 20,3 | 1120 | 12,6 |
| MAS0415AEAAAX-OILLC | 4x2x1,50 | 23,1 | 1427 | 12,6 |
| MAS0615AEAAAX-OILLC | 6x2x1,50 | 26,3 | 1833 | 12,6 |
| MAS0815AEAAAX-OILLC | 8x2x1,50 | 27,9 | 2113 | 12,6 |
| MAS1015AEAAAX-OILLC | 10x2x1,50 | 30,9 | 2542 | 12,6 |
| MAS1215AEAAAX-OILLC | 12x2x1,50 | 33 | 2953 | 12,6 |
| MAS1615AEAAAX-OILLC | 16x2x1,50 | 35,7 | 3394 | 12,6 |
| MAS2415AEAAAX-OILLC | 24x2x1,50 | 41,3 | 4500 | 12,6 |
| MAS0115AEAAAX-OILLC | 1x2x2,50 | 17,3 | 844 | 7,7 |
| MAS0215AEAAAX-OILLC | 2x2x2,50 | 22,2 | 1313 | 7,7 |
| MAS0415AEAAAX-OILLC | 4x2x2,50 | 24,7 | 1640 | 7,7 |
| MAS0615AEAAAX-OILLC | 6x2x2,50 | 28,5 | 2208 | 7,7 |
| MAS0815AEAAAX-OILLC | 8x2x2,50 | 30,7 | 2609 | 7,7 |
| MAS1015AEAAAX-OILLC | 10x2x2,50 | 35,6 | 3355 | 7,7 |
| MAS1215AEAAAX-OILLC | 12x2x2,50 | 36,6 | 3655 | 7,7 |
| MAS1615AEAAAX-OILLC | 16x2x2,50 | 39,2 | 4185 | 7,7 |
| MAS2415AEAAAX-OILLC | 24x2x2,50 | 45,6 | 5581 | 7,7 |

RAMCRO - PAS 5308-2:2009 PART2 TYPE3

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride FR - PVC acc. to EN 50363-3

Chemical Protection:

Lead Cover

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride FR- PVC acc. to EN 50363-3

Colour Outer Sheath:

Blue (IS), Black (NIS)

CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT2 TY3 - 1x2x0,5 mm² - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

STANDARD REFERENCES

- PAS 5308-2:2009 Part 2 Type 1
- BS EN 60228
- BS 6234
- BS 50363
- IEC 60331-2
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour
- Nylon Cover

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

PAS 5308-2:2009 Part 2 Type 3

PVC/IAM/CAM/PVC/Pb/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including 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. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|---------------------------------|--------------------------|---------------------------------|--|
| MAC0250AEAA-OILLC | 2x2x0,50 | 17,7 | 862 | 37,5 |
| MAC0450AEAA-OILLC | 4x2x0,50 | 19,8 | 1109 | 37,5 |
| MAC0650AEAA-OILLC | 6x2x0,50 | 22,4 | 1357 | 37,5 |
| MAC0850AEAA-OILLC | 8x2x0,50 | 24 | 1539 | 37,5 |
| MAC1050AEAA-OILLC | 10x2x0,50 | 26,8 | 1890 | 37,5 |
| MAC1250AEAA-OILLC | 12x2x0,50 | 27,5 | 2057 | 37,5 |
| MAC1650AEAA-OILLC | 16x2x0,50 | 29,5 | 2348 | 37,5 |
| MAC2450AEAA-OILLC | 24x2x0,50 | 35,7 | 3360 | 37,5 |
| MAC0275AEAA-OILLC | 2x2x0,75 | 18,2 | 912 | 25,5 |
| MAC0475AEAA-OILLC | 4x2x0,75 | 20,9 | 1208 | 25,5 |
| MAC0675AEAA-OILLC | 6x2x0,75 | 23,7 | 1497 | 25,5 |
| MAC0875AEAA-OILLC | 8x2x0,75 | 24,9 | 1656 | 25,5 |
| MAC1075AEAA-OILLC | 10x2x0,75 | 28,1 | 2115 | 25,5 |
| MAC1275AEAA-OILLC | 12x2x0,75 | 29 | 2265 | 25,5 |
| MAC1675AEAA-OILLC | 16x2x0,75 | 31,6 | 2719 | 25,5 |
| MAC2475AEAA-OILLC | 24x2x0,75 | 37,6 | 3766 | 25,5 |
| MAC0210AEAA-OILLC | 2x2x1,00 | 20,3 | 1123 | 18,8 |
| MAC0410AEAA-OILLC | 4x2x1,00 | 23,1 | 1432 | 18,8 |
| MAC0610AEAA-OILLC | 6x2x1,00 | 26,3 | 1841 | 18,8 |
| MAC0810AEAA-OILLC | 8x2x1,00 | 28 | 2123 | 18,8 |
| MAC1010AEAA-OILLC | 10x2x1,00 | 31,6 | 2635 | 18,8 |
| MAC1210AEAA-OILLC | 12x2x1,00 | 33,1 | 2967 | 18,8 |
| MAC1610AEAA-OILLC | 16x2x1,00 | 35,8 | 3411 | 18,8 |
| MAC2410AEAA-OILLC | 24x2x1,00 | 41,5 | 4525 | 18,8 |
| MAC0215AEAA-OILLC | 2x2x1,50 | 20,9 | 1182 | 12,6 |
| MAC0415AEAA-OILLC | 4x2x1,50 | 23,4 | 1484 | 12,6 |
| MAC0615AEAA-OILLC | 6x2x1,50 | 26,6 | 1915 | 12,6 |
| MAC0815AEAA-OILLC | 8x2x1,50 | 28,3 | 2217 | 12,6 |
| MAC1015AEAA-OILLC | 10x2x1,50 | 32,1 | 2754 | 12,6 |
| MAC1215AEAA-OILLC | 12x2x1,50 | 33,5 | 3106 | 12,6 |
| MAC1615AEAA-OILLC | 16x2x1,50 | 36,5 | 3689 | 12,6 |
| MAC2415AEAA-OILLC | 24x2x1,50 | 42,1 | 4782 | 12,6 |
| MAC0225AEAA-OILLC | 2x2x,50 | 23,1 | 1402 | 7,7 |
| MAC0425AEAA-OILLC | 4x2x,50 | 25,9 | 1837 | 7,7 |
| MAC0625AEAA-OILLC | 6x2x,50 | 29,3 | 2332 | 7,7 |
| MAC0825AEAA-OILLC | 8x2x,50 | 31,8 | 2796 | 7,7 |
| MAC1025AEAA-OILLC | 10x2x,50 | 36,3 | 3590 | 7,7 |
| MAC1225AEAA-OILLC | 12x2x,50 | 37,1 | 3810 | 7,7 |
| MAC1625AEAA-OILLC | 16x2x,50 | 40 | 4494 | 7,7 |
| MAC2425AEAA-OILLC | 24x2x2,50 | 47,1 | 5986 | 7,7 |

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special cables



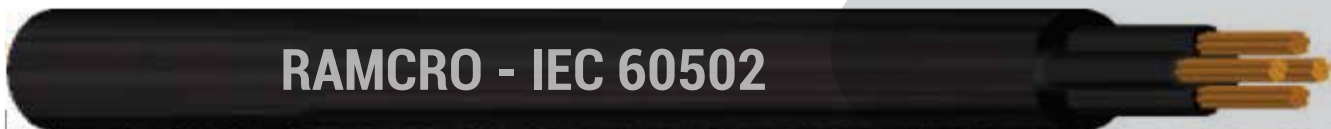
ramcro
special cables

www.ramcro.it

A large industrial refinery or chemical plant at sunset. The sky is filled with colorful clouds in shades of purple, blue, and orange. The facility is illuminated with various lights, including bright yellow and red lights. In the foreground, there is a large, white, dome-shaped structure. The background shows several tall distillation columns and a complex network of pipes and scaffolding.

IEC 60502

PVC/Unscreened/PVC



RAMCRO - IEC 60502

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for indoor applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

IDENTIFICATION OF CORES

Core: Black Numbered

CABLE PRINTING

RAMCRO - 0,6/1 kV - IEC 60502 - 10x2,5 mm² - IEC 60332-1
- EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH +
METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 5000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 600/1000 V |

STANDARD REFERENCES

- IEC 60502
- IEC 60228
- IEC 60811
- IEC 60754-1
- IEC 60754-2
- IEC 60331-1
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +70° C*



*The higher temperature can be manage on Request.

PVC/Unscreened/PVC

these cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for indoor applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|------------------------------|-----------------------|------------------------------|---|
| SSS0210HEAAD-1000V | 2x1 | 7.2 | 84 | 20.3 |
| SSS0310HEAAD-1000V | 3x1 | 7.3 | 98 | 20.3 |
| SSS0510HEAAD-1000V | 5x1 | 8.8 | 142 | 20.3 |
| SSS0710HEAAD-1000V | 7x1 | 9.6 | 182 | 20.3 |
| SSS1210HEAAD-1000V | 12x1 | 12.7 | 294 | 20.3 |
| SSS1910HEAAD-1000V | 19x1 | 15.0 | 436 | 20.3 |
| SSS2410HEAAD-1000V | 24x1 | 17.7 | 549 | 20.3 |
| SSS0215HEAAD-1000V | 2x1.5 | 7.9 | 105 | 13.8 |
| SSS0315HEAAD-1000V | 3x1.5 | 8.0 | 123 | 13.8 |
| SSS0515HEAAD-1000V | 5x1.5 | 9.7 | 180 | 13.8 |
| SSS0715HEAAD-1000V | 7x1.5 | 10.6 | 232 | 13.8 |
| SSS1215HEAAD-1000V | 12x1.5 | 14.1 | 377 | 13.8 |
| SSS1915HEAAD-1000V | 19x1.5 | 16.7 | 562 | 13.8 |
| SSS2415HEAAD-1000V | 24x1.5 | 19.7 | 709 | 13.8 |
| SSS0225HEAAD-1000V | 2x2.5 | 8.8 | 140 | 8.3 |
| SSS0325HEAAD-1000V | 3x2.5 | 9 | 168 | 8.3 |
| SSS0525HEAAD-1000V | 5x2.5 | 10.8 | 249 | 8.3 |
| SSS0725HEAAD-1000V | 7x2.5 | 11.9 | 325 | 8.3 |
| SSS1225HEAAD-1000V | 12x2.5 | 15.9 | 532 | 8.3 |
| SSS1925HEAAD-1000V | 19x2.5 | 18.8 | 800 | 8.3 |
| SSS2425HEAAD-1000V | 24x2.5 | 22.3 | 1010 | 8.3 |
| SSS0240HEAAD-1000V | 2x4 | 10.2 | 195 | 5.1 |
| SSS0340HEAAD-1000V | 3x4 | 10.4 | 237 | 5.1 |
| SSS0540HEAAD-1000V | 5x4 | 12.7 | 353 | 5.1 |
| SSS0740HEAAD-1000V | 7x4 | 13.9 | 464 | 5.1 |
| SSS1240HEAAD-1000V | 12x4 | 18.8 | 764 | 5.1 |
| SSS1940HEAAD-1000V | 19x4 | 22.2 | 1155 | 5.1 |
| SSS2440HEAAD-1000V | 24x4 | 26.4 | 1460 | 5.1 |
| SSS0260HEAAD-1000V | 2x6 | 11.9 | 276 | 3.4 |
| SSS0360HEAAD-1000V | 3x6 | 12.1 | 339 | 3.4 |
| SSS0560HEAAD-1000V | 5x6 | 14.8 | 510 | 3.4 |
| SSS0760HEAAD-1000V | 7x6 | 16.3 | 674 | 3.4 |
| SSS1260HEAAD-1000V | 12x6 | 22.1 | 1116 | 3.4 |
| SSS1960HEAAD-1000V | 19x6 | 26.2 | 1697 | 3.4 |
| SSS2460HEAAD-1000V | 24x6 | 31.2 | 2146 | 3.4 |
| SSS0211HEAAD-1000V | 2x10 | 14.5 | 432 | 2.0 |
| SSS0311HEAAD-1000V | 3x10 | 14.8 | 538 | 2.0 |
| SSS0511HEAAD-1000V | 5x10 | 18.2 | 818 | 2.0 |
| SSS0711HEAAD-1000V | 7x10 | 20 | 1089 | 2.0 |
| SSS1211HEAAD-1000V | 12x10 | 27.2 | 1811 | 2.0 |
| SSS1911HEAAD-1000V | 19x10 | 32.4 | 2769 | 2.0 |
| SSS2411HEAAD-1000V | 24x10 | 38.6 | 3504 | 2.0 |

PVC/Unscreened/PVC/SWA/PVC

RAMCRO - IEC 60502

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Inner Sheath:

Polyvinyl chloride - PVC

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- EC 60502
- IEC 60228
- IEC 60811
- IEC 60754-1
- IEC 60754-2
- IEC 60331-1
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



IDENTIFICATION OF CORES

Core: Black Numbered

CABLE PRINTING

RAMCRO - 0,6/1 kV - IEC 60502 - 10x2,5 mm² - IEC 60332-1
- EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH +
METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 5000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 600/1000 V |

ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +70° C*



*The higher temperature can be manage on Request.

PVC/Unscreened/PVC/SWA/PVC

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|--------------------|------------------------------|-----------------------|------------------------------|---|
| SSS0210AEAAD-1000V | 2x1 | 11.0 | 256 | 20.3 |
| SSS0310AEAAD-1000V | 3x1 | 11.1 | 272 | 20.3 |
| SSS0510AEAAD-1000V | 5x1 | 13.0 | 363 | 20.3 |
| SSS0710AEAAD-1000V | 7x1 | 13.8 | 419 | 20.3 |
| SSS1210AEAAD-1000V | 12x1 | 17.3 | 617 | 20.3 |
| SSS1910AEAAD-1000V | 19x1 | 20.2 | 912 | 20.3 |
| SSS2410AEAAD-1000V | 24x1 | 23.3 | 1128 | 20.3 |
| SSS0215AEAAD-1000V | 2x1.5 | 11.7 | 289 | 13.8 |
| SSS0315AEAAD-1000V | 3x1.5 | 12.3 | 329 | 13.8 |
| SSS0515AEAAD-1000V | 5x1.5 | 13.9 | 419 | 13.8 |
| SSS0715AEAAD-1000V | 7x1.5 | 14.8 | 489 | 13.8 |
| SSS1215AEAAD-1000V | 12x1.5 | 18.6 | 729 | 13.8 |
| SSS1915AEAAD-1000V | 19x1.5 | 22.3 | 1113 | 13.8 |
| SSS2415AEAAD-1000V | 24x1.5 | 26.0 | 1482 | 13.8 |
| SSS0225AEAAD-1000V | 2x2.5 | 13 | 361 | 8.3 |
| SSS0325AEAAD-1000V | 3x2.5 | 13.2 | 392 | 8.3 |
| SSS0525AEAAD-1000V | 5x2.5 | 15 | 511 | 8.3 |
| SSS0725AEAAD-1000V | 7x2.5 | 16 | 608 | 8.3 |
| SSS1225AEAAD-1000V | 12x2.5 | 21.1 | 1032 | 8.3 |
| SSS1925AEAAD-1000V | 19x2.5 | 24.4 | 1410 | 8.3 |
| SSS2425AEAAD-1000V | 24x2.5 | 29 | 1907 | 8.3 |
| SSS0240AEAAD-1000V | 2x4 | 14.4 | 445 | 5.1 |
| SSS0340AEAAD-1000V | 3x4 | 14.6 | 491 | 5.1 |
| SSS0540AEAAD-1000V | 5x4 | 17.3 | 676 | 5.1 |
| SSS0740AEAAD-1000V | 7x4 | 18.5 | 812 | 5.1 |
| SSS1240AEAAD-1000V | 12x4 | 24.3 | 1371 | 5.1 |
| SSS1940AEAAD-1000V | 19x4 | 28.9 | 2050 | 5.1 |
| SSS2440AEAAD-1000V | 24x4 | 33.8 | 2702 | 5.1 |
| SSS0260AEAAD-1000V | 2x6 | 16.1 | 559 | 3.4 |
| SSS0360AEAAD-1000V | 3x6 | 16.3 | 627 | 3.4 |
| SSS0560AEAAD-1000V | 5x6 | 20.1 | 983 | 3.4 |
| SSS0760AEAAD-1000V | 7x6 | 21.5 | 1186 | 3.4 |
| SSS1260AEAAD-1000V | 12x6 | 28.7 | 2005 | 3.4 |
| SSS1960AEAAD-1000V | 19x6 | 33.7 | 2933 | 3.4 |
| SSS2460AEAAD-1000V | 24x6 | 38.5 | 3574 | 3.4 |
| SSS0211AEAAD-1000V | 2x10 | 19.8 | 896 | 2.0 |
| SSS0311AEAAD-1000V | 3x10 | 20.1 | 1010 | 2.0 |
| SSS0511AEAAD-1000V | 5x10 | 23.8 | 1411 | 2.0 |
| SSS0711AEAAD-1000V | 7x10 | 26.3 | 1872 | 2.0 |
| SSS1211AEAAD-1000V | 12x10 | 34.6 | 3086 | 2.0 |
| SSS1911AEAAD-1000V | 19x10 | 39.7 | 4245 | 2.0 |
| SSS2411AEAAD-1000V | 24x10 | 45.8 | 5216 | 2.0 |

PVC/Unscreened/PVC/Pb/PVC/SWA/PVC

RAMCRO - IEC 60502

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Inner Sheath:

Polyvinyl chloride - PVC

Chemical Protection:

Lead Cover

Armour:

Galvanized Steel Wire Armour

Separation Sheath:

Polyvinyl chloride - PVC

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

CABLE PRINTING

RAMCRO - 0,6/1 kV - IEC 60502 - 10x2,5 mm² - IEC 60332-1
- EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH +
METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 5000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 600/1000 V |

IDENTIFICATION OF CORES

Core: Black Numbered

STANDARD REFERENCES

- EC 60502
- IEC 60228
- IEC 60811
- IEC 60754-1
- IEC 60754-2
- IEC 60331-1
- IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

20 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in according to EN 60079-14 ANNEX E
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant
- SWB or STA armour

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +70° C*



*The higher temperature can be manage on Request.

PVC/Unscreened/PVC/Pb/PVC/SWA/PVC

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|----------------------|---------------------------------|--------------------------|---------------------------------|--|
| SSS0210AEAAD-1000VLC | 2x1 | 16.1 | 758 | 20.3 |
| SSS0310AEAAD-1000VLC | 3x1 | 16.2 | 780 | 20.3 |
| SSS0510AEAAD-1000VLC | 5x1 | 18.1 | 950 | 20.3 |
| SSS0710AEAAD-1000VLC | 7x1 | 18.9 | 1041 | 20.3 |
| SSS1210AEAAD-1000VLC | 12x1 | 23.5 | 1542 | 20.3 |
| SSS1910AEAAD-1000VLC | 19x1 | 26.5 | 1983 | 20.3 |
| SSS2410AEAAD-1000VLC | 24x1 | 29.7 | 2434 | 20.3 |
| SSS0215AEAAD-1000VLC | 2x1.5 | 16.8 | 821 | 13.8 |
| SSS0315AEAAD-1000VLC | 3x1.5 | 17.3 | 885 | 13.8 |
| SSS0515AEAAD-1000VLC | 5x1.5 | 18.9 | 1044 | 13.8 |
| SSS0715AEAAD-1000VLC | 7x1.5 | 21.0 | 1290 | 13.8 |
| SSS1215AEAAD-1000VLC | 12x1.5 | 24.9 | 1721 | 13.8 |
| SSS1915AEAAD-1000VLC | 19x1.5 | 28.7 | 2366 | 13.8 |
| SSS2415AEAAD-1000VLC | 24x1.5 | 31.9 | 2843 | 13.8 |
| SSS0225AEAAD-1000VLC | 2x2.5 | 18.1 | 949 | 8.3 |
| SSS0325AEAAD-1000VLC | 3x2.5 | 18.2 | 988 | 8.3 |
| SSS0525AEAAD-1000VLC | 5x2.5 | 21.3 | 1324 | 8.3 |
| SSS0725AEAAD-1000VLC | 7x2.5 | 22.3 | 1471 | 8.3 |
| SSS1225AEAAD-1000VLC | 12x2.5 | 27.6 | 2224 | 8.3 |
| SSS1925AEAAD-1000VLC | 19x2.5 | 31.1 | 2862 | 8.3 |
| SSS2425AEAAD-1000VLC | 24x2.5 | 36.4 | 3794 | 8.3 |
| SSS0240AEAAD-1000VLC | 2x4 | 20.2 | 1199 | 5.1 |
| SSS0340AEAAD-1000VLC | 3x4 | 20.8 | 1284 | 5.1 |
| SSS0540AEAAD-1000VLC | 5x4 | 23.5 | 1599 | 5.1 |
| SSS0740AEAAD-1000VLC | 7x4 | 24.7 | 1796 | 5.1 |
| SSS1240AEAAD-1000VLC | 12x4 | 31 | 2820 | 5.1 |
| SSS1940AEAAD-1000VLC | 19x4 | 36.3 | 3934 | 5.1 |
| SSS2440AEAAD-1000VLC | 24x4 | 40.6 | 4745 | 5.1 |
| SSS0260AEAAD-1000VLC | 2x6 | 22.3 | 1423 | 3.4 |
| SSS0360AEAAD-1000VLC | 3x6 | 22.5 | 1503 | 3.4 |
| SSS0560AEAAD-1000VLC | 5x6 | 26.3 | 2046 | 3.4 |
| SSS0760AEAAD-1000VLC | 7x6 | 28 | 2399 | 3.4 |
| SSS1260AEAAD-1000VLC | 12x6 | 35.9 | 3776 | 3.4 |
| SSS1960AEAAD-1000VLC | 19x6 | 40.4 | 4965 | 3.4 |
| SSS2460AEAAD-1000VLC | 24x6 | 45.5 | 6025 | 3.4 |
| SSS0211AEAAD-1000VLC | 2x10 | 26 | 1943 | 2.0 |
| SSS0311AEAAD-1000VLC | 3x10 | 26.3 | 2072 | 2.0 |
| SSS0511AEAAD-1000VLC | 5x10 | 30.2 | 2742 | 2.0 |
| SSS0711AEAAD-1000VLC | 7x10 | 33.1 | 3456 | 2.0 |
| SSS1211AEAAD-1000VLC | 12x10 | 41.4 | 5176 | 2.0 |
| SSS1911AEAAD-1000VLC | 19x10 | 47.1 | 6835 | 2.0 |
| SSS2411AEAAD-1000VLC | 24x10 | 53.6 | 8510 | 2.0 |

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UL 13 / PLTC Cables

PVC 105°C - Overall Screened

RAMCRO - UL 13 PLTC - PVC HT 105°

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Hi Temperature Polyvinylchloride - PVC HT 105°C

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20
- Shielded - 105°C + BATCH + METER MARKING

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +105° C

Insulation Operation:

-30° C up to +105° C



ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

PVC 105°C - Overall Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106HEOCN-UL13 | 1x2x20AWG | 5,7 | 44 | 34.6 |
| MAS0206HEOCN-UL13 | 2x2x20AWG | 7,6 | 71 | 34.6 |
| MAS0406HEOCN-UL13 | 4x2x20AWG | 8,7 | 110 | 34.6 |
| MAS0606HEOCN-UL13 | 6x2x20AWG | 14,1 | 273 | 34.6 |
| MAS0806HEOCN-UL13 | 8x2x20AWG | 15,0 | 321 | 34.6 |
| MAS1006HEOCN-UL13 | 10x2x20AWG | 16,7 | 380 | 34.6 |
| MAS1206HEOCN-UL13 | 12x2x20AWG | 17,2 | 419 | 34.6 |
| MAS1606HEOCN-UL13 | 16x2x20AWG | 18,6 | 506 | 34.6 |
| MAS2406HEOCN-UL13 | 24x2x20AWG | 22,1 | 690 | 34.6 |
| MAS0105HEOCN-UL13 | 1x2x18AWG | 6,2 | 55 | 21.8 |
| MAS0205HEOCN-UL13 | 2x2x18AWG | 8,3 | 90 | 21.8 |
| MAS0405HEOCN-UL13 | 4x2x18AWG | 9,6 | 143 | 21.8 |
| MAS0605HEOCN-UL13 | 6x2x18AWG | 15,2 | 333 | 21.8 |
| MAS0805HEOCN-UL13 | 8x2x18AWG | 16,3 | 397 | 21.8 |
| MAS1005HEOCN-UL13 | 10x2x18AWG | 18,2 | 473 | 21.8 |
| MAS1205HEOCN-UL13 | 12x2x18AWG | 18,7 | 528 | 21.8 |
| MAS1605HEOCN-UL13 | 16x2x18AWG | 20,3 | 646 | 21.8 |
| MAS2405HEOCN-UL13 | 24x2x18AWG | 24,3 | 895 | 21.8 |
| MAS0105HEOCN-UL13 | 1x2x16AWG | 6,8 | 69 | 13.7 |
| MAS0205HEOCN-UL13 | 2x2x16AWG | 9,2 | 116 | 13.7 |
| MAS0405HEOCN-UL13 | 4x2x16AWG | 14,5 | 319 | 13.7 |
| MAS0605HEOCN-UL13 | 6x2x16AWG | 16,6 | 419 | 13.7 |
| MAS0805HEOCN-UL13 | 8x2x16AWG | 17,9 | 507 | 13.7 |
| MAS1005HEOCN-UL13 | 10x2x16AWG | 20,1 | 610 | 13.7 |
| MAS1205HEOCN-UL13 | 12x2x16AWG | 20,6 | 687 | 13.7 |
| MAS1605HEOCN-UL13 | 16x2x16AWG | 22,5 | 853 | 13.7 |
| MAS2405HEOCN-UL13 | 24x2x16AWG | 27,6 | 1233 | 13.7 |
| MAS0101HEOCN-UL13 | 1x2x14AWG | 8,0 | 95 | 8.6 |
| MAS0201HEOCN-UL13 | 2x2x14AWG | 14,9 | 297 | 8.6 |
| MAS0401HEOCN-UL13 | 4x2x14AWG | 16,7 | 434 | 8.6 |
| MAS0601HEOCN-UL13 | 6x2x14AWG | 19,3 | 583 | 8.6 |
| MAS0801HEOCN-UL13 | 8x2x14AWG | 20,9 | 717 | 8.6 |
| MAS1001HEOCN-UL13 | 10x2x14AWG | 23,7 | 868 | 8.6 |
| MAS1201HEOCN-UL13 | 12x2x14AWG | 24,4 | 988 | 8.6 |
| MAS1601HEOCN-UL13 | 16x2x14AWG | 27,3 | 1279 | 8.6 |
| MAS2401HEOCN-UL13 | 24x2x14AWG | 33,0 | 1810 | 8.6 |
| MAS0152HEOCN-UL13 | 1x2x12AWG | 8,9 | 128 | 5.4 |
| MAS0252HEOCN-UL13 | 2x2x12AWG | 16,3 | 374 | 5.4 |
| MAS0452HEOCN-UL13 | 4x2x12AWG | 18,5 | 569 | 5.4 |
| MAS0652HEOCN-UL13 | 6x2x12AWG | 21,5 | 779 | 5.4 |
| MAS0852HEOCN-UL13 | 8x2x12AWG | 23,4 | 971 | 5.4 |
| MAS1052HEOCN-UL13 | 10x2x12AWG | 27,2 | 1220 | 5.4 |
| MAS1252HEOCN-UL13 | 12x2x12AWG | 28,0 | 1396 | 5.4 |
| MAS1652HEOCN-UL13 | 16x2x12AWG | 30,8 | 1768 | 5.4 |
| MAS2452HEOCN-UL13 | 24x2x12AWG | 38,0 | 2580 | 5.4 |

PVC 105°C - Individual and Collective Screened

RAMCRO - UL 13 PLTC - PVC HT 105°



These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Hi Temperature Polyvinylchloride - PVC HT 105°C

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20
- Shielded - 105°C + BATCH + METER MARKING

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +105°C

Insulation Operation:

-30° C up to +105°C



ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

PVC 105°C - Individual Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0206HEOCN-UL13 | 2x2x20AWG | 7,8 | 80 | 34.6 |
| MAC0406HEOCN-UL13 | 4x2x20AWG | 9,0 | 126 | 34.6 |
| MAC0606HEOCN-UL13 | 6x2x20AWG | 14,4 | 301 | 34.6 |
| MAC0806HEOCN-UL13 | 8x2x20AWG | 15,5 | 356 | 34.6 |
| MAC1006HEOCN-UL13 | 10x2x20AWG | 17,2 | 424 | 34.6 |
| MAC1206HEOCN-UL13 | 12x2x20AWG | 17,7 | 471 | 34.6 |
| MAC1606HEOCN-UL13 | 16x2x20AWG | 19,2 | 574 | 34.6 |
| MAC2006HEOCN-UL13 | 20x2x20AWG | 21,1 | 683 | 34.6 |
| MAC2406HEOCN-UL13 | 24x2x20AWG | 22,8 | 790 | 34.6 |
| MAC0205HEOCN-UL13 | 2x2x18AWG | 8,6 | 100 | 21.8 |
| MAC0405HEOCN-UL13 | 4x2x18AWG | 13,7 | 280 | 21.8 |
| MAC0605HEOCN-UL13 | 6x2x18AWG | 15,5 | 364 | 21.8 |
| MAC0805HEOCN-UL13 | 8x2x18AWG | 16,7 | 438 | 21.8 |
| MAC1005HEOCN-UL13 | 10x2x18AWG | 18,7 | 524 | 21.8 |
| MAC1205HEOCN-UL13 | 12x2x18AWG | 19,2 | 587 | 21.8 |
| MAC1605HEOCN-UL13 | 16x2x18AWG | 20,9 | 725 | 21.8 |
| MAC2005HEOCN-UL13 | 20x2x18AWG | 23,1 | 868 | 21.8 |
| MAC2405HEOCN-UL13 | 24x2x18AWG | 25,6 | 1044 | 21.8 |
| MAC0205HEOCN-UL13 | 2x2x16AWG | 9,5 | 126 | 13.7 |
| MAC0405HEOCN-UL13 | 4x2x16AWG | 14,8 | 341 | 13.7 |
| MAC0605HEOCN-UL13 | 6x2x16AWG | 16,9 | 450 | 13.7 |
| MAC0805HEOCN-UL13 | 8x2x16AWG | 18,3 | 548 | 13.7 |
| MAC1005HEOCN-UL13 | 10x2x16AWG | 20,6 | 661 | 13.7 |
| MAC1205HEOCN-UL13 | 12x2x16AWG | 21,1 | 747 | 13.7 |
| MAC1605HEOCN-UL13 | 16x2x16AWG | 23,1 | 931 | 13.7 |
| MAC2005HEOCN-UL13 | 20x2x16AWG | 26,1 | 1157 | 13.7 |
| MAC2405HEOCN-UL13 | 24x2x16AWG | 28,4 | 1350 | 13.7 |
| MAC0201HEOCN-UL13 | 2x2x14AWG | 15,1 | 310 | 8.6 |
| MAC0401HEOCN-UL13 | 4x2x14AWG | 17 | 458 | 8.6 |
| MAC0601HEOCN-UL13 | 6x2x14AWG | 19,6 | 618 | 8.6 |
| MAC0801HEOCN-UL13 | 8x2x14AWG | 21,3 | 763 | 8.6 |
| MAC1001HEOCN-UL13 | 10x2x14AWG | 24,2 | 926 | 8.6 |
| MAC1201HEOCN-UL13 | 12x2x14AWG | 24,9 | 1055 | 8.6 |
| MAC1601HEOCN-UL13 | 16x2x14AWG | 27,9 | 1368 | 8.6 |
| MAC2001HEOCN-UL13 | 20x2x14AWG | 30,9 | 1657 | 8.6 |
| MAC2401HEOCN-UL13 | 24x2x14AWG | 33,8 | 1942 | 8.6 |
| MAC0252HEOCN-UL13 | 2x2x12AWG | 16,6 | 388 | 5.4 |
| MAC0452HEOCN-UL13 | 4x2x12AWG | 18,8 | 596 | 5.4 |
| MAC0652HEOCN-UL13 | 6x2x12AWG | 21,9 | 818 | 5.4 |
| MAC0852HEOCN-UL13 | 8x2x12AWG | 23,8 | 1022 | 5.4 |
| MAC1052HEOCN-UL13 | 10x2x12AWG | 27,7 | 1285 | 5.4 |
| MAC1252HEOCN-UL13 | 12x2x12AWG | 28,5 | 1473 | 5.4 |
| MAC1652HEOCN-UL13 | 16x2x12AWG | 31,4 | 1868 | 5.4 |
| MAC2052HEOCN-UL13 | 20x2x12AWG | 35,4 | 2321 | 5.4 |
| MAC2452HEOCN-UL13 | 24x2x12AWG | 38,7 | 2729 | 5.4 |



PVC 105°C - Collective Screened with Armour

RAMCRO - UL 13 PLTC - PVC HT 105°



These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Hi Temperature Polyvinylchloride - PVC HT 105°C

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride - PVC

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x Cable Diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20
- Shielded - 105°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +105°C

Insulation Operation:

-30° C up to +105°C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

PVC 105°C - Collective Screened with Amour

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106AEOCN-UL13 | 1x2x20AWG | 9,3 | 174 | 34.6 |
| MAS0206AEOCN-UL13 | 2x2x20AWG | 15,2 | 380 | 34.6 |
| MAS0406AEOCN-UL13 | 4x2x20AWG | 16,3 | 451 | 34.6 |
| MAS0606AEOCN-UL13 | 6x2x20AWG | 18,4 | 567 | 34.6 |
| MAS0806AEOCN-UL13 | 8x2x20AWG | 19,4 | 636 | 34.6 |
| MAS1006AEOCN-UL13 | 10x2x20AWG | 21,0 | 730 | 34.6 |
| MAS1206AEOCN-UL13 | 12x2x20AWG | 21,5 | 778 | 34.6 |
| MAS1606AEOCN-UL13 | 16x2x20AWG | 24,1 | 1041 | 34.6 |
| MAS2406AEOCN-UL13 | 24x2x20AWG | 28,8 | 1493 | 34.6 |
| MAS0105AEOCN-UL13 | 1x2x18AWG | 13,5 | 310 | 21.8 |
| MAS0205AEOCN-UL13 | 2x2x18AWG | 15,9 | 420 | 21.8 |
| MAS0405AEOCN-UL13 | 4x2x18AWG | 17,2 | 511 | 21.8 |
| MAS0605AEOCN-UL13 | 6x2x18AWG | 19,5 | 650 | 21.8 |
| MAS0805AEOCN-UL13 | 8x2x18AWG | 20,6 | 738 | 21.8 |
| MAS1005AEOCN-UL13 | 10x2x18AWG | 23,2 | 960 | 21.8 |
| MAS1205AEOCN-UL13 | 12x2x18AWG | 24,2 | 1065 | 21.8 |
| MAS1605AEOCN-UL13 | 16x2x18AWG | 26,4 | 1265 | 21.8 |
| MAS2405AEOCN-UL13 | 24x2x18AWG | 31,0 | 1774 | 21.8 |
| MAS0105AEOCN-UL13 | 1x2x16AWG | 14,1 | 341 | 13.7 |
| MAS0205AEOCN-UL13 | 2x2x16AWG | 16,9 | 474 | 13.7 |
| MAS0405AEOCN-UL13 | 4x2x16AWG | 18,8 | 623 | 13.7 |
| MAS0605AEOCN-UL13 | 6x2x16AWG | 20,9 | 766 | 13.7 |
| MAS0805AEOCN-UL13 | 8x2x16AWG | 22,9 | 984 | 13.7 |
| MAS1005AEOCN-UL13 | 10x2x16AWG | 26,1 | 1220 | 13.7 |
| MAS1205AEOCN-UL13 | 12x2x16AWG | 26,7 | 1313 | 13.7 |
| MAS1605AEOCN-UL13 | 16x2x16AWG | 29,3 | 1670 | 13.7 |
| MAS2405AEOCN-UL13 | 24x2x16AWG | 34,8 | 2273 | 13.7 |
| MAS0101AEOCN-UL13 | 1x2x14AWG | 15,6 | 415 | 8.6 |
| MAS0201AEOCN-UL13 | 2x2x14AWG | 19,2 | 608 | 8.6 |
| MAS0401AEOCN-UL13 | 4x2x14AWG | 21,0 | 783 | 8.6 |
| MAS0601AEOCN-UL13 | 6x2x14AWG | 24,8 | 1135 | 8.6 |
| MAS0801AEOCN-UL13 | 8x2x14AWG | 26,9 | 1351 | 8.6 |
| MAS1001AEOCN-UL13 | 10x2x14AWG | 30,4 | 1726 | 8.6 |
| MAS1201AEOCN-UL13 | 12x2x14AWG | 31,1 | 1870 | 8.6 |
| MAS1601AEOCN-UL13 | 16x2x14AWG | 34,0 | 2262 | 8.6 |
| MAS2401AEOCN-UL13 | 24x2x14AWG | 41,1 | 3272 | 8.6 |
| MAS0152AEOCN-UL13 | 1x2x12AWG | 16,5 | 476 | 5.4 |
| MAS0252AEOCN-UL13 | 2x2x12AWG | 20,7 | 716 | 5.4 |
| MAS0452AEOCN-UL13 | 4x2x12AWG | 23,5 | 1063 | 5.4 |
| MAS0652AEOCN-UL13 | 6x2x12AWG | 27,5 | 1431 | 5.4 |
| MAS0852AEOCN-UL13 | 8x2x12AWG | 30,1 | 1819 | 5.4 |
| MAS1052AEOCN-UL13 | 10x2x12AWG | 33,9 | 2199 | 5.4 |
| MAS1252AEOCN-UL13 | 12x2x12AWG | 36,0 | 2646 | 5.4 |
| MAS1652AEOCN-UL13 | 16x2x12AWG | 38,8 | 3135 | 5.4 |
| MAS2452AEOCN-UL13 | 24x2x12AWG | 46,5 | 4312 | 5.4 |

PVC 105°C - Individual and Collective Screened with Armour

RAMCRO - UL 13 PLTC - PVC HT 105°

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Hi Temperature Polyvinylchloride - PVC HT 105°C

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride - PVC

Armour:

Galvanized Steel Wire Armour

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20
- Shielded - 105°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +105°C

Insulation Operation:

-30° C up to +105°C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

PVC 105°C - Individual and Collective Screened with Armour

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0206AEOCN-UL13 | 2x2x20AWG | 15,5 | 396 | 34.6 |
| MAC0406AEOCN-UL13 | 4x2x20AWG | 16,6 | 477 | 34.6 |
| MAC0606AEOCN-UL13 | 6x2x20AWG | 18,8 | 604 | 34.6 |
| MAC0806AEOCN-UL13 | 8x2x20AWG | 19,8 | 681 | 34.6 |
| MAC1006AEOCN-UL13 | 10x2x20AWG | 21,6 | 786 | 34.6 |
| MAC1206AEOCN-UL13 | 12x2x20AWG | 22,7 | 944 | 34.6 |
| MAC1606AEOCN-UL13 | 16x2x20AWG | 24,7 | 1126 | 34.6 |
| MAC2006AEOCN-UL13 | 20x2x20AWG | 27,1 | 1324 | 34.6 |
| MAC2406AEOCN-UL13 | 24x2x20AWG | 29,6 | 1620 | 34.6 |
| MAC0205AEOCN-UL13 | 2x2x18AWG | 16,2 | 438 | 21.8 |
| MAC0405AEOCN-UL13 | 4x2x18AWG | 18,0 | 568 | 21.8 |
| MAC0605AEOCN-UL13 | 6x2x18AWG | 19,9 | 690 | 21.8 |
| MAC0805AEOCN-UL13 | 8x2x18AWG | 21,0 | 789 | 21.8 |
| MAC1005AEOCN-UL13 | 10x2x18AWG | 24,2 | 1063 | 21.8 |
| MAC1205AEOCN-UL13 | 12x2x18AWG | 24,8 | 1140 | 21.8 |
| MAC1605AEOCN-UL13 | 16x2x18AWG | 27,0 | 1362 | 21.8 |
| MAC2005AEOCN-UL13 | 20x2x18AWG | 29,8 | 1706 | 21.8 |
| MAC2405AEOCN-UL13 | 24x2x18AWG | 32,3 | 1970 | 21.8 |
| MAC0205AEOCN-UL13 | 2x2x16AWG | 17,1 | 492 | 13.7 |
| MAC0405AEOCN-UL13 | 4x2x16AWG | 19,1 | 651 | 13.7 |
| MAC0605AEOCN-UL13 | 6x2x16AWG | 21,3 | 806 | 13.7 |
| MAC0805AEOCN-UL13 | 8x2x16AWG | 23,3 | 1037 | 13.7 |
| MAC1005AEOCN-UL13 | 10x2x16AWG | 26,6 | 1287 | 13.7 |
| MAC1205AEOCN-UL13 | 12x2x16AWG | 27,2 | 1390 | 13.7 |
| MAC1605AEOCN-UL13 | 16x2x16AWG | 29,9 | 1770 | 13.7 |
| MAC2005AEOCN-UL13 | 20x2x16AWG | 32,8 | 2099 | 13.7 |
| MAC2405AEOCN-UL13 | 24x2x16AWG | 36,4 | 2616 | 13.7 |
| MAC0201AEOCN-UL13 | 2x2x14AWG | 19,4 | 627 | 8.6 |
| MAC0401AEOCN-UL13 | 4x2x14AWG | 21,3 | 814 | 8.6 |
| MAC0601AEOCN-UL13 | 6x2x14AWG | 25,7 | 1217 | 8.6 |
| MAC0801AEOCN-UL13 | 8x2x14AWG | 27,4 | 1411 | 8.6 |
| MAC1001AEOCN-UL13 | 10x2x14AWG | 30,9 | 1802 | 8.6 |
| MAC1201AEOCN-UL13 | 12x2x14AWG | 31,7 | 1957 | 8.6 |
| MAC1601AEOCN-UL13 | 16x2x14AWG | 35,1 | 2419 | 8.6 |
| MAC2001AEOCN-UL13 | 20x2x14AWG | 39,0 | 3031 | 8.6 |
| MAC2401AEOCN-UL13 | 24x2x14AWG | 41,8 | 3437 | 8.6 |
| MAC0252AEOCN-UL13 | 2x2x12AWG | 20,9 | 737 | 5.4 |
| MAC0452AEOCN-UL13 | 4x2x12AWG | 24,3 | 1136 | 5.4 |
| MAC0652AEOCN-UL13 | 6x2x12AWG | 27,9 | 1482 | 5.4 |
| MAC0852AEOCN-UL13 | 8x2x12AWG | 30,6 | 1886 | 5.4 |
| MAC1052AEOCN-UL13 | 10x2x12AWG | 34,9 | 2328 | 5.4 |
| MAC1252AEOCN-UL13 | 12x2x12AWG | 36,6 | 2746 | 5.4 |
| MAC1652AEOCN-UL13 | 16x2x12AWG | 39,4 | 3262 | 5.4 |
| MAC2052AEOCN-UL13 | 20x2x12AWG | 43,5 | 3885 | 5.4 |
| MAC2452AEOCN-UL13 | 24x2x12AWG | 47,3 | 4496 | 5.4 |

RAMCRO - UL 13 PLTC - XLPE

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Cross Linked Polyethylene - XLPE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

NEC Class I Div. II
IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

XLPE - Overall Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106HEEXN-UL13 | 1x2x20AWG | 5,7 | 41 | 34,6 |
| MAS0206HEEXN-UL13 | 2x2x20AWG | 7,9 | 67 | 34,6 |
| MAS0406HEEXN-UL13 | 4x2x20AWG | 9,1 | 102 | 34,6 |
| MAS0606HEEXN-UL13 | 6x2x20AWG | 14,6 | 258 | 34,6 |
| MAS0806HEEXN-UL13 | 8x2x20AWG | 15,6 | 302 | 34,6 |
| MAS1006HEEXN-UL13 | 10x2x20AWG | 17,4 | 357 | 34,6 |
| MAS1206HEEXN-UL13 | 12x2x20AWG | 17,9 | 392 | 34,6 |
| MAS1606HEEXN-UL13 | 16x2x20AWG | 19,4 | 472 | 34,6 |
| MAS2406HEEXN-UL13 | 24x2x20AWG | 23,1 | 639 | 34,6 |
| MAS0105HEEXN-UL13 | 1x2x18AWG | 6,2 | 51 | 21,8 |
| MAS0205HEEXN-UL13 | 2x2x18AWG | 8,7 | 85 | 21,8 |
| MAS0405HEEXN-UL13 | 4x2x18AWG | 13,9 | 246 | 21,8 |
| MAS0605HEEXN-UL13 | 6x2x18AWG | 15,8 | 316 | 21,8 |
| MAS0805HEEXN-UL13 | 8x2x18AWG | 17,0 | 375 | 21,8 |
| MAS1005HEEXN-UL13 | 10x2x18AWG | 19,0 | 447 | 21,8 |
| MAS1205HEEXN-UL13 | 12x2x18AWG | 19,5 | 497 | 21,8 |
| MAS1605HEEXN-UL13 | 16x2x18AWG | 21,3 | 606 | 21,8 |
| MAS2405HEEXN-UL13 | 24x2x18AWG | 26,0 | 868 | 21,8 |
| MAS0105HEEXN-UL13 | 1x2x16AWG | 6,8 | 64 | 13,7 |
| MAS0205HEEXN-UL13 | 2x2x16AWG | 13,5 | 220 | 13,7 |
| MAS0405HEEXN-UL13 | 4x2x16AWG | 15,1 | 305 | 13,7 |
| MAS0605HEEXN-UL13 | 6x2x16AWG | 17,2 | 400 | 13,7 |
| MAS0805HEEXN-UL13 | 8x2x16AWG | 18,6 | 482 | 13,7 |
| MAS1005HEEXN-UL13 | 10x2x16AWG | 21,0 | 580 | 13,7 |
| MAS1205HEEXN-UL13 | 12x2x16AWG | 21,6 | 651 | 13,7 |
| MAS1605HEEXN-UL13 | 16x2x16AWG | 23,6 | 805 | 13,7 |
| MAS2405HEEXN-UL13 | 24x2x16AWG | 29,0 | 1001 | 13,7 |
| MAS0101HEEXN-UL13 | 1x2x14AWG | 7,6 | 85 | 8,6 |
| MAS0201HEEXN-UL13 | 2x2x14AWG | 14,8 | 272 | 8,6 |
| MAS0401HEEXN-UL13 | 4x2x14AWG | 16,6 | 394 | 8,6 |
| MAS0601HEEXN-UL13 | 6x2x14AWG | 19,1 | 526 | 8,6 |
| MAS0801HEEXN-UL13 | 8x2x14AWG | 20,8 | 645 | 8,6 |
| MAS1001HEEXN-UL13 | 10x2x14AWG | 23,5 | 782 | 8,6 |
| MAS1201HEEXN-UL13 | 12x2x14AWG | 24,2 | 887 | 8,6 |
| MAS1601HEEXN-UL13 | 16x2x14AWG | 27,1 | 1147 | 8,6 |
| MAS2401HEEXN-UL13 | 24x2x14AWG | 32,8 | 1619 | 8,6 |
| MAS0152HEEXN-UL13 | 1x2x12AWG | 8,5 | 116 | 5,4 |
| MAS0252HEEXN-UL13 | 2x2x12AWG | 16,4 | 346 | 5,4 |
| MAS0452HEEXN-UL13 | 4x2x12AWG | 18,5 | 524 | 5,4 |
| MAS0652HEEXN-UL13 | 6x2x12AWG | 21,5 | 715 | 5,4 |
| MAS0852HEEXN-UL13 | 8x2x12AWG | 23,4 | 890 | 5,4 |
| MAS1052HEEXN-UL13 | 10x2x12AWG | 27,2 | 1119 | 5,4 |
| MAS1252HEEXN-UL13 | 12x2x12AWG | 28,0 | 1278 | 5,4 |
| MAS1652HEEXN-UL13 | 16x2x12AWG | 30,8 | 1616 | 5,4 |
| MAS2452HEEXN-UL13 | 24x2x12AWG | 38,0 | 2355 | 5,4 |

RAMCRO - UL 13 PLTC - XLPE

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Cross Linked Polyethylene - XLPE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

NEC Class I Div. II
IEC Zone 1 - Group 2



TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

XLPE - Overall Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106HEEXN-UL13 | 1x2x20AWG | 5,7 | 41 | 34.6 |
| MAS0206HEEXN-UL13 | 2x2x20AWG | 7,9 | 67 | 34.6 |
| MAS0406HEEXN-UL13 | 4x2x20AWG | 9,1 | 102 | 34.6 |
| MAS0606HEEXN-UL13 | 6x2x20AWG | 14,6 | 258 | 34.6 |
| MAS0806HEEXN-UL13 | 8x2x20AWG | 15,6 | 302 | 34.6 |
| MAS1006HEEXN-UL13 | 10x2x20AWG | 17,4 | 357 | 34.6 |
| MAS1206HEEXN-UL13 | 12x2x20AWG | 17,9 | 392 | 34.6 |
| MAS1606HEEXN-UL13 | 16x2x20AWG | 19,4 | 472 | 34.6 |
| MAS2406HEEXN-UL13 | 24x2x20AWG | 23,1 | 639 | 34.6 |
| MAS0105HEEXN-UL13 | 1x2x18AWG | 6,2 | 51 | 21.8 |
| MAS0205HEEXN-UL13 | 2x2x18AWG | 8,7 | 85 | 21.8 |
| MAS0405HEEXN-UL13 | 4x2x18AWG | 13,9 | 246 | 21.8 |
| MAS0605HEEXN-UL13 | 6x2x18AWG | 15,8 | 316 | 21.8 |
| MAS0805HEEXN-UL13 | 8x2x18AWG | 17,0 | 375 | 21.8 |
| MAS1005HEEXN-UL13 | 10x2x18AWG | 19,0 | 447 | 21.8 |
| MAS1205HEEXN-UL13 | 12x2x18AWG | 19,5 | 497 | 21.8 |
| MAS1605HEEXN-UL13 | 16x2x18AWG | 21,3 | 606 | 21.8 |
| MAS2405HEEXN-UL13 | 24x2x18AWG | 26,0 | 868 | 21.8 |
| MAS0105HEEXN-UL13 | 1x2x16AWG | 6,8 | 64 | 13.7 |
| MAS0205HEEXN-UL13 | 2x2x16AWG | 13,5 | 220 | 13.7 |
| MAS0405HEEXN-UL13 | 4x2x16AWG | 15,1 | 305 | 13.7 |
| MAS0605HEEXN-UL13 | 6x2x16AWG | 17,2 | 400 | 13.7 |
| MAS0805HEEXN-UL13 | 8x2x16AWG | 18,6 | 482 | 13.7 |
| MAS1005HEEXN-UL13 | 10x2x16AWG | 21,0 | 580 | 13.7 |
| MAS1205HEEXN-UL13 | 12x2x16AWG | 21,6 | 651 | 13.7 |
| MAS1605HEEXN-UL13 | 16x2x16AWG | 23,6 | 805 | 13.7 |
| MAS2405HEEXN-UL13 | 24x2x16AWG | 29,0 | 1001 | 13.7 |
| MAS0101HEEXN-UL13 | 1x2x14AWG | 7,6 | 85 | 8.6 |
| MAS0201HEEXN-UL13 | 2x2x14AWG | 14,8 | 272 | 8.6 |
| MAS0401HEEXN-UL13 | 4x2x14AWG | 16,6 | 394 | 8.6 |
| MAS0601HEEXN-UL13 | 6x2x14AWG | 19,1 | 526 | 8.6 |
| MAS0801HEEXN-UL13 | 8x2x14AWG | 20,8 | 645 | 8.6 |
| MAS1001HEEXN-UL13 | 10x2x14AWG | 23,5 | 782 | 8.6 |
| MAS1201HEEXN-UL13 | 12x2x14AWG | 24,2 | 887 | 8.6 |
| MAS1601HEEXN-UL13 | 16x2x14AWG | 27,1 | 1147 | 8.6 |
| MAS2401HEEXN-UL13 | 24x2x14AWG | 32,8 | 1619 | 8.6 |
| MAS0152HEEXN-UL13 | 1x2x12AWG | 8,5 | 116 | 5.4 |
| MAS0252HEEXN-UL13 | 2x2x12AWG | 16,4 | 346 | 5.4 |
| MAS0452HEEXN-UL13 | 4x2x12AWG | 18,5 | 524 | 5.4 |
| MAS0652HEEXN-UL13 | 6x2x12AWG | 21,5 | 715 | 5.4 |
| MAS0852HEEXN-UL13 | 8x2x12AWG | 23,4 | 890 | 5.4 |
| MAS1052HEEXN-UL13 | 10x2x12AWG | 27,2 | 1119 | 5.4 |
| MAS1252HEEXN-UL13 | 12x2x12AWG | 28,0 | 1278 | 5.4 |
| MAS1652HEEXN-UL13 | 16x2x12AWG | 30,8 | 1616 | 5.4 |
| MAS2452HEEXN-UL13 | 24x2x12AWG | 38,0 | 2355 | 5.4 |

XLPE - Individual and Collective Screened

RAMCRO - UL 13 PLTC - XLPE

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Cross Linked Polyethylene - XLPE

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

NEC Class I Div. II
IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

XLPE - Individual Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0206HEEXN-UL13 | 2x2x20AWG | 8,2 | 76 | 34.6 |
| MAC0406HEEXN-UL13 | 4x2x20AWG | 9,4 | 118 | 34.6 |
| MAC0606HEEXN-UL13 | 6x2x20AWG | 15,0 | 286 | 34.6 |
| MAC0806HEEXN-UL13 | 8x2x20AWG | 16,1 | 338 | 34.6 |
| MAC1006HEEXN-UL13 | 10x2x20AWG | 18,0 | 402 | 34.6 |
| MAC1206HEEXN-UL13 | 12x2x20AWG | 18,4 | 444 | 34.6 |
| MAC1606HEEXN-UL13 | 16x2x20AWG | 20,0 | 539 | 34.6 |
| MAC2006HEEXN-UL13 | 20x2x20AWG | 22,1 | 640 | 34.6 |
| MAC2406HEEXN-UL13 | 24x2x20AWG | 23,9 | 739 | 34.6 |
| MAC0205HEEXN-UL13 | 2x2x18AWG | 9,0 | 95 | 21.8 |
| MAC0405HEEXN-UL13 | 4x2x18AWG | 14,2 | 268 | 21.8 |
| MAC0605HEEXN-UL13 | 6x2x18AWG | 16,1 | 348 | 21.8 |
| MAC0805HEEXN-UL13 | 8x2x18AWG | 17,4 | 416 | 21.8 |
| MAC1005HEEXN-UL13 | 10x2x18AWG | 19,5 | 498 | 21.8 |
| MAC1205HEEXN-UL13 | 12x2x18AWG | 20,1 | 557 | 21.8 |
| MAC1605HEEXN-UL13 | 16x2x18AWG | 21,9 | 684 | 21.8 |
| MAC2005HEEXN-UL13 | 20x2x18AWG | 24,2 | 818 | 21.8 |
| MAC2405HEEXN-UL13 | 24x2x18AWG | 26,8 | 985 | 21.8 |
| MAC0205HEEXN-UL13 | 2x2x16AWG | 13,8 | 232 | 13.7 |
| MAC0405HEEXN-UL13 | 4x2x16AWG | 15,4 | 327 | 13.7 |
| MAC0605HEEXN-UL13 | 6x2x16AWG | 17,6 | 431 | 13.7 |
| MAC0805HEEXN-UL13 | 8x2x16AWG | 19,1 | 523 | 13.7 |
| MAC1005HEEXN-UL13 | 10x2x16AWG | 21,5 | 630 | 13.7 |
| MAC1205HEEXN-UL13 | 12x2x16AWG | 22,1 | 710 | 13.7 |
| MAC1605HEEXN-UL13 | 16x2x16AWG | 24,2 | 883 | 13.7 |
| MAC2005HEEXN-UL13 | 20x2x16AWG | 27,3 | 1098 | 13.7 |
| MAC2405HEEXN-UL13 | 24x2x16AWG | 29,8 | 1279 | 13.7 |
| MAC0201HEEXN-UL13 | 2x2x14AWG | 15,0 | 285 | 8.6 |
| MAC0401HEEXN-UL13 | 4x2x14AWG | 16,9 | 418 | 8.6 |
| MAC0601HEEXN-UL13 | 6x2x14AWG | 19,5 | 562 | 8.6 |
| MAC0801HEEXN-UL13 | 8x2x14AWG | 21,2 | 692 | 8.6 |
| MAC1001HEEXN-UL13 | 10x2x14AWG | 24 | 839 | 8.6 |
| MAC1201HEEXN-UL13 | 12x2x14AWG | 24,8 | 955 | 8.6 |
| MAC1601HEEXN-UL13 | 16x2x14AWG | 27,7 | 1236 | 8.6 |
| MAC2001HEEXN-UL13 | 20x2x14AWG | 30,7 | 1495 | 8.6 |
| MAC2401HEEXN-UL13 | 24x2x14AWG | 33,6 | 1751 | 8.6 |
| MAC0252HEEXN-UL13 | 2x2x12AWG | 16,6 | 361 | 5.4 |
| MAC0452HEEXN-UL13 | 4x2x12AWG | 18,8 | 551 | 5.4 |
| MAC0652HEEXN-UL13 | 6x2x12AWG | 21,9 | 754 | 5.4 |
| MAC0852HEEXN-UL13 | 8x2x12AWG | 23,9 | 941 | 5.4 |
| MAC1052HEACN-UL13 | 10x2x12AWG | 27,7 | 1183 | 5.4 |
| MAC1252HEEXN-UL13 | 12x2x12AWG | 28,6 | 1355 | 5.4 |
| MAC1652HEEXN-UL13 | 16x2x12AWG | 31,4 | 1716 | 5.4 |
| MAC2052HEEXN-UL13 | 20x2x12AWG | 35,5 | 2131 | 5.4 |
| MAC2452HEEXN-UL13 | 24x2x12AWG | 38,8 | 2504 | 5.4 |

XLPE - Collective Screened with Armour

RAMCRO - UL 13 PLTC - XLPE



These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Cross Linked Polyethylene - XLPE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

XLPE - Collective Screened with Armour

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106AEEXN-UL13 | 1x2x20AWG | 9,3 | 169 | 34.6 |
| MAS0206AEEXN-UL13 | 2x2x20AWG | 15,5 | 375 | 34.6 |
| MAS0406AEEXN-UL13 | 4x2x20AWG | 16,7 | 443 | 34.6 |
| MAS0606AEEXN-UL13 | 6x2x20AWG | 18,9 | 556 | 34.6 |
| MAS0806AEEXN-UL13 | 8x2x20AWG | 19,9 | 622 | 34.6 |
| MAS1006AEEXN-UL13 | 10x2x20AWG | 22,4 | 813 | 34.6 |
| MAS1206AEEXN-UL13 | 12x2x20AWG | 22,9 | 860 | 34.6 |
| MAS1606AEEXN-UL13 | 16x2x20AWG | 25,5 | 1050 | 34.6 |
| MAS2406AEEXN-UL13 | 24x2x20AWG | 29,9 | 1462 | 34.6 |
| MAS0105AEEXN-UL13 | 1x2x18AWG | 13,5 | 297 | 21.8 |
| MAS0205AEEXN-UL13 | 2x2x18AWG | 16,3 | 415 | 21.8 |
| MAS0405AEEXN-UL13 | 4x2x18AWG | 18,2 | 529 | 21.8 |
| MAS0605AEEXN-UL13 | 6x2x18AWG | 20,1 | 638 | 21.8 |
| MAS0805AEEXN-UL13 | 8x2x18AWG | 21,3 | 722 | 21.8 |
| MAS1005AEEXN-UL13 | 10x2x18AWG | 24,5 | 981 | 21.8 |
| MAS1205AEEXN-UL13 | 12x2x18AWG | 25,6 | 1078 | 21.8 |
| MAS1605AEEXN-UL13 | 16x2x18AWG | 27,3 | 1237 | 21.8 |
| MAS2405AEEXN-UL13 | 24x2x18AWG | 32,7 | 1789 | 21.8 |
| MAS0105AEEXN-UL13 | 1x2x16AWG | 14,1 | 327 | 13.7 |
| MAS0205AEEXN-UL13 | 2x2x16AWG | 17,8 | 496 | 13.7 |
| MAS0405AEEXN-UL13 | 4x2x16AWG | 19,4 | 613 | 13.7 |
| MAS0605AEEXN-UL13 | 6x2x16AWG | 21,5 | 752 | 13.7 |
| MAS0805AEEXN-UL13 | 8x2x16AWG | 24,1 | 1006 | 13.7 |
| MAS1005AEEXN-UL13 | 10x2x16AWG | 27,0 | 1202 | 13.7 |
| MAS1205AEEXN-UL13 | 12x2x16AWG | 27,6 | 1290 | 13.7 |
| MAS1605AEEXN-UL13 | 16x2x16AWG | 30,3 | 1643 | 13.7 |
| MAS2405AEEXN-UL13 | 24x2x16AWG | 37,0 | 2430 | 13.7 |
| MAS0101AEEXN-UL13 | 1x2x14AWG | 15,2 | 382 | 8.6 |
| MAS0201AEEXN-UL13 | 2x2x14AWG | 19,1 | 574 | 8.6 |
| MAS0401AEEXN-UL13 | 4x2x14AWG | 20,9 | 733 | 8.6 |
| MAS0601AEEXN-UL13 | 6x2x14AWG | 24,7 | 1064 | 8.6 |
| MAS0801AEEXN-UL13 | 8x2x14AWG | 26,8 | 1262 | 8.6 |
| MAS1001AEEXN-UL13 | 10x2x14AWG | 30,2 | 1617 | 8.6 |
| MAS1201AEEXN-UL13 | 12x2x14AWG | 30,9 | 1747 | 8.6 |
| MAS1601AEEXN-UL13 | 16x2x14AWG | 33,8 | 2105 | 8.6 |
| MAS2401AEEXN-UL13 | 24x2x14AWG | 40,8 | 3045 | 8.6 |
| MAS0152AEEXN-UL13 | 1x2x12AWG | 16,1 | 440 | 5.4 |
| MAS0252AEEXN-UL13 | 2x2x12AWG | 20,7 | 681 | 5.4 |
| MAS0452AEEXN-UL13 | 4x2x12AWG | 23,5 | 1008 | 5.4 |
| MAS0652AEEXN-UL13 | 6x2x12AWG | 27,6 | 1353 | 5.4 |
| MAS0852AEEXN-UL13 | 8x2x12AWG | 30,2 | 1723 | 5.4 |
| MAS1052AEEXN-UL13 | 10x2x12AWG | 33,9 | 2080 | 5.4 |
| MAS1252AEEXN-UL13 | 12x2x12AWG | 36,1 | 2506 | 5.4 |
| MAS1652AEEXN-UL13 | 16x2x12AWG | 38,8 | 2960 | 5.4 |
| MAS2452AEEXN-UL13 | 24x2x12AWG | 46,6 | 4057 | 5.4 |

XLPE - Individual and Collective Screened with Armour

RAMCRO - UL 13 PLTC - XLPE

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Cross Linked Polyetilene - XLPE

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

XLPE - Individual and Collective Screened with Armour

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0206AEEXN-UL13 | 2x2x20AWG | 15,8 | 391 | 34,6 |
| MAC0406AEEXN-UL13 | 4x2x20AWG | 17,1 | 469 | 34,6 |
| MAC0606AEEXN-UL13 | 6x2x20AWG | 19,3 | 593 | 34,6 |
| MAC0806AEEXN-UL13 | 8x2x20AWG | 20,4 | 668 | 34,6 |
| MAC1006AEEXN-UL13 | 10x2x20AWG | 23,0 | 873 | 34,6 |
| MAC1206AEEXN-UL13 | 12x2x20AWG | 23,5 | 928 | 34,6 |
| MAC1606AEEXN-UL13 | 16x2x20AWG | 26,1 | 1136 | 34,6 |
| MAC2006AEEXN-UL13 | 20x2x20AWG | 28,8 | 1427 | 34,6 |
| MAC2406AEEXN-UL13 | 24x2x20AWG | 30,7 | 1590 | 34,6 |
| MAC0205AEEXN-UL13 | 2x2x18AWG | 16,6 | 433 | 21,8 |
| MAC0405AEEXN-UL13 | 4x2x18AWG | 18,5 | 558 | 21,8 |
| MAC0605AEEXN-UL13 | 6x2x18AWG | 20,5 | 679 | 21,8 |
| MAC0805AEEXN-UL13 | 8x2x18AWG | 22,4 | 873 | 21,8 |
| MAC1005AEEXN-UL13 | 10x2x18AWG | 25,6 | 1081 | 21,8 |
| MAC1205AEEXN-UL13 | 12x2x18AWG | 26,1 | 1154 | 21,8 |
| MAC1605AEEXN-UL13 | 16x2x18AWG | 28,0 | 1334 | 21,8 |
| MAC2005AEEXN-UL13 | 20x2x18AWG | 30,9 | 1677 | 21,8 |
| MAC2405AEEXN-UL13 | 24x2x18AWG | 33,6 | 1934 | 21,8 |
| MAC0205AEEXN-UL13 | 2x2x16AWG | 18,1 | 514 | 13,7 |
| MAC0405AEEXN-UL13 | 4x2x16AWG | 19,7 | 642 | 13,7 |
| MAC0605AEEXN-UL13 | 6x2x16AWG | 22,7 | 894 | 13,7 |
| MAC0805AEEXN-UL13 | 8x2x16AWG | 24,6 | 1060 | 13,7 |
| MAC1005AEEXN-UL13 | 10x2x16AWG | 27,6 | 1269 | 13,7 |
| MAC1205AEEXN-UL13 | 12x2x16AWG | 28,9 | 1500 | 13,7 |
| MAC1605AEEXN-UL13 | 16x2x16AWG | 31,0 | 1744 | 13,7 |
| MAC2005AEEXN-UL13 | 20x2x16AWG | 34,1 | 2065 | 13,7 |
| MAC2405AEEXN-UL13 | 24x2x16AWG | 37,8 | 2581 | 13,7 |
| MAC0201AEEXN-UL13 | 2x2x14AWG | 19,4 | 593 | 8,6 |
| MAC0401AEEXN-UL13 | 4x2x14AWG | 21,2 | 764 | 8,6 |
| MAC0601AEEXN-UL13 | 6x2x14AWG | 25,6 | 1144 | 8,6 |
| MAC0801AEEXN-UL13 | 8x2x14AWG | 27,3 | 1322 | 8,6 |
| MAC1001AEEXN-UL13 | 10x2x14AWG | 30,8 | 1694 | 8,6 |
| MAC1201AEEXN-UL13 | 12x2x14AWG | 31,5 | 1834 | 8,6 |
| MAC1601AEEXN-UL13 | 16x2x14AWG | 35,0 | 2260 | 8,6 |
| MAC2001AEEXN-UL13 | 20x2x14AWG | 38,8 | 2838 | 8,6 |
| MAC2401AEEXN-UL13 | 24x2x14AWG | 41,6 | 3212 | 8,6 |
| MAC0252AEEXN-UL13 | 2x2x12AWG | 20,9 | 701 | 5,4 |
| MAC0452AEEXN-UL13 | 4x2x12AWG | 24,3 | 1081 | 5,4 |
| MAC0652AEEXN-UL13 | 6x2x12AWG | 28,7 | 1537 | 5,4 |
| MAC0852AEEXN-UL13 | 8x2x12AWG | 30,6 | 1790 | 5,4 |
| MAC1052AEEXN-UL13 | 10x2x12AWG | 35,0 | 2207 | 5,4 |
| MAC1252AEEXN-UL13 | 12x2x12AWG | 36,6 | 2607 | 5,4 |
| MAC1652AEEXN-UL13 | 16x2x12AWG | 39,5 | 3088 | 5,4 |
| MAC2052AEEXN-UL13 | 20x2x12AWG | 43,5 | 3672 | 5,4 |
| MAC2452AEEXN-UL13 | 24x2x12AWG | 47,4 | 4242 | 5,4 |

SIL - Overall Screened

RAMCRO - UL 13 PLTC - Silicon Rubber

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Special Mix Silicon Rubber - SIL

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, sec. 725 PLTC,
- NEC code, sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

SIL - Overall Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106HEESN-UL13 | 1x2x20AWG | 6,9 | 58 | 34.6 |
| MAS0206HEESN-UL13 | 2x2x20AWG | 9,2 | 95 | 34.6 |
| MAS0406HEESN-UL13 | 4x2x20AWG | 14,5 | 270 | 34.6 |
| MAS0606HEESN-UL13 | 6x2x20AWG | 16,6 | 350 | 34.6 |
| MAS0806HEESN-UL13 | 8x2x20AWG | 17,8 | 418 | 34.6 |
| MAS1006HEESN-UL13 | 10x2x20AWG | 20,1 | 499 | 34.6 |
| MAS1206HEESN-UL13 | 12x2x20AWG | 20,6 | 556 | 34.6 |
| MAS1606HEESN-UL13 | 16x2x20AWG | 22,5 | 683 | 34.6 |
| MAS2406HEESN-UL13 | 24x2x20AWG | 27,6 | 981 | 34.6 |
| MAS0105HEESN-UL13 | 1x2x18AWG | 7,4 | 69 | 21.8 |
| MAS0205HEESN-UL13 | 2x2x18AWG | 13,8 | 227 | 21.8 |
| MAS0405HEESN-UL13 | 4x2x18AWG | 15,4 | 315 | 21.8 |
| MAS0605HEESN-UL13 | 6x2x18AWG | 17,6 | 414 | 21.8 |
| MAS0805HEESN-UL13 | 8x2x18AWG | 19,1 | 500 | 21.8 |
| MAS1005HEESN-UL13 | 10x2x18AWG | 21,5 | 601 | 21.8 |
| MAS1205HEESN-UL13 | 12x2x18AWG | 22,1 | 676 | 21.8 |
| MAS1605HEESN-UL13 | 16x2x18AWG | 24,2 | 837 | 21.8 |
| MAS2405HEESN-UL13 | 24x2x18AWG | 29,8 | 1210 | 21.8 |
| MAS0105HEESN-UL13 | 1x2x16AWG | 8,0 | 84 | 13.7 |
| MAS0205HEESN-UL13 | 2x2x16AWG | 14,7 | 264 | 13.7 |
| MAS0405HEESN-UL13 | 4x2x16AWG | 16,5 | 380 | 13.7 |
| MAS0605HEESN-UL13 | 6x2x16AWG | 19,0 | 506 | 13.7 |
| MAS0805HEESN-UL13 | 8x2x16AWG | 20,6 | 619 | 13.7 |
| MAS1005HEESN-UL13 | 10x2x16AWG | 23,3 | 748 | 13.7 |
| MAS1205HEESN-UL13 | 12x2x16AWG | 24,0 | 848 | 13.7 |
| MAS1605HEESN-UL13 | 16x2x16AWG | 26,8 | 1095 | 13.7 |
| MAS2405HEESN-UL13 | 24x2x16AWG | 32,5 | 1541 | 13.7 |
| MAS0101HEESN-UL13 | 1x2x14AWG | 8,8 | 107 | 8.6 |
| MAS0201HEESN-UL13 | 2x2x14AWG | 15,8 | 318 | 8.6 |
| MAS0401HEESN-UL13 | 4x2x14AWG | 17,9 | 475 | 8.6 |
| MAS0601HEESN-UL13 | 6x2x14AWG | 20,7 | 644 | 8.6 |
| MAS0801HEESN-UL13 | 8x2x14AWG | 22,5 | 798 | 8.6 |
| MAS1001HEESN-UL13 | 10x2x14AWG | 26,1 | 1003 | 8.6 |
| MAS1201HEESN-UL13 | 12x2x14AWG | 26,9 | 1142 | 8.6 |
| MAS1601HEESN-UL13 | 16x2x14AWG | 29,6 | 1437 | 8.6 |
| MAS2401HEESN-UL13 | 24x2x14AWG | 36,4 | 2091 | 8.6 |
| MAS0152HEESN-UL13 | 1x2x12AWG | 8,8 | 107 | 5.4 |
| MAS0252HEESN-UL13 | 2x2x12AWG | 15,8 | 318 | 5.4 |
| MAS0452HEESN-UL13 | 4x2x12AWG | 17,9 | 475 | 5.4 |
| MAS0652HEESN-UL13 | 6x2x12AWG | 20,7 | 644 | 5.4 |
| MAS0852HEESN-UL13 | 8x2x12AWG | 22,5 | 798 | 5.4 |
| MAS1052HEESN-UL13 | 10x2x12AWG | 26,1 | 1003 | 5.4 |
| MAS1252HEESN-UL13 | 12x2x12AWG | 26,9 | 1142 | 5.4 |
| MAS1652HEESN-UL13 | 16x2x12AWG | 29,6 | 1437 | 5.4 |
| MAS2452HEESN-UL13 | 24x2x12AWG | 36,4 | 2091 | 5.4 |



SIL - Individual and Overall Screened

RAMCRO - UL 13 PLTC - Silicon Rubber

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Special Mix Silicon Rubber - SIL

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20 - Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

SIL - Individual and Overall Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0206HEESN-UL13 | 2x2x20AWG | 9,5 | 105 | 34.6 |
| MAC0406HEESN-UL13 | 4x2x20AWG | 14,8 | 292 | 34.6 |
| MAC0606HEESN-UL13 | 6x2x20AWG | 16,9 | 381 | 34.6 |
| MAC0806HEESN-UL13 | 8x2x20AWG | 18,2 | 458 | 34.6 |
| MAC1006HEESN-UL13 | 10x2x20AWG | 20,5 | 549 | 34.6 |
| MAC1206HEESN-UL13 | 12x2x20AWG | 21,1 | 616 | 34.6 |
| MAC1606HEESN-UL13 | 16x2x20AWG | 23,1 | 760 | 34.6 |
| MAC2006HEESN-UL13 | 20x2x20AWG | 26,0 | 944 | 34.6 |
| MAC2406HEESN-UL13 | 24x2x20AWG | 28,3 | 1096 | 34.6 |
| MAC0205HEESN-UL13 | 2x2x18AWG | 14,0 | 240 | 21.8 |
| MAC0405HEESN-UL13 | 4x2x18AWG | 15,6 | 339 | 21.8 |
| MAC0605HEESN-UL13 | 6x2x18AWG | 18,0 | 449 | 21.8 |
| MAC0805HEESN-UL13 | 8x2x18AWG | 19,5 | 546 | 21.8 |
| MAC1005HEESN-UL13 | 10x2x18AWG | 22,0 | 658 | 21.8 |
| MAC1205HEESN-UL13 | 12x2x18AWG | 22,6 | 743 | 21.8 |
| MAC1605HEESN-UL13 | 16x2x18AWG | 24,8 | 925 | 21.8 |
| MAC2005HEESN-UL13 | 20x2x18AWG | 28,0 | 1150 | 21.8 |
| MAC2405HEESN-UL13 | 24x2x18AWG | 30,5 | 1340 | 21.8 |
| MAC0205HEESN-UL13 | 2x2x16AWG | 14,9 | 277 | 13.7 |
| MAC0405HEESN-UL13 | 4x2x16AWG | 16,7 | 404 | 13.7 |
| MAC0605HEESN-UL13 | 6x2x16AWG | 19,3 | 541 | 13.7 |
| MAC0805HEESN-UL13 | 8x2x16AWG | 21,0 | 665 | 13.7 |
| MAC1005HEESN-UL13 | 10x2x16AWG | 23,8 | 805 | 13.7 |
| MAC1205HEESN-UL13 | 12x2x16AWG | 24,5 | 915 | 13.7 |
| MAC1605HEESN-UL13 | 16x2x16AWG | 27,4 | 1183 | 13.7 |
| MAC2005HEESN-UL13 | 20x2x16AWG | 30,4 | 1429 | 13.7 |
| MAC2405HEESN-UL13 | 24x2x16AWG | 33,2 | 1672 | 13.7 |
| MAC0201HEESN-UL13 | 2x2x14AWG | 16,1 | 333 | 8.6 |
| MAC0401HEESN-UL13 | 4x2x14AWG | 18,1 | 502 | 8.6 |
| MAC0601HEESN-UL13 | 6x2x14AWG | 21,1 | 683 | 8.6 |
| MAC0801HEESN-UL13 | 8x2x14AWG | 22,9 | 848 | 8.6 |
| MAC1001HEESN-UL13 | 10x2x14AWG | 26,6 | 1067 | 8.6 |
| MAC1201HEESN-UL13 | 12x2x14AWG | 27,4 | 1217 | 8.6 |
| MAC1601HEESN-UL13 | 16x2x14AWG | 30,1 | 1537 | 8.6 |
| MAC2001HEESN-UL13 | 20x2x14AWG | 33,5 | 1866 | 8.6 |
| MAC2401HEESN-UL13 | 24x2x14AWG | 37,2 | 2239 | 8.6 |
| MAC0252HEESN-UL13 | 2x2x12AWG | 17,5 | 412 | 5.4 |
| MAC0452HEESN-UL13 | 4x2x12AWG | 19,9 | 644 | 5.4 |
| MAC0652HEESN-UL13 | 6x2x12AWG | 23,2 | 889 | 5.4 |
| MAC0852HEESN-UL13 | 8x2x12AWG | 25,9 | 1149 | 5.4 |
| MAC1052HEESN-UL13 | 10x2x12AWG | 29,5 | 1403 | 5.4 |
| MAC1252HEESN-UL13 | 12x2x12AWG | 30,4 | 1614 | 5.4 |
| MAC1652HEESN-UL13 | 16x2x12AWG | 33,5 | 2055 | 5.4 |
| MAC2052HEESN-UL13 | 20x2x12AWG | 37,9 | 2555 | 5.4 |
| MAC2452HEESN-UL13 | 24x2x12AWG | 41,5 | 3010 | 5.4 |

SIL - Overall Screened with Armour

RAMCRO - UL 13 PLTC - Silicon Rubber



These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Special Mix Silicon Rubber - SIL

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II
IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

SIL - Overall Screened with Armour

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106AEESN-UL13 | 1x2x20AWG | 14,3 | 324 | 34.6 |
| MAS0206AEESN-UL13 | 2x2x20AWG | 16,9 | 440 | 34.6 |
| MAS0406AEESN-UL13 | 4x2x20AWG | 18,8 | 567 | 34.6 |
| MAS0606AEESN-UL13 | 6x2x20AWG | 20,9 | 688 | 34.6 |
| MAS0806AEESN-UL13 | 8x2x20AWG | 22,9 | 885 | 34.6 |
| MAS1006AEESN-UL13 | 10x2x20AWG | 26,1 | 1095 | 34.6 |
| MAS1206AEESN-UL13 | 12x2x20AWG | 26,7 | 1169 | 34.6 |
| MAS1606AEESN-UL13 | 16x2x20AWG | 29,2 | 1484 | 34.6 |
| MAS2406AEESN-UL13 | 24x2x20AWG | 34,8 | 1998 | 34.6 |
| MAS0105AEESN-UL13 | 1x2x18AWG | 15,0 | 361 | 21.8 |
| MAS0205AEESN-UL13 | 2x2x18AWG | 18,1 | 508 | 21.8 |
| MAS0405AEESN-UL13 | 4x2x18AWG | 19,7 | 629 | 21.8 |
| MAS0605AEESN-UL13 | 6x2x18AWG | 22,6 | 876 | 21.8 |
| MAS0805AEESN-UL13 | 8x2x18AWG | 24,6 | 1036 | 21.8 |
| MAS1005AEESN-UL13 | 10x2x18AWG | 27,5 | 1239 | 21.8 |
| MAS1205AEESN-UL13 | 12x2x18AWG | 28,8 | 1464 | 21.8 |
| MAS1605AEESN-UL13 | 16x2x18AWG | 30,9 | 1696 | 21.8 |
| MAS2405AEESN-UL13 | 24x2x18AWG | 37,8 | 2510 | 21.8 |
| MAS0105AEESN-UL13 | 1x2x16AWG | 15,6 | 393 | 13.7 |
| MAS0205AEESN-UL13 | 2x2x16AWG | 19,0 | 564 | 13.7 |
| MAS0405AEESN-UL13 | 4x2x16AWG | 20,8 | 716 | 13.7 |
| MAS0605AEESN-UL13 | 6x2x16AWG | 24,5 | 1039 | 13.7 |
| MAS0805AEESN-UL13 | 8x2x16AWG | 26,6 | 1230 | 13.7 |
| MAS1005AEESN-UL13 | 10x2x16AWG | 30,0 | 1577 | 13.7 |
| MAS1205AEESN-UL13 | 12x2x16AWG | 30,7 | 1699 | 13.7 |
| MAS1605AEESN-UL13 | 16x2x16AWG | 33,6 | 2044 | 13.7 |
| MAS2405AEESN-UL13 | 24x2x16AWG | 40,5 | 2954 | 13.7 |
| MAS0101AEESN-UL13 | 1x2x14AWG | 16,4 | 438 | 8.6 |
| MAS0201AEESN-UL13 | 2x2x14AWG | 20,1 | 642 | 8.6 |
| MAS0401AEESN-UL13 | 4x2x14AWG | 22,9 | 943 | 8.6 |
| MAS0601AEESN-UL13 | 6x2x14AWG | 26,8 | 1259 | 8.6 |
| MAS0801AEESN-UL13 | 8x2x14AWG | 29,3 | 1600 | 8.6 |
| MAS1001AEESN-UL13 | 10x2x14AWG | 32,9 | 1928 | 8.6 |
| MAS1201AEESN-UL13 | 12x2x14AWG | 33,7 | 2094 | 8.6 |
| MAS1601AEESN-UL13 | 16x2x14AWG | 37,6 | 2730 | 8.6 |
| MAS2401AEESN-UL13 | 24x2x14AWG | 45,0 | 3725 | 8.6 |
| MAS0152AEESN-UL13 | 1x2x12AWG | 17,8 | 527 | 5.4 |
| MAS0252AEESN-UL13 | 2x2x12AWG | 21,6 | 750 | 5.4 |
| MAS0452AEESN-UL13 | 4x2x12AWG | 25,6 | 1198 | 5.4 |
| MAS0652AEESN-UL13 | 6x2x12AWG | 29,6 | 1661 | 5.4 |
| MAS0852AEESN-UL13 | 8x2x12AWG | 32,2 | 1996 | 5.4 |
| MAS1052AEESN-UL13 | 10x2x12AWG | 37,1 | 2603 | 5.4 |
| MAS1252AEESN-UL13 | 12x2x12AWG | 38,0 | 2839 | 5.4 |
| MAS1652AEESN-UL13 | 16x2x12AWG | 41,0 | 3380 | 5.4 |
| MAS2452AEESN-UL13 | 24x2x12AWG | 49,3 | 4667 | 5.4 |

SIL - Individual and Overall Screened with Armour

RAMCRO - UL 13 PLTC - Silicon Rubber

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Special Mix Silicon Rubber - SIL

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter

**Hazardous Area Classification**

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

SIL - Individual and Overall Screened with Armour

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0206AEESN-UL13 | 2x2x20AWG | 17,1 | 457 | 34.6 |
| MAC0406AEESN-UL13 | 4x2x20AWG | 19,1 | 595 | 34.6 |
| MAC0606AEESN-UL13 | 6x2x20AWG | 21,2 | 727 | 34.6 |
| MAC0806AEESN-UL13 | 8x2x20AWG | 23,3 | 937 | 34.6 |
| MAC1006AEESN-UL13 | 10x2x20AWG | 26,6 | 1160 | 34.6 |
| MAC1206AEESN-UL13 | 12x2x20AWG | 27,2 | 1243 | 34.6 |
| MAC1606AEESN-UL13 | 16x2x20AWG | 29,8 | 1582 | 34.6 |
| MAC2006AEESN-UL13 | 20x2x20AWG | 32,8 | 1867 | 34.6 |
| MAC2406AEESN-UL13 | 24x2x20AWG | 36,4 | 2338 | 34.6 |
| MAC0205AEESN-UL13 | 2x2x18AWG | 18,3 | 527 | 21.8 |
| MAC0405AEESN-UL13 | 4x2x18AWG | 20,0 | 660 | 21.8 |
| MAC0605AEESN-UL13 | 6x2x18AWG | 23,0 | 921 | 21.8 |
| MAC0805AEESN-UL13 | 8x2x18AWG | 25,5 | 1126 | 21.8 |
| MAC1005AEESN-UL13 | 10x2x18AWG | 28,7 | 1443 | 21.8 |
| MAC1205AEESN-UL13 | 12x2x18AWG | 29,4 | 1549 | 21.8 |
| MAC1605AEESN-UL13 | 16x2x18AWG | 31,5 | 1805 | 21.8 |
| MAC2005AEESN-UL13 | 20x2x18AWG | 36,0 | 2377 | 21.8 |
| MAC2405AEESN-UL13 | 24x2x18AWG | 38,5 | 2672 | 21.8 |
| MAC0205AEESN-UL13 | 2x2x16AWG | 19,2 | 583 | 13.7 |
| MAC0405AEESN-UL13 | 4x2x16AWG | 21,1 | 747 | 13.7 |
| MAC0605AEESN-UL13 | 6x2x16AWG | 24,9 | 1085 | 13.7 |
| MAC0805AEESN-UL13 | 8x2x16AWG | 27,0 | 1288 | 13.7 |
| MAC1005AEESN-UL13 | 10x2x16AWG | 30,5 | 1651 | 13.7 |
| MAC1205AEESN-UL13 | 12x2x16AWG | 31,2 | 1785 | 13.7 |
| MAC1605AEESN-UL13 | 16x2x16AWG | 34,2 | 2153 | 13.7 |
| MAC2005AEESN-UL13 | 20x2x16AWG | 38,4 | 2757 | 13.7 |
| MAC2405AEESN-UL13 | 24x2x16AWG | 41,2 | 3117 | 13.7 |
| MAC0201AEESN-UL13 | 2x2x14AWG | 20,4 | 662 | 8.6 |
| MAC0401AEESN-UL13 | 4x2x14AWG | 23,2 | 977 | 8.6 |
| MAC0601AEESN-UL13 | 6x2x14AWG | 27,1 | 1309 | 8.6 |
| MAC0801AEESN-UL13 | 8x2x14AWG | 29,7 | 1666 | 8.6 |
| MAC1001AEESN-UL13 | 10x2x14AWG | 33,4 | 2010 | 8.6 |
| MAC1201AEESN-UL13 | 12x2x14AWG | 34,2 | 2188 | 8.6 |
| MAC1601AEESN-UL13 | 16x2x14AWG | 38,2 | 2854 | 8.6 |
| MAC2001AEESN-UL13 | 20x2x14AWG | 41,6 | 3324 | 8.6 |
| MAC2401AEESN-UL13 | 24x2x14AWG | 45,7 | 3905 | 8.6 |
| MAC0252AEESN-UL13 | 2x2x12AWG | 22,5 | 872 | 5.4 |
| MAC0452AEESN-UL13 | 4x2x12AWG | 25,9 | 1236 | 5.4 |
| MAC0652AEESN-UL13 | 6x2x12AWG | 30,0 | 1717 | 5.4 |
| MAC0852AEESN-UL13 | 8x2x12AWG | 32,7 | 2068 | 5.4 |
| MAC1052AEESN-UL13 | 10x2x12AWG | 37,6 | 2695 | 5.4 |
| MAC1252AEESN-UL13 | 12x2x12AWG | 38,5 | 2944 | 5.4 |
| MAC1652AEESN-UL13 | 16x2x12AWG | 41,6 | 3515 | 5.4 |
| MAC2052AEESN-UL13 | 20x2x12AWG | 46,5 | 4253 | 5.4 |
| MAC2452AEESN-UL13 | 24x2x12AWG | 50,1 | 4863 | 5.4 |

Mica Tape + XLPE Overall Screened

RAMCRO - UL 13 PLTC - Mica Tape + XLPE



These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Mica Tape + Cross Liked Polyethylene - XLPE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

Mica Tape + XLPE Overall Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106HEEON-UL13 | 1x2x20AWG | 7,5 | 66 | 34.6 |
| MAS0206HEEON-UL13 | 2x2x20AWG | 14,4 | 229 | 34.6 |
| MAS0406HEEON-UL13 | 4x2x20AWG | 16,1 | 312 | 34.6 |
| MAS0606HEEON-UL13 | 6x2x20AWG | 18,6 | 406 | 34.6 |
| MAS0806HEEON-UL13 | 8x2x20AWG | 20,1 | 487 | 34.6 |
| MAS1006HEEON-UL13 | 10x2x20AWG | 22,8 | 584 | 34.6 |
| MAS1206HEEON-UL13 | 12x2x20AWG | 23,5 | 651 | 34.6 |
| MAS1606HEEON-UL13 | 16x2x20AWG | 26,2 | 833 | 34.6 |
| MAS2406HEEON-UL13 | 24x2x20AWG | 31,7 | 1152 | 34.6 |
| MAS0105HEEON-UL13 | 1x2x18AWG | 7,9 | 76 | 21.8 |
| MAS0205HEEON-UL13 | 2x2x18AWG | 15,2 | 256 | 21.8 |
| MAS0405HEEON-UL13 | 4x2x18AWG | 17,1 | 357 | 21.8 |
| MAS0605HEEON-UL13 | 6x2x18AWG | 19,7 | 471 | 21.8 |
| MAS0805HEEON-UL13 | 8x2x18AWG | 21,4 | 569 | 21.8 |
| MAS1005HEEON-UL13 | 10x2x18AWG | 24,3 | 685 | 21.8 |
| MAS1205HEEON-UL13 | 12x2x18AWG | 25,6 | 802 | 21.8 |
| MAS1605HEEON-UL13 | 16x2x18AWG | 28,0 | 989 | 21.8 |
| MAS2405HEEON-UL13 | 24x2x18AWG | 34,0 | 1379 | 21.8 |
| MAS0105HEEON-UL13 | 1x2x16AWG | 37,4 | 1754 | 13.7 |
| MAS0205HEEON-UL13 | 2x2x16AWG | 16,1 | 294 | 13.7 |
| MAS0405HEEON-UL13 | 4x2x16AWG | 18,2 | 422 | 13.7 |
| MAS0605HEEON-UL13 | 6x2x16AWG | 21,2 | 563 | 13.7 |
| MAS0805HEEON-UL13 | 8x2x16AWG | 23,1 | 688 | 13.7 |
| MAS1005HEEON-UL13 | 10x2x16AWG | 26,8 | 866 | 13.7 |
| MAS1205HEEON-UL13 | 12x2x16AWG | 27,6 | 976 | 13.7 |
| MAS1605HEEON-UL13 | 16x2x16AWG | 30,3 | 1214 | 13.7 |
| MAS2405HEEON-UL13 | 24x2x16AWG | 37,4 | 1754 | 13.7 |
| MAS0101HEEON-UL13 | 1x2x14AWG | 9,3 | 113 | 8.6 |
| MAS0201HEEON-UL13 | 2x2x14AWG | 17,4 | 349 | 8.6 |
| MAS0401HEEON-UL13 | 4x2x14AWG | 19,7 | 518 | 8.6 |
| MAS0601HEEON-UL13 | 6x2x14AWG | 23 | 701 | 8.6 |
| MAS0801HEEON-UL13 | 8x2x14AWG | 25,7 | 898 | 8.6 |
| MAS1001HEEON-UL13 | 10x2x14AWG | 29,2 | 1090 | 8.6 |
| MAS1201HEEON-UL13 | 12x2x14AWG | 30,1 | 1238 | 8.6 |
| MAS1601HEEON-UL13 | 16x2x14AWG | 33,2 | 1556 | 8.6 |
| MAS2401HEEON-UL13 | 24x2x14AWG | 41,1 | 2260 | 8.6 |
| MAS0152HEEON-UL13 | 1x2x12AWG | 14,1 | 261 | 5.4 |
| MAS0252HEEON-UL13 | 2x2x12AWG | 18,9 | 426 | 5.4 |
| MAS0452HEEON-UL13 | 4x2x12AWG | 21,6 | 653 | 5.4 |
| MAS0652HEEON-UL13 | 6x2x12AWG | 25,9 | 929 | 5.4 |
| MAS0852HEEON-UL13 | 8x2x12AWG | 28,3 | 1156 | 5.4 |
| MAS1052HEEON-UL13 | 10x2x12AWG | 32,3 | 1409 | 5.4 |
| MAS1252HEEON-UL13 | 12x2x12AWG | 33,4 | 1613 | 5.4 |
| MAS1652HEEON-UL13 | 16x2x12AWG | 37,3 | 2090 | 5.4 |
| MAS2452HEEON-UL13 | 24x2x12AWG | 46,2 | 3044 | 5.4 |



Mica Tape + XLPE Individual and Overall Screened

RAMCRO - UL 13 PLTC - Mica Tape + XLPE



These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Mica Tape + Cross Liked Polyethylene - XLPE

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20 - Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

Mica Tape + XLPE Individual and Overall Screened

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0206HEEON-UL13 | 2x2x20AWG | 14,6 | 242 | 34.6 |
| MAC0406HEEON-UL13 | 4x2x20AWG | 16,4 | 337 | 34.6 |
| MAC0606HEEON-UL13 | 6x2x20AWG | 19,0 | 441 | 34.6 |
| MAC0806HEEON-UL13 | 8x2x20AWG | 20,6 | 533 | 34.6 |
| MAC1006HEEON-UL13 | 10x2x20AWG | 23,3 | 641 | 34.6 |
| MAC1206HEEON-UL13 | 12x2x20AWG | 24,0 | 719 | 34.6 |
| MAC1606HEEON-UL13 | 16x2x20AWG | 26,8 | 923 | 34.6 |
| MAC2006HEEON-UL13 | 20x2x20AWG | 29,7 | 1105 | 34.6 |
| MAC2406HEEON-UL13 | 24x2x20AWG | 32,5 | 1284 | 34.6 |
| MAC0205HEEON-UL13 | 2x2x18AWG | 15,4 | 269 | 21.8 |
| MAC0405HEEON-UL13 | 4x2x18AWG | 17,4 | 382 | 21.8 |
| MAC0605HEEON-UL13 | 6x2x18AWG | 20,1 | 506 | 21.8 |
| MAC0805HEEON-UL13 | 8x2x18AWG | 21,9 | 615 | 21.8 |
| MAC1005HEEON-UL13 | 10x2x18AWG | 24,8 | 743 | 21.8 |
| MAC1205HEEON-UL13 | 12x2x18AWG | 26,1 | 870 | 21.8 |
| MAC1605HEEON-UL13 | 16x2x18AWG | 28,6 | 1078 | 21.8 |
| MAC2005HEEON-UL13 | 20x2x18AWG | 31,8 | 1296 | 21.8 |
| MAC2405HEEON-UL13 | 24x2x18AWG | 35,3 | 1554 | 21.8 |
| MAC0205HEEON-UL13 | 2x2x16AWG | 16,4 | 309 | 13.7 |
| MAC0405HEEON-UL13 | 4x2x16AWG | 18,5 | 449 | 13.7 |
| MAC0605HEEON-UL13 | 6x2x16AWG | 21,6 | 602 | 13.7 |
| MAC0805HEEON-UL13 | 8x2x16AWG | 23,5 | 739 | 13.7 |
| MAC1005HEEON-UL13 | 10x2x16AWG | 27,3 | 930 | 13.7 |
| MAC1205HEEON-UL13 | 12x2x16AWG | 28,1 | 1052 | 13.7 |
| MAC1605HEEON-UL13 | 16x2x16AWG | 30,9 | 1314 | 13.7 |
| MAC2005HEEON-UL13 | 20x2x16AWG | 34,9 | 1629 | 13.7 |
| MAC2405HEEON-UL13 | 24x2x16AWG | 38,1 | 1903 | 13.7 |
| MAC0201HEEON-UL13 | 2x2x14AWG | 17,6 | 364 | 8.6 |
| MAC0401HEEON-UL13 | 4x2x14AWG | 20,0 | 545 | 8.6 |
| MAC0601HEEON-UL13 | 6x2x14AWG | 23,4 | 740 | 8.6 |
| MAC0801HEEON-UL13 | 8x2x14AWG | 26,1 | 950 | 8.6 |
| MAC1001HEEON-UL13 | 10x2x14AWG | 29,8 | 1154 | 8.6 |
| MAC1201HEEON-UL13 | 12x2x14AWG | 30,7 | 1314 | 8.6 |
| MAC1601HEEON-UL13 | 16x2x14AWG | 33,8 | 1655 | 8.6 |
| MAC2001HEEON-UL13 | 20x2x14AWG | 38,2 | 2055 | 8.6 |
| MAC2401HEEON-UL13 | 24x2x14AWG | 41,9 | 2409 | 8.6 |
| MAC0252HEEON-UL13 | 2x2x12AWG | 19,2 | 442 | 5.4 |
| MAC0452HEEON-UL13 | 4x2x12AWG | 21,9 | 682 | 5.4 |
| MAC0652HEEON-UL13 | 6x2x12AWG | 26,3 | 973 | 5.4 |
| MAC0852HEEON-UL13 | 8x2x12AWG | 28,7 | 1213 | 5.4 |
| MAC1052HEEON-UL13 | 10x2x12AWG | 32,8 | 1480 | 5.4 |
| MAC1252HEEON-UL13 | 12x2x12AWG | 33,9 | 1697 | 5.4 |
| MAC1652HEEON-UL13 | 16x2x12AWG | 37,9 | 2201 | 5.4 |
| MAC2052HEEON-UL13 | 20x2x12AWG | 42,4 | 2678 | 5.4 |
| MAC2452HEEON-UL13 | 24x2x12AWG | 47,0 | 3208 | 5.4 |

Mica Tape + XLPE Overall Screened with Armour

RAMCRO - UL 13 PLTC - Mica Tape + XLPE



These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Mica Tape + Cross Liked Polyethylene - XLPE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20 -
Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

Mica Tape + XLPE Overall Screened with Armour

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAS0106AEEON-UL13 | 1x2x20AWG | 15,1 | 354 | 34.6 |
| MAS0206AEEON-UL13 | 2x2x20AWG | 18,7 | 512 | 34.6 |
| MAS0406AEEON-UL13 | 4x2x20AWG | 20,5 | 621 | 34.6 |
| MAS0606AEEON-UL13 | 6x2x20AWG | 24,1 | 897 | 34.6 |
| MAS0806AEEON-UL13 | 8x2x20AWG | 26,2 | 1042 | 34.6 |
| MAS1006AEEON-UL13 | 10x2x20AWG | 29,5 | 1340 | 34.6 |
| MAS1206AEEON-UL13 | 12x2x20AWG | 30,2 | 1420 | 34.6 |
| MAS1606AEEON-UL13 | 16x2x20AWG | 33,0 | 1675 | 34.6 |
| MAS2406AEEON-UL13 | 24x2x20AWG | 39,7 | 2420 | 34.6 |
| MAS0105AEEON-UL13 | 1x2x18AWG | 15,6 | 378 | 21.8 |
| MAS0205AEEON-UL13 | 2x2x18AWG | 19,5 | 554 | 21.8 |
| MAS0405AEEON-UL13 | 4x2x18AWG | 21,4 | 682 | 21.8 |
| MAS0605AEEON-UL13 | 6x2x18AWG | 25,8 | 1021 | 21.8 |
| MAS0805AEEON-UL13 | 8x2x18AWG | 27,5 | 1156 | 21.8 |
| MAS1005AEEON-UL13 | 10x2x18AWG | 31,1 | 1488 | 21.8 |
| MAS1205AEEON-UL13 | 12x2x18AWG | 32,3 | 1635 | 21.8 |
| MAS1605AEEON-UL13 | 16x2x18AWG | 36,1 | 2120 | 21.8 |
| MAS2405AEEON-UL13 | 24x2x18AWG | 42,0 | 2709 | 21.8 |
| MAS0105AEEON-UL13 | 1x2x16AWG | 16,2 | 410 | 13.7 |
| MAS0205AEEON-UL13 | 2x2x16AWG | 20,4 | 610 | 13.7 |
| MAS0405AEEON-UL13 | 4x2x16AWG | 23,2 | 871 | 13.7 |
| MAS0605AEEON-UL13 | 6x2x16AWG | 27,2 | 1150 | 13.7 |
| MAS0805AEEON-UL13 | 8x2x16AWG | 29,8 | 1452 | 13.7 |
| MAS1005AEEON-UL13 | 10x2x16AWG | 33,5 | 1743 | 13.7 |
| MAS1205AEEON-UL13 | 12x2x16AWG | 34,3 | 1866 | 13.7 |
| MAS1605AEEON-UL13 | 16x2x16AWG | 38,3 | 2426 | 13.7 |
| MAS2405AEEON-UL13 | 24x2x16AWG | 45,9 | 3261 | 13.7 |
| MAS0101AEEON-UL13 | 1x2x14AWG | 16,9 | 453 | 8.6 |
| MAS0201AEEON-UL13 | 2x2x14AWG | 21,7 | 688 | 8.6 |
| MAS0401AEEON-UL13 | 4x2x14AWG | 25,8 | 1072 | 8.6 |
| MAS0601AEEON-UL13 | 6x2x14AWG | 29,8 | 1472 | 8.6 |
| MAS0801AEEON-UL13 | 8x2x14AWG | 32,4 | 1743 | 8.6 |
| MAS1001AEEON-UL13 | 10x2x14AWG | 37,3 | 2288 | 8.6 |
| MAS1201AEEON-UL13 | 12x2x14AWG | 38,2 | 2458 | 8.6 |
| MAS1601AEEON-UL13 | 16x2x14AWG | 41,2 | 2871 | 8.6 |
| MAS2401AEEON-UL13 | 24x2x14AWG | 49,6 | 3900 | 8.6 |
| MAS0152AEEON-UL13 | 1x2x12AWG | 18,4 | 539 | 5.4 |
| MAS0252AEEON-UL13 | 2x2x12AWG | 24,4 | 938 | 5.4 |
| MAS0452AEEON-UL13 | 4x2x12AWG | 27,6 | 1255 | 5.4 |
| MAS0652AEEON-UL13 | 6x2x12AWG | 32,6 | 1789 | 5.4 |
| MAS0852AEEON-UL13 | 8x2x12AWG | 36,3 | 2319 | 5.4 |
| MAS1052AEEON-UL13 | 10x2x12AWG | 40,4 | 2722 | 5.4 |
| MAS1252AEEON-UL13 | 12x2x12AWG | 41,4 | 2950 | 5.4 |
| MAS1652AEEON-UL13 | 16x2x12AWG | 45,9 | 3612 | 5.4 |
| MAS2452AEEON-UL13 | 24x2x12AWG | 55,8 | 5014 | 5.4 |



Mica Tape + XLPE Individual Overall Screened with Armour

RAMCRO - UL 13 PLTC - Mica Tape + XLPE

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Mica Tape + Cross Liked Polyethylene - XLPE

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Armour:

Galvanized Steel Wires Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Black

STANDARD REFERENCES

- UL 13 PLTC Type
- ASTM B3 / B33
- NEC code, Sec. 725 PLTC,
- NEC code, Sec. 727 ITC,
- UL 1685
- ASTM D 1239
- NF C 32-020
- IRAM IAP

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



Hazardous Area Classification

NEC Class I Div. II

IEC Zone 1 - Group 2



CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 - Shielded - 75°C + BATCH + METER MARKING

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-40° C up to +75° C

Insulation Operation:

-40° C up to +90° C



IDENTIFICATION OF CORES

Pair: ○ ●

UL 13 - PLTC Cable

Mica Tape + XLPE Individual Overall Screened with Armour

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| MAC0206AEEON-UL13 | 2x2x20AWG | 19,0 | 543 | 34.6 |
| MAC0406AEEON-UL13 | 4x2x20AWG | 20,8 | 674 | 34.6 |
| MAC0606AEEON-UL13 | 6x2x20AWG | 24,5 | 976 | 34.6 |
| MAC0806AEEON-UL13 | 8x2x20AWG | 26,6 | 1145 | 34.6 |
| MAC1006AEEON-UL13 | 10x2x20AWG | 30,1 | 1470 | 34.6 |
| MAC1206AEEON-UL13 | 12x2x20AWG | 30,7 | 1572 | 34.6 |
| MAC1606AEEON-UL13 | 16x2x20AWG | 33,6 | 1873 | 34.6 |
| MAC2006AEEON-UL13 | 20x2x20AWG | 37,8 | 2406 | 34.6 |
| MAC2406AEEON-UL13 | 24x2x20AWG | 40,5 | 2698 | 34.6 |
| MAC0205AEEON-UL13 | 2x2x18AWG | 19,8 | 585 | 21.8 |
| MAC0405AEEON-UL13 | 4x2x18AWG | 21,7 | 738 | 21.8 |
| MAC0605AEEON-UL13 | 6x2x18AWG | 26,2 | 1105 | 21.8 |
| MAC0805AEEON-UL13 | 8x2x18AWG | 27,9 | 1264 | 21.8 |
| MAC1005AEEON-UL13 | 10x2x18AWG | 31,6 | 1625 | 21.8 |
| MAC1205AEEON-UL13 | 12x2x18AWG | 32,9 | 1796 | 21.8 |
| MAC1605AEEON-UL13 | 16x2x18AWG | 36,7 | 2334 | 21.8 |
| MAC2005AEEON-UL13 | 20x2x18AWG | 39,9 | 2683 | 21.8 |
| MAC2405AEEON-UL13 | 24x2x18AWG | 43,3 | 3085 | 21.8 |
| MAC0205AEEON-UL13 | 2x2x16AWG | 20,7 | 644 | 13.7 |
| MAC0405AEEON-UL13 | 4x2x16AWG | 23,6 | 935 | 13.7 |
| MAC0605AEEON-UL13 | 6x2x16AWG | 27,6 | 1242 | 13.7 |
| MAC0805AEEON-UL13 | 8x2x16AWG | 30,2 | 1575 | 13.7 |
| MAC1005AEEON-UL13 | 10x2x16AWG | 34,0 | 1895 | 13.7 |
| MAC1205AEEON-UL13 | 12x2x16AWG | 36,2 | 2285 | 13.7 |
| MAC1605AEEON-UL13 | 16x2x16AWG | 39,0 | 2663 | 13.7 |
| MAC2005AEEON-UL13 | 20x2x16AWG | 42,9 | 3144 | 13.7 |
| MAC2405AEEON-UL13 | 24x2x16AWG | 46,7 | 3611 | 13.7 |
| MAC0201AEEON-UL13 | 2x2x14AWG | 22,7 | 826 | 8.6 |
| MAC0401AEEON-UL13 | 4x2x14AWG | 26,1 | 1141 | 8.6 |
| MAC0601AEEON-UL13 | 6x2x14AWG | 30,2 | 1574 | 8.6 |
| MAC0801AEEON-UL13 | 8x2x14AWG | 32,9 | 1875 | 8.6 |
| MAC1001AEEON-UL13 | 10x2x14AWG | 37,8 | 2456 | 8.6 |
| MAC1201AEEON-UL13 | 12x2x14AWG | 38,7 | 2655 | 8.6 |
| MAC1601AEEON-UL13 | 16x2x14AWG | 41,9 | 3126 | 8.6 |
| MAC2001AEEON-UL13 | 20x2x14AWG | 46,8 | 3766 | 8.6 |
| MAC2401AEEON-UL13 | 24x2x14AWG | 50,4 | 4277 | 8.6 |
| MAC0252AEEON-UL13 | 2x2x12AWG | 24,7 | 981 | 5.4 |
| MAC0452AEEON-UL13 | 4x2x12AWG | 28,0 | 1332 | 5.4 |
| MAC0652AEEON-UL13 | 6x2x12AWG | 33,0 | 1904 | 5.4 |
| MAC0852AEEON-UL13 | 8x2x12AWG | 36,8 | 2470 | 5.4 |
| MAC1052AEEON-UL13 | 10x2x12AWG | 40,9 | 2910 | 5.4 |
| MAC1252AEEON-UL13 | 12x2x12AWG | 42,0 | 3171 | 5.4 |
| MAC1652AEEON-UL13 | 16x2x12AWG | 46,5 | 3901 | 5.4 |
| MAC2052AEEON-UL13 | 20x2x12AWG | 50,9 | 4567 | 5.4 |
| MAC2452AEEON-UL13 | 24x2x12AWG | 56,6 | 5442 | 5.4 |

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The image shows an industrial plant with several tall, cylindrical distillation columns connected by a network of pipes. To the right, there is a large, multi-story blue steel structure, possibly a distillation tower or a processing unit. The scene is bathed in a warm, golden light, suggesting a sunrise or sunset. In the foreground, there are some green plants, possibly grass or weeds, which are slightly out of focus. The overall composition is industrial and technical.

NF M 87-202

Collectively Screened, Unarmoured

RAMCRO - NF M 87-202 EGSF



These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded to UTE C 32-014

Insulation:

Polyvinyl Chloride - PVC to NF C 32-020

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride - PVC, Oil Resistant acc. to NF C 32-020

Colour Outer Sheath:

Blue

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGSF NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

Collectively Screened, Unarmoured

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108HDPK-EGSF | 1x2x0,50 | 4,8 | 32 | 37.5 |
| SAM3708HDPK-EGSF | 1x3x0,50 | 5,0 | 40 | 37.5 |
| SAM0208HDPK-EGSF | 2x2x0,50 | 6,4 | 53 | 37.5 |
| SAM3808HDPK-EGSF | 2x3x0,50 | 7,4 | 71 | 37.5 |
| SAM0308HDPK-EGSF | 3x2x0,50 | 6,8 | 69 | 37.5 |
| SAM3108HDPK-EGSF | 3x3x0,50 | 7,8 | 94 | 37.5 |
| SAM0708HDPK-EGSF | 7x2x0,50 | 8,7 | 132 | 37.5 |
| SAM7108HDPK-EGSF | 7x3x0,50 | 10,2 | 188 | 37.5 |
| SAM1208HDPK-EGSF | 12x2x0,50 | 11,4 | 214 | 37.5 |
| SAM3308HDPK-EGSF | 12x3x0,50 | 13,5 | 307 | 37.5 |
| SAM1908HDPK-EGSF | 19x2x0,50 | 13,3 | 320 | 37.5 |
| SAM7408HDPK-EGSF | 19x3x0,50 | 16,3 | 479 | 37.5 |
| SAM2708HDPK-EGSF | 27x2x0,50 | 16,4 | 458 | 37.5 |
| SAM8108HDPK-EGSF | 27x3x0,50 | 19,9 | 682 | 37.5 |
| MAS0108HDPK-EGSF | 1x2x0,88 | 5,7 | 46 | 22.3 |
| MAS3708HDPK-EGSF | 1x3x0,88 | 6,0 | 59 | 22.3 |
| MAS0208HDPK-EGSF | 2x2x0,88 | 7,8 | 78 | 22.3 |
| MAS3808HDPK-EGSF | 2x3x0,88 | 9,1 | 107 | 22.3 |
| MAS0308HDPK-EGSF | 3x2x0,88 | 8,3 | 103 | 22.3 |
| MAS3108HDPK-EGSF | 3x3x0,88 | 9,7 | 144 | 22.3 |
| MAS0708HDPK-EGSF | 7x2x0,88 | 10,8 | 208 | 22.3 |
| MAS7108HDPK-EGSF | 7x3x0,88 | 12,8 | 298 | 22.3 |
| MAS1208HDPK-EGSF | 12x2x0,88 | 14,7 | 354 | 22.3 |
| MAS3308HDPK-EGSF | 12x3x0,88 | 17,4 | 509 | 22.3 |
| MAS1908HDPK-EGSF | 19x2x0,88 | 17,2 | 532 | 22.3 |
| MAS7408HDPK-EGSF | 19x3x0,88 | 20,9 | 792 | 22.3 |
| MAS2708HDPK-EGSF | 27x2x0,88 | 21,1 | 758 | 22.3 |
| MAS8108HDPK-EGSF | 27x3x0,88 | 25,6 | 1124 | 22.3 |
| MAS0115HDPK-EGSF | 1x2x1,50 | 6,4 | 62 | 12.6 |
| MAS3715HDPK-EGSF | 1x3x1,50 | 6,7 | 82 | 12.6 |
| MAS0215HDPK-EGSF | 2x2x1,50 | 8,8 | 108 | 12.6 |
| MAS3815HDPK-EGSF | 2x3x1,50 | 10,4 | 152 | 12.6 |
| MAS0315HDPK-EGSF | 3x2x1,50 | 9,4 | 148 | 12.6 |
| MAS3115HDPK-EGSF | 3x3x1,50 | 11,0 | 210 | 12.6 |
| MAS0715HDPK-EGSF | 7x2x1,50 | 12,4 | 307 | 12.6 |
| MAS7115HDPK-EGSF | 7x3x1,50 | 15,1 | 460 | 12.6 |
| MAS1215HDPK-EGSF | 12x2x1,50 | 16,9 | 524 | 12.6 |
| MAS3315HDPK-EGSF | 12x3x1,50 | 20,4 | 781 | 12.6 |
| MAS1915HDPK-EGSF | 19x2x1,50 | 20,2 | 816 | 12.6 |
| MAS7415HDPK-EGSF | 19x3x1,50 | 24,5 | 1212 | 12.6 |
| MAS2715HDPK-EGSF | 27x2x1,50 | 24,7 | 1159 | 12.6 |
| MAS8115HDPK-EGSF | 27x3x1,50 | 29,4 | 1689 | 12.6 |

Individual Screened, Unarmoured

RAMCRO - NF M 87-202 EISF



These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded to UTE C 32-014

Insulation:

Polyvinyl Chloride - PVC to NF C 32-020

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Individual Sheath:

Polyvinyl Chloride - PVC to NF C 32-020

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Polyvinyl chloride - PVC, Oil Resistant acc. to NF C 32-020

Colour Outer Sheath:

Blue

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EISF NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

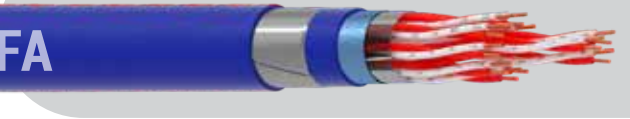
Individual Screened, Unarmoured

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108HDPK-EISF | 1x2x0,50 | 5,7 | 47 | 37.5 |
| SAM3708HDPK-EISF | 1x3x0,50 | 6,0 | 55 | 37.5 |
| SAM0208HDPK-EISF | 2x2x0,50 | 9,7 | 87 | 37.5 |
| SAM3808HDPK-EISF | 2x3x0,50 | 10,2 | 104 | 37.5 |
| SAM0308HDPK-EISF | 3x2x0,50 | 10,3 | 114 | 37.5 |
| SAM3108HDPK-EISF | 3x3x0,50 | 10,8 | 139 | 37.5 |
| SAM0708HDPK-EISF | 7x2x0,50 | 14,1 | 240 | 37.5 |
| SAM7108HDPK-EISF | 7x3x0,50 | 14,8 | 295 | 37.5 |
| SAM1208HDPK-EISF | 12x2x0,50 | 19,1 | 404 | 37.5 |
| SAM3308HDPK-EISF | 12x3x0,50 | 20,0 | 499 | 37.5 |
| SAM1908HDPK-EISF | 19x2x0,50 | 22,8 | 618 | 37.5 |
| SAM7408HDPK-EISF | 19x3x0,50 | 24,0 | 767 | 37.5 |
| SAM2708HDPK-EISF | 27x2x0,50 | 27,4 | 846 | 37.5 |
| SAM8108HDPK-EISF | 27x3x0,50 | 28,8 | 1057 | 37.5 |
| MAS0108HDPK-EISF | 1x2x0,88 | 6,6 | 63 | 22.3 |
| MAS3708HDPK-EISF | 1x3x0,88 | 6,9 | 76 | 22.3 |
| MAS0208HDPK-EISF | 2x2x0,88 | 11,5 | 119 | 22.3 |
| MAS3808HDPK-EISF | 2x3x0,88 | 12,1 | 146 | 22.3 |
| MAS0308HDPK-EISF | 3x2x0,88 | 12,3 | 158 | 22.3 |
| MAS3108HDPK-EISF | 3x3x0,88 | 12,9 | 198 | 22.3 |
| MAS0708HDPK-EISF | 7x2x0,88 | 16,8 | 337 | 22.3 |
| MAS7108HDPK-EISF | 7x3x0,88 | 17,7 | 428 | 22.3 |
| MAS1208HDPK-EISF | 12x2x0,88 | 23,3 | 591 | 22.3 |
| MAS3308HDPK-EISF | 12x3x0,88 | 24,5 | 749 | 22.3 |
| MAS1908HDPK-EISF | 19x2x0,88 | 27,4 | 875 | 22.3 |
| MAS7408HDPK-EISF | 19x3x0,88 | 28,9 | 1121 | 22.3 |
| MAS2708HDPK-EISF | 27x2x0,88 | 33 | 1207 | 22.3 |
| MAS8108HDPK-EISF | 27x3x0,88 | 34,9 | 1553 | 22.3 |
| MAS0115HDPK-EISF | 1x2x1,50 | 7,3 | 80 | 12.6 |
| MAS3715HDPK-EISF | 1x3x1,50 | 7,7 | 101 | 12.6 |
| MAS0215HDPK-EISF | 2x2x1,50 | 12,9 | 153 | 12.6 |
| MAS3815HDPK-EISF | 2x3x1,50 | 13,6 | 196 | 12.6 |
| MAS0315HDPK-EISF | 3x2x1,50 | 14,1 | 221 | 12.6 |
| MAS3115HDPK-EISF | 3x3x1,50 | 14,9 | 284 | 12.6 |
| MAS0715HDPK-EISF | 7x2x1,50 | 19,2 | 467 | 12.6 |
| MAS7115HDPK-EISF | 7x3x1,50 | 20,3 | 612 | 12.6 |
| MAS1215HDPK-EISF | 12x2x1,50 | 26 | 785 | 12.6 |
| MAS3315HDPK-EISF | 12x3x1,50 | 27,5 | 1033 | 12.6 |
| MAS1915HDPK-EISF | 19x2x1,50 | 30,7 | 1175 | 12.6 |
| MAS7415HDPK-EISF | 19x3x1,50 | 32,5 | 1563 | 12.6 |
| MAS2715HDPK-EISF | 27x2x1,50 | 37,1 | 1628 | 12.6 |
| MAS8115HDPK-EISF | 27x3x1,50 | 39,3 | 2177 | 12.6 |

Collectively Screened, Armoured

RAMCRO - NF M 87-202 EGFA



These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded acc. to UTE C 32-014

Insulation:

Polyvinyl Chloride - PVC acc. to NF C 32-020

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride - PVC acc. to NF C 32-020

Armour:

Double Steel Tape Armour

Outer Sheath:

Polyvinyl chloride - PVC, Oil Resistant acc. to NF C 32-020

Colour Outer Sheath:

Blue

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGFA NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

Collectively Screened, Armoured

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108TDPAX-EGFA | 1x2x0,50 | 8,0 | 128 | 37.5 |
| SAM3708TDPAX-EGFA | 1x3x0,50 | 8,2 | 138 | 37.5 |
| SAM0208TDPAX-EGFA | 2x2x0,50 | 9,6 | 165 | 37.5 |
| SAM3808TDPAX-EGFA | 2x3x0,50 | 10,6 | 194 | 37.5 |
| SAM0308TDPAX-EGFA | 3x2x0,50 | 9,9 | 184 | 37.5 |
| SAM3108TDPAX-EGFA | 3x3x0,50 | 11,0 | 221 | 37.5 |
| SAM0708TDPAX-EGFA | 7x2x0,50 | 11,9 | 280 | 37.5 |
| SAM7108TDPAX-EGFA | 7x3x0,50 | 13,4 | 352 | 37.5 |
| SAM1208TDPAX-EGFA | 12x2x0,50 | 14,6 | 390 | 37.5 |
| SAM3308TDPAX-EGFA | 12x3x0,50 | 17,1 | 523 | 37.5 |
| SAM1908TDPAX-EGFA | 19x2x0,50 | 16,9 | 534 | 37.5 |
| SAM7408TDPAX-EGFA | 19x3x0,50 | 19,8 | 731 | 37.5 |
| SAM2708TDPAX-EGFA | 27x2x0,50 | 20,0 | 713 | 37.5 |
| SAM8108TDPAX-EGFA | 27x3x0,50 | 23,5 | 983 | 37.5 |
| MAS0108TDPAX-EGFA | 1x2x0,88 | 8,9 | 150 | 22.3 |
| MAS3708TDPAX-EGFA | 1x3x0,88 | 9,2 | 166 | 22.3 |
| MAS0208TDPAX-EGFA | 2x2x0,88 | 11,0 | 204 | 22.3 |
| MAS3808TDPAX-EGFA | 2x3x0,88 | 12,3 | 258 | 22.3 |
| MAS0308TDPAX-EGFA | 3x2x0,88 | 11,5 | 246 | 22.3 |
| MAS3108TDPAX-EGFA | 3x3x0,88 | 12,9 | 302 | 22.3 |
| MAS0708TDPAX-EGFA | 7x2x0,88 | 14 | 378 | 22.3 |
| MAS7108TDPAX-EGFA | 7x3x0,88 | 16,4 | 506 | 22.3 |
| MAS1208TDPAX-EGFA | 12x2x0,88 | 18,3 | 587 | 22.3 |
| MAS3308TDPAX-EGFA | 12x3x0,88 | 21,0 | 777 | 22.3 |
| MAS1908TDPAX-EGFA | 19x2x0,88 | 20,8 | 797 | 22.3 |
| MAS7408TDPAX-EGFA | 19x3x0,88 | 24,5 | 1114 | 22.3 |
| MAS2708TDPAX-EGFA | 27x2x0,88 | 24,7 | 1082 | 22.3 |
| MAS8108TDPAX-EGFA | 27x3x0,88 | 29,5 | 1537 | 22.3 |
| MAS0115TDPAX-EGFA | 1x2x1,50 | 9,5 | 173 | 12.6 |
| MAS3715TDPAX-EGFA | 1x3x1,50 | 9,9 | 197 | 12.6 |
| MAS0215TDPAX-EGFA | 2x2x1,50 | 12 | 258 | 12.6 |
| MAS3815TDPAX-EGFA | 2x3x1,50 | 13,5 | 317 | 12.6 |
| MAS0315TDPAX-EGFA | 3x2x1,50 | 12,6 | 302 | 12.6 |
| MAS3115TDPAX-EGFA | 3x3x1,50 | 14,2 | 382 | 12.6 |
| MAS0715TDPAX-EGFA | 7x2x1,50 | 15,9 | 510 | 12.6 |
| MAS7115TDPAX-EGFA | 7x3x1,50 | 18,6 | 697 | 12.6 |
| MAS1215TDPAX-EGFA | 12x2x1,50 | 20,4 | 784 | 12.6 |
| MAS3315TDPAX-EGFA | 12x3x1,50 | 24,0 | 1097 | 12.6 |
| MAS1915TDPAX-EGFA | 19x2x1,50 | 23,8 | 1129 | 12.6 |
| MAS7415TDPAX-EGFA | 19x3x1,50 | 28,4 | 1609 | 12.6 |
| MAS2715TDPAX-EGFA | 27x2x1,50 | 28,7 | 1560 | 12.6 |
| MAS8115TDPAX-EGFA | 27x3x1,50 | 33,4 | 2164 | 12.6 |

Collectively Screened, Armoured

RAMCRO - NF M 87-202 EIFA

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded acc. to UTE C 32-014

Insulation:

Polyvinyl Chloride - PVC to NF C 32-020

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Individual Sheath:

Polyvinyl Chloride - PVC to NF C 32-020

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride - PVC acc. to NF C 32-020

Armour:

Double Steel Tape Armour

Outer Sheath:

Polyvinyl chloride - PVC, Oil Resistant acc. to NF C 32-020

Colour Outer Sheath:

Blue

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGFA NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

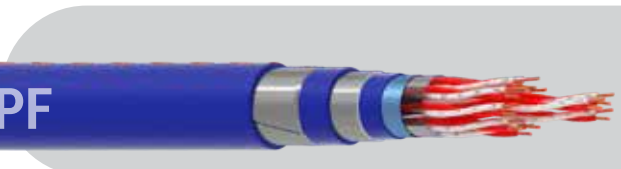
Collectively Screened, Armoured

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|------------------|------------------------------|-----------------------|------------------------------|---|
| SAI0108TDPK-EIFA | 1x2x0,50 | 8,9 | 153 | 37.5 |
| SAI3708TDPK-EIFA | 1x3x0,50 | 9,2 | 164 | 37.5 |
| SAI0208TDPK-EIFA | 2x2x0,50 | 12,9 | 247 | 37.5 |
| SAI3808TDPK-EIFA | 2x3x0,50 | 13,4 | 270 | 37.5 |
| SAI0308TDPK-EIFA | 3x2x0,50 | 13,5 | 282 | 37.5 |
| SAI3108TDPK-EIFA | 3x3x0,50 | 14,0 | 312 | 37.5 |
| SAI0708TDPK-EIFA | 7x2x0,50 | 17,7 | 470 | 37.5 |
| SAI7108TDPK-EIFA | 7x3x0,50 | 18,4 | 535 | 37.5 |
| SAI1208TDPK-EIFA | 12x2x0,50 | 22,7 | 705 | 37.5 |
| SAI3308TDPK-EIFA | 12x3x0,50 | 23,6 | 820 | 37.5 |
| SAI1908TDPK-EIFA | 19x2x0,50 | 26,4 | 982 | 37.5 |
| SAI7408TDPK-EIFA | 19x3x0,50 | 27,6 | 1147 | 37.5 |
| SAI2708TDPK-EIFA | 27x2x0,50 | 31,4 | 1307 | 37.5 |
| SAI8108TDPK-EIFA | 27x3x0,50 | 32,8 | 1546 | 37.5 |
| MAS0108TDPK-EIFA | 1x2x0,88 | 9,8 | 179 | 22.3 |
| MAS3708TDPK-EIFA | 1x3x0,88 | 10,1 | 195 | 22.3 |
| MAS0208TDPK-EIFA | 2x2x0,88 | 14,7 | 299 | 22.3 |
| MAS3808TDPK-EIFA | 2x3x0,88 | 15,3 | 333 | 22.3 |
| MAS0308TDPK-EIFA | 3x2x0,88 | 15,9 | 363 | 22.3 |
| MAS3108TDPK-EIFA | 3x3x0,88 | 16,5 | 411 | 22.3 |
| MAS0708TDPK-EIFA | 7x2x0,88 | 20,4 | 603 | 22.3 |
| MAS7108TDPK-EIFA | 7x3x0,88 | 21,3 | 707 | 22.3 |
| MAS1208TDPK-EIFA | 12x2x0,88 | 26,9 | 958 | 22.3 |
| MAS3308TDPK-EIFA | 12x3x0,88 | 28,5 | 1160 | 22.3 |
| MAS1908TDPK-EIFA | 19x2x0,88 | 31,4 | 1333 | 22.3 |
| MAS7408TDPK-EIFA | 19x3x0,88 | 32,9 | 1608 | 22.3 |
| MAS2708TDPK-EIFA | 27x2x0,88 | 37,0 | 1760 | 22.3 |
| MAS8108TDPK-EIFA | 27x3x0,88 | 38,9 | 2135 | 22.3 |
| MAS0115TDPK-EIFA | 1x2x1,50 | 10,5 | 203 | 12.6 |
| MAS3715TDPK-EIFA | 1x3x1,50 | 10,9 | 228 | 12.6 |
| MAS0215TDPK-EIFA | 2x2x1,50 | 16,5 | 364 | 12.6 |
| MAS3815TDPK-EIFA | 2x3x1,50 | 17,2 | 416 | 12.6 |
| MAS0315TDPK-EIFA | 3x2x1,50 | 17,7 | 450 | 12.6 |
| MAS3115TDPK-EIFA | 3x3x1,50 | 18,5 | 523 | 12.6 |
| MAS0715TDPK-EIFA | 7x2x1,50 | 22,8 | 768 | 12.6 |
| MAS7115TDPK-EIFA | 7x3x1,50 | 23,9 | 934 | 12.6 |
| MAS1215TDPK-EIFA | 12x2x1,50 | 30 | 1219 | 12.6 |
| MAS3315TDPK-EIFA | 12x3x1,50 | 31,6 | 1489 | 12.6 |
| MAS1915TDPK-EIFA | 19x2x1,50 | 34,7 | 1690 | 12.6 |
| MAS7415TDPK-EIFA | 19x3x1,50 | 36,5 | 2104 | 12.6 |
| MAS2715TDPK-EIFA | 27x2x1,50 | 41,1 | 2245 | 12.6 |
| MAS8115TDPK-EIFA | 27x3x1,50 | 43,3 | 2827 | 12.6 |

Instrumentation Cable 300/500V

RAMCRO - NF M 87-202 EGPF



These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded acc. to UTE C 32-014

Insulation:

Polyvinyl Chloride - PVC to NF C 32-020

Wrapping:

At least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride - PVC acc. to NF C 32-020

Chemical Protection:

Lead Cover

Armour:

Double Steel Tape Armour

Outer Sheath:

Polyvinyl chloride - PVC, Oil Resistant acc. to NF C 32-020

Colour Outer Sheath:

Blue

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGFA NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

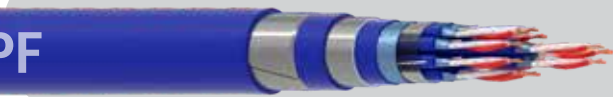
Instrumentation Cable 300/500V

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108TDPAX-EGPF | 1x2x0,50 | 12,8 | 493 | 37.5 |
| SAM3708TDPAX-EGPF | 1x3x0,50 | 13,0 | 513 | 37.5 |
| SAM0208TDPAX-EGPF | 2x2x0,50 | 14,4 | 601 | 37.5 |
| SAM3808TDPAX-EGPF | 2x3x0,50 | 15,4 | 674 | 37.5 |
| SAM0308TDPAX-EGPF | 3x2x0,50 | 14,7 | 637 | 37.5 |
| SAM3108TDPAX-EGPF | 3x3x0,50 | 16,2 | 736 | 37.5 |
| SAM0708TDPAX-EGPF | 7x2x0,50 | 17,1 | 823 | 37.5 |
| SAM7108TDPAX-EGPF | 7x3x0,50 | 19,0 | 984 | 37.5 |
| SAM1208TDPAX-EGPF | 12x2x0,50 | 20,2 | 1076 | 37.5 |
| SAM3308TDPAX-EGPF | 12x3x0,50 | 22,3 | 1289 | 37.5 |
| SAM1908TDPAX-EGPF | 19x2x0,50 | 22,1 | 1294 | 37.5 |
| SAM7408TDPAX-EGPF | 19x3x0,50 | 25,2 | 1701 | 37.5 |
| SAM2708TDPAX-EGPF | 27x2x0,50 | 25,4 | 1691 | 37.5 |
| SAM8108TDPAX-EGPF | 27x3x0,50 | 29,5 | 2244 | 37.5 |
| MAS0108TDPAX-EGPF | 1x2x0,88 | 13,7 | 556 | 22.3 |
| MAS3708TDPAX-EGPF | 1x3x0,88 | 14,0 | 585 | 22.3 |
| MAS0208TDPAX-EGPF | 2x2x0,88 | 16,2 | 718 | 22.3 |
| MAS3808TDPAX-EGPF | 2x3x0,88 | 17,5 | 820 | 22.3 |
| MAS0308TDPAX-EGPF | 3x2x0,88 | 16,7 | 769 | 22.3 |
| MAS3108TDPAX-EGPF | 3x3x0,88 | 18,1 | 889 | 22.3 |
| MAS0708TDPAX-EGPF | 7x2x0,88 | 19,6 | 1038 | 22.3 |
| MAS7108TDPAX-EGPF | 7x3x0,88 | 21,6 | 1240 | 22.3 |
| MAS1208TDPAX-EGPF | 12x2x0,88 | 23,5 | 1408 | 22.3 |
| MAS3308TDPAX-EGPF | 12x3x0,88 | 26,4 | 1804 | 22.3 |
| MAS1908TDPAX-EGPF | 19x2x0,88 | 26,2 | 1815 | 22.3 |
| MAS7408TDPAX-EGPF | 19x3x0,88 | 30,5 | 2420 | 22.3 |
| MAS2708TDPAX-EGPF | 27x2x0,88 | 30,7 | 2400 | 22.3 |
| MAS8108TDPAX-EGPF | 27x3x0,88 | 35,9 | 3322 | 22.3 |
| MAS0115TDPAX-EGPF | 1x2x1,50 | 14,3 | 608 | 12.6 |
| MAS3715TDPAX-EGPF | 1x3x1,50 | 14,7 | 648 | 12.6 |
| MAS0215TDPAX-EGPF | 2x2x1,50 | 17,2 | 806 | 12.6 |
| MAS3815TDPAX-EGPF | 2x3x1,50 | 19,1 | 956 | 12.6 |
| MAS0315TDPAX-EGPF | 3x2x1,50 | 17,8 | 876 | 12.6 |
| MAS3115TDPAX-EGPF | 3x3x1,50 | 19,8 | 1052 | 12.6 |
| MAS0715TDPAX-EGPF | 7x2x1,50 | 21,1 | 1226 | 12.6 |
| MAS7115TDPAX-EGPF | 7x3x1,50 | 24,0 | 1610 | 12.6 |
| MAS1215TDPAX-EGPF | 12x2x1,50 | 25,8 | 1784 | 12.6 |
| MAS3315TDPAX-EGPF | 12x3x1,50 | 30,0 | 2378 | 12.6 |
| MAS1915TDPAX-EGPF | 19x2x1,50 | 29,8 | 2399 | 12.6 |
| MAS7415TDPAX-EGPF | 19x3x1,50 | 34,6 | 3224 | 12.6 |
| MAS2715TDPAX-EGPF | 27x2x1,50 | 34,9 | 3188 | 12.6 |
| MAS8115TDPAX-EGPF | 27x3x1,50 | 40,0 | 4298 | 12.6 |

Instrumentation Cable 300/500V

RAMCRO - NF M 87-202 EIPF



These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded acc. to UTE C 32-014

Insulation:

Polyvinyl Chloride - PVC to NF C 32-020

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Individual Sheath:

Polyvinyl Chloride - PVC to NF C 32-020

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Polyvinyl chloride - PVC acc. to NF C 32-020

Chemical Protection:

Lead Cover

Armour:

Double Steel Tape Armour

Outer Sheath:

Polyvinyl chloride - PVC, Oil Resistant acc. to NF C 32-020

Colour Outer Sheath:

Blue

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|--------------|
| Insulation Resistance @ 20°C: | > 25 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGFA NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

Instrumentation Cable 300/500V

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108TDPAX-EGPF | 1x2x0,50 | 13,7 | 561 | 37.5 |
| SAM3708TDPAX-EGPF | 1x3x0,50 | 14,0 | 583 | 37.5 |
| SAM0208TDPAX-EGPF | 2x2x0,50 | 18,1 | 837 | 37.5 |
| SAM3808TDPAX-EGPF | 2x3x0,50 | 19,0 | 901 | 37.5 |
| SAM0308TDPAX-EGPF | 3x2x0,50 | 19,1 | 921 | 37.5 |
| SAM3108TDPAX-EGPF | 3x3x0,50 | 19,6 | 973 | 37.5 |
| SAM0708TDPAX-EGPF | 7x2x0,50 | 22,9 | 1270 | 37.5 |
| SAM7108TDPAX-EGPF | 7x3x0,50 | 23,6 | 1366 | 37.5 |
| SAM1208TDPAX-EGPF | 12x2x0,50 | 28,7 | 1934 | 37.5 |
| SAM3308TDPAX-EGPF | 12x3x0,50 | 29,6 | 2093 | 37.5 |
| SAM1908TDPAX-EGPF | 19x2x0,50 | 33,0 | 2549 | 37.5 |
| SAM7408TDPAX-EGPF | 19x3x0,50 | 34,2 | 2781 | 37.5 |
| SAM2708TDPAX-EGPF | 27x2x0,50 | 37,8 | 3232 | 37.5 |
| SAM8108TDPAX-EGPF | 27x3x0,50 | 39,4 | 3672 | 37.5 |
| MAS0108TDPAX-EGPF | 1x2x0,88 | 14,6 | 627 | 22.3 |
| MAS3708TDPAX-EGPF | 1x3x0,88 | 14,9 | 657 | 22.3 |
| MAS0208TDPAX-EGPF | 2x2x0,88 | 20,3 | 994 | 22.3 |
| MAS3808TDPAX-EGPF | 2x3x0,88 | 20,9 | 1056 | 22.3 |
| MAS0308TDPAX-EGPF | 3x2x0,88 | 21,1 | 1078 | 22.3 |
| MAS3108TDPAX-EGPF | 3x3x0,88 | 21,7 | 1155 | 22.3 |
| MAS0708TDPAX-EGPF | 7x2x0,88 | 25,8 | 1610 | 22.3 |
| MAS7108TDPAX-EGPF | 7x3x0,88 | 26,7 | 1757 | 22.3 |
| MAS1208TDPAX-EGPF | 12x2x0,88 | 33,5 | 2548 | 22.3 |
| MAS3308TDPAX-EGPF | 12x3x0,88 | 34,7 | 2794 | 22.3 |
| MAS1908TDPAX-EGPF | 19x2x0,88 | 37,8 | 3253 | 22.3 |
| MAS7408TDPAX-EGPF | 19x3x0,88 | 39,5 | 3733 | 22.3 |
| MAS2708TDPAX-EGPF | 27x2x0,88 | 44,2 | 4345 | 22.3 |
| MAS8108TDPAX-EGPF | 27x3x0,88 | 46,1 | 4847 | 22.3 |
| MAS0115TDPAX-EGPF | 1x2x1,50 | 15,3 | 681 | 12.6 |
| MAS3715TDPAX-EGPF | 1x3x1,50 | 16,1 | 737 | 12.6 |
| MAS0215TDPAX-EGPF | 2x2x1,50 | 21,7 | 1105 | 12.6 |
| MAS3815TDPAX-EGPF | 2x3x1,50 | 22,4 | 1189 | 12.6 |
| MAS0315TDPAX-EGPF | 3x2x1,50 | 22,9 | 1247 | 12.6 |
| MAS3115TDPAX-EGPF | 3x3x1,50 | 23,7 | 1363 | 12.6 |
| MAS0715TDPAX-EGPF | 7x2x1,50 | 28,8 | 2001 | 12.6 |
| MAS7115TDPAX-EGPF | 7x3x1,50 | 29,9 | 2219 | 12.6 |
| MAS1215TDPAX-EGPF | 12x2x1,50 | 36,4 | 3050 | 12.6 |
| MAS3315TDPAX-EGPF | 12x3x1,50 | 37,9 | 3412 | 12.6 |
| MAS1915TDPAX-EGPF | 19x2x1,50 | 41,3 | 3932 | 12.6 |
| MAS7415TDPAX-EGPF | 19x3x1,50 | 43,7 | 4648 | 12.6 |
| MAS2715TDPAX-EGPF | 27x2x1,50 | 48,5 | 5262 | 12.6 |
| MAS8115TDPAX-EGPF | 27x3x1,50 | 50,9 | 6173 | 12.6 |

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NF M87-202 CR1-C1

NF M87-202 EGSF - CR1-C1



Collectively Screened, Unarmoured

RAMCRO - NF M 87-202 CR1-C1 EGSF



These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded to UTE C 32-014

Insulation:

Special Mix Silicon Rubber - SIL

Wrapping:

At least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Orange

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGSF NF M87-202 CR1-C1 - RAMCRO
2019 + BATCH + METER MARKING

NF M87-202 EGSF - CR1-C1

Collectively Screened, Unarmoured

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108TUESK-EGSF | 1x2x0,50 | 6,1 | 46 | 37.5 |
| SAM3708TUESX-EGSF | 1x3x0,50 | 6,5 | 59 | 37.5 |
| SAM0208TUESK-EGSF | 2x2x0,50 | 8,3 | 78 | 37.5 |
| SAM3808TUESX-EGSF | 2x3x0,50 | 10,0 | 107 | 37.5 |
| SAM0308TUESK-EGSF | 3x2x0,50 | 8,8 | 102 | 37.5 |
| SAM3108TUESX-EGSF | 3x3x0,50 | 10,6 | 142 | 37.5 |
| SAM0708TUESK-EGSF | 7x2x0,50 | 11,6 | 201 | 37.5 |
| SAM7108TUESX-EGSF | 7x3x0,50 | 14,5 | 303 | 37.5 |
| SAM1208TUESK-EGSF | 12x2x0,50 | 15,8 | 345 | 37.5 |
| SAM3308TUESX-EGSF | 12x3x0,50 | 19,6 | 513 | 37.5 |
| SAM1908TUESK-EGSF | 19x2x0,50 | 18,9 | 531 | 37.5 |
| SAM7408TUESX-EGSF | 19x3x0,50 | 23,4 | 787 | 37.5 |
| SAM2708TUESK-EGSF | 27x2x0,50 | 23,1 | 752 | 37.5 |
| SAM8108TUESX-EGSF | 27x3x0,50 | 28,2 | 1084 | 37.5 |
| MAS0190TUESK-EGSF | 1x2x0,88 | 6,9 | 61 | 22.3 |
| MAS3790TUESX-EGSF | 1x3x0,88 | 7,3 | 78 | 22.3 |
| MAS0290TUESK-EGSF | 2x2x0,88 | 9,5 | 103 | 22.3 |
| MAS3890TUESX-EGSF | 2x3x0,88 | 11,4 | 143 | 22.3 |
| MAS0390TUESK-EGSF | 3x2x0,88 | 10 | 138 | 22.3 |
| MAS3190TUESX-EGSF | 3x3x0,88 | 12,1 | 195 | 22.3 |
| MAS0790TUESK-EGSF | 7x2x0,88 | 13,3 | 280 | 22.3 |
| MAS7190TUESX-EGSF | 7x3x0,88 | 16,6 | 421 | 22.3 |
| MAS1290TUESK-EGSF | 12x2x0,88 | 18,5 | 497 | 22.3 |
| MAS3390TUESX-EGSF | 12x3x0,88 | 22,9 | 738 | 22.3 |
| MAS1990TUESK-EGSF | 19x2x0,88 | 21,8 | 742 | 22.3 |
| MAS7490TUESX-EGSF | 19x3x0,88 | 26,9 | 1104 | 22.3 |
| MAS2790TUESK-EGSF | 27x2x0,88 | 26,6 | 1054 | 22.3 |
| MAS8190TUESX-EGSF | 27x3x0,88 | 32,5 | 1530 | 22.3 |
| MAS0115TUESK-EGSF | 1x2x1,50 | 6,4 | 50 | 12.6 |
| MAS3715TUESX-EGSF | 1x3x1,50 | 6,7 | 63 | 12.6 |
| MAS0215TUESK-EGSF | 2x2x1,50 | 8,7 | 83 | 12.6 |
| MAS3815TUESX-EGSF | 2x3x1,50 | 10,4 | 114 | 12.6 |
| MAS0315TUESK-EGSF | 3x2x1,50 | 9,2 | 109 | 12.6 |
| MAS3115TUESX-EGSF | 3x3x1,50 | 11,1 | 152 | 12.6 |
| MAS0715TUESK-EGSF | 7x2x1,50 | 12,1 | 216 | 12.6 |
| MAS7115TUESX-EGSF | 7x3x1,50 | 15,1 | 324 | 12.6 |
| MAS1215TUESK-EGSF | 12x2x1,50 | 16,5 | 369 | 12.6 |
| MAS3315TUESX-EGSF | 12x3x1,50 | 20,5 | 550 | 12.6 |
| MAS1915TUESK-EGSF | 19x2x1,50 | 19,8 | 569 | 12.6 |
| MAS7415TUESX-EGSF | 19x3x1,50 | 24,5 | 845 | 12.6 |
| MAS2715TUESK-EGSF | 27x2x1,50 | 24,2 | 807 | 12.6 |
| MAS8115TUESX-EGSF | 27x3x1,50 | 29,6 | 1165 | 12.6 |

Individual Screened, Unarmoured

RAMCRO - NF M 87-202 CR1-C1 EISF



These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded to UTE C 32-014

Insulation:

Special Mix Silicon Rubber - SIL

Individual Sheath:

Polyvinyl Chloride - PVC to NF C 32-020

Wrapping:

At least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Orange

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EISF NF M87-202 CR1-C1 - RAMCRO
2019 + BATCH + METER MARKING

NF M87-202 EISF - CR1-C1

Individual Screened, Unarmoured

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108TUESK-EISF | 1x2x0,50 | 7,1 | 65 | 37.5 |
| SAM3708TUESX-EISF | 1x3x0,50 | 7,4 | 78 | 37.5 |
| SAM0208TUESK-EISF | 2x2x0,50 | 12,4 | 124 | 37.5 |
| SAM3808TUESX-EISF | 2x3x0,50 | 13,1 | 150 | 37.5 |
| SAM0308TUESK-EISF | 3x2x0,50 | 13,2 | 164 | 37.5 |
| SAM3108TUESX-EISF | 3x3x0,50 | 14,3 | 216 | 37.5 |
| SAM0708TUESK-EISF | 7x2x0,50 | 18,5 | 364 | 37.5 |
| SAM7108TUESX-EISF | 7x3x0,50 | 19,6 | 451 | 37.5 |
| SAM1208TUESK-EISF | 12x2x0,50 | 25,1 | 610 | 37.5 |
| SAM3308TUESX-EISF | 12x3x0,50 | 26,5 | 760 | 37.5 |
| SAM1908TUESK-EISF | 19x2x0,50 | 29,6 | 896 | 37.5 |
| SAM7408TUESX-EISF | 19x3x0,50 | 31,3 | 1129 | 37.5 |
| SAM2708TUESK-EISF | 27x2x0,50 | 35,8 | 1230 | 37.5 |
| SAM8108TUESX-EISF | 27x3x0,50 | 37,9 | 1559 | 37.5 |
| MAS0190TUESK-EISF | 1x2x0,88 | 7,8 | 81 | 22.3 |
| MAS3790TUESX-EISF | 1x3x0,88 | 8,2 | 100 | 22.3 |
| MAS0290TUESK-EISF | 2x2x0,88 | 14,3 | 169 | 22.3 |
| MAS3890TUESX-EISF | 2x3x0,88 | 15,1 | 207 | 22.3 |
| MAS0390TUESK-EISF | 3x2x0,88 | 15,2 | 222 | 22.3 |
| MAS3190TUESX-EISF | 3x3x0,88 | 16,1 | 278 | 22.3 |
| MAS0790TUESK-EISF | 7x2x0,88 | 20,8 | 464 | 22.3 |
| MAS7190TUESX-EISF | 7x3x0,88 | 22,0 | 590 | 22.3 |
| MAS1290TUESK-EISF | 12x2x0,88 | 28,3 | 781 | 22.3 |
| MAS3390TUESX-EISF | 12x3x0,88 | 29,9 | 995 | 22.3 |
| MAS1990TUESK-EISF | 19x2x0,88 | 33,4 | 1158 | 22.3 |
| MAS7490TUESX-EISF | 19x3x0,88 | 35,3 | 1492 | 22.3 |
| MAS2790TUESK-EISF | 27x2x0,88 | 40,4 | 1597 | 22.3 |
| MAS8190TUESX-EISF | 27x3x0,88 | 42,8 | 2070 | 22.3 |
| MAS0115TUESK-EISF | 1x2x1,50 | 8,6 | 101 | 12.6 |
| MAS3715TUESX-EISF | 1x3x1,50 | 9,0 | 128 | 12.6 |
| MAS0215TUESK-EISF | 2x2x1,50 | 15,8 | 211 | 12.6 |
| MAS3815TUESX-EISF | 2x3x1,50 | 16,7 | 266 | 12.6 |
| MAS0315TUESK-EISF | 3x2x1,50 | 16,8 | 281 | 12.6 |
| MAS3115TUESX-EISF | 3x3x1,50 | 17,8 | 362 | 12.6 |
| MAS0715TUESK-EISF | 7x2x1,50 | 23,4 | 619 | 12.6 |
| MAS7115TUESX-EISF | 7x3x1,50 | 24,8 | 806 | 12.6 |
| MAS1215TUESK-EISF | 12x2x1,50 | 31,4 | 1005 | 12.6 |
| MAS3315TUESX-EISF | 12x3x1,50 | 33,3 | 1322 | 12.6 |
| MAS1915TUESK-EISF | 19x2x1,50 | 37,1 | 1504 | 12.6 |
| MAS7415TUESX-EISF | 19x3x1,50 | 39,4 | 2000 | 12.6 |
| MAS2715TUESK-EISF | 27x2x1,50 | 45 | 2084 | 12.6 |
| MAS8115TUESX-EISF | 27x3x1,50 | 47,8 | 2786 | 12.6 |

Collectively Screened, Armoured

RAMCRO - NF M 87-202 CR1-C1 EGFA

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded acc. to UTE C 32-014

Insulation:

Special Mix Silicon Rubber - SIL

Wrapping:

At least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Armour:

Double Steel Tape Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Orange

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGFA NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

NF M87-202 EGFA - CR1-C1

Collectively Screened, Armoured

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108TUESK-EGFA | 1x2x0,50 | 9,3 | 158 | 37.5 |
| SAM3708TUESX-EGFA | 1x3x0,50 | 9,7 | 174 | 37.5 |
| SAM0208TUESK-EGFA | 2x2x0,50 | 11,5 | 224 | 37.5 |
| SAM3808TUESX-EGFA | 2x3x0,50 | 13,1 | 270 | 37.5 |
| SAM0308TUESK-EGFA | 3x2x0,50 | 12,0 | 253 | 37.5 |
| SAM3108TUESX-EGFA | 3x3x0,50 | 13,8 | 313 | 37.5 |
| SAM0708TUESK-EGFA | 7x2x0,50 | 14,8 | 382 | 37.5 |
| SAM7108TUESX-EGFA | 7x3x0,50 | 18,0 | 535 | 37.5 |
| SAM1208TUESK-EGFA | 12x2x0,50 | 19,4 | 594 | 37.5 |
| SAM3308TUESX-EGFA | 12x3x0,50 | 23,2 | 813 | 37.5 |
| SAM1908TUESK-EGFA | 19x2x0,50 | 22,5 | 822 | 37.5 |
| SAM7408TUESX-EGFA | 19x3x0,50 | 27,0 | 1146 | 37.5 |
| SAM2708TUESK-EGFA | 27x2x0,50 | 26,7 | 1107 | 37.5 |
| SAM8108TUESX-EGFA | 27x3x0,50 | 32,1 | 1544 | 37.5 |
| MAS0190TUESK-EGFA | 1x2x0,88 | 10,1 | 180 | 22.3 |
| MAS3790TUESX-EGFA | 1x3x0,88 | 10,5 | 201 | 22.3 |
| MAS0290TUESK-EGFA | 2x2x0,88 | 12,6 | 261 | 22.3 |
| MAS3890TUESX-EGFA | 2x3x0,88 | 14,5 | 322 | 22.3 |
| MAS0390TUESK-EGFA | 3x2x0,88 | 13,2 | 302 | 22.3 |
| MAS3190TUESX-EGFA | 3x3x0,88 | 15,3 | 382 | 22.3 |
| MAS0790TUESK-EGFA | 7x2x0,88 | 16,9 | 497 | 22.3 |
| MAS7190TUESX-EGFA | 7x3x0,88 | 20,1 | 680 | 22.3 |
| MAS1290TUESK-EGFA | 12x2x0,88 | 22,1 | 783 | 22.3 |
| MAS3390TUESX-EGFA | 12x3x0,88 | 26,5 | 1090 | 22.3 |
| MAS1990TUESK-EGFA | 19x2x0,88 | 25,3 | 1078 | 22.3 |
| MAS7490TUESX-EGFA | 19x3x0,88 | 30,9 | 1540 | 22.3 |
| MAS2790TUESK-EGFA | 27x2x0,88 | 30,6 | 1484 | 22.3 |
| MAS8190TUESX-EGFA | 27x3x0,88 | 36,5 | 2051 | 22.3 |
| MAS0115TUESK-EGFA | 1x2x1,50 | 10,8 | 206 | 12.6 |
| MAS3715TUESX-EGFA | 1x3x1,50 | 11,3 | 248 | 12.6 |
| MAS0215TUESK-EGFA | 2x2x1,50 | 13,8 | 309 | 12.6 |
| MAS3815TUESX-EGFA | 2x3x1,50 | 16,3 | 406 | 12.6 |
| MAS0315TUESK-EGFA | 3x2x1,50 | 14,4 | 366 | 12.6 |
| MAS3115TUESX-EGFA | 3x3x1,50 | 17,6 | 511 | 12.6 |
| MAS0715TUESK-EGFA | 7x2x1,50 | 18,9 | 654 | 12.6 |
| MAS7115TUESX-EGFA | 7x3x1,50 | 22,6 | 904 | 12.6 |
| MAS1215TUESK-EGFA | 12x2x1,50 | 24,4 | 1020 | 12.6 |
| MAS3315TUESX-EGFA | 12x3x1,50 | 29,8 | 1454 | 12.6 |
| MAS1915TUESK-EGFA | 19x2x1,50 | 28,9 | 1483 | 12.6 |
| MAS7415TUESX-EGFA | 19x3x1,50 | 34,4 | 2058 | 12.6 |
| MAS2715TUESK-EGFA | 27x2x1,50 | 34 | 1978 | 12.6 |
| MAS8115TUESX-EGFA | 27x3x1,50 | 40,8 | 2765 | 12.6 |

Collectively Screened, Armoured

RAMCRO - NF M 87-202 CR1-C1 EIFA

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded acc. to UTE C 32-014

Insulation:

Special Mix Silicon Rubber - SIL

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Armour:

Double Steel Tape Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Orange

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGFA NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

NF M87-202 EIFA - CR1-C1

Collectively Screened, Armoured

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAI0108TUESK-EIFA | 1x2x0,50 | 10,3 | 187 | 37.5 |
| SAI3708TUESX-EIFA | 1x3x0,50 | 10,6 | 204 | 37.5 |
| SAI0208TUESK-EIFA | 2x2x0,50 | 16,0 | 332 | 37.5 |
| SAI3808TUESX-EIFA | 2x3x0,50 | 16,7 | 366 | 37.5 |
| SAI0308TUESK-EIFA | 3x2x0,50 | 16,8 | 382 | 37.5 |
| SAI3108TUESX-EIFA | 3x3x0,50 | 17,9 | 449 | 37.5 |
| SAI0708TUESK-EIFA | 7x2x0,50 | 22,1 | 655 | 37.5 |
| SAI7108TUESX-EIFA | 7x3x0,50 | 23,2 | 756 | 37.5 |
| SAI1208TUESK-EIFA | 12x2x0,50 | 29,1 | 1028 | 37.5 |
| SAI3308TUESX-EIFA | 12x3x0,50 | 30,5 | 1198 | 37.5 |
| SAI1908TUESK-EIFA | 19x2x0,50 | 33,6 | 1388 | 37.5 |
| SAI7408TUESX-EIFA | 19x3x0,50 | 35,3 | 1646 | 37.5 |
| SAI2708TUESK-EIFA | 27x2x0,50 | 39,8 | 1816 | 37.5 |
| SAI8108TUESX-EIFA | 27x3x0,50 | 41,9 | 2176 | 37.5 |
| MAS0190TUESK-EIFA | 1x2x0,88 | 11,0 | 211 | 22.3 |
| MAS3790TUESX-EIFA | 1x3x0,88 | 11,4 | 245 | 22.3 |
| MAS0290TUESK-EIFA | 2x2x0,88 | 17,9 | 402 | 22.3 |
| MAS3890TUESX-EIFA | 2x3x0,88 | 18,7 | 450 | 22.3 |
| MAS0390TUESK-EIFA | 3x2x0,88 | 18,8 | 467 | 22.3 |
| MAS3190TUESX-EIFA | 3x3x0,88 | 19,7 | 534 | 22.3 |
| MAS0790TUESK-EIFA | 7x2x0,88 | 24,4 | 793 | 22.3 |
| MAS7190TUESX-EIFA | 7x3x0,88 | 25,6 | 934 | 22.3 |
| MAS1290TUESK-EIFA | 12x2x0,88 | 32,3 | 1251 | 22.3 |
| MAS3390TUESX-EIFA | 12x3x0,88 | 33,9 | 1489 | 22.3 |
| MAS1990TUESK-EIFA | 19x2x0,88 | 37,4 | 1705 | 22.3 |
| MAS7490TUESX-EIFA | 19x3x0,88 | 39,3 | 2069 | 22.3 |
| MAS2790TUESK-EIFA | 27x2x0,88 | 44,4 | 2252 | 22.3 |
| MAS8190TUESX-EIFA | 27x3x0,88 | 46,8 | 2762 | 22.3 |
| MAS0115TUESK-EIFA | 1x2x1,50 | 11,8 | 251 | 12.6 |
| MAS3715TUESX-EIFA | 1x3x1,50 | 12,2 | 283 | 12.6 |
| MAS0215TUESK-EIFA | 2x2x1,50 | 19,4 | 463 | 12.6 |
| MAS3815TUESX-EIFA | 2x3x1,50 | 20,3 | 530 | 12.6 |
| MAS0315TUESK-EIFA | 3x2x1,50 | 20,4 | 547 | 12.6 |
| MAS3115TUESX-EIFA | 3x3x1,50 | 21,4 | 641 | 12.6 |
| MAS0715TUESK-EIFA | 7x2x1,50 | 27 | 984 | 12.6 |
| MAS7115TUESX-EIFA | 7x3x1,50 | 28,8 | 1217 | 12.6 |
| MAS1215TUESK-EIFA | 12x2x1,50 | 35,4 | 1521 | 12.6 |
| MAS3315TUESX-EIFA | 12x3x1,50 | 37,3 | 1865 | 12.6 |
| MAS1915TUESK-EIFA | 19x2x1,50 | 41,1 | 2107 | 12.6 |
| MAS7415TUESX-EIFA | 19x3x1,50 | 43,4 | 2637 | 12.6 |
| MAS2715TUESK-EIFA | 27x2x1,50 | 49 | 2809 | 12.6 |
| MAS8115TUESX-EIFA | 27x3x1,50 | 51,8 | 3553 | 12.6 |

RAMCRO - NF M 87-202 CR1-C1 EGPF

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded acc. to UTE C 32-014

Insulation:

Special Mix Silicon Rubber - SIL

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Chemical Protection:

Lead Cover

Armour:

Double Steel Tape Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Orange

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGFA NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

NF M87-202 EGPF - CR1-C1

Instrumentation Cable 300/500V

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108TUESK-EGPF | 1x2x0,50 | 14,1 | 581 | 37.5 |
| SAM3708TUESX-EGPF | 1x3x0,50 | 14,5 | 611 | 37.5 |
| SAM0208TUESK-EGPF | 2x2x0,50 | 16,7 | 747 | 37.5 |
| SAM3808TUESX-EGPF | 2x3x0,50 | 18,7 | 886 | 37.5 |
| SAM0308TUESK-EGPF | 3x2x0,50 | 17,2 | 799 | 37.5 |
| SAM3108TUESX-EGPF | 3x3x0,50 | 19,4 | 957 | 37.5 |
| SAM0708TUESK-EGPF | 7x2x0,50 | 20,4 | 1073 | 37.5 |
| SAM7108TUESX-EGPF | 7x3x0,50 | 23,2 | 1337 | 37.5 |
| SAM1208TUESK-EGPF | 12x2x0,50 | 24,8 | 1534 | 37.5 |
| SAM3308TUESX-EGPF | 12x3x0,50 | 29,2 | 2046 | 37.5 |
| SAM1908TUESK-EGPF | 19x2x0,50 | 28,5 | 2021 | 37.5 |
| SAM7408TUESX-EGPF | 19x3x0,50 | 33,6 | 2712 | 37.5 |
| SAM2708TUESK-EGPF | 27x2x0,50 | 33,3 | 2657 | 37.5 |
| SAM8108TUESX-EGPF | 27x3x0,50 | 38,7 | 3577 | 37.5 |
| MAS0190TUESK-EGPF | 1x2x0,88 | 14,9 | 635 | 22.3 |
| MAS3790TUESX-EGPF | 1x3x0,88 | 15,3 | 674 | 22.3 |
| MAS0290TUESK-EGPF | 2x2x0,88 | 17,8 | 834 | 22.3 |
| MAS3890TUESX-EGPF | 2x3x0,88 | 20,1 | 1002 | 22.3 |
| MAS0390TUESK-EGPF | 3x2x0,88 | 18,8 | 922 | 22.3 |
| MAS3190TUESX-EGPF | 3x3x0,88 | 20,9 | 1096 | 22.3 |
| MAS0790TUESK-EGPF | 7x2x0,88 | 22,1 | 1248 | 22.3 |
| MAS7190TUESX-EGPF | 7x3x0,88 | 25,5 | 1656 | 22.3 |
| MAS1290TUESK-EGPF | 12x2x0,88 | 27,7 | 1934 | 22.3 |
| MAS3390TUESX-EGPF | 12x3x0,88 | 33,1 | 2627 | 22.3 |
| MAS1990TUESK-EGPF | 19x2x0,88 | 31,7 | 2449 | 22.3 |
| MAS7490TUESX-EGPF | 19x3x0,88 | 37,3 | 3387 | 22.3 |
| MAS2790TUESK-EGPF | 27x2x0,88 | 37,0 | 3312 | 22.3 |
| MAS8190TUESX-EGPF | 27x3x0,88 | 43,7 | 4535 | 22.3 |
| MAS0115TUESK-EGPF | 1x2x1,50 | 16 | 710 | 12.6 |
| MAS3715TUESX-EGPF | 1x3x1,50 | 16,5 | 761 | 12.6 |
| MAS0215TUESK-EGPF | 2x2x1,50 | 19,4 | 953 | 12.6 |
| MAS3815TUESX-EGPF | 2x3x1,50 | 21,5 | 1134 | 12.6 |
| MAS0315TUESK-EGPF | 3x2x1,50 | 20 | 1041 | 12.6 |
| MAS3115TUESX-EGPF | 3x3x1,50 | 22,8 | 1294 | 12.6 |
| MAS0715TUESK-EGPF | 7x2x1,50 | 24,3 | 1573 | 12.6 |
| MAS7115TUESX-EGPF | 7x3x1,50 | 28,6 | 2111 | 12.6 |
| MAS1215TUESK-EGPF | 12x2x1,50 | 30,4 | 2312 | 12.6 |
| MAS3315TUESX-EGPF | 12x3x1,50 | 36,2 | 3237 | 12.6 |
| MAS1915TUESK-EGPF | 19x2x1,50 | 35,1 | 3107 | 12.6 |
| MAS7415TUESX-EGPF | 19x3x1,50 | 41,0 | 4234 | 12.6 |
| MAS2715TUESK-EGPF | 27x2x1,50 | 40,6 | 4130 | 12.6 |
| MAS8115TUESX-EGPF | 27x3x1,50 | 48,2 | 5691 | 12.6 |

Instrumentation Cable 300/500V

RAMCRO - NF M 87-202 CR1-C1 EIPF

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded acc. to UTE C 32-014

Insulation:

Special Mix Silicon Rubber - SIL

Individual Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Individual Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

0,026 mm Aluminium / PETP tape over copper drain wire

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Chemical Protection:

Lead Cover

Armour:

Double Steel Tape Armour

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free - LSZH

Colour Outer Sheath:

Orange

IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ●

Quad: ● ○ ● ●

ELECTRICAL DATA

| | |
|--|---------------|
| Insulation Resistance @ 20°C: | > 200 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 300/500 V |

STANDARD REFERENCES

- NF M 87-202
- UTE C 32-014
- NF C 32-020
- BS EN/IEC 60331-21
- BS EN/IEC 60332-1
- BS EN/IEC 60332-3-24

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Hazardous Area Classification

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant



TEMPERATURE RANGE

During Installation:

-5° C up to +50° C

Fixed Installation:

-30° C up to +80° C

Insulation Operation:

-30° C up to +90° C



CABLE PRINTING

1 IP 15 EGFA NF M87-202 - RAMCRO 2019 + BATCH + METER MARKING

NF M87-202 EIPF - CR1-C1

Instrumentation Cable 300/500V

These cables are designed for safe use in petroleum and petrochemical units particularly for the transmission of AC or DC analogue signals. Suitable for aliphatic hydrocarbons resistance applications.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | APPROX. CABLE WEIGHT (kg/km) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-------------------|------------------------------|-----------------------|------------------------------|---|
| SAM0108TUESK-EIPF | 1x2x0,50 | 15,1 | 653 | 37.5 |
| SAM3708TUESX-EIPF | 1x3x0,50 | 15,8 | 699 | 37.5 |
| SAM0208TUESK-EIPF | 2x2x0,50 | 21,2 | 1046 | 37.5 |
| SAM3808TUESX-EIPF | 2x3x0,50 | 21,9 | 1110 | 37.5 |
| SAM0308TUESK-EIPF | 3x2x0,50 | 22,0 | 1132 | 37.5 |
| SAM3108TUESX-EIPF | 3x3x0,50 | 23,1 | 1248 | 37.5 |
| SAM0708TUESK-EIPF | 7x2x0,50 | 27,7 | 1812 | 37.5 |
| SAM7108TUESX-EIPF | 7x3x0,50 | 29,2 | 1993 | 37.5 |
| SAM1208TUESK-EIPF | 12x2x0,50 | 35,5 | 2778 | 37.5 |
| SAM3308TUESX-EIPF | 12x3x0,50 | 36,9 | 3031 | 37.5 |
| SAM1908TUESK-EIPF | 19x2x0,50 | 40,2 | 3527 | 37.5 |
| SAM7408TUESX-EIPF | 19x3x0,50 | 42,3 | 3933 | 37.5 |
| SAM2708TUESK-EIPF | 27x2x0,50 | 47,2 | 4691 | 37.5 |
| SAM8108TUESX-EIPF | 27x3x0,50 | 49,3 | 5197 | 37.5 |
| MAS0190TUESK-EIPF | 1x2x0,88 | 16,2 | 725 | 22.3 |
| MAS3790TUESX-EIPF | 1x3x0,88 | 16,6 | 766 | 22.3 |
| MAS0290TUESK-EIPF | 2x2x0,88 | 23,1 | 1200 | 22.3 |
| MAS3890TUESX-EIPF | 2x3x0,88 | 24,1 | 1359 | 22.3 |
| MAS0390TUESK-EIPF | 3x2x0,88 | 24,2 | 1383 | 22.3 |
| MAS3190TUESX-EIPF | 3x3x0,88 | 25,1 | 1490 | 22.3 |
| MAS0790TUESK-EIPF | 7x2x0,88 | 30,4 | 2089 | 22.3 |
| MAS7190TUESX-EIPF | 7x3x0,88 | 32,0 | 2325 | 22.3 |
| MAS1290TUESK-EIPF | 12x2x0,88 | 38,9 | 3302 | 22.3 |
| MAS3390TUESX-EIPF | 12x3x0,88 | 40,5 | 3642 | 22.3 |
| MAS1990TUESK-EIPF | 19x2x0,88 | 44,6 | 4268 | 22.3 |
| MAS7490TUESX-EIPF | 19x3x0,88 | 46,7 | 4910 | 22.3 |
| MAS2790TUESK-EIPF | 27x2x0,88 | 52,0 | 5627 | 22.3 |
| MAS8190TUESX-EIPF | 27x3x0,88 | 54,6 | 6491 | 22.3 |
| MAS0115TUESK-EIPF | 1x2x1,50 | 17 | 787 | 12.6 |
| MAS3715TUESX-EIPF | 1x3x1,50 | 17,4 | 839 | 12.6 |
| MAS0215TUESK-EIPF | 2x2x1,50 | 24,8 | 1405 | 12.6 |
| MAS3815TUESX-EIPF | 2x3x1,50 | 25,7 | 1516 | 12.6 |
| MAS0315TUESK-EIPF | 3x2x1,50 | 25,8 | 1539 | 12.6 |
| MAS3115TUESX-EIPF | 3x3x1,50 | 26,8 | 1680 | 12.6 |
| MAS0715TUESK-EIPF | 7x2x1,50 | 33,6 | 2558 | 12.6 |
| MAS7115TUESX-EIPF | 7x3x1,50 | 35,0 | 2842 | 12.6 |
| MAS1215TUESK-EIPF | 12x2x1,50 | 42,4 | 3809 | 12.6 |
| MAS3315TUESX-EIPF | 12x3x1,50 | 44,5 | 4415 | 12.6 |
| MAS1915TUESK-EIPF | 19x2x1,50 | 48,5 | 5072 | 12.6 |
| MAS7415TUESX-EIPF | 19x3x1,50 | 51,0 | 5931 | 12.6 |
| MAS2715TUESK-EIPF | 27x2x1,50 | 56,8 | 6706 | 12.6 |
| MAS8115TUESX-EIPF | 27x3x1,50 | 59,6 | 7677 | 12.6 |

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HI-TEMPERATURE CABLES

Flororam & Siloram

RAMCRO - HI TEMPERATURE CABLE

These high temperature cables are designed to work in many areas where extreme temperatures occur and is exceptionally stable to oil, fat, acid, alkali, and solvents. Furthermore fluorinated flexible cables are sun and weather resistant.

CONSTRUCTION

Formation:

Tinned Copper Conductor, Stranded
Nickel-Plated Copper

Insulation:

FEP-MFA-PFA-ETFE or Special Mix Silicon Rubber

Collective Screen:

Tinned Copper Wire Braid (90% Coverage)

Outer Sheath:

FEP, MFA, PFA, ETFE or Special Mix Silicon Rubber

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60288
- IEC 60811
- IEC 60754-1
- IEC 60754-2
- IEC 60332-1
- DIN VDE 0472 p. 804
- UL 13

CABLE PRINTING

On Request

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter

**Hazardous Area Classification**

NEC Class I Div. II
IEC Zone 1 - Group 2



IDENTIFICATION OF CORES

Core: ● ● ● ● ● ●

TEMPERATURE RANGE

Installation Temperature:

-5° C up to +50° C

Bare Copper Conductor:

-30° C up to +130° C

Tinned / Silver Copper Conductor:

-30° C up to +180° C

Nickel-Plated Copper Conductor:

-30° C up to +260° C



ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 5000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 600 V |



www.ramcro.it

HI-TEMPERATURE CABLES

Flororam & Siloram

These high temperature cables are designed to work in many areas where extreme temperatures occur and is exceptionally stable to oil, fat, acid, alkali, and solvents. Furthermore floramate flexible cables are sun and weather resistant.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-----------------|------------------------------|-----------------------|---|
| STS0226HEVVX-HT | 2x0.25 | 3.0 | 66.30 |
| STS0426HEVVX-HT | 4x0.25 | 3.4 | 66.30 |
| STS0250HEVVX-HT | 2x0.50 | 3.9 | 36.36 |
| STS0450HEVVX-HT | 4x0.50 | 4.5 | 36.36 |
| STS0275HEVVX-HT | 2x0.75 | 4.2 | 24.80 |
| STS0475HEVVX-HT | 4x0.75 | 4.8 | 24.80 |
| STS0210HEVVX-HT | 2x1.00 | 4.7 | 18.30 |
| STS0410HEVVX-HT | 4x1.00 | 5.4 | 18.30 |
| STS0215HEVVX-HT | 2x1.50 | 5.3 | 12.42 |
| STS0415HEVVX-HT | 4x1.50 | 6.1 | 12.42 |
| STS0225HEVVX-HT | 2x2.50 | 6.4 | 7.56 |
| STS0425HEVVX-HT | 4x2.50 | 7.4 | 7.56 |
| STS0240HEVVX-HT | 2x4.00 | 7.4 | 4.2 |
| STS0440HEVVX-HT | 4x4.00 | 8.7 | 4.2 |
| STS0260HEVVX-HT | 2x6.00 | 8.3 | 3.6 |
| STS0460HEVVX-HT | 4x6.00 | 9.7 | 3.6 |

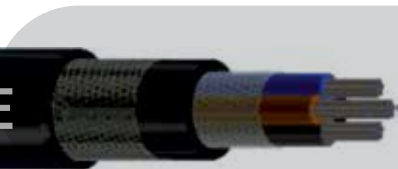
| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-----------------|------------------------------|-----------------------|---|
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| STS0250HEVVX-HT | 2x0.50 | 5.5 | 36.36 |
| STS0450HEVVX-HT | 4x0.50 | 6.3 | 36.36 |
| STS0275HEVVX-HT | 2x0.75 | 6.2 | 24.80 |
| STS0475HEVVX-HT | 4x0.75 | 7.3 | 24.80 |
| STS0210HEVVX-HT | 2x1.00 | 7.1 | 18.30 |
| STS0410HEVVX-HT | 4x1.00 | 8.2 | 18.30 |
| STS0215HEVVX-HT | 2x1.50 | 7.7 | 12.42 |
| STS0415HEVVX-HT | 4x1.50 | 8.9 | 12.42 |
| STS0225HEVVX-HT | 2x2.50 | 9.0 | 7.56 |
| STS0425HEVVX-HT | 4x2.50 | 10.6 | 7.56 |
| STS0240HEVVX-HT | 2x4.00 | 11.0 | 4.2 |
| STS0440HEVVX-HT | 4x4.00 | 13.2 | 4.2 |
| STS0260HEVVX-HT | 2x6.00 | 12.3 | 3.6 |
| STS0460HEVVX-HT | 4x6.00 | 14.74 | 3.6 |



HI-TEMPERATURE CABLES

Flororam & Siloram

RAMCRO - HI TEMPERATURE CABLE



These high temperature cables are designed to work in many areas where extreme temperatures occur and is exceptionally stable to oil, fat, acid, alkali, and solvents. Furthermore fluorinated flexible cables are sun and weather resistant.

CONSTRUCTION

Formation:

Tinned Copper Conductor, Stranded
Nickel-Plated Copper

Insulation:

FEP-MFA-PFA-ETFE or Special Mix Silicon Rubber

Collective Screen:

Tinned Copper Wire Braid (90% Coverage)

Inner Sheath:

FEP, MFA, PFA, ETFE or Special Mix Silicon Rubber

Armour:

Galvanized Steel Wire Braid

Outer Sheath:

FEP, MFA, PFA, ETFE or Special Mix Silicon Rubber

Colour Outer Sheath:

Black

CABLE PRINTING

On Request

IDENTIFICATION OF CORES

Pair: ● ● ● ● ● ●

ELECTRICAL DATA

| | |
|--|----------------|
| Insulation Resistance @ 20°C: | > 1000 MOhm*Km |
| Test Voltage Core-Core: | 2000 V |
| Test Voltage Core-Screen: | 2000 V |
| Mutual Capacitance between conductors: | < 250 nF/km |
| Inductance: | < 1 mH/km |
| Operating Voltage: | 600 V |

STANDARD REFERENCES

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- IEC 60811
- IEC 60754-1
- IEC 60754-2
- IEC 60332-1
- DIN VDE 0472 p. 804
- UL 13

CHARACTERISTICS

Min. Bending Radius

14 x cable diameter



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TEMPERATURE RANGE

Installation Temperature:

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-30° C up to +180° C

Nickel-Plated Copper Conductor:

-30° C up to +260° C



HI-TEMPERATURE CABLES

Flororam & Siloram

These high temperature cables are designed to work in many areas where extreme temperatures occur and is exceptionally stable to oil, fat, acid, alkali, and solvents. Furthermore floramate flexible cables are sun and weather resistant.

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-----------------|------------------------------|-----------------------|---|
| STS0226WEVVX-HT | 2x0.25 | 4.6 | 66.30 |
| STS0426WEVVX-HT | 4x0.25 | 5.0 | 66.30 |
| STS0250WEVVX-HT | 2x0.50 | 5.5 | 36.36 |
| STS0450WEVVX-HT | 4x0.50 | 6.1 | 36.36 |
| STS0275WEVVX-HT | 2x0.75 | 5.8 | 24.80 |
| STS0475WEVVX-HT | 4x0.75 | 6.4 | 24.80 |
| STS0210WEVVX-HT | 2x1.00 | 6.5 | 18.30 |
| STS0410WEVVX-HT | 4x1.00 | 7.2 | 18.30 |
| STS0215WEVVX-HT | 2x1.50 | 7.1 | 12.42 |
| STS0415WEVVX-HT | 4x1.50 | 7.9 | 12.42 |
| STS0225WEVVX-HT | 2x2.50 | 8.2 | 7.56 |
| STS0425WEVVX-HT | 4x2.50 | 9.2 | 7.56 |
| STS0240WEVVX-HT | 2x4.00 | 9.2 | 4.2 |
| STS0440WEVVX-HT | 4x4.00 | 10.5 | 4.2 |
| STS0260WEVVX-HT | 2x6.00 | 10.1 | 3.6 |
| STS0460WEVVX-HT | 4x6.00 | 11.5 | 3.6 |

| RAMCRO CODE | FORMATION (mm ²) | OVERALL DIAMETER (mm) | MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km) |
|-----------------|------------------------------|-----------------------|---|
| STS0226WEVVX-HT | 2x0.25 | 7.6 | 66.30 |
| STS0426WEVVX-HT | 4x0.25 | 8.3 | 66.30 |
| STS0250WEVVX-HT | 2x0.50 | 8.5 | 36.36 |
| STS0450WEVVX-HT | 4x0.50 | 9.3 | 36.36 |
| STS0275WEVVX-HT | 2x0.75 | 9.2 | 24.80 |
| STS0475WEVVX-HT | 4x0.75 | 10.5 | 24.80 |
| STS0210WEVVX-HT | 2x1.00 | 10.1 | 18.30 |
| STS0410WEVVX-HT | 4x1.00 | 11.4 | 18.30 |
| STS0215WEVVX-HT | 2x1.50 | 10.7 | 12.42 |
| STS0415WEVVX-HT | 4x1.50 | 12.3 | 12.42 |
| STS0225WEVVX-HT | 2x2.50 | 12.4 | 7.56 |
| STS0425WEVVX-HT | 4x2.50 | 14.4 | 7.56 |
| STS0240WEVVX-HT | 2x4.00 | 14.8 | 4.2 |
| STS0440WEVVX-HT | 4x4.00 | 17.6 | 4.2 |
| STS0260WEVVX-HT | 2x6.00 | 16.5 | 3.6 |
| STS0460WEVVX-HT | 4x6.00 | 19.5 | 3.6 |



THERMOCOUPLE CABLES

With conductor materials such as nickel or chromium, thermocouple & compensating cables are used for temperature sensing in industrial processes.

- Conductor material according to the requirements of the IEC 60584-3 standard
- Design: solid, stranded or ~ exible
- Sizes: 0.5 mm² up to 1.5 mm²

Criteria for the choice of type, design or size of conductor are:

- The type of thermoelement used
- The E.M.F-tolerances
- The ~ exibility

Solid conductors are used in most cases.

Characteristics

- Characteristics
- Reduced flame propagation
- Oil resistant
- Sunlight resistant
- Indoor and outdoor installation
- On racks, trays, in conduits
- Not for direct burial
- Blue for intrinsically safe systems available



Thermosensitive Applications

RAMCRO - THERMOCOUPLES

These cables are used for connections of different types of thermocouple cables in control processes in oil and gas industries, also ready for thermo-sensitive detection systems. Armoured cables are suitable for direct burial applications.

CONSTRUCTION

Formation:

Solid (class 1), Stranded (class 2), Flexible (class 5)

Insulation:

XLPE, PVC, PE, EFTE, FEP, MFA, PFA and PTFE

Screen:

Individual or Collective

Inner Sheath:

XLPE, PVC, PE, EFTE, FEP, MFA, PFA and PTFE

Armour:

Galvanized Steel Wire Braid

Outer Sheath:

XLPE, PVC, PE, EFTE, FEP, MFA, PFA and PTFE

Colour Outer Sheath:

On Request

TYPE OF THERMOCOUPLE

| TYPE | Alloys | IEC 584-3 BS 4937 P30 | BS 1843 | ANSI MC96.1 |
|------|-----------------------|--------------------------|---------|-------------|
| K | Chromel Alumel | | | |
| J | Iron Constantan | | | |
| N | Nicrosil Nisil | | | |
| R | Pt 13% Rh Pure Pt | | | Not Defined |
| S | Pt 10% Rh Pure Pt | Not Defined | | Not Defined |
| T | Copper Constantan | | | |
| E | Chromel Constantan | | | |

STANDARD REFERENCES

- IEC 584-3
- BS 4937 P30
- BS 1843
- ANSI MC96.1

IDENTIFICATION OF CORES

| TYPE | Temperature range °C (continuous) | Temperature range °C (short term) | Tolerance class one (°C) | Tolerance class two (°C) |
|------|-----------------------------------|-----------------------------------|--|--|
| K | 0 to +1100 | -180 to +1300 | ± 1.5 between -40 °C and 375 °C ± 0.004xT between 375 °C and 1000 °C | ± 2.5 between -40 °C and 333 °C ± 0.0075xT between 333 °C and 1200 °C |
| J | 0 to +700 | -180 to +800 | ± 1.5 between -40 °C and 375 °C ± 0.004xT between 375 °C and 750 °C | ± 2.5 between -40 °C and 333 °C ± 0.0075xT between 333 °C and 750 °C |
| N | 0 to +1100 | -270 to +1300 | ± 1.5 between -40 °C and 375 °C ± 0.004xT between 375 °C and 1000 °C | ± 2.5 between -40 °C and 333 °C ± 0.0075xT between 333 °C and 1200 °C |
| R | 0 to +1600 | -50 to +1700 | ± 1.0 between 0 °C and 1100 °C ± [1+0.003x(T-1100)] between 1100 °C and 1600 °C | ± 1.5 between 0 °C and 600 °C ± 0.0025xT between 600 °C and 1600 °C |
| S | 0 to +1600 | -50 to +1750 | ± 1.0 between 0 °C and 1100 °C ± [1+0.003x(T-1100)] between 1100 °C and 1600 °C | ± 1.5 between 0 °C and 600 °C ± 0.0025xT between 600 °C and 1600 °C |
| T | -185 to +300 | -250 to +400 | ± 0.5 between -40 °C and 125 °C ± 0.004xT between 125 °C and 350 °C | ± 1.0 between -40 °C and 133 °C ± 0.0075xT between 133 °C and 350 °C |
| N | 0 to +800 | -40 to +900 | ± 1.5 between -40 °C and 375 °C ± 0.004xT between 375 °C and 800 °C | ± 2.5 between -40 °C and 333 °C ± 0.0075xT between 333 °C and 900 °C |

HANDLING, STORAGE AND LAYING OF CABLES

Great care is taken in the manufacturing of cables to ensure quality at every stage.

- Handling is the next important factor to ensure that by poor workmanship and mishandling the quality does not deteriorate.
- Of course laying is generally carried out by unskilled or semi-skilled men, strict supervision should be maintained so that this material, which can be very easily damaged, is handled with great care.
- If great care during installation is observed in the handling of cables on site the life of the cables is extended.

A. CABLE INSPECTION

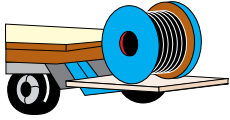
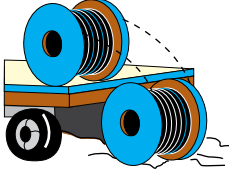
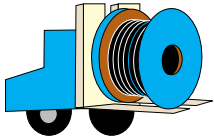
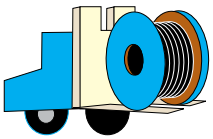
Inspect every cable reel for damage before accepting the shipment. Be particularly alert for cable damage if:

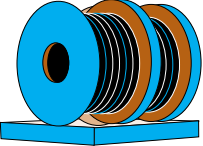
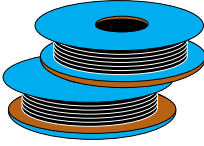
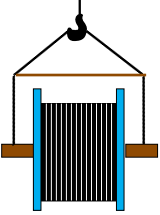
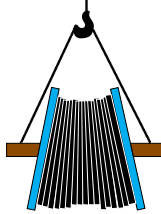
- A reel is lying flat on its side
- Several reels are stacked one over the other
- Other freight is stacked on a reel
- Cable drums are without planks or broken
- Nails have been driven into reel flanges to secure shipping blocks
- A reel flange is damaged
- A cable covering is removed, stained or damaged
- A cable end seal is removed or damaged. A reel has been dropped (hidden damage likely)

B. CABLE HANDLING & STORAGE

Damage to cables can occur due to the incorrect handling to which the drums and cables may be subjected; causing breakdown of the drum flanges and in exceptional cases, movement of the drum barrel takes place. Once this breakdown of the drum occurs, the cable is immediately exposed to damage. Cables damaged during handling & storage can cause service failures when the subject cable is put to use.

Thus the following is a list of Do's and Don'ts that should be followed while handling and storing the cables before it is put to use.

| ✓ Do's | Don'ts ✗ |
|---|--|
|  <p>When off loading reels from a truck, lower reels carefully using a hydraulic gate, hoist or forklift truck.</p> |  <p>Never drop reels. If reels must be rolled, roll in opposite direction of the cable wraps to keep cable from loosening on the reel.</p> |
|  <p>If a fork lift is used, approach the reel from the flange side. Position the forks such that the reel is lifted by both reel flanges. Also Consideration should be given to, Traffic patterns during off-loading & damage during the time in storage.</p> |  <p>Do not allow the lift forks to contact the cable. Care must be taken by the fork lift operator not to make sudden turns or stops.</p> |

| ✓ Do's | Don'ts ✗ |
|---|---|
|  <p>Cable reels should be stored on hard surfaces resting on the flanges edge (flanges vertical). Align reels flange to flange and, if possible, arrange so that first in is first out.</p> |  <p>Multiple reels stacked on top of each other ("Pancake" storage) is not recommended for cable drums. The weight of the stack can total thousands of Kgs. creating an enormous load on the bottom reel. Also, damage to the reel and/or cable will likely occur when the reel is flipped for transit. A concentration of stress on the reel flange may cause it to break and subsequently damage the cable.</p> |
|  <p>When using a hoist, install a mandrel through the reel arbor holes and attach a sling. Use a spreader bar approximately 6 inches longer than the overall reel width placed between the sling ends just above the reel flanges.</p> |  <p>This may lead to the bending of the reel flanges and mashing the cable.</p> |

C. PRE-INSTALLATION

To ensure safety during cable installation, following shall be checked prior to installation.

1. The cable selected is proper for designed application.
2. The cable has not been damaged in transit or storage.

Review all applicable state and national codes to verify that the cable chosen is appropriate for the job. Also consult your local electricity authority. Next, you must identify any existing cable damage and prevent any further damaged from occurring. This is done through proper cable inspection, handling and storage.

D. INSTALLATION & LAYING

Mechanical stresses during installation are generally more severe than those encountered while in service. Thus care should be taken as regards to the following while installation and laying of cables.

1. Care shall be taken during laying to avoid sharp bending, and twisting.
2. Cable shall be unwound from the drum by lifting the drum on the center.
3. Shaft supported both ends with suitable jacks / stands.
4. Under no circumstances the cable winding shall be lifted off a coil or drum lying flat at the flanges. This would cause serious twist and damages.
5. Suitable protection shall be provided to the cables against mechanical damages, it includes covers, pipes etc.

E. RECOMMENDED MINIMUM BENDING RADIUS FOR LV CABLES

Single Core: $15 \times D$

Multicore : $12 \times D$

Where D= Diameter of cable in mm

F. RECOMMENDED SAFE PULLING FORCE WITH STOCKINGS:

a) For Unarmoured Cable : $P=5 D^2$

Where P= Pulling Force

b) For Armoured Cable : $P=9 D^2$

Where D= Diameter of cable inmm

G. RECOMMENDED SAFE PULLING FORCE WHENPULLED WITH PULLING EYE:

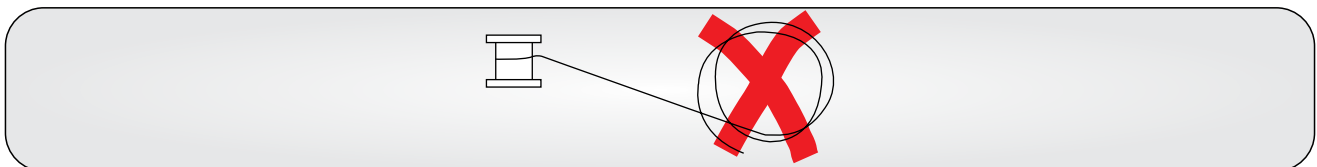
a) For Aluminum Conductors : 30 N/mm^2

b) For Copper Conductor : 50 N/mm^2

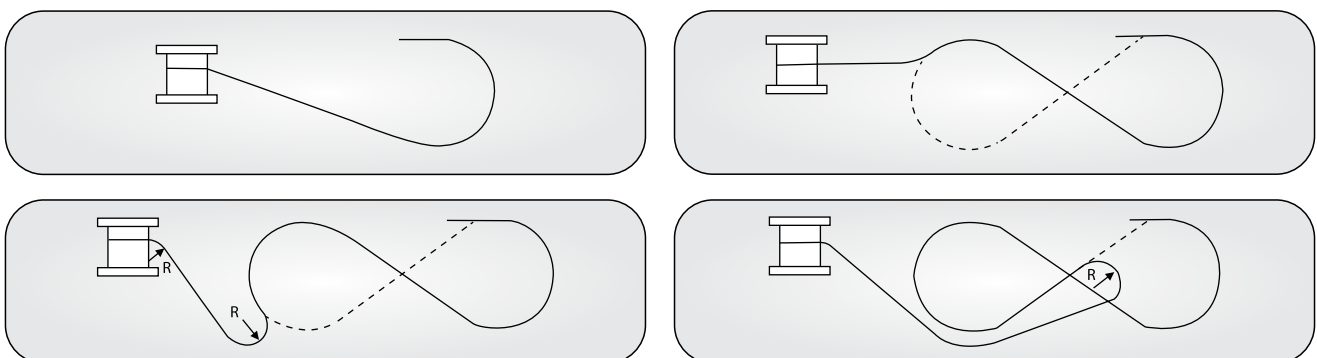
SPECIAL PRECAUTIONS FOR HANDLING / INSTALLATION OFLOW SMOKE SHEATHED CABLES

- Cables like LSF sheath needs to be handled with care during installation. While special additives are used in formulation of LSF compound to give the typical flame retardant characteristics of Zero Halogen Polymers some mechanical properties deteriorate. The following basic precautions are necessary.
- Cables should not be exposed to sunlight for consider able period before installation i.e. the temp of cables sheath should be below 45°C .
- Preferably installation is done during morning hours when the ambient temperature is low.
- Wire/ropes should not be used directly on the cable sheath for pulling.
- When pulled on cable trays/or any uneven surface, special attentions is needed to welding or unusually rough terrains.
- Rollers and bends should not have any sharpness which may damage sheath.

DO NOT ATTEMPT "COILING" OF CABLE ON THE GROUND



ON THE GROUND CABLE CAN BE FLAKED IN A FIGURE OF EIGHT FORMATION



Note: R Minimum Permissible bending radius of cable.

QD 06/01

Edited by RAMCRO S.p.A. on January 2023





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For Product or PDF

