Eight Decades of Trust & Innovation

OIL & GAS

ABOUT US

- 80 Years Strong: Among the pioneers of India's cable manufacturing industry, proudly wiring the nation for over eight decades
- Nation First: Driving Make in India and Viksit Bharat with cables engineered for critical and strategic sectors
- Comprehensive Product Portfolio: Manufacturing a wide range of high-performance wires and cables for diverse industrial applications
- Innovation at the Core: Fully in-house R&D facility with deep expertise in compounding technology, meeting the toughest national and international standards
- Compounding Excellence: Dedicated in-house compounds manufacturing team ensuring superior quality, consistency, and performance
- Breaking Barriers: First private sector company in India to install a 3 MeV Electron Beam Accelerator (Radiation Dynamics Inc., USA) for advanced irradiated curing Cable Technology
- Diverse Reach: Supplying electrical cables to defence, railways, metros, power, utilities, windmills, mining, and other strategic infrastructure sectors
- Future-Ready Manufacturing: World-class plant and machinery with cutting-edge automation, designed for precision, scale, and reliability
- Large-Scale Infrastructure: State-of-the-art manufacturing facility spread across around 5,00,000 sq. ft.
- Tested. Trusted. Certified.: NABL-accredited testing laboratory with advanced testing infrastructure ensuring uncompromising quality and reliability
- Always Ahead: Continuous upgrades in manufacturing and testing capabilities to keep pace with India's rapidly evolving infrastructure growth

THE OIL & GAS INDUSTRY :

Oil & Gas industry is a major global economic sector responsible for energy production, petrochemical processing, and industrial development. Across upstream, midstream, and downstream operations, reliable electrical infrastructure is essential for safe, efficient, and continuous performance. Electrical, control, and instrumentation cables play a critical role in powering equipment, enabling automation, transmitting data, and maintaining operational safety in harsh and hazardous environments.

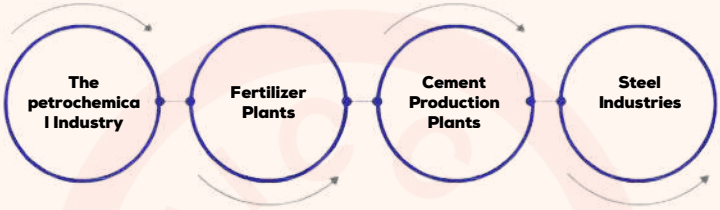
In upstream exploration and production facilities, cables support drilling equipment, sensors, offshore platforms, and automated control systems while withstanding extreme temperatures, moisture, chemicals, and mechanical stress. Midstream operations such as pipelines, pumping stations, and storage terminals rely on durable cable systems resistant to corrosion, vibration, and environmental fluctuations for uninterrupted transportation of oil and gas. In downstream refineries and petrochemical plants, specialized power, control, and instrumentation cables ensure efficient process automation, machinery operation, and real-time monitoring.

Oil & Gas applications require technologically advanced cable solutions including power cables, instrumentation cables, control cables, subsea & marine cables, and fire-resistant cables. These cables are engineered to deliver high performance under severe operating conditions and are designed with features such as flame retardancy, low smoke halogen-free (LSZH) properties, chemical and oil resistance, high mechanical strength, and fire survival capability. Safety and reliability are fundamental requirements in Oil & Gas installations. Modern cable systems are designed to minimize electrical hazards, maintain circuit integrity during fire conditions, and ensure reliable operation in hazardous and classified areas. Compliance with international standards such as IEC, UL, BS, and NEC ensures product quality, durability, and operational safety. As the industry continues to adopt automation, digital monitoring, and sustainable technologies, the demand for robust and intelligent cable solutions continues to grow. High-quality cable systems remain essential for ensuring uninterrupted energy flow, secure signal transmission, operational efficiency, and long-term reliability throughout the Oil & Gas infrastructure.

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;

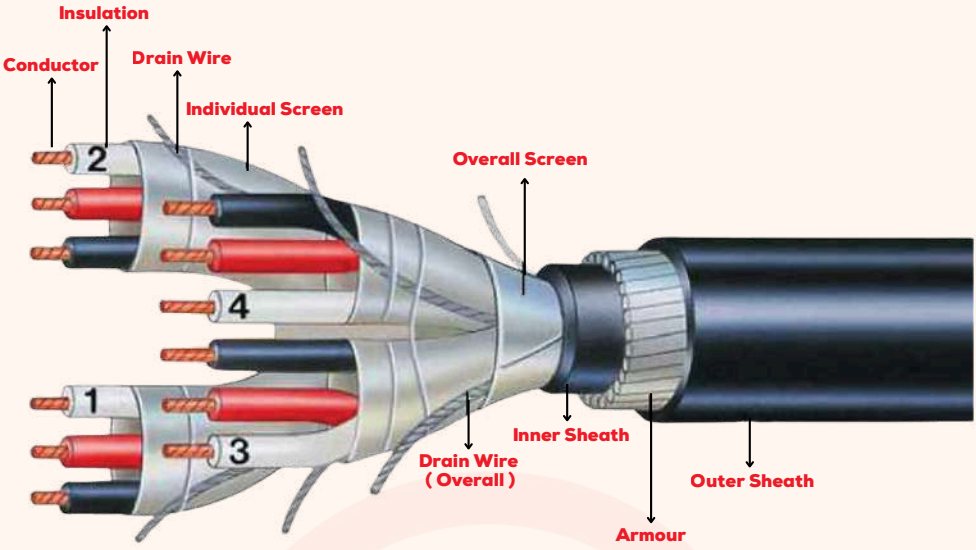


This post provides some meaningful information you ought to know, including types of instrumentation cables. Are you keen to find the best signal-transmitting wire that offers protection against interruption and interference? This is the best place to be.

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 polyethene 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

(3) OVERALL 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, te 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.

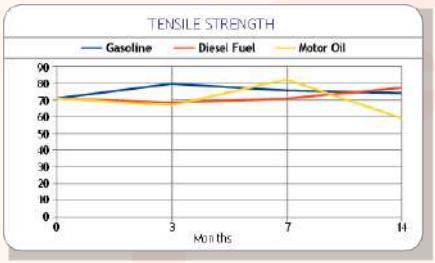
That is possible using a polyamide inner sheath. Polyamide has a good chemical resistance against hydrocarbon (comparable to lead), greater mechanical characteristics (specially against lateral compression (crush)) and less weight.

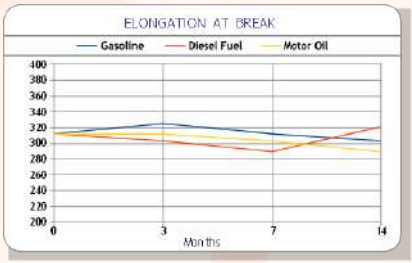
TESTS:

NICCO has conducted tests to verify mechanical behaviour of polyamide after some days of immersion in hydrocarbon. Some samples were immerged 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 dumbell 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 NICCO OIL 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 instal- lations 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.

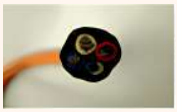
THE INDICATIONS ABOUT THE CABLE MUST BE AS THE FOLLOW:

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

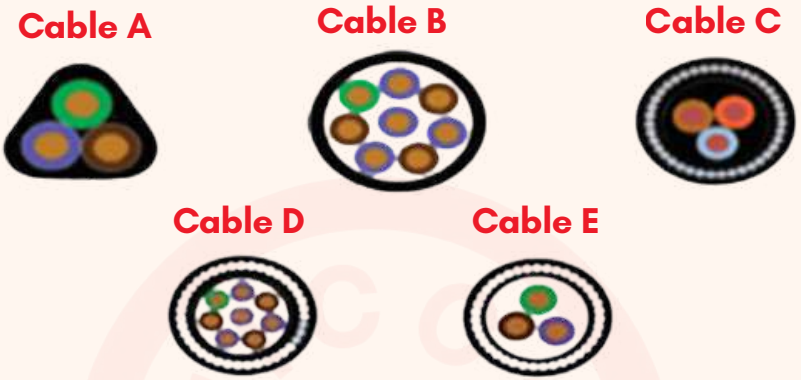
2. CABLE CONSTRUCTION SHOULD BE ROUND

- 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

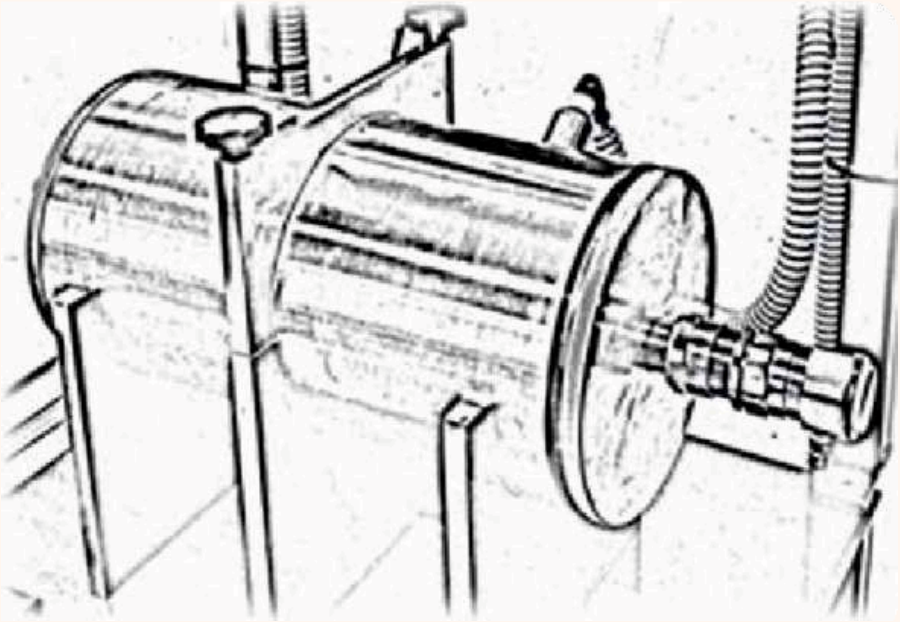
- Which type is suitable for use with Flameproof Ex d equipment when a cable gland with an elastomeric sealing ring would be considered?
- Thermoset, thermosetting or elastomeric cable which is substantially compact and circular, has extruded bedding and fillers, if any, are non-hygroscopic, may utilize flameproof cable entry devices, incorporating a sealing ring selected in ac- cordance with figure 1,



CABLE INDICATIONS FOR NICCO OIL 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.


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

EN 50288-7:2005

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:	Poliolefin 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 Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

Pair : ● ○

STANDARD REFERENCES

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

ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in accordingto EN 60079-14 ANNEXE
- 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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

ELECTRICAL

- 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

EN 50288-7:2005

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 (mm²)	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

NICCO - 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

EN 50288-7:2005

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 (mm²)	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

NICCO - 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

EN 50288-7:2005

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 (mm²)	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

NICCO - 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

EN 50288-7:2005

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

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:	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
Outer Sheath:	Polyvinyl chloride FR - PVC
Colour Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

Pair : ● ○ +Yellow Numbered Tapes

STANDARD REFERENCES

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

ON REQUEST

- Low Smoke Zero Halogen
- GAS-STOP in accordingto EN 60079-14 ANNEXE
- 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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

ELECTRICAL

- 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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:	Poliolefin 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 Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATIONOF CORES

Pair : ● ○

STANDARD REFERENCES

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

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

ELECTRICAL

- 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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	1063	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

NICCO - 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

EN 50288-7:2005

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.

NICCO 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	25,5	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

NICCO - 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

EN 50288-7:2005

RE-2Y(ST)YRY-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
Outer Sheath:	Polyvinyl chloride FR - PVC
Armour:	Galvanized Steel Wires Armour
Colour Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATIONOF CORES

Pair : ● ○ +Yellow Numbered Tapes

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

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

ELECTRICAL

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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

RE 2Y(ST)Y4YRY - NYLON COVER

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

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded acc. to HD 383
Insulation:	Poliolefin 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
Outer Sheath:	Polyvinyl chloride FR - PVC
Armour:	Galvanized Steel Wires Armour
Colour Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATIONOF CORES

Pair : ● ○

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

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

ELECTRICAL

- 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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	16,5	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

NICCO - 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

EN 50288-7:2005 NICCO - EN 50288-7 RE-Y(St)Y4YRY-Pimf

RE-2Y(ST)Y4YRY-PIMF

These c bles are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. pe rochemical 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
Chemical Protection:	Nylon Cover
Outer Sheath:	Polyvinyl chloride - PVC
Armour:	Galvanized Steel Wires Armour
Colour Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

Pair : ● ○

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

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

ELECTRICAL

• 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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.

NICCO CODE	FORMATION (mm²)	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

NICCO - 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

EN 50288-7:2005

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.

NICCO 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

NICCO - 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

PAS 5308-1:2009

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.

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded acc. to HD 383
Insulation:	Polyetilene 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 - PVC
Colour Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type
- 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

CABLE PRINTING

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

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 ATEX
- 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

- 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

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.

NICCO CODE	FORMATION (mm²)	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

PAS 5308-1:2009 PART 1 TYPE 1

PE/CAM/PVC

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
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

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.

CONSTRUCTION

Formation: Plain annealed copper wire, Stranded acc. to HD 383

Insulation: Polyetilene 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 Outher Sheath: Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type
- 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

CABLE PRINTING

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

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 ATEX
- 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

- 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

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.

NICCO CODE	FORMATION (mm²)	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

PAS 5308-1:2009 PART 1 TYPE 2

PE/CAM/PE/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

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded acc. to HD 383
Insulation:	Polyetilene 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:	Polyetilene - PE
Armour:	Galvanized Steel Wire Armour
Outer Sheath:	Polyvinyl chloride FR - PVC
Colour Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type
- 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

CABLE PRINTING

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

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 ATEX
- 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

- 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

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.

NICCO CODE	FORMATION (mm²)	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

PAS 5308-1:2009 PART 1 TYPE 2
PE/CAM/PVC/SWA/PVC

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
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

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.

CONSTRUCTION

Formation: Plain annealed copper wire, Stranded acc. to HD 383

Insulation: Polyetilene 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: Polyetilene - PE

Armour: Galvanized Steel Wire Armour

CONSTRUCTION

Outer Sheath: Polyvinyl chloride FR - PVC

Colour Outher Sheath: Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

STANDARD REFERENCES

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

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

CABLE PRINTING

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

ON REQUEST

- Low Smoke Zero Halogen ATEX
- 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

- 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

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.

NICCO CODE	FORMATION (mm²)	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

PAS 5308-2:2009

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

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 Outher Sheath: Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type
- 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

CABLE PRINTING

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

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 ATEX
- High Performance Polyvinyl chloride - Hi-PVC
- Oil Resistant Sheath
- Personalized Colour Code
- UV Resistant

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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

PAS 5308-2:2009 PART 2 TYPE 1

PVC/CAM/PVC

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
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

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.

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 Outher Sheath: Blue (IS), Black (NIS)

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

STANDARD REFERENCES

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

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

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

ON REQUEST

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

ELECTRICAL

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

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.

NICCO CODE	FORMATION (mm²)	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

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

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 Outher Sheath: Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type
- 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

CABLE PRINTING

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

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

STANDARD REFERENCES

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

CABLE PRINTING

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

ON REQUEST

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

ELECTRICAL

- 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

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.

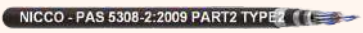
NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150AEAAX-OIL	1x2x0,50	10,2	200	37,5
MAS0250AEAAX-OIL	2x2x0,50	12,2	271	37,5
MAS0450AEAAX-OIL	4x2x0,50	13,6	348	37,5
MAS0650AEAAX-OIL	6x2x0,50	15,5	439	37,5
MAS0850AEAAX-OIL	8x2x0,50	17,2	537	37,5
MAS1050AEAAX-OIL	10x2x0,50	20	733	37,5

PAS 5308-2:2009 PART 2 TYPE 2

PVC/CAM/PVC/SWA/PVC

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS1650AEAAX-OIL	16x2x0,50	22	914	37,5
MAS2450AEAAX-OIL	24x2x0,50	27,7	1424	37,5
MAS0175AEAAX-OIL	1x2x0,75	10,5	214	25.5
MAS0275AEAAX-OIL	2x2x0,75	13	305	25.5
MAS0475AEAAX-OIL	4x2x0,75	14,3	388	25.5
MAS0675AEAAX-OIL	6x2x0,75	17	525	25.5
MAS0875AEAAX-OIL	8x2x0,75	18,2	607	25.5
MAS1075AEAAX-OIL	10x2x0,75	21,1	825	25.5
MAS1275AEAAX-OIL	12x2x0,75	21,6	891	25.5
MAS1675AEAAX-OIL	16x2x0,75	23,7	1073	25.5
MAS2475AEAAX-OIL	24x2x0,75	29,6	1641	25.5
MAS0110AEAAX-OIL	1x2x1,00	11,3	243	18.8
MAS0210AEAAX-OIL	2x2x1,00	14,1	354	18.8
MAS0410AEAAX-OIL	4x2x1,00	16,1	480	18.8
MAS0610AEAAX-OIL	6x2x1,00	18,7	630	18.8
MAS0810AEAAX-OIL	8x2x1,00	21	849	18.8
MAS1010AEAAX-OIL	10x2x1,00	23,8	1025	18.8
MAS1210AEAAX-OIL	12x2x1,00	25,9	1300	18.8
MAS1610AEAAX-OIL	16x2x1,00	28	1519	18.8
MAS2410AEAAX-OIL	24x2x1,00	34,1	2226	18.8
MAS0115AEAAX-OIL	1x2x1,50	11,4	255	12.6
MAS0215AEAAX-OIL	2x2x1,50	14,4	375	12.6
MAS0415AEAAX-OIL	4x2x1,50	16,8	539	12.6
MAS0615AEAAX-OIL	6x2x1,50	20	793	12.6
MAS0815AEAAX-OIL	8x2x1,50	21,4	923	12.6
MAS1015AEAAX-OIL	10x2x1,50	24,2	1118	12.6
MAS1215AEAAX-OIL	12x2x1,50	26,4	1412	12.6
MAS1615AEAAX-OIL	16x2x1,50	28,5	1666	12.6
MAS2415AEAAX-OIL	24x2x1,50	34,7	2445	12.6
MAS0125AEAAX-OIL	1x2x2,50	12,3	298	7.7
MAS0225AEAAX-OIL	2x2x2,50	16,1	471	7.7
MAS0425AEAAX-OIL	4x2x2,50	18,4	669	7.7
MAS0625AEAAX-OIL	6x2x2,50	22	987	7.7
MAS0825AEAAX-OIL	8x2x2,50	24	1196	7.7
MAS1025AEAAX-OIL	10x2x2,50	28,4	1629	7.7
MAS1225AEAAX-OIL	12x2x2,50	29,4	1799	7.7
MAS1625AEAAX-OIL	16x2x2,50	31,8	2152	7.7
MAS2425AEAAX-OIL	24x2x2,50	38,8	3149	7.7

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.

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 Outher Sheath:	Blue (IS), Black (NIS)

IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type
- 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

CABLE PRINTING

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

TEMPERATURE RANGE

During Installation:	-5° C up to +50° C	**Insulation Operation:**	-30° C up to +90°C
Fixed Installation:	-30° C up to +80°C		

ON REQUEST

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

ELECTRICAL

- 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

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.

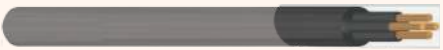
NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250AEAAX-OIL	2x2x0,50	12,7	298	37,5
MAC0450AEAAX-OIL	4x2x0,50	13,9	380	37,5
MAC0650AEAAX-OIL	6x2x0,50	16,1	494	37,5
MAC0850AEAAX-OIL	8x2x0,50	17,7	595	37,5
MAC1050AEAAX-OIL	10x2x0,50	20,5	808	37,5
MAC1250AEAAX-OIL	12x2x0,50	21	873	37,5
MAC1650AEAAX-OIL	16x2x0,50	23	1053	37,5
MAC2450AEAAX-OIL	24x2x0,50	28,5	1595	37,5
MAC0275AEAAX-OIL	2x2x0,75	13,2	323	25.5
MAC0475AEAAX-OIL	4x2x0,75	14,6	419	25.5
MAC0675AEAAX-OIL	6x2x0,75	17,4	571	25.5
MAC0875AEAAX-OIL	8x2x0,75	18,6	665	25.5
MAC1075AEAAX-OIL	10x2x0,75	21,6	901	25.5
MAC1275AEAAX-OIL	12x2x0,75	22,5	1004	25.5
MAC1675AEAAX-OIL	16x2x0,75	24,9	1233	25.5
MAC2475AEAAX-OIL	24x2x0,75	30,4	1812	25.5
MAC0210AEAAX-OIL	2x2x1,00	14,4	374	18.8
MAC0410AEAAX-OIL	4x2x1,00	16,8	535	18.8
MAC0610AEAAX-OIL	6x2x1,00	20	786	18.8
MAC0810AEAAX-OIL	8x2x1,00	21,5	915	18.8
MAC1010AEAAX-OIL	10x2x1,00	24,9	1154	18.8
MAC1210AEAAX-OIL	12x2x1,00	26,5	1400	18.8
MAC1610AEAAX-OIL	16x2x1,00	28,6	1648	18.8

PAS 5308-2:2009 PART 2 TYPE 2
PVC/IAM/CAM/PVC/SWA/PVC

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC2410AEAAX-OIL	24x2x1,00	34,9	2418	18.8
MAC0215AEAAX-OIL	2x2x1,50	14,6	325	12.6
MAC0415AEAAX-OIL	4x2x1,50	17,1	574	12.6
MAC0615AEAAX-OIL	6x2x1,50	20,3	844	12.6
MAC0815AEAAX-OIL	8x2x1,50	21,8	990	12.6
MAC1015AEAAX-OIL	10x2x1,50	26,3	1391	12.6
MAC1215AEAAX-OIL	12x2x1,50	26,9	1512	12.6
MAC1615AEAAX-OIL	16x2x1,50	29,3	1809	12.6
MAC2415AEAAX-OIL	24x2x1,50	35,5	2637	12.6
MAC0215AEAAX-OIL	2x2x,50	16,8	512	7.7
MAC0415AEAAX-OIL	4x2x,50	18,7	704	7.7
MAC0615AEAAX-OIL	6x2x,50	22,8	1065	7.7
MAC0815AEAAX-OIL	8x2x,50	26	1451	7.7
MAC1015AEAAX-OIL	10x2x,50	29,1	1731	7.7
MAC1215AEAAX-OIL	12x2x,50	29,9	1899	7.7
MAC1615AEAAX-OIL	16x2x,50	33,2	2472	7.7
MAC2415AEAAX-OIL	24x2x2,50	39,9	3387	7.7

IEC 60502

IEC 60502-1



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.

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 Outher Sheath: Black

IDENTIFICATION OF CORES

Core: Black Numbered

STANDARD REFERENCES

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

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*

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

CABLE PRINTING

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

ON REQUEST

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

*The higher temperature can be manage on Request.

ELECTRICAL

- 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

IEC 60502-1

PVC/UNSCREENED/PVC

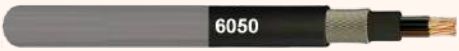
hese cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for indoor applications.

NICCO CODE	FORMATION (mm²)	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

IEC 60502-1
PVC/UNSCREENED/PVC

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
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

IEC 60502-1



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.

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 Outher Sheath: Black

IDENTIFICATION OF CORES

Core: Black Numbered

STANDARD REFERENCES

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

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*

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

ON REQUEST

- Low Smoke Zero Halogen ATEX
- 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

- 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

CABLE PRINTING

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

IEC 60502-1

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.

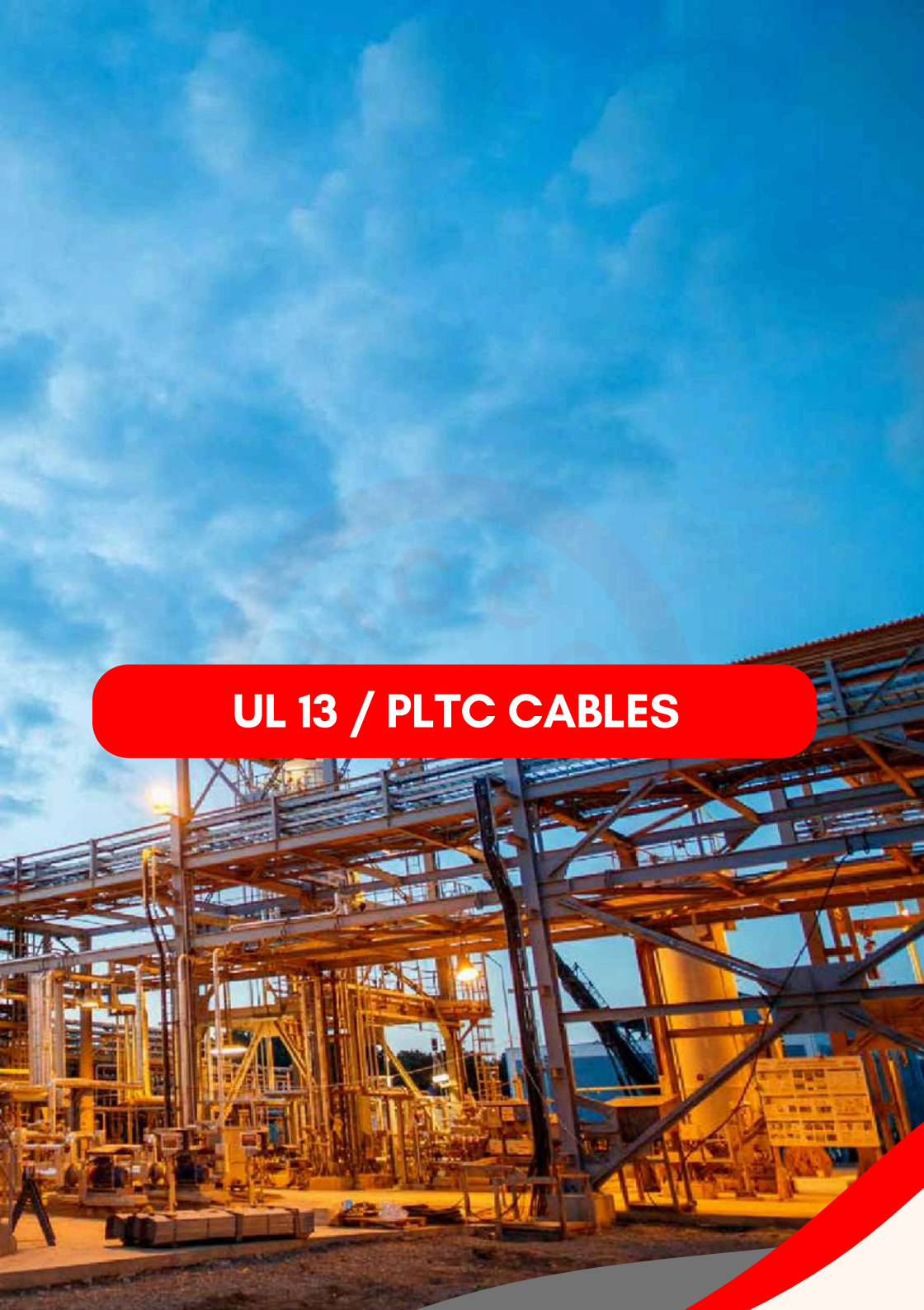
NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SSS0210AEAAD-1000V	2x1	11.0	256	20.3
SSS0310AEAAD-1000V	3x1	11.1	272	20.3
SSS0510AEAAD-1000V	5x1	13.0	363	20.3
SSS0710AEAAD-1000V	7x1	13.8	419	20.3
SSS1210AEAAD-1000V	12x1	17.3	617	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

IEC 60502-1

PVC/UNSCREENED/PVC/SWA/PVC

NICCO CODE	FORMATION (mm^2)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
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

UL 13 / PLTC CABLES



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.

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 Outher Sheath: Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : NEC Class I Div. II
IEC Zone 1 - Group 2

ELECTRICAL

- 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

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

NICCO CODE	FORMATION (mm²)	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

UL 13 - PLTC CABLE

PVC 105°C - INDIVIDUAL AND COLLECTIVE 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

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 Outher Sheath: Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : NEC Class I Div. II
IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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

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.

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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	14 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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	950	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

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.

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
Individual Screen:	0,026 mm Aluminium / PETP tape over copper drain wire
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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

TEMPERATURE RANGE

During Installation:	-5° C up to +50° C
Fixed Installation:	-40° C up to +105°C
Insulation Operation:	-40° C up to +105°C

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	14 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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
MAC2406AEACN-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

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. Suitable for direct burial applications.

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded
Insulation:	Cross Linked Polyetilene - 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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

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

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.

NICCO CODE	FORMATION (mm²)	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

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. Suitable for direct burial applications.

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded
Insulation:	Cross Linked Polyetilene - 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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

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

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.

NICCO CODE	FORMATION (mm²)	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

UL 13 - PLTC CABLE

XLPE - INDIVIDUAL AND COLLECTIVE 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.

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
Outer Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Colour Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

• 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

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.

NICCO CODE	FORMATION (mm²)	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
MAC0203HEEXN-UL13	2x2x16AWG	13,8	232	13.7
MAC0403HEEXN-UL13	4x2x16AWG	15,4	327	13.7
MAC0603HEEXN-UL13	6x2x16AWG	17,6	431	13.7
MAC0803HEEXN-UL13	8x2x16AWG	19,1	523	13.7
MAC1003HEEXN-UL13	10x2x16AWG	21,5	630	13.7
MAC1203HEEXN-UL13	12x2x16AWG	22,1	710	13.7
MAC1603HEEXN-UL13	16x2x16AWG	24,2	883	13.7
MAC2003HEEXN-UL13	20x2x16AWG	27,3	1098	13.7
MAC2403HEEXN-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

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.

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded
Insulation:	Cross Linked Polyetilene - 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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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
MAS1205AEACN-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

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.

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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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

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.

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 Outher Sheath: Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius : 14 x cable diameter

Hazardous Area Classification : NEC Class I Div. II
IEC Zone 1 - Group 2

ELECTRICAL

- 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

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

NICCO CODE	FORMATION (mm²)	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

UL 13 - PLTC CABLE

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.

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 Outher Sheath: Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius : 14 x cable diameter

Hazardous Area Classification : NEC Class I Div. II
IEC Zone 1 - Group 2

ELECTRICAL

- 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

UL 13 - PLTC CABLE

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.

NICCO CODE	FORMATION (mm²)	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

UL 13 - PLTC CABLE

NICCO - UL 13 PLTC - Silicon Rubber 

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.

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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	14 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

UL 13 - PLTC CABLE

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.

NICCO CODE	FORMATION (mm²)	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

UL 13 - PLTC CABLE

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.

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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	14 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

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

UL 13 - PLTC CABLE

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.

NICCO CODE	FORMATION (mm²)	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

UL 13 - PLTC CABLE

NICCO - UL 13 PLTC - Mica Tape + XLPE 

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.

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded
Insulation:	Mica Tape + Cross Liked Polyetilene - 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 Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	14 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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

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.

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded
Insulation:	Mica Tape + Cross Liked 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
Outer Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Colour Outher Sheath:	Black

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	14 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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

UL 13 - PLTC CABLE

NICCO - UL 13 PLTC - Mica Tape + XLPE 

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.

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded
Insulation:	Mica Tape + Cross Liked 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
Outer Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Colour Outher Sheath:	Black
Inner Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Armour:	Galvanized Steel Wires Amour

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	14 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (nm²)	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	39,2	2458	8.6
MAS1601AEEON-UL13	16x2x14AWG	41,2	2871	8.6
MAS2401AEEON-UL13	24x2x14AWG	49,6	3900	8.6
MAS0152AEEON-UL13	1x2x12AWG	18,4	339	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

UL 13 - PLTC CABLE NICCO - UL 13 PLTC - Mica Tape + XLPE

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.

CONSTRUCTION

Formation:	Plain annealed copper wire, Stranded
Insulation:	Mica Tape + Cross Liked 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
Outer Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Colour Outher Sheath:	Black
Inner Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Armour:	Galvanized Steel Wires Amour

IDENTIFICATION OF CORES

Pair: ● ○

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

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

CABLE PRINTING

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

CHARACTERISTICS

Min. Bending Radius :	14 x cable diameter
Hazardous Area Classification :	NEC Class I Div. II IEC Zone 1 - Group 2

ELECTRICAL

- 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

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.

NICCO 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

NF M 87-202

NF M 87-202 EGSF

NICCO - NF M 87-202 EGSF

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.

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 Outher Sheath: Blue

IDENTIFICATION OF CORES

Pair:

Triad:

Quad:

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

TEMPERATURE RANGE

During Installation: -5° C up to +50° C

Fixed Installation: -30° C up to +75°C

Insulation Operation: -30° C up to +90°C

CABLE

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2

Oil Resistant, Hydrocarbon Resistant

ELECTRICAL

- 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

NF M 87-202 EGSF

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.

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108HDPAK-EGSF	1x2x0,50	4,8	32	37.5
SAM3708HDPAX-EGSF	1x3x0,50	5,0	40	37.5
SAM0208HDPAK-EGSF	2x2x0,50	6,4	53	37.5
SAM3808HDPAX-EGSF	2x3x0,50	7,4	71	37.5
SAM0308HDPAK-EGSF	3x2x0,50	6,8	69	37.5
SAM3108HDPAX-EGSF	3x3x0,50	7,8	94	37.5
SAM0708HDPAK-EGSF	7x2x0,50	8,7	132	37.5
SAM7108HDPAX-EGSF	7x3x0,50	10,2	188	37.5
SAM1208HDPAK-EGSF	12x2x0,50	11,4	214	37.5
SAM3308HDPAX-EGSF	12x3x0,50	13,5	307	37.5
SAM1908HDPAK-EGSF	19x2x0,50	13,3	320	37.5
SAM7408HDPAX-EGSF	19x3x0,50	16,3	479	37.5
SAM2708HDPAK-EGSF	27x2x0,50	16,4	458	37.5
SAM8108HDPAX-EGSF	27x3x0,50	19,9	682	37.5
MAS0108HDPAK-EGSF	1x2x0,88	5,7	46	22.3
MAS3708HDPAX-EGSF	1x3x0,88	6,0	59	22.3
MAS0208HDPAK-EGSF	2x2x0,88	7,8	78	22.3
MAS3808HDPAX-EGSF	2x3x0,88	9,1	107	22.3
MAS0308HDPAK-EGSF	3x2x0,88	8,3	103	22.3
MAS3108HDPAX-EGSF	3x3x0,88	9,7	144	22.3
MAS0708HDPAK-EGSF	7x2x0,88	10,8	208	22.3
MAS7108HDPAX-EGSF	7x3x0,88	12,8	298	22.3
MAS1208HDPAK-EGSF	12x2x0,88	14,7	354	22.3
MAS3308HDPAX-EGSF	12x3x0,88	17,4	509	22.3
MAS1908HDPAK-EGSF	19x2x0,88	17,2	532	22.3
MAS7408HDPAX-EGSF	19x3x0,88	20,9	792	22.3
MAS2708HDPAK-EGSF	27x2x0,88	21,1	758	22.3
MAS8108HDPAX-EGSF	27x3x0,88	25,6	1124	22.3
MAS0115HDPAK-EGSF	1x2x1,50	6,4	62	12.6
MAS3715HDPAX-EGSF	1x3x1,50	6,7	82	12.6
MAS0215HDPAK-EGSF	2x2x1,50	8,8	108	12.6
MAS3815HDPAX-EGSF	2x3x1,50	10,4	152	12.6
MAS0315HDPAK-EGSF	3x2x1,50	9,4	148	12.6
MAS3115HDPAX-EGSF	3x3x1,50	11,0	210	12.6
MAS0715HDPAK-EGSF	7x2x1,50	12,4	307	12.6
MAS7115HDPAX-EGSF	7x3x1,50	15,1	460	12.6
MAS1215HDPAK-EGSF	12x2x1,50	16,9	524	12.6
MAS3315HDPAX-EGSF	12x3x1,50	20,4	781	12.6
MAS1915HDPAK-EGSF	19x2x1,50	20,2	816	12.6
MAS7415HDPAX-EGSF	19x3x1,50	24,5	1212	12.6
MAS2715HDPAK-EGSF	27x2x1,50	24,7	1159	12.6
MAS8115HDPAX-EGSF	27x3x1,50	29,4	1689	12.6

NF M87-202 EISF

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.

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 Outher Sheath: Blue

IDENTIFICATION OF CORES

Pair: Triad:
Quad:

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

TEMPERATURE RANGE

During Installation: -5° C up to +50° C
Fixed Installation: -30° C up to +75°C
Insulation Operation: -30° C up to +90°C

CABLE

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter
Hazardous Area Classification : IEC Zone 1 - Group 2
Oil Resistant, Hydrocarbon Resistant

ELECTRICAL

- 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

NF M87-202 EISF

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.

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108HDPAK-EISF	1x2x0,50	5,7	47	37.5
SAM3708HDPAX-EISF	1x3x0,50	6,0	55	37.5
SAM0208HDPAK-EISF	2x2x0,50	9,7	87	37.5
SAM3808HDPAX-EISF	2x3x0,50	10,2	104	37.5
SAM0308HDPAK-EISF	3x2x0,50	10,3	114	37.5
SAM3108HDPAX-EISF	3x3x0,50	10,8	139	37.5
SAM0708HDPAK-EISF	7x2x0,50	14,1	240	37.5
SAM7108HDPAX-EISF	7x3x0,50	14,8	295	37.5
SAM1208HDPAK-EISF	12x2x0,50	19,1	404	37.5
SAM3308HDPAX-EISF	12x3x0,50	20,0	499	37.5
SAM1908HDPAK-EISF	19x2x0,50	22,8	618	37.5
SAM7408HDPAX-EISF	19x3x0,50	24,0	767	37.5
SAM2708HDPAK-EISF	27x2x0,50	27,4	846	37.5
SAM8108HDPAX-EISF	27x3x0,50	28,8	1057	37.5
MAS0108HDPAK-EISF	1x2x0,88	6,6	63	22.3
MAS3708HDPAX-EISF	1x3x0,88	6,9	76	22.3
MAS0208HDPAK-EISF	2x2x0,88	11,5	119	22.3
MAS3808HDPAX-EISF	2x3x0,88	12,1	146	22.3
MAS0308HDPAK-EISF	3x2x0,88	12,3	156	22.3
MAS3108HDPAX-EISF	3x3x0,88	12,9	198	22.3
MAS0708HDPAK-EISF	7x2x0,88	16,8	337	22.3
MAS7108HDPAX-EISF	7x3x0,88	17,7	428	22.3
MAS1208HDPAK-EISF	12x2x0,88	23,3	591	22.3
MAS3308HDPAX-EISF	12x3x0,88	24,5	749	22.3
MAS1908HDPAK-EISF	19x2x0,88	27,4	875	22.3
MAS7408HDPAX-EISF	19x3x0,88	28,9	1121	22.3
MAS2708HDPAK-EISF	27x2x0,88	33	1207	22.3
MAS8108HDPAX-EISF	27x3x0,88	34,9	1553	22.3
MAS0115HDPAK-EISF	1x2x1,50	7,3	80	12.6
MAS3715HDPAX-EISF	1x3x1,50	7,7	101	12.6
MAS0215HDPAK-EISF	2x2x1,50	12,9	153	12.6
MAS3815HDPAX-EISF	2x3x1,50	13,6	196	12.6
MAS0315HDPAK-EISF	3x2x1,50	14,1	221	12.6
MAS3115HDPAX-EISF	3x3x1,50	14,9	284	12.6
MAS0715HDPAK-EISF	7x2x1,50	19,2	467	12.6
MAS7115HDPAX-EISF	7x3x1,50	20,3	612	12.6
MAS1215HDPAK-EISF	12x2x1,50	26	785	12.6
MAS3315HDPAX-EISF	12x3x1,50	27,5	1033	12.6
MAS1915HDPAK-EISF	19x2x1,50	30,7	1175	12.6
MAS7415HDPAX-EISF	19x3x1,50	32,5	1563	12.6
MAS2715HDPAK-EISF	27x2x1,50	37,1	1628	12.6
MAS8115HDPAX-EISF	27x3x1,50	39,3	2177	12.6

NF M87-202 EGFA

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.

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
Inner Sheath:	Polyvinyl chloride - PVC acc. to NF C 32-020
Armour:	Double Steel Tape Armour
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 Outher Sheath:	Blue

IDENTIFICATION OF CORES

Pair: Triad:

Quad:

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

TEMPERATURE RANGE

During Installation:	-5° C up to +50° C
Fixed Installation:	-30° C up to +75°C
Insulation Operation:	-30° C up to +90°C

CABLE

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	IEC Zone 1 - Group 2

Oil Resistant, Hydrocarbon Resistant

ELECTRICAL

• 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

NF M87-202 EGFA

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.

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TDPAK-EGFA	1x2x0,50	8,0	128	37.5
SAM3708TDPAX-EGFA	1x3x0,50	8,2	138	37.5
SAM0208TDPAK-EGFA	2x2x0,50	9,6	165	37.5
SAM3808TDPAX-EGFA	2x3x0,50	10,6	194	37.5
SAM0308TDPAK-EGFA	3x2x0,50	9,9	184	37.5
SAM3108TDPAX-EGFA	3x3x0,50	11,0	221	37.5
SAM0708TDPAK-EGFA	7x2x0,50	11,9	280	37.5
SAM7108TDPAX-EGFA	7x3x0,50	13,4	352	37.5
SAM1208TDPAK-EGFA	12x2x0,50	14,6	390	37.5
SAM3308TDPAX-EGFA	12x3x0,50	17,1	523	37.5
SAM1908TDPAK-EGFA	19x2x0,50	16,9	534	37.5
SAM7408TDPAX-EGFA	19x3x0,50	19,8	731	37.5
SAM2708TDPAK-EGFA	27x2x0,50	20,0	713	37.5
SAM8108TDPAX-EGFA	27x3x0,50	23,5	983	37.5
MAS0108TDPAK-EGFA	1x2x0,88	8,9	150	22.3
MAS3708TDPAX-EGFA	1x3x0,88	9,2	166	22.3
MAS0208TDPAK-EGFA	2x2x0,88	11,0	204	22.3
MAS3808TDPAX-EGFA	2x3x0,88	12,3	258	22.3
MAS0308TDPAK-EGFA	3x2x0,88	11,5	246	22.3
MAS3108TDPAX-EGFA	3x3x0,88	12,9	302	22.3
MAS0708TDPAK-EGFA	7x2x0,88	14	378	22.3
MAS7108TDPAX-EGFA	7x3x0,88	16,4	506	22.3
MAS1208TDPAK-EGFA	12x2x0,88	18,3	587	22.3
MAS3308TDPAX-EGFA	12x3x0,88	21,0	777	22.3
MAS1908TDPAK-EGFA	19x2x0,88	20,8	797	22.3
MAS7408TDPAX-EGFA	19x3x0,88	24,5	1114	22.3
MAS2708TDPAK-EGFA	27x2x0,88	24,7	1082	22.3
MAS8108TDPAX-EGFA	27x3x0,88	29,5	1537	22.3
MAS0115TDPAK-EGFA	1x2x1,50	9,5	173	12.6
MAS3715TDPAX-EGFA	1x3x1,50	9,9	197	12.6
MAS0215TDPAK-EGFA	2x2x1,50	12	258	12.6
MAS3815TDPAX-EGFA	2x3x1,50	13,5	317	12.6
MAS0315TDPAK-EGFA	3x2x1,50	12,6	302	12.6
MAS3115TDPAX-EGFA	3x3x1,50	14,2	382	12.6
MAS0715TDPAK-EGFA	7x2x1,50	15,9	510	12.6
MAS7115TDPAX-EGFA	7x3x1,50	18,6	697	12.6
MAS1215TDPAK-EGFA	12x2x1,50	20,4	784	12.6
MAS3315TDPAX-EGFA	12x3x1,50	24,0	1097	12.6
MAS1915TDPAK-EGFA	19x2x1,50	23,8	1129	12.6
MAS7415TDPAX-EGFA	19x3x1,50	28,4	1609	12.6
MAS2715TDPAK-EGFA	27x2x1,50	28,7	1560	12.6
MAS8115TDPAX-EGFA	27x3x1,50	33,4	2164	12.6

NF M87-202 EIFA

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.

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
Inner Sheath:	Polyvinyl chloride - PVC acc. to NF C 32-020
Armour:	Double Steel Tape Armour
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 Outher Sheath:	Blue

IDENTIFICATION OF CORES

Pair: Triad:

Quad:

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

TEMPERATURE RANGE

During Installation:	-5° C up to +50° C
Fixed Installation:	-30° C up to +75°C
Insulation Operation:	-30° C up to +90°C

CABLE

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	IEC Zone 1 - Group 2

Oil Resistant, Hydrocarbon Resistant

ELECTRICAL

• 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

NF M87-202 EIFA

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.

NICCO CODE	FORMATION (mm^2)	OVERALL DIAMETER (nm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAI0108TDPAK-EIFA	1x2x0.50	8,9	153	37.5
SAI3708TDPAX-EIFA	1x3x0.50	9,2	164	37.5
SAI0208TDPAK-EIFA	2x2x0.50	12,9	247	37.5
SAI3808TDPAX-EIFA	2x3x0.50	13,4	270	37.5
SAI0308TDPAK-EIFA	3x2x0.50	13,5	282	37.5
SAI3108TDPAX-EIFA	3x3x0.50	14,0	312	37.5
SAI0708TDPAK-EIFA	7x2x0.50	17,7	470	37.5
SAI7108TDPAX-EIFA	7x3x0.50	18,4	535	37.5
SAI1208TDPAK-EIFA	12x2x0.50	22,7	705	37.5
SAI3308TDPAX-EIFA	12x3x0.50	23,6	820	37.5
SAI1908TDPAK-EIFA	19x2x0.50	26,4	982	37.5
SAI7408TDPAX-EIFA	19x3x0.50	27,6	1147	37.5
SAI2708TDPAK-EIFA	27x2x0.50	31,4	1307	37.5
SAI8108TDPAX-EIFA	27x3x0.50	32,8	1546	37.5
MAS0108TDPAK-EIFA	1x2x0.88	9,8	179	22.3
MAS3708TDPAX-EIFA	1x3x0.88	10,1	195	22.3
MAS0208TDPAK-EIFA	2x2x0.88	14,7	299	22.3
MAS3808TDPAX-EIFA	2x3x0.88	15,3	333	22.3
MAS0308TDPAK-EIFA	3x2x0.88	15,9	363	22.3
MAS3108TDPAX-EIFA	3x3x0.88	16,5	411	22.3
MAS0708TDPAK-EIFA	7x2x0.88	20,4	603	22.3
MAS7108TDPAX-EIFA	7x3x0.88	21,3	707	22.3
MAS1208TDPAK-EIFA	12x2x0.88	26,9	958	22.3
MAS3308TDPAX-EIFA	12x3x0.88	28,5	1160	22.3
MAS1908TDPAK-EIFA	19x2x0.88	31,4	1333	22.3
MAS7408TDPAX-EIFA	19x3x0.88	32,9	1608	22.3
MAS2708TDPAK-EIFA	27x2x0.88	37,0	1760	22.3
MAS8108TDPAX-EIFA	27x3x0.88	38,9	2135	22.3
MAS0115TDPAK-EIFA	1x2x1.50	10,5	203	12.6
MAS3715TDPAX-EIFA	1x3x1.50	10,9	228	12.6
MAS0215TDPAK-EIFA	2x2x1.50	16,5	364	12.6
MAS3815TDPAX-EIFA	2x3x1.50	17,2	416	12.6
MAS0315TDPAK-EIFA	3x2x1.50	17,7	450	12.6
MAS3115TDPAX-EIFA	3x3x1.50	18,5	523	12.6
MAS0715TDPAK-EIFA	7x2x1.50	22,8	768	12.6
MAS7115TDPAX-EIFA	7x3x1.50	23,9	934	12.6
MAS1215TDPAK-EIFA	12x2x1.50	30	1219	12.6
MAS3315TDPAX-EIFA	12x3x1.50	31,6	1489	12.6
MAS1915TDPAK-EIFA	19x2x1.50	34,7	1690	12.6
MAS7415TDPAX-EIFA	19x3x1.50	36,5	2104	12.6
MAS2715TDPAK-EIFA	27x2x1.50	41,1	2245	12.6
MAS8115TDPAX-EIFA	27x3x1.50	43,3	2827	12.6

NF M87-202 CR1-C1

NF M87-202 EGSF - CR1-C1

NICCO - NF M 87-202 CR1-C1 EGSF

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.

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 Outher Sheath: Orange

IDENTIFICATION OF CORES

Pair:
Triad:
Quad:

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

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

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter
Hazardous Area Classification : IEC Zone 1 - Group 2
Oil Resistant, Hydrocarbon Resistant

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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

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.

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 Outher Sheath: Orange

IDENTIFICATION OF CORES

Pair:

Triad: Quad:

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

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

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

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter
Hazardous Area Classification : IEC Zone 1 - Group 2
Oil Resistant, Hydrocarbon Resistant

ELECTRICAL

- 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

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.

NICCO CODE	FORMATION (mm²)	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

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.

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
Inner Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Collective Screen:	0,026 mm Aluminium / PETP tape over copper drain wire
Armour:	Double Steel Tape Armour
Outer Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Colour Outher Sheath:	Orange

IDENTIFICATION OF CORES

Pair: ● ○

Triad: ● ○ ● Quad: ● ○ ● ●

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

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

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	IEC Zone 1 - Group 2
Oil Resistant, Hydrocarbon Resistant	

ELECTRICAL

• 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

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.

NICCO CODE	FORMATION (mm²)	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

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.

CONSTRUCTION

Formation:	Plain annealed copper wire, Solid or Stranded 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
Inner Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Collective Screen:	0,026 mm Aluminium / PETP tape over copper drain wire
Armour:	Double Steel Tape Armour
Outer Sheath:	Thermoplastic Low Smoke, Halogen Free - LSZH
Colour Outher Sheath:	Orange

IDENTIFICATION OF CORES

Pair: Triad: Quad:

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

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

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

CHARACTERISTICS

Min. Bending Radius :	8 x cable diameter
Hazardous Area Classification :	IEC Zone 1 - Group 2
Oil Resistant, Hydrocarbon Resistant	

ELECTRICAL

• 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

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.

NICCO CODE	FORMATION (mm²)	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

HI-TEMPERATURE CABLES

FLORORAM & SILORAM

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

CONSTRUCTION

Formation: Tinned Copper Conductor, Stranded Nickel-Plated Copper

Collective Screen: Tinned Copper Wire Braid (90% Coverage)

Outer Sheath: FEP, MFA, PFA, EFTE or Special Mix Silicon Rubber

Colour Outher Sheath: Black

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

IDENTIFICATION OF CORES

Pair:

STANDARD REFERENCES

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

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

Nikel-Plated Copper Conductor: -30° C up to +260°C

CABLE PRINTING

On Request

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2
NEC Class I Div. II

ELECTRICAL

- 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

HI-TEMPERATURE CABLES
FLORORAM & SILORAM

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

NICCO CODE	FORMATION (mm²)	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

NICCO CODE	FORMATION (mm²)	OVERALL DIAMETER (mm)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
STS0226HEVVX-HT	2x0.25	4.6	66.30
STS0426HEVVX-HT	4x0.25	5.3	66.30
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

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

CONSTRUCTION

Formation: Tinned Copper Conductor, Stranded Nickel-Plated Copper

Collective Screen: Tinned Copper Wire Braid (90% Coverage)

Outer Sheath: FEP, MFA, PFA, EFTE or Special Mix Silicon Rubber

Colour Outher Sheath: Black

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

Inner Sheath: EP, MFA, PFA, EFTE or Special Mix Silicon Rubber

Armour: Galvanized Steel Wire Braid

IDENTIFICATION OF CORES

Pair:

STANDARD REFERENCES

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

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

Nikel-Plated Copper Conductor: -30° C up to +260°C

CABLE PRINTING

On Request

CHARACTERISTICS

Min. Bending Radius : 8 x cable diameter

Hazardous Area Classification : IEC Zone 1 - Group 2
NEC Class I Div. II

ELECTRICAL

- 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

HI-TEMPERATURE CABLES
FLORORAM & SILORAM

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

NICCO CODE	FORMATION (mm²)	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

NICCO CODE	FORMATION (mm²)	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

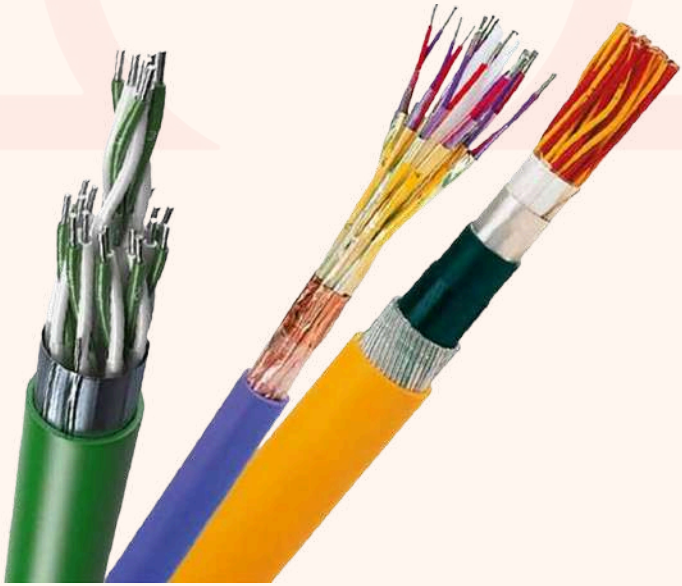
Criteria for the choice of type, design or size of conductor are:

- 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



THERMOCOUPLE CABLES

THERMOSENSITIVE APPLICATIONS

These cables are use for connections of different types of thermocouple cables in control process 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

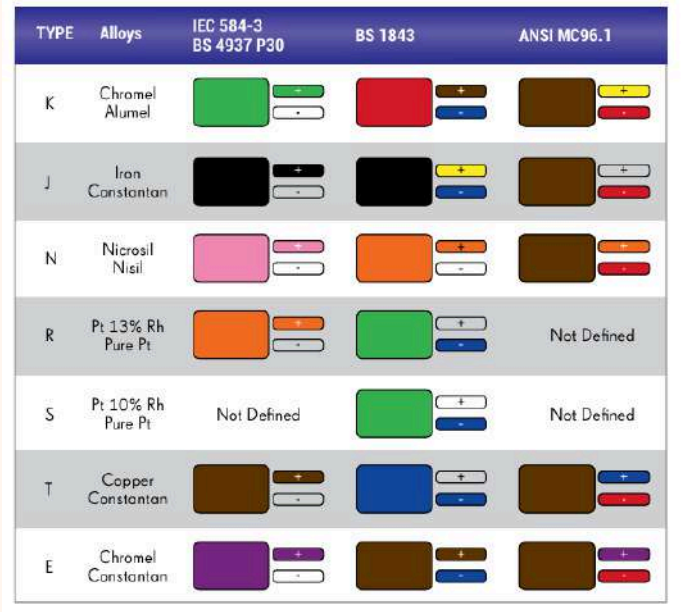
Outer Sheath: XLPE, PVC, PE, EFTE, FEP, MFA, PFA and PTFE

Colour Outher Sheath: On Request

STANDARD REFERENCES

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

TYPE OF THERMOCOUPLE



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

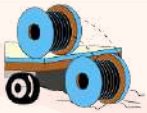
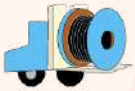
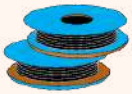
Inspect every cable reel for damage before accepting the shipment. Be particularly alert for cable damage if:

- 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. ABLE 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
 When off loading reels from a truck, lower reels carefully using a hydraulic gate, hoist or forklift truck.	 Never drop reels. If reels must be rolled, roll in opposite direction of the cable wraps to keep cable from loosening on the reel.
 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 dur-ing the time in storage.	 Do not allow the lift forks to contact the ca - ble. Care must be taken by the fork lift op erator not to make sudden turns or stops.
 Cable reels should be stored on hard sur faces resting on the flanges edge (flanges vertical). Align reels flange to flange and, if possible, arrange so that first in is first out.	 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.
 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.	 This may lead to the bending of the reel flanges and mashing the cable.

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 careshould 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: 15xD
Multicore : 12 x D
Where D= Diameter of cable in mm

F. RECOMMENDED SAFE PULLING FORCE WITH STOCKINGS:

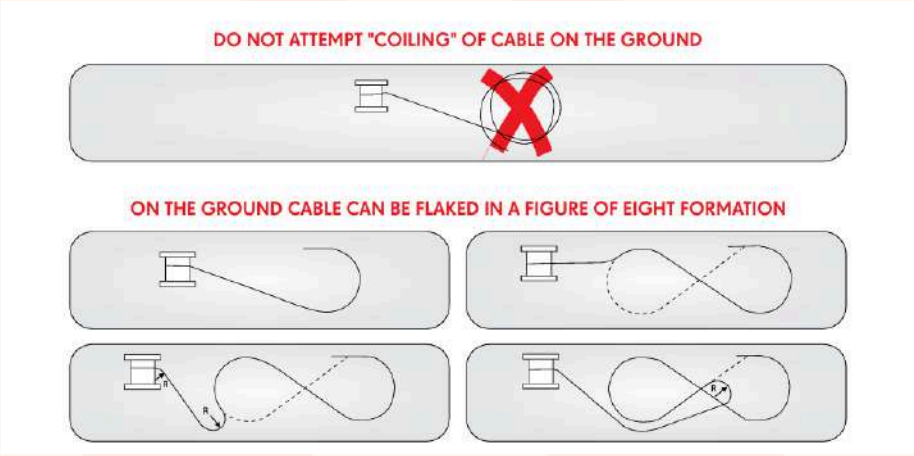
a) For Unarmoured Cable : P=5 D
Where P= Pulling Force 2 2
b) For Armoured Cable : P=9 D
Where D= Diameter of cable inmm

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.



Note: R Minimum Permissible bending radius of cable.

QD 06/01

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

EXISTING CERTIFICATIONS

ISO 9001 / 14001 / 45001

Directorate of Quality Assurance (Navy) [DQAN] Registration Certificate

Defense Research and Development Laboratory (DRDL) Registration Certificate

Integrated Headquarters of Ministry of Defence (IHQ/DEE/MOD)

Research Designs and Standards Organization (RDSO)

American Bureau of Shipping (ABS)

Indian Register of Shipping (IRS)

Underwriters Laboratories (UL)

Central Power Research Institute (CPRI)

Bureau of Indian Standards (BIS)

International Railway Industry Standard (IRIS)

National Accreditation Board for Testing and Calibration Laboratories (NABL)

Det Norske Veritas (DNV)

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