



# INSTRUMENTATION CABLE



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# 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:**

Polyethylene FR - PE acc. to BS 6234

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Outer Sheath:**

Polyvinyl chloride FR - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

### IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

### ON REQUEST

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

### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150HEADX-OIL	1x2x0,50	5,6	40	37,5
MAS0250HEADX-OIL	2x2x0,50	8,2	70	37,5
MAS0450HEADX-OIL	4x2x0,50	9,5	107	37,5
MAS0650HEADX-OIL	6x2x0,50	11,9	164	37,5
MAS0850HEADX-OIL	8x2x0,50	13,1	202	37,5
MAS1050HEADX-OIL	10x2x0,50	16,1	245	37,5
MAS1250HEADX-OIL	12x2x0,50	15,6	278	37,5
MAS1650HEADX-OIL	16x2x0,50	17,4	356	37,5
MAS2450HEADX-OIL	24x2x0,50	22,1	542	37,5
MAS0175HEADX-OIL	1x2x0,75	5,9	47	25,5
MAS0275HEADX-OIL	2x2x0,75	8,8	83	25,5
MAS0475HEADX-OIL	4x2x0,75	10,2	130	25,5
MAS0675HEADX-OIL	6x2x0,75	12,8	200	25,5
MAS0875HEADX-OIL	8x2x0,75	14,1	248	25,5
MAS1075HEADX-OIL	10x2x0,75	16,2	302	25,5
MAS1275HEADX-OIL	12x2x0,75	17	354	25,5
MAS1675HEADX-OIL	16x2x0,75	19,4	477	25,5
MAS2475HEADX-OIL	24x2x0,75	23,9	676	25,5
MAS0110HEADX-OIL	1x2x1,00	6,7	58	18,8
MAS0210HEADX-OIL	2x2x1,00	10,1	105	18,8
MAS0410HEADX-OIL	4x2x1,00	12,3	186	18,8
MAS0610HEADX-OIL	6x2x1,00	14,7	257	18,8
MAS0810HEADX-OIL	8x2x1,00	16,2	322	18,8
MAS1010HEADX-OIL	10x2x1,00	19,5	434	18,8
MAS1210HEADX-OIL	12x2x1,00	20,2	495	18,8
MAS1610HEADX-OIL	16x2x1,00	22,4	623	18,8
MAS2410HEADX-OIL	24x2x1,00	27,6	889	18,8
MAS0115HEADX-OIL	1x2x1,50	6,8	67	12,6
MAS0215HEADX-OIL	2x2x1,50	10,3	122	12,6
MAS0415HEADX-OIL	4x2x1,50	12,6	221	12,6
MAS0615HEADX-OIL	6x2x1,50	15	309	12,6
MAS0815HEADX-OIL	8x2x1,50	16,8	399	12,6
MAS1015HEADX-OIL	10x2x1,50	20	520	12,6
MAS1215HEADX-OIL	12x2x1,50	20,6	597	12,6
MAS1615HEADX-OIL	16x2x1,50	22,9	759	12,6
MAS2415HEADX-OIL	24x2x1,50	28,3	1092	12,6
MAS0125HEADX-OIL	1x2x2,50	7,7	90	7,7
MAS0225HEADX-OIL	2x2x2,50	12,3	187	7,7
MAS0425HEADX-OIL	4x2x2,50	14,3	312	7,7
MAS0625HEADX-OIL	6x2x2,50	17,4	451	7,7
MAS0825HEADX-OIL	8x2x2,50	19,8	605	7,7
MAS1025HEADX-OIL	10x2x2,50	22,8	743	7,7
MAS1225HEADX-OIL	12x2x2,50	23,6	861	7,7
MAS1625HEADX-OIL	16x2x2,50	26,2	1106	7,7
MAS2425HEADX-OIL	24x2x2,50	32,8	1622	7,7

# 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:

Polyethylene FR - PE acc. to BS 6234

### Individual Screen:

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

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Outer Sheath:

Polyvinyl chloride FR - PVC

### Colour Outer Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

## ON REQUEST

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

## 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

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

## ELECTRICAL DATA

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





# PAS 5308-1:2009 Part 1 Type 1

## PE/IAM/CAM/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone. Part 1 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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:

Polyethylene FR - PE acc. to BS 6234

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Inner Sheath:

Polyethylene - PE

### Armour:

Galvanized Steel Wire Armour

### Outer Sheath:

Polyvinyl chloride FR - PVC

### Colour Outer Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2

## IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

## ON REQUEST

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

## TEMPERATURE RANGE

### During Installation:

-5° C up to +50° C

### Fixed Installation:

-30° C up to +80° C

### Insulation Operation:

-30° C up to +90° C



## CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT1 TY2 - 1x2x0,5 mm2 - IEC 60332-1 - EN 5075: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

## ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 1000 MOhm\*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V



# PAS 5308-1:2009 Part 1 Type 2

## PE/CAM/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemical industry. The signals can be of analogue, data or voice types and from a variety of transducers such as pressure, proximity or microphone. Part 1 Type 2 cables are designed where a greater degree of mechanical protection is required or where there is direct burial at a suitable depth. Collectively and individually screened pairs are available within the range.

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

# 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:

Polyethylene FR - PE acc. to BS 6234

### Individual Screen:

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

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Inner Sheath:

Polyethylene - PE

### Armour:

Galvanized Steel Wire Armour

### Outer Sheath:

Polyvinyl chloride FR - PVC

### Colour Outer Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## ON REQUEST

- 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

## IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

## 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

RAMCRO - 300/500 V - PAS 5308 - PT1 TY2 - 1x2x0,5 mm<sup>2</sup> - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

## ELECTRICAL DATA

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





# PAS 5308-1:2009 Part 1 Type 2

## PE/IAM/CAM/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemical industry. The signals can be of analogue, data or voice types and from a variety of transducers such as pressure, proximity or microphone. Part 1 Type 2 cables are designed where a greater degree of mechanical protection is required or where there is direct burial at a suitable depth. Collectively and individually screened pairs are available within the range.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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 5308-1:2009 Part 1 Type 3

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

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



## CONSTRUCTION

### Formation:

Plain annealed copper wire, Stranded acc. to HD 383

### Insulation:

Polyethylene FR - PE acc. to BS 6234

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Inner Sheath:

Polyethylene FR - PE

### Chemical Protection:

Lead Cover

### Inner Sheath:

Polyvinyl chloride FR - PVC

### Armour:

Galvanized Steel Wire Armour

### Outer Sheath:

Polyvinyl chloride FR - PVC

### Colour Outer Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## ON REQUEST

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

## IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

## 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

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

## ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm\*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V



# PAS 5308-1:2009 Part 1 Type 3

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

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

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

# PAS 5308-1:2009 Part 1 Type 3

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

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



## CONSTRUCTION

Plain annealed copper wire, Stranded acc. to HD 383

### Insulation:

Polyethylene FR - PE acc. to BS 6234

### Individual Screen:

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

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Inner Sheath:

Polyethylene FR - PE

### Chemical Protection:

Lead Cover

### Inner Sheath:

Polyvinyl chloride FR - PVC

### Armour:

Galvanized Steel Wire Armour

### Outer Sheath:

Polyvinyl chloride FR - PVC

### Colour Outer Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

- PAS 5308-1:2009 Part 1 Type 3

- BS EN 60228

- BS 6234

- BS 50363

- IEC 60331-2

- IEC 60332-3-24

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## ON REQUEST

- High Performance Polyvinyl chloride - Hi-PVC

- Oil Resistant Sheath

- Nylon Cover

- UV Resistant

- Fire Resistant Version: Silicon or Mica + XLPE

- SWB or STA armour

## IDENTIFICATION OF CORES

In according to PAS 5308-1:2009

## 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

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

## ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 1000 MOhm\*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V





# PAS 5308-1:2009 Part 1 Type 3

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

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

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



Assessed to ISO 9001:2015  
LPCB Cert. No 568



CERTIFIED MANAGEMENT SYSTEM  
BS OHSAS 18001



CERTIFIED MANAGEMENT SYSTEM  
ISO 14001



# 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.



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## CONSTRUCTION

### Formation:

Plain annealed copper wire, Stranded acc. to HD 383

### Insulation:

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

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Outer Sheath:

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

### Colour Outer Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

## ON REQUEST

- 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



## CABLE PRINTING

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

## ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm\*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V



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**ramcro**  
special cables



# PAS 5308-2:2009 Part 2 Type 1

## PVC/CAM/PVC

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

# 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 Outer Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2

## IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

## ON REQUEST

- 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



## CABLE PRINTING

RAMCRO - 300/500 V - PAS 5308 - PT2 TY1 - 1x2x0,5 mm<sup>2</sup> - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

## ELECTRICAL DATA

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



# PAS 5308-2:2009 Part 2 Type 1

## PVC/IAM/CAM/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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

### Inner Sheath:

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

### Armour:

Galvanized Steel Wire Armour

### Outer Sheath:

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

### Colour Outer Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## ON REQUEST

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

## IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

## TEMPERATURE RANGE

### During Installation:

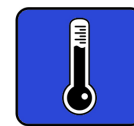
-5° C up to +50° C

### Fixed Installation:

-30° C up to +80° C

### Insulation Operation:

-30° C up to +90° C



## CABLE PRINTING

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

## ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm\*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V



# PAS 5308-2:2009 Part 2 Type 2

## PVC/CAM/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

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



# 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.



EAC

## 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

### Outher Sheath:

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

### Colour Outher Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## ON REQUEST

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

## IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

## 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

RAMCRO - 300/500 V - PAS 5308 - PT2 TY2 - 1x2x0,5 mm<sup>2</sup> - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

## ELECTRICAL DATA

### Insulation Resistance @ 20°C:

> 25 MOhm\*Km

### Test Voltage Core-Core:

2000 V

### Test Voltage Core-Screen:

2000 V

### Mutual Capacitance between conductors:

< 250 nF/km

### Inductance:

< 1 mH/km

### Operating Voltage:

300/500 V



# PAS 5308-2:2009 Part 2 Type 2

## PVC/IAM/CAM/PVC/SWA/PVC

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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
MAC2410AEAAX-OIL	24x2x1,00	34,9	2418	18,8
MAC0215AEAAX-OIL	2x2x1,50	14,6	395	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

# PAS 5308-2:2009 Part 2 Type 3

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

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.



## CONSTRUCTION

### Formation:

Plain annealed copper wire, Stranded acc. to HD 383

### Insulation:

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

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Inner Sheath:

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

### Chemical Protection:

Lead Cover

### Armour:

Galvanized Steel Wire Armour

### Outher Sheath:

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

### Colour Outher Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## ON REQUEST

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

## IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

## 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

RAMCRO - 300/500 V - PAS 5308 - PT2 TY3 - 1x2x0,5 mm<sup>2</sup> - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

## ELECTRICAL DATA

### Insulation Resistance @ 20°C:

> 25 MOhm\*Km

### Test Voltage Core-Core:

2000 V

### Test Voltage Core-Screen:

2000 V

### Mutual Capacitance between conductors:

< 250 nF/km

### Inductance:

< 1 mH/km

### Operating Voltage:

300/500 V



# PAS 5308-2:2009 Part 2 Type 3

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

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

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

# PAS 5308-2:2009 Part 2 Type 3

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

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.



EAC

## CONSTRUCTION

### Formation:

Plain annealed copper wire, Stranded acc. to HD 383

### Insulation:

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

### Individual Screen:

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

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Inner Sheath:

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

### Chemical Protection:

Lead Cover

### Armour:

Galvanized Steel Wire Armour

### Outher Sheath:

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

### Colour Outher Sheath:

Blue (IS), Black (NIS)

## STANDARD REFERENCES

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

## CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2

## ON REQUEST

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

## IDENTIFICATION OF CORES

In according to PAS 5308-2:2009

## 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

RAMCRO - 300/500 V - PAS 5308 - PT2 TY3 - 1x2x0,5 mm<sup>2</sup> - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

## ELECTRICAL DATA

### Insulation Resistance @ 20°C:

> 25 MOhm\*Km

### Test Voltage Core-Core:

2000 V

### Test Voltage Core-Screen:

2000 V

### Mutual Capacitance between conductors:

< 250 nF/km

### Inductance:

< 1 mH/km

### Operating Voltage:

300/500 V





# PAS 5308-2:2009 Part 2 Type 3

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

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including the petrochemical industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity or microphone. Part 2 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250AEAAX-OILLC	2x2x0,50	17,7	862	37,5
MAC0450AEAAX-OILLC	4x2x0,50	19,8	1109	37,5
MAC0650AEAAX-OILLC	6x2x0,50	22,4	1357	37,5
MAC0850AEAAX-OILLC	8x2x0,50	24	1539	37,5
MAC1050AEAAX-OILLC	10x2x0,50	26,8	1890	37,5
MAC1250AEAAX-OILLC	12x2x0,50	27,5	2057	37,5
MAC1650AEAAX-OILLC	16x2x0,50	29,5	2348	37,5
MAC2450AEAAX-OILLC	24x2x0,50	35,7	3360	37,5
MAC0275AEAAX-OILLC	2x2x0,75	18,2	912	25,5
MAC0475AEAAX-OILLC	4x2x0,75	20,9	1208	25,5
MAC0675AEAAX-OILLC	6x2x0,75	23,7	1497	25,5
MAC0875AEAAX-OILLC	8x2x0,75	24,9	1656	25,5
MAC1075AEAAX-OILLC	10x2x0,75	28,1	2115	25,5
MAC1275AEAAX-OILLC	12x2x0,75	29	2265	25,5
MAC1675AEAAX-OILLC	16x2x0,75	31,6	2719	25,5
MAC2475AEAAX-OILLC	24x2x0,75	37,6	3766	25,5
MAC0210AEAAX-OILLC	2x2x1,00	20,3	1123	18,8
MAC0410AEAAX-OILLC	4x2x1,00	23,1	1432	18,8
MAC0610AEAAX-OILLC	6x2x1,00	26,3	1841	18,8
MAC0810AEAAX-OILLC	8x2x1,00	28	2123	18,8
MAC1010AEAAX-OILLC	10x2x1,00	31,6	2635	18,8
MAC1210AEAAX-OILLC	12x2x1,00	33,1	2967	18,8
MAC1610AEAAX-OILLC	16x2x1,00	35,8	3411	18,8
MAC2410AEAAX-OILLC	24x2x1,00	41,5	4525	18,8
MAC0215AEAAX-OILLC	2x2x1,50	20,9	1182	12,6
MAC0415AEAAX-OILLC	4x2x1,50	23,4	1484	12,6
MAC0615AEAAX-OILLC	6x2x1,50	26,6	1915	12,6
MAC0815AEAAX-OILLC	8x2x1,50	28,3	2217	12,6
MAC1015AEAAX-OILLC	10x2x1,50	32,1	2754	12,6
MAC1215AEAAX-OILLC	12x2x1,50	33,5	3106	12,6
MAC1615AEAAX-OILLC	16x2x1,50	36,5	3689	12,6
MAC2415AEAAX-OILLC	24x2x1,50	42,1	4782	12,6
MAC0225AEAAX-OILLC	2x2x,50	23,1	1402	7,7
MAC0425AEAAX-OILLC	4x2x,50	25,9	1837	7,7
MAC0625AEAAX-OILLC	6x2x,50	29,3	2332	7,7
MAC0825AEAAX-OILLC	8x2x,50	31,8	2796	7,7
MAC1025AEAAX-OILLC	10x2x,50	36,3	3590	7,7
MAC1225AEAAX-OILLC	12x2x,50	37,1	3810	7,7
MAC1625AEAAX-OILLC	16x2x,50	40	4494	7,7
MAC2425AEAAX-OILLC	24x2x2,50	47,1	5986	7,7

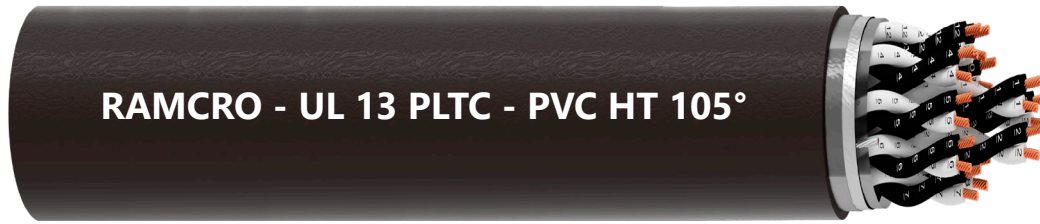


# UL 13

# 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.



E345186



## CONSTRUCTION

### Formation:

Plain annealed copper wire, Stranded

### Insulation:

Hi Temperature Polyvinylchloride - PVC HT 105°C

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Outer Sheath:

Polyvinyl chloride - PVC

### Colour Outer Sheath:

Black

## STANDARD REFERENCES

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

## CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



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

## IDENTIFICATION OF CORES

Pair:



## TEMPERATURE RANGE

### During Installation:

-5° C up to +50° C

### Fixed Installation:

-30° C up to +80° C

### Insulation Operation:

-30° C up to +105° C



## CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 - Shielded - 90°C + BATCH + METER MARKING

## ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm\*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

600 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.

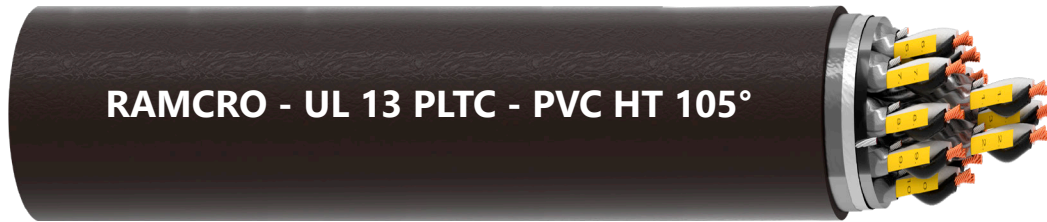
RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0106HEACN-UL13	1x2x20AWG	5,7	44	34,6
MAS0206HEACN-UL13	2x2x20AWG	7,6	71	34,6
MAS0406HEACN-UL13	4x2x20AWG	8,7	110	34,6
MAS0606HEACN-UL13	6x2x20AWG	14,1	273	34,6
MAS0806HEACN-UL13	8x2x20AWG	15,0	321	34,6
MAS1006HEACN-UL13	10x2x20AWG	16,7	380	34,6
MAS1206HEACN-UL13	12x2x20AWG	17,2	419	34,6
MAS1606HEACN-UL13	16x2x20AWG	18,6	506	34,6
MAS2406HEACN-UL13	24x2x20AWG	22,1	690	34,6
MAS0105HEACN-UL13	1x2x18AWG	6,2	55	21,8
MAS0205HEACN-UL13	2x2x18AWG	8,3	90	21,8
MAS0405HEACN-UL13	4x2x18AWG	9,6	143	21,8
MAS0605HEACN-UL13	6x2x18AWG	15,2	333	21,8
MAS0805HEACN-UL13	8x2x18AWG	16,3	397	21,8
MAS1005HEACN-UL13	10x2x18AWG	18,2	473	21,8
MAS1205HEACN-UL13	12x2x18AWG	18,7	528	21,8
MAS1605HEACN-UL13	16x2x18AWG	20,3	646	21,8
MAS2405HEACN-UL13	24x2x18AWG	24,3	895	21,8
MAS0105HEACN-UL13	1x2x16AWG	6,8	69	13,7
MAS0205HEACN-UL13	2x2x16AWG	9,2	116	13,7
MAS0405HEACN-UL13	4x2x16AWG	14,5	319	13,7
MAS0605HEACN-UL13	6x2x16AWG	16,6	419	13,7
MAS0805HEACN-UL13	8x2x16AWG	17,9	507	13,7
MAS1005HEACN-UL13	10x2x16AWG	20,1	610	13,7
MAS1205HEACN-UL13	12x2x16AWG	20,6	687	13,7
MAS1605HEACN-UL13	16x2x16AWG	22,5	853	13,7
MAS2405HEACN-UL13	24x2x16AWG	27,6	1233	13,7
MAS0101HEACN-UL13	1x2x14AWG	8,0	95	8,6
MAS0201HEACN-UL13	2x2x14AWG	14,9	297	8,6
MAS0401HEACN-UL13	4x2x14AWG	16,7	434	8,6
MAS0601HEACN-UL13	6x2x14AWG	19,3	583	8,6
MAS0801HEACN-UL13	8x2x14AWG	20,9	717	8,6
MAS1001HEACN-UL13	10x2x14AWG	23,7	868	8,6
MAS1201HEACN-UL13	12x2x14AWG	24,4	988	8,6
MAS1601HEACN-UL13	16x2x14AWG	27,3	1279	8,6
MAS2401HEACN-UL13	24x2x14AWG	33,0	1810	8,6
MAS0152HEACN-UL13	1x2x12AWG	8,9	128	5,4
MAS0252HEACN-UL13	2x2x12AWG	16,3	374	5,4
MAS0452HEACN-UL13	4x2x12AWG	18,5	569	5,4
MAS0652HEACN-UL13	6x2x12AWG	21,5	779	5,4
MAS0852HEACN-UL13	8x2x12AWG	23,4	971	5,4
MAS1052HEACN-UL13	10x2x12AWG	27,2	1220	5,4
MAS1252HEACN-UL13	12x2x12AWG	28,0	1396	5,4
MAS1652HEACN-UL13	16x2x12AWG	30,8	1768	5,4
MAS2452HEACN-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 Outer Sheath:

Black

## STANDARD REFERENCES

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

## CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



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

## IDENTIFICATION OF CORES

Pair:



## TEMPERATURE RANGE

### During Installation:

-5° C up to +50° C

### Fixed Installation:

-30° C up to +80° C

### Insulation Operation:

-30° C up to +105° C



## CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 - Shielded - 90°C + BATCH + METER MARKING

## ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 V



# UL 13 - PLTC Cable

## PVC 105°C - Individual screened

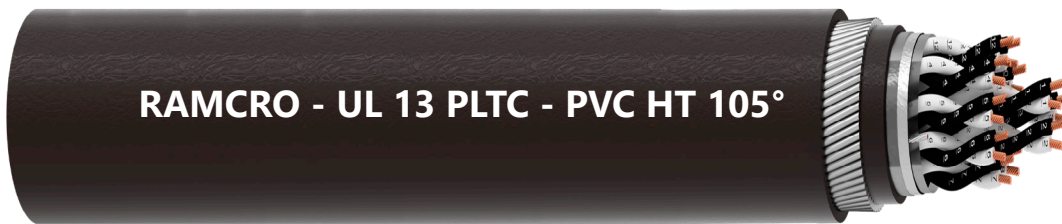
These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0206HEACN-UL13	2x2x20AWG	7,8	80	34,6
MAC0406HEACN-UL13	4x2x20AWG	9,0	126	34,6
MAC0606HEACN-UL13	6x2x20AWG	14,4	301	34,6
MAC0806HEACN-UL13	8x2x20AWG	15,5	356	34,6
MAC1006HEACN-UL13	10x2x20AWG	17,2	424	34,6
MAC1206HEACN-UL13	12x2x20AWG	17,7	471	34,6
MAC1606HEACN-UL13	16x2x20AWG	19,2	574	34,6
MAC2006HEACN-UL13	20x2x20AWG	21,1	683	34,6
MAC2406HEACN-UL13	24x2x20AWG	22,8	790	34,6
MAC0205HEACN-UL13	2x2x18AWG	8,6	100	21,8
MAC0405HEACN-UL13	4x2x18AWG	13,7	280	21,8
MAC0605HEACN-UL13	6x2x18AWG	15,5	364	21,8
MAC0805HEACN-UL13	8x2x18AWG	16,7	438	21,8
MAC1005HEACN-UL13	10x2x18AWG	18,7	524	21,8
MAC1205HEACN-UL13	12x2x18AWG	19,2	587	21,8
MAC1605HEACN-UL13	16x2x18AWG	20,9	725	21,8
MAC2005HEACN-UL13	20x2x18AWG	23,1	868	21,8
MAC2405HEACN-UL13	24x2x18AWG	25,6	1044	21,8
MAC0205HEACN-UL13	2x2x16AWG	9,5	126	13,7
MAC0405HEACN-UL13	4x2x16AWG	14,8	341	13,7
MAC0605HEACN-UL13	6x2x16AWG	16,9	450	13,7
MAC0805HEACN-UL13	8x2x16AWG	18,3	548	13,7
MAC1005HEACN-UL13	10x2x16AWG	20,6	661	13,7
MAC1205HEACN-UL13	12x2x16AWG	21,1	747	13,7
MAC1605HEACN-UL13	16x2x16AWG	23,1	931	13,7
MAC2005HEACN-UL13	20x2x16AWG	26,1	1157	13,7
MAC2405HEACN-UL13	24x2x16AWG	28,4	1350	13,7
MAC0201HEACN-UL13	2x2x14AWG	15,1	310	8,6
MAC0401HEACN-UL13	4x2x14AWG	17	458	8,6
MAC0601HEACN-UL13	6x2x14AWG	19,6	618	8,6
MAC0801HEACN-UL13	8x2x14AWG	21,3	763	8,6
MAC1001HEACN-UL13	10x2x14AWG	24,2	926	8,6
MAC1201HEACN-UL13	12x2x14AWG	24,9	1055	8,6
MAC1601HEACN-UL13	16x2x14AWG	27,9	1368	8,6
MAC2001HEACN-UL13	20x2x14AWG	30,9	1657	8,6
MAC2401HEACN-UL13	24x2x14AWG	33,8	1942	8,6
MAC0252HEACN-UL13	2x2x12AWG	16,6	388	5,4
MAC0452HEACN-UL13	4x2x12AWG	18,8	596	5,4
MAC0652HEACN-UL13	6x2x12AWG	21,9	818	5,4
MAC0852HEACN-UL13	8x2x12AWG	23,8	1022	5,4
MAC1052HEACN-UL13	10x2x12AWG	27,7	1285	5,4
MAC1252HEACN-UL13	12x2x12AWG	28,5	1473	5,4
MAC1652HEACN-UL13	16x2x12AWG	31,4	1868	5,4
MAC2052HEACN-UL13	20x2x12AWG	35,4	2321	5,4
MAC2452HEACN-UL13	24x2x12AWG	38,7	2729	5,4

# UL 13 - PLTC Cable

PVC 105°C - 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

### Collective Screen:

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

### Inner Sheath:

Polyvinyl chloride - PVC

### Armour:

Galvanized Steel Wire Armour

### Outher Sheath:

Polyvinyl chloride - PVC

### Colour Outher Sheath:

Black

## STANDARD REFERENCES

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

## CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

## IDENTIFICATION OF CORES

Pair:



## TEMPERATURE RANGE

### During Installation:

-5° C up to +50° C

### Fixed Installation:

-30° C up to +80° C

### Insulation Operation:

-30° C up to +105° C



## CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 pr 20 - Shielded - 90°C + BATCH + METER MARKING

## ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0106AEACN-UL13	1x2x20AWG	9,3	174	34,6
MAS0206AEACN-UL13	2x2x20AWG	15,2	380	34,6
MAS0406AEACN-UL13	4x2x20AWG	16,3	451	34,6
MAS0606AEACN-UL13	6x2x20AWG	18,4	567	34,6
MAS0806AEACN-UL13	8x2x20AWG	19,4	636	34,6
MAS1006AEACN-UL13	10x2x20AWG	21,0	730	34,6
MAS1206AEACN-UL13	12x2x20AWG	21,5	778	34,6
MAS1606AEACN-UL13	16x2x20AWG	24,1	1041	34,6
MAS2406AEACN-UL13	24x2x20AWG	28,8	1493	34,6
MAS0105AEACN-UL13	1x2x18AWG	13,5	310	21,8
MAS0205AEACN-UL13	2x2x18AWG	15,9	420	21,8
MAS0405AEACN-UL13	4x2x18AWG	17,2	511	21,8
MAS0605AEACN-UL13	6x2x18AWG	19,5	650	21,8
MAS0805AEACN-UL13	8x2x18AWG	20,6	738	21,8
MAS1005AEACN-UL13	10x2x18AWG	23,2	960	21,8
MAS1205AEACN-UL13	12x2x18AWG	24,2	1065	21,8
MAS1605AEACN-UL13	16x2x18AWG	26,4	1265	21,8
MAS2405AEACN-UL13	24x2x18AWG	31,0	1774	21,8
MAS0105AEACN-UL13	1x2x16AWG	14,1	341	13,7
MAS0205AEACN-UL13	2x2x16AWG	16,9	474	13,7
MAS0405AEACN-UL13	4x2x16AWG	18,8	623	13,7
MAS0605AEACN-UL13	6x2x16AWG	20,9	766	13,7
MAS0805AEACN-UL13	8x2x16AWG	22,9	984	13,7
MAS1005AEACN-UL13	10x2x16AWG	26,1	1220	13,7
MAS1205AEACN-UL13	12x2x16AWG	26,7	1313	13,7
MAS1605AEACN-UL13	16x2x16AWG	29,3	1670	13,7
MAS2405AEACN-UL13	24x2x16AWG	34,8	2273	13,7
MAS0101AEACN-UL13	1x2x14AWG	15,6	415	8,6
MAS0201AEACN-UL13	2x2x14AWG	19,2	608	8,6
MAS0401AEACN-UL13	4x2x14AWG	21,0	783	8,6
MAS0601AEACN-UL13	6x2x14AWG	24,8	1135	8,6
MAS0801AEACN-UL13	8x2x14AWG	26,9	1351	8,6
MAS1001AEACN-UL13	10x2x14AWG	30,4	1726	8,6
MAS1201AEACN-UL13	12x2x14AWG	31,1	1870	8,6
MAS1601AEACN-UL13	16x2x14AWG	34,0	2262	8,6
MAS2401AEACN-UL13	24x2x14AWG	41,1	3272	8,6
MAS0152AEACN-UL13	1x2x12AWG	16,5	476	5,4
MAS0252AEACN-UL13	2x2x12AWG	20,7	716	5,4
MAS0452AEACN-UL13	4x2x12AWG	23,5	1063	5,4
MAS0652AEACN-UL13	6x2x12AWG	27,5	1431	5,4
MAS0852AEACN-UL13	8x2x12AWG	30,1	1819	5,4
MAS1052AEACN-UL13	10x2x12AWG	33,9	2199	5,4
MAS1252AEACN-UL13	12x2x12AWG	36,0	2646	5,4
MAS1652AEACN-UL13	16x2x12AWG	38,8	3135	5,4
MAS2452AEACN-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.



RAMCRO - UL 13 PLTC - PVC HT 105°



## CONSTRUCTION

### Formation:

Plain annealed copper wire, Stranded

### Insulation:

Hi Temperature Polyvinylchloride - PVC HT 105°C

### Individual Screen:

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

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Collective Screen:

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

### Inner Sheath:

Polyvinyl chloride - PVC

### Armour:

Galvanized Steel Wire Armour

### Outer Sheath:

Polyvinyl chloride - PVC

### Colour Outer Sheath:

Black

## STANDARD REFERENCES

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

## CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

## IDENTIFICATION OF CORES

Pair:



## TEMPERATURE RANGE

### During Installation:

-5° C up to +50° C

### Fixed Installation:

-30° C up to +80° C

### Insulation Operation:

-30° C up to +105° C



## CABLE PRINTING

RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 1 pr 20 - Shielded - 90°C + BATCH + METER MARKING

## ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0206AEACN-UL13	2x2x20AWG	15,5	396	34,6
MAC0406AEACN-UL13	4x2x20AWG	16,6	477	34,6
MAC0606AEACN-UL13	6x2x20AWG	18,8	604	34,6
MAC0806AEACN-UL13	8x2x20AWG	19,8	681	34,6
MAC1006AEACN-UL13	10x2x20AWG	21,6	786	34,6
MAC1206AEACN-UL13	12x2x20AWG	22,7	944	34,6
MAC1606AEACN-UL13	16x2x20AWG	24,7	1126	34,6
MAC2006AEACN-UL13	20x2x20AWG	27,1	1324	34,6
MAC2406AEACN-UL13	24x2x20AWG	29,6	1620	34,6
MAC0205AEACN-UL13	2x2x18AWG	16,2	438	21,8
MAC0405AEACN-UL13	4x2x18AWG	18,0	568	21,8
MAC0605AEACN-UL13	6x2x18AWG	19,9	690	21,8
MAC0805AEACN-UL13	8x2x18AWG	21,0	789	21,8
MAC1005AEACN-UL13	10x2x18AWG	24,2	1063	21,8
MAC1205AEACN-UL13	12x2x18AWG	24,8	1140	21,8
MAC1605AEACN-UL13	16x2x18AWG	27,0	1362	21,8
MAC2005AEACN-UL13	20x2x18AWG	29,8	1706	21,8
MAC2405AEACN-UL13	24x2x18AWG	32,3	1970	21,8
MAC0205AEACN-UL13	2x2x16AWG	17,1	492	13,7
MAC0405AEACN-UL13	4x2x16AWG	19,1	651	13,7
MAC0605AEACN-UL13	6x2x16AWG	21,3	806	13,7
MAC0805AEACN-UL13	8x2x16AWG	23,3	1037	13,7
MAC1005AEACN-UL13	10x2x16AWG	26,6	1287	13,7
MAC1205AEACN-UL13	12x2x16AWG	27,2	1390	13,7
MAC1605AEACN-UL13	16x2x16AWG	29,9	1770	13,7
MAC2005AEACN-UL13	20x2x16AWG	32,8	2099	13,7
MAC2405AEACN-UL13	24x2x16AWG	36,4	2616	13,7
MAC0201AEACN-UL13	2x2x14AWG	19,4	627	8,6
MAC0401AEACN-UL13	4x2x14AWG	21,3	814	8,6
MAC0601AEACN-UL13	6x2x14AWG	25,7	1217	8,6
MAC0801AEACN-UL13	8x2x14AWG	27,4	1411	8,6
MAC1001AEACN-UL13	10x2x14AWG	30,9	1802	8,6
MAC1201AEACN-UL13	12x2x14AWG	31,7	1957	8,6
MAC1601AEACN-UL13	16x2x14AWG	35,1	2419	8,6
MAC2001AEACN-UL13	20x2x14AWG	39,0	3031	8,6
MAC2401AEACN-UL13	24x2x14AWG	41,8	3437	8,6
MAC0252AEACN-UL13	2x2x12AWG	20,9	737	5,4
MAC0452AEACN-UL13	4x2x12AWG	24,3	1136	5,4
MAC0652AEACN-UL13	6x2x12AWG	27,9	1482	5,4
MAC0852AEACN-UL13	8x2x12AWG	30,6	1886	5,4
MAC1052AEACN-UL13	10x2x12AWG	34,9	2328	5,4
MAC1252AEACN-UL13	12x2x12AWG	36,6	2746	5,4
MAC1652AEACN-UL13	16x2x12AWG	39,4	3262	5,4
MAC2052AEACN-UL13	20x2x12AWG	43,5	3885	5,4
MAC2452AEACN-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.



### CONSTRUCTION

**Formation:**

Plain annealed copper wire, Stranded

**Insulation:**

Cross Linked Polyethylene - XLPE

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 1000 MOhm\*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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.



### CONSTRUCTION

**Formation:**

Plain annealed copper wire, Stranded

**Insulation:**

Cross Linked Polyethylene - XLPE

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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 Polyethylene - XLPE

**Individual Screen:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0206HEEXN-UL13	2x2x20AWG	8,2	76	34,6
MAC0406HEEXN-UL13	4x2x20AWG	9,4	118	34,6
MAC0606HEEXN-UL13	6x2x20AWG	15,0	286	34,6
MAC0806HEEXN-UL13	8x2x20AWG	16,1	338	34,6
MAC1006HEEXN-UL13	10x2x20AWG	18,0	402	34,6
MAC1206HEEXN-UL13	12x2x20AWG	18,4	444	34,6
MAC1606HEEXN-UL13	16x2x20AWG	20,0	539	34,6
MAC2006HEEXN-UL13	20x2x20AWG	22,1	640	34,6
MAC2406HEEXN-UL13	24x2x20AWG	23,9	739	34,6
MAC0205HEEXN-UL13	2x2x18AWG	9,0	95	21,8
MAC0405HEEXN-UL13	4x2x18AWG	14,2	268	21,8
MAC0605HEEXN-UL13	6x2x18AWG	16,1	348	21,8
MAC0805HEEXN-UL13	8x2x18AWG	17,4	416	21,8
MAC1005HEEXN-UL13	10x2x18AWG	19,5	498	21,8
MAC1205HEEXN-UL13	12x2x18AWG	20,1	557	21,8
MAC1605HEEXN-UL13	16x2x18AWG	21,9	684	21,8
MAC2005HEEXN-UL13	20x2x18AWG	24,2	818	21,8
MAC2405HEEXN-UL13	24x2x18AWG	26,8	985	21,8
MAC0205HEEXN-UL13	2x2x16AWG	13,8	232	13,7
MAC0405HEEXN-UL13	4x2x16AWG	15,4	327	13,7
MAC0605HEEXN-UL13	6x2x16AWG	17,6	431	13,7
MAC0805HEEXN-UL13	8x2x16AWG	19,1	523	13,7
MAC1005HEEXN-UL13	10x2x16AWG	21,5	630	13,7
MAC1205HEEXN-UL13	12x2x16AWG	22,1	710	13,7
MAC1605HEEXN-UL13	16x2x16AWG	24,2	883	13,7
MAC2005HEEXN-UL13	20x2x16AWG	27,3	1098	13,7
MAC2405HEEXN-UL13	24x2x16AWG	29,8	1279	13,7
MAC0201HEEXN-UL13	2x2x14AWG	15,0	285	8,6
MAC0401HEEXN-UL13	4x2x14AWG	16,9	418	8,6
MAC0601HEEXN-UL13	6x2x14AWG	19,5	562	8,6
MAC0801HEEXN-UL13	8x2x14AWG	21,2	692	8,6
MAC1001HEEXN-UL13	10x2x14AWG	24	839	8,6
MAC1201HEEXN-UL13	12x2x14AWG	24,8	955	8,6
MAC1601HEEXN-UL13	16x2x14AWG	27,7	1236	8,6
MAC2001HEEXN-UL13	20x2x14AWG	30,7	1495	8,6
MAC2401HEEXN-UL13	24x2x14AWG	33,6	1751	8,6
MAC0252HEEXN-UL13	2x2x12AWG	16,6	361	5,4
MAC0452HEEXN-UL13	4x2x12AWG	18,8	551	5,4
MAC0652HEEXN-UL13	6x2x12AWG	21,9	754	5,4
MAC0852HEEXN-UL13	8x2x12AWG	23,9	941	5,4
MAC1052HEACN-UL13	10x2x12AWG	27,7	1183	5,4
MAC1252HEEXN-UL13	12x2x12AWG	28,6	1355	5,4
MAC1652HEEXN-UL13	16x2x12AWG	31,4	1716	5,4
MAC2052HEEXN-UL13	20x2x12AWG	35,5	2131	5,4
MAC2452HEEXN-UL13	24x2x12AWG	38,8	2504	5,4



# UL 13 - PLTC Cable

## XLPE - Collective screened with armour

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



### CONSTRUCTION

**Formation:**

Plain annealed copper wire, Stranded

**Insulation:**

Cross Linked Polyethylene - XLPE

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Armour:**

Galvanized Steel Wires Armour

**Outher Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outher Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 V



# UL 13 - PLTC Cable

## XLPE - Collective screened with armour

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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. Suitable for direct burial applications.



E345186



### CONSTRUCTION

**Formation:**

Plain annealed copper wire, Stranded

**Insulation:**

Cross Linked Polyethylene - XLPE

**Individual Screen:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Armour:**

Galvanized Steel Wires Armour

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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 Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 200 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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 Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

<b>Insulation Resistance @ 20°C:</b>	> 200 MOhm*Km
<b>Test Voltage Core-Core:</b>	2000 V
<b>Test Voltage Core-Screen:</b>	2000 V
<b>Mutual Capacitance between conductors:</b>	< 250 nF/km
<b>Inductance:</b>	< 1 mH/km
<b>Operating Voltage:</b>	600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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

## 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 Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 200 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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.



RAMCRO - UL 13 PLTC - Silicon Rubber



### CONSTRUCTION

**Formation:**

Plain annealed copper wire, Stranded

**Insulation:**

Special Mix Silicon Rubber - SIL

**Individual Screen:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Armour:**

Galvanized Steel Wires Armour

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 200 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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

## 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 Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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 Outer Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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

## 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

**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

**Outher Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outher Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0106AEEON-UL13	1x2x20AWG	15,1	354	34,6
MAS0206AEEON-UL13	2x2x20AWG	18,7	512	34,6
MAS0406AEEON-UL13	4x2x20AWG	20,5	621	34,6
MAS0606AEEON-UL13	6x2x20AWG	24,1	897	34,6
MAS0806AEEON-UL13	8x2x20AWG	26,2	1042	34,6
MAS1006AEEON-UL13	10x2x20AWG	29,5	1340	34,6
MAS1206AEEON-UL13	12x2x20AWG	30,2	1420	34,6
MAS1606AEEON-UL13	16x2x20AWG	33,0	1675	34,6
MAS2406AEEON-UL13	24x2x20AWG	39,7	2420	34,6
MAS0105AEEON-UL13	1x2x18AWG	15,6	378	21,8
MAS0205AEEON-UL13	2x2x18AWG	19,5	554	21,8
MAS0405AEEON-UL13	4x2x18AWG	21,4	682	21,8
MAS0605AEEON-UL13	6x2x18AWG	25,8	1021	21,8
MAS0805AEEON-UL13	8x2x18AWG	27,5	1156	21,8
MAS1005AEEON-UL13	10x2x18AWG	31,1	1488	21,8
MAS1205AEEON-UL13	12x2x18AWG	32,3	1635	21,8
MAS1605AEEON-UL13	16x2x18AWG	36,1	2120	21,8
MAS2405AEEON-UL13	24x2x18AWG	42,0	2709	21,8
MAS0105AEEON-UL13	1x2x16AWG	16,2	410	13,7
MAS0205AEEON-UL13	2x2x16AWG	20,4	610	13,7
MAS0405AEEON-UL13	4x2x16AWG	23,2	871	13,7
MAS0605AEEON-UL13	6x2x16AWG	27,2	1150	13,7
MAS0805AEEON-UL13	8x2x16AWG	29,8	1452	13,7
MAS1005AEEON-UL13	10x2x16AWG	33,5	1743	13,7
MAS1205AEEON-UL13	12x2x16AWG	34,3	1866	13,7
MAS1605AEEON-UL13	16x2x16AWG	38,3	2426	13,7
MAS2405AEEON-UL13	24x2x16AWG	45,9	3261	13,7
MAS0101AEEON-UL13	1x2x14AWG	16,9	453	8,6
MAS0201AEEON-UL13	2x2x14AWG	21,7	688	8,6
MAS0401AEEON-UL13	4x2x14AWG	25,8	1072	8,6
MAS0601AEEON-UL13	6x2x14AWG	29,8	1472	8,6
MAS0801AEEON-UL13	8x2x14AWG	32,4	1743	8,6
MAS1001AEEON-UL13	10x2x14AWG	37,3	2288	8,6
MAS1201AEEON-UL13	12x2x14AWG	38,2	2458	8,6
MAS1601AEEON-UL13	16x2x14AWG	41,2	2871	8,6
MAS2401AEEON-UL13	24x2x14AWG	49,6	3900	8,6
MAS0152AEEON-UL13	1x2x12AWG	18,4	539	5,4
MAS0252AEEON-UL13	2x2x12AWG	24,4	938	5,4
MAS0452AEEON-UL13	4x2x12AWG	27,6	1255	5,4
MAS0652AEEON-UL13	6x2x12AWG	32,6	1789	5,4
MAS0852AEEON-UL13	8x2x12AWG	36,3	2319	5,4
MAS1052AEEON-UL13	10x2x12AWG	40,4	2722	5,4
MAS1252AEEON-UL13	12x2x12AWG	41,4	2950	5,4
MAS1652AEEON-UL13	16x2x12AWG	45,9	3612	5,4
MAS2452AEEON-UL13	24x2x12AWG	55,8	5014	5,4



# 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.



### 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

**Inner Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Armour:**

Galvanized Steel Wires Armour

**Outher Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outher Sheath:**

Black

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
14 x cable diameter



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

### IDENTIFICATION OF CORES

Pair:



### 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

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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



Assessed to ISO 9001:2015  
LPCB Cert. No 568



CERTIFIED MANAGEMENT SYSTEM  
BS OHSAS 18001



CERTIFIED MANAGEMENT SYSTEM  
ISO 14001



2002/95/EC



# NF M 87-202

# 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 Outer Sheath:**

Blue

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2



**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108HDPAX-EGSF	1x2x0,50	4,8	32	37,5
SAM3708HDPAX-EGSF	1x3x0,50	5,0	40	37,5
SAM0208HDPAX-EGSF	2x2x0,50	6,4	53	37,5
SAM3808HDPAX-EGSF	2x3x0,50	7,4	71	37,5
SAM0308HDPAX-EGSF	3x2x0,50	6,8	69	37,5
SAM3108HDPAX-EGSF	3x3x0,50	7,8	94	37,5
SAM0708HDPAX-EGSF	7x2x0,50	8,7	132	37,5
SAM7108HDPAX-EGSF	7x3x0,50	10,2	188	37,5
SAM1208HDPAX-EGSF	12x2x0,50	11,4	214	37,5
SAM3308HDPAX-EGSF	12x3x0,50	13,5	307	37,5
SAM1908HDPAX-EGSF	19x2x0,50	13,3	320	37,5
SAM7408HDPAX-EGSF	19x3x0,50	16,3	479	37,5
SAM2708HDPAX-EGSF	27x2x0,50	16,4	458	37,5
SAM8108HDPAX-EGSF	27x3x0,50	19,9	682	37,5
MAS0108HDPAX-EGSF	1x2x0,88	5,7	46	22,3
MAS3708HDPAX-EGSF	1x3x0,88	6,0	59	22,3
MAS0208HDPAX-EGSF	2x2x0,88	7,8	78	22,3
MAS3808HDPAX-EGSF	2x3x0,88	9,1	107	22,3
MAS0308HDPAX-EGSF	3x2x0,88	8,3	103	22,3
MAS3108HDPAX-EGSF	3x3x0,88	9,7	144	22,3
MAS0708HDPAX-EGSF	7x2x0,88	10,8	208	22,3
MAS7108HDPAX-EGSF	7x3x0,88	12,8	298	22,3
MAS1208HDPAX-EGSF	12x2x0,88	14,7	354	22,3
MAS3308HDPAX-EGSF	12x3x0,88	17,4	509	22,3
MAS1908HDPAX-EGSF	19x2x0,88	17,2	532	22,3
MAS7408HDPAX-EGSF	19x3x0,88	20,9	792	22,3
MAS2708HDPAX-EGSF	27x2x0,88	21,1	758	22,3
MAS8108HDPAX-EGSF	27x3x0,88	25,6	1124	22,3
MAS0115HDPAX-EGSF	1x2x1,50	6,4	62	12,6
MAS3715HDPAX-EGSF	1x3x1,50	6,7	82	12,6
MAS0215HDPAX-EGSF	2x2x1,50	8,8	108	12,6
MAS3815HDPAX-EGSF	2x3x1,50	10,4	152	12,6
MAS0315HDPAX-EGSF	3x2x1,50	9,4	148	12,6
MAS3115HDPAX-EGSF	3x3x1,50	11,0	210	12,6
MAS0715HDPAX-EGSF	7x2x1,50	12,4	307	12,6
MAS7115HDPAX-EGSF	7x3x1,50	15,1	460	12,6
MAS1215HDPAX-EGSF	12x2x1,50	16,9	524	12,6
MAS3315HDPAX-EGSF	12x3x1,50	20,4	781	12,6
MAS1915HDPAX-EGSF	19x2x1,50	20,2	816	12,6
MAS7415HDPAX-EGSF	19x3x1,50	24,5	1212	12,6
MAS2715HDPAX-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 Outer Sheath:**

Blue

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V





# 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.

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

# 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 acc. to UTE C 32-014

**Insulation:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

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

**Armour:**

Double Steel Tape Armour

**Outer Sheath:**

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

**Colour Outer Sheath:**

Blue

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TDPAX-EGFA	1x2x0,50	8,0	128	37,5
SAM3708TDPAX-EGFA	1x3x0,50	8,2	138	37,5
SAM0208TDPAX-EGFA	2x2x0,50	9,6	165	37,5
SAM3808TDPAX-EGFA	2x3x0,50	10,6	194	37,5
SAM0308TDPAX-EGFA	3x2x0,50	9,9	184	37,5
SAM3108TDPAX-EGFA	3x3x0,50	11,0	221	37,5
SAM0708TDPAX-EGFA	7x2x0,50	11,9	280	37,5
SAM7108TDPAX-EGFA	7x3x0,50	13,4	352	37,5
SAM1208TDPAX-EGFA	12x2x0,50	14,6	390	37,5
SAM3308TDPAX-EGFA	12x3x0,50	17,1	523	37,5
SAM1908TDPAX-EGFA	19x2x0,50	16,9	534	37,5
SAM7408TDPAX-EGFA	19x3x0,50	19,8	731	37,5
SAM2708TDPAX-EGFA	27x2x0,50	20,0	713	37,5
SAM8108TDPAX-EGFA	27x3x0,50	23,5	983	37,5
MAS0108TDPAX-EGFA	1x2x0,88	8,9	150	22,3
MAS3708TDPAX-EGFA	1x3x0,88	9,2	166	22,3
MAS0208TDPAX-EGFA	2x2x0,88	11,0	204	22,3
MAS3808TDPAX-EGFA	2x3x0,88	12,3	258	22,3
MAS0308TDPAX-EGFA	3x2x0,88	11,5	246	22,3
MAS3108TDPAX-EGFA	3x3x0,88	12,9	302	22,3
MAS0708TDPAX-EGFA	7x2x0,88	14	378	22,3
MAS7108TDPAX-EGFA	7x3x0,88	16,4	506	22,3
MAS1208TDPAX-EGFA	12x2x0,88	18,3	587	22,3
MAS3308TDPAX-EGFA	12x3x0,88	21,0	777	22,3
MAS1908TDPAX-EGFA	19x2x0,88	20,8	797	22,3
MAS7408TDPAX-EGFA	19x3x0,88	24,5	1114	22,3
MAS2708TDPAX-EGFA	27x2x0,88	24,7	1082	22,3
MAS8108TDPAX-EGFA	27x3x0,88	29,5	1537	22,3
MAS0115TDPAX-EGFA	1x2x1,50	9,5	173	12,6
MAS3715TDPAX-EGFA	1x3x1,50	9,9	197	12,6
MAS0215TDPAX-EGFA	2x2x1,50	12	258	12,6
MAS3815TDPAX-EGFA	2x3x1,50	13,5	317	12,6
MAS0315TDPAX-EGFA	3x2x1,50	12,6	302	12,6
MAS3115TDPAX-EGFA	3x3x1,50	14,2	382	12,6
MAS0715TDPAX-EGFA	7x2x1,50	15,9	510	12,6
MAS7115TDPAX-EGFA	7x3x1,50	18,6	697	12,6
MAS1215TDPAX-EGFA	12x2x1,50	20,4	784	12,6
MAS3315TDPAX-EGFA	12x3x1,50	24,0	1097	12,6
MAS1915TDPAX-EGFA	19x2x1,50	23,8	1129	12,6
MAS7415TDPAX-EGFA	19x3x1,50	28,4	1609	12,6
MAS2715TDPAX-EGFA	27x2x1,50	28,7	1560	12,6
MAS8115TDPAX-EGFA	27x3x1,50	33,4	2164	12,6

# 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 acc. to UTE C 32-014

**Insulation:**

Polyvinyl Chloride - PVC to NF C 32-020

**Individual Screen:**

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

**Individual Sheath:**

Polyvinyl Chloride - PVC to NF C 32-020

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

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

**Armour:**

Double Steel Tape Armour

**Outer Sheath:**

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

**Colour Outer Sheath:**

Blue

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2



**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAI0108TDPAX-EIFA	1x2x0,50	8,9	153	37,5
SAI3708TDPAX-EIFA	1x3x0,50	9,2	164	37,5
SAI0208TDPAX-EIFA	2x2x0,50	12,9	247	37,5
SAI3808TDPAX-EIFA	2x3x0,50	13,4	270	37,5
SAI0308TDPAX-EIFA	3x2x0,50	13,5	282	37,5
SAI3108TDPAX-EIFA	3x3x0,50	14,0	312	37,5
SAI0708TDPAX-EIFA	7x2x0,50	17,7	470	37,5
SAI7108TDPAX-EIFA	7x3x0,50	18,4	535	37,5
SAI1208TDPAX-EIFA	12x2x0,50	22,7	705	37,5
SAI3308TDPAX-EIFA	12x3x0,50	23,6	820	37,5
SAI1908TDPAX-EIFA	19x2x0,50	26,4	982	37,5
SAI7408TDPAX-EIFA	19x3x0,50	27,6	1147	37,5
SAI2708TDPAX-EIFA	27x2x0,50	31,4	1307	37,5
SAI8108TDPAX-EIFA	27x3x0,50	32,8	1546	37,5
MAS0108TDPAX-EIFA	1x2x0,88	9,8	179	22,3
MAS3708TDPAX-EIFA	1x3x0,88	10,1	195	22,3
MAS0208TDPAX-EIFA	2x2x0,88	14,7	299	22,3
MAS3808TDPAX-EIFA	2x3x0,88	15,3	333	22,3
MAS0308TDPAX-EIFA	3x2x0,88	15,9	363	22,3
MAS3108TDPAX-EIFA	3x3x0,88	16,5	411	22,3
MAS0708TDPAX-EIFA	7x2x0,88	20,4	603	22,3
MAS7108TDPAX-EIFA	7x3x0,88	21,3	707	22,3
MAS1208TDPAX-EIFA	12x2x0,88	26,9	958	22,3
MAS3308TDPAX-EIFA	12x3x0,88	28,5	1160	22,3
MAS1908TDPAX-EIFA	19x2x0,88	31,4	1333	22,3
MAS7408TDPAX-EIFA	19x3x0,88	32,9	1608	22,3
MAS2708TDPAX-EIFA	27x2x0,88	37,0	1760	22,3
MAS8108TDPAX-EIFA	27x3x0,88	38,9	2135	22,3
MAS0115TDPAX-EIFA	1x2x1,50	10,5	203	12,6
MAS3715TDPAX-EIFA	1x3x1,50	10,9	228	12,6
MAS0215TDPAX-EIFA	2x2x1,50	16,5	364	12,6
MAS3815TDPAX-EIFA	2x3x1,50	17,2	416	12,6
MAS0315TDPAX-EIFA	3x2x1,50	17,7	450	12,6
MAS3115TDPAX-EIFA	3x3x1,50	18,5	523	12,6
MAS0715TDPAX-EIFA	7x2x1,50	22,8	768	12,6
MAS7115TDPAX-EIFA	7x3x1,50	23,9	934	12,6
MAS1215TDPAX-EIFA	12x2x1,50	30	1219	12,6
MAS3315TDPAX-EIFA	12x3x1,50	31,6	1489	12,6
MAS1915TDPAX-EIFA	19x2x1,50	34,7	1690	12,6
MAS7415TDPAX-EIFA	19x3x1,50	36,5	2104	12,6
MAS2715TDPAX-EIFA	27x2x1,50	41,1	2245	12,6
MAS8115TDPAX-EIFA	27x3x1,50	43,3	2827	12,6

# NF M87-202 EGPF

## Instrumentation Cable 300/500 V

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



### CONSTRUCTION

**Formation:**

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

**Insulation:**

Polyvinyl Chloride - PVC to NF C 32-020

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

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

**Chemical Protection:**

Lead Cover

**Armour:**

Double Steel Tape Armour

**Outer Sheath:**

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

**Colour Outer Sheath:**

Blue

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2



**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# NF M87-202 EGPF

## Instrumentation Cable 300/500 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TDPAX-EGPF	1x2x0,50	12,8	493	37,5
SAM3708TDPAX-EGPF	1x3x0,50	13,0	513	37,5
SAM0208TDPAX-EGPF	2x2x0,50	14,4	601	37,5
SAM3808TDPAX-EGPF	2x3x0,50	15,4	674	37,5
SAM0308TDPAX-EGPF	3x2x0,50	14,7	637	37,5
SAM3108TDPAX-EGPF	3x3x0,50	16,2	736	37,5
SAM0708TDPAX-EGPF	7x2x0,50	17,1	823	37,5
SAM7108TDPAX-EGPF	7x3x0,50	19,0	984	37,5
SAM1208TDPAX-EGPF	12x2x0,50	20,2	1076	37,5
SAM3308TDPAX-EGPF	12x3x0,50	22,3	1289	37,5
SAM1908TDPAX-EGPF	19x2x0,50	22,1	1294	37,5
SAM7408TDPAX-EGPF	19x3x0,50	25,2	1701	37,5
SAM2708TDPAX-EGPF	27x2x0,50	25,4	1691	37,5
SAM8108TDPAX-EGPF	27x3x0,50	29,5	2244	37,5
MAS0108TDPAX-EGPF	1x2x0,88	13,7	556	22,3
MAS3708TDPAX-EGPF	1x3x0,88	14,0	585	22,3
MAS0208TDPAX-EGPF	2x2x0,88	16,2	718	22,3
MAS3808TDPAX-EGPF	2x3x0,88	17,5	820	22,3
MAS0308TDPAX-EGPF	3x2x0,88	16,7	769	22,3
MAS3108TDPAX-EGPF	3x3x0,88	18,1	889	22,3
MAS0708TDPAX-EGPF	7x2x0,88	19,6	1038	22,3
MAS7108TDPAX-EGPF	7x3x0,88	21,6	1240	22,3
MAS1208TDPAX-EGPF	12x2x0,88	23,5	1408	22,3
MAS3308TDPAX-EGPF	12x3x0,88	26,4	1804	22,3
MAS1908TDPAX-EGPF	19x2x0,88	26,2	1815	22,3
MAS7408TDPAX-EGPF	19x3x0,88	30,5	2420	22,3
MAS2708TDPAX-EGPF	27x2x0,88	30,7	2400	22,3
MAS8108TDPAX-EGPF	27x3x0,88	35,9	3322	22,3
MAS0115TDPAX-EGPF	1x2x1,50	14,3	608	12,6
MAS3715TDPAX-EGPF	1x3x1,50	14,7	648	12,6
MAS0215TDPAX-EGPF	2x2x1,50	17,2	806	12,6
MAS3815TDPAX-EGPF	2x3x1,50	19,1	956	12,6
MAS0315TDPAX-EGPF	3x2x1,50	17,8	876	12,6
MAS3115TDPAX-EGPF	3x3x1,50	19,8	1052	12,6
MAS0715TDPAX-EGPF	7x2x1,50	21,1	1226	12,6
MAS7115TDPAX-EGPF	7x3x1,50	24,0	1610	12,6
MAS1215TDPAX-EGPF	12x2x1,50	25,8	1784	12,6
MAS3315TDPAX-EGPF	12x3x1,50	30,0	2378	12,6
MAS1915TDPAX-EGPF	19x2x1,50	29,8	2399	12,6
MAS7415TDPAX-EGPF	19x3x1,50	34,6	3224	12,6
MAS2715TDPAX-EGPF	27x2x1,50	34,9	3188	12,6
MAS8115TDPAX-EGPF	27x3x1,50	40,0	4298	12,6



# NF M87-202 EIPF

## Instrumentation Cable 300/500 V

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



### CONSTRUCTION

**Formation:**

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

**Insulation:**

Polyvinyl Chloride - PVC to NF C 32-020

**Individual Screen:**

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

**Individual Sheath:**

Polyvinyl Chloride - PVC to NF C 32-020

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

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

**Chemical Protection:**

Lead Cover

**Armour:**

Double Steel Tape Armour

**Outer Sheath:**

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

**Colour Outer Sheath:**

Blue

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2



**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 25 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# NF M87-202 EIPF

## Instrumentation Cable 300/500 V

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

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



Assessed to ISO 9001:2015  
LPCB Cert. No 568



Member of CISO Federation  
CERTIFIED MANAGEMENT SYSTEM  
BS OHSAS 18001



Member of CISO Federation  
CERTIFIED MANAGEMENT SYSTEM  
ISO 14001



# NF M 87-202 CR1-C1

# NF M 87-202 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.



### CONSTRUCTION

**Formation:**

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

**Insulation:**

Special Mix Silicon Rubber - SIL

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Orange

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 200 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# NF M 87-202 EGSF - CR1-C1 -

## Collectively Screened, Unarmoured

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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
MAS0108TUESK-EGSF	1x2x0,88	6,9	61	22,3
MAS3708TUESX-EGSF	1x3x0,88	7,3	78	22,3
MAS0208TUESK-EGSF	2x2x0,88	9,5	103	22,3
MAS3808TUESX-EGSF	2x3x0,88	11,4	143	22,3
MAS0308TUESK-EGSF	3x2x0,88	10	138	22,3
MAS3108TUESX-EGSF	3x3x0,88	12,1	195	22,3
MAS0708TUESK-EGSF	7x2x0,88	13,3	280	22,3
MAS7108TUESX-EGSF	7x3x0,88	16,6	421	22,3
MAS1208TUESK-EGSF	12x2x0,88	18,5	497	22,3
MAS3308TUESX-EGSF	12x3x0,88	22,9	738	22,3
MAS1908TUESK-EGSF	19x2x0,88	21,8	742	22,3
MAS7408TUESX-EGSF	19x3x0,88	26,9	1104	22,3
MAS2708TUESK-EGSF	27x2x0,88	26,6	1054	22,3
MAS8108TUESX-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 Outer Sheath:**

Orange

### STANDARD REFERENCES

- NF M 87-202

- UTE C 32-014

- NF C 32-020

- BS EN/IEC 60331-21

- BS EN/IEC 60332-1

- BS EN/IEC 60332-3-24

### CHARACTERISTICS



**Min. Bending Radius**

8 x cable diameter



**Hazardous Area Classification**

IEC Zone 1 - Group 2



**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 200 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V





# NF M87-202 EISF - CR1-C1 -

## Individual Screened, Unarmoured

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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
MAS0108TUESK-EISF	1x2x0,88	7,8	81	22,3
MAS3708TUESX-EISF	1x3x0,88	8,2	100	22,3
MAS0208TUESK-EISF	2x2x0,88	14,3	169	22,3
MAS3808TUESX-EISF	2x3x0,88	15,1	207	22,3
MAS0308TUESK-EISF	3x2x0,88	15,2	222	22,3
MAS3108TUESX-EISF	3x3x0,88	16,1	278	22,3
MAS0708TUESK-EISF	7x2x0,88	20,8	464	22,3
MAS7108TUESX-EISF	7x3x0,88	22,0	590	22,3
MAS1208TUESK-EISF	12x2x0,88	28,3	781	22,3
MAS3308TUESX-EISF	12x3x0,88	29,9	995	22,3
MAS1908TUESK-EISF	19x2x0,88	33,4	1158	22,3
MAS7408TUESX-EISF	19x3x0,88	35,3	1492	22,3
MAS2708TUESK-EISF	27x2x0,88	40,4	1597	22,3
MAS8108TUESX-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 acc. to UTE C 32-014

**Insulation:**

Special Mix Silicon Rubber - SIL

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Armour:**

Double Steel Tape Armour

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Orange

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 200 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# NF M87-202 EGFA - CR1-C1 -

## Collectively Screened, armoured

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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
MAS0108TUESK-EGFA	1x2x0,88	10,1	180	22,3
MAS3708TUESX-EGFA	1x3x0,88	10,5	201	22,3
MAS0208TUESK-EGFA	2x2x0,88	12,6	261	22,3
MAS3808TUESX-EGFA	2x3x0,88	14,5	322	22,3
MAS0308TUESK-EGFA	3x2x0,88	13,2	302	22,3
MAS3108TUESX-EGFA	3x3x0,88	15,3	382	22,3
MAS0708TUESK-EGFA	7x2x0,88	16,9	497	22,3
MAS7108TUESX-EGFA	7x3x0,88	20,1	680	22,3
MAS1208TUESK-EGFA	12x2x0,88	22,1	783	22,3
MAS3308TUESX-EGFA	12x3x0,88	26,5	1090	22,3
MAS1908TUESK-EGFA	19x2x0,88	25,3	1078	22,3
MAS7408TUESX-EGFA	19x3x0,88	30,9	1540	22,3
MAS2708TUESK-EGFA	27x2x0,88	30,6	1484	22,3
MAS8108TUESX-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 acc. to UTE C 32-014

**Insulation:**

Special Mix Silicon Rubber - SIL

**Individual Screen:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Armour:**

Double Steel Tape Armour

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Orange

### STANDARD REFERENCES

- NF M 87-202

- UTE C 32-014

- NF C 32-020

- BS EN/IEC 60331-21

- BS EN/IEC 60332-1

- BS EN/IEC 60332-3-24

### CHARACTERISTICS



**Min. Bending Radius**

8 x cable diameter



**Hazardous Area Classification**

IEC Zone 1 - Group 2



**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 200 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# NF M87-202 EIFA - CR1-C1 -

## Collectively Screened, armoured

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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
MAS0108TUESK-EIFA	1x2x0,88	11,0	211	22,3
MAS3708TUESX-EIFA	1x3x0,88	11,4	245	22,3
MAS0208TUESK-EIFA	2x2x0,88	17,9	402	22,3
MAS3808TUESX-EIFA	2x3x0,88	18,7	450	22,3
MAS0308TUESK-EIFA	3x2x0,88	18,8	467	22,3
MAS3108TUESX-EIFA	3x3x0,88	19,7	534	22,3
MAS0708TUESK-EIFA	7x2x0,88	24,4	793	22,3
MAS7108TUESX-EIFA	7x3x0,88	25,6	934	22,3
MAS1208TUESK-EIFA	12x2x0,88	32,3	1251	22,3
MAS3308TUESX-EIFA	12x3x0,88	33,9	1489	22,3
MAS1908TUESK-EIFA	19x2x0,88	37,4	1705	22,3
MAS7408TUESX-EIFA	19x3x0,88	39,3	2069	22,3
MAS2708TUESK-EIFA	27x2x0,88	44,4	2252	22,3
MAS8108TUESX-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

# NF M87-202 EGPF - CR1-C1 -

## Instrumentation Cable 300/500 V

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



### CONSTRUCTION

**Formation:**

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

**Insulation:**

Special Mix Silicon Rubber - SIL

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Chemical Protection:**

Lead Cover

**Armour:**

Double Steel Tape Armour

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Orange

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2



Oil Resistant, Hydrocarbon Resistant

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm\*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V



# NF M87-202 EGPF - CR1-C1 -

## Instrumentation Cable 300/500 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TUESK-EGPF	1x2x0,50	14,1	581	37,5
SAM3708TUESX-EGPF	1x3x0,50	14,5	611	37,5
SAM0208TUESK-EGPF	2x2x0,50	16,7	747	37,5
SAM3808TUESX-EGPF	2x3x0,50	18,7	886	37,5
SAM0308TUESK-EGPF	3x2x0,50	17,2	799	37,5
SAM3108TUESX-EGPF	3x3x0,50	19,4	957	37,5
SAM0708TUESK-EGPF	7x2x0,50	20,4	1073	37,5
SAM7108TUESX-EGPF	7x3x0,50	23,2	1337	37,5
SAM1208TUESK-EGPF	12x2x0,50	24,8	1534	37,5
SAM3308TUESX-EGPF	12x3x0,50	29,2	2046	37,5
SAM1908TUESK-EGPF	19x2x0,50	28,5	2021	37,5
SAM7408TUESX-EGPF	19x3x0,50	33,6	2712	37,5
SAM2708TUESK-EGPF	27x2x0,50	33,3	2657	37,5
SAM8108TUESX-EGPF	27x3x0,50	38,7	3577	37,5
MAS0108TUESK-EGPF	1x2x0,88	14,9	635	22,3
MAS3708TUESX-EGPF	1x3x0,88	15,3	674	22,3
MAS0208TUESK-EGPF	2x2x0,88	17,8	834	22,3
MAS3808TUESX-EGPF	2x3x0,88	20,1	1002	22,3
MAS0308TUESK-EGPF	3x2x0,88	18,8	922	22,3
MAS3108TUESX-EGPF	3x3x0,88	20,9	1096	22,3
MAS0708TUESK-EGPF	7x2x0,88	22,1	1248	22,3
MAS7108TUESX-EGPF	7x3x0,88	25,5	1656	22,3
MAS1208TUESK-EGPF	12x2x0,88	27,7	1934	22,3
MAS3308TUESX-EGPF	12x3x0,88	33,1	2627	22,3
MAS1908TUESK-EGPF	19x2x0,88	31,7	2449	22,3
MAS7408TUESX-EGPF	19x3x0,88	37,3	3387	22,3
MAS2708TUESK-EGPF	27x2x0,88	37,0	3312	22,3
MAS8108TUESX-EGPF	27x3x0,88	43,7	4535	22,3
MAS0115TUESK-EGPF	1x2x1,50	16	710	12,6
MAS3715TUESX-EGPF	1x3x1,50	16,5	761	12,6
MAS0215TUESK-EGPF	2x2x1,50	19,4	953	12,6
MAS3815TUESX-EGPF	2x3x1,50	21,5	1134	12,6
MAS0315TUESK-EGPF	3x2x1,50	20	1041	12,6
MAS3115TUESX-EGPF	3x3x1,50	22,8	1294	12,6
MAS0715TUESK-EGPF	7x2x1,50	24,3	1573	12,6
MAS7115TUESX-EGPF	7x3x1,50	28,6	2111	12,6
MAS1215TUESK-EGPF	12x2x1,50	30,4	2312	12,6
MAS3315TUESX-EGPF	12x3x1,50	36,2	3237	12,6
MAS1915TUESK-EGPF	19x2x1,50	35,1	3107	12,6
MAS7415TUESX-EGPF	19x3x1,50	41,0	4234	12,6
MAS2715TUESK-EGPF	27x2x1,50	40,6	4130	12,6
MAS8115TUESX-EGPF	27x3x1,50	48,2	5691	12,6



# NF M87-202 EIPF - CR1-C1 -

## Instrumentation Cable 300/500 V

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



### CONSTRUCTION

**Formation:**

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

**Insulation:**

Special Mix Silicon Rubber - SIL

**Individual Screen:**

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

**Individual Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Chemical Protection:**

Lead Cover

**Armour:**

Double Steel Tape Armour

**Outer Sheath:**

Thermoplastic Low Smoke, Halogen Free - LSZH

**Colour Outer Sheath:**

Orange

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2



**Oil Resistant, Hydrocarbon Resistant**

### IDENTIFICATION OF CORES

Pair:



Triad:



Quad:



### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### CABLE PRINTING

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

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 200 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

300/500 V



# NF M87-202 EIPF - CR1-C1 -

## Instrumentation Cable 300/500 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TUESK-EIPF	1x2x0,50	15,1	653	37,5
SAM3708TUESX-EIPF	1x3x0,50	15,8	699	37,5
SAM0208TUESK-EIPF	2x2x0,50	21,2	1046	37,5
SAM3808TUESX-EIPF	2x3x0,50	21,9	1110	37,5
SAM0308TUESK-EIPF	3x2x0,50	22,0	1132	37,5
SAM3108TUESX-EIPF	3x3x0,50	23,1	1248	37,5
SAM0708TUESK-EIPF	7x2x0,50	27,7	1812	37,5
SAM7108TUESX-EIPF	7x3x0,50	29,2	1993	37,5
SAM1208TUESK-EIPF	12x2x0,50	35,5	2778	37,5
SAM3308TUESX-EIPF	12x3x0,50	36,9	3031	37,5
SAM1908TUESK-EIPF	19x2x0,50	40,2	3527	37,5
SAM7408TUESX-EIPF	19x3x0,50	42,3	3933	37,5
SAM2708TUESK-EIPF	27x2x0,50	47,2	4691	37,5
SAM8108TUESX-EIPF	27x3x0,50	49,3	5197	37,5
MAS0108TUESK-EIPF	1x2x0,88	16,2	725	22,3
MAS3708TUESX-EIPF	1x3x0,88	16,6	766	22,3
MAS0208TUESK-EIPF	2x2x0,88	23,1	1200	22,3
MAS3808TUESX-EIPF	2x3x0,88	24,1	1359	22,3
MAS0308TUESK-EIPF	3x2x0,88	24,2	1383	22,3
MAS3108TUESX-EIPF	3x3x0,88	25,1	1490	22,3
MAS0708TUESK-EIPF	7x2x0,88	30,4	2089	22,3
MAS7108TUESX-EIPF	7x3x0,88	32,0	2325	22,3
MAS1208TUESK-EIPF	12x2x0,88	38,9	3302	22,3
MAS3308TUESX-EIPF	12x3x0,88	40,5	3642	22,3
MAS1908TUESK-EIPF	19x2x0,88	44,6	4268	22,3
MAS7408TUESX-EIPF	19x3x0,88	46,7	4910	22,3
MAS2708TUESK-EIPF	27x2x0,88	52,0	5627	22,3
MAS8108TUESX-EIPF	27x3x0,88	54,6	6491	22,3
MAS0115TUESK-EIPF	1x2x1,50	17	787	12,6
MAS3715TUESX-EIPF	1x3x1,50	17,4	839	12,6
MAS0215TUESK-EIPF	2x2x1,50	24,8	1405	12,6
MAS3815TUESX-EIPF	2x3x1,50	25,7	1516	12,6
MAS0315TUESK-EIPF	3x2x1,50	25,8	1539	12,6
MAS3115TUESX-EIPF	3x3x1,50	26,8	1680	12,6
MAS0715TUESK-EIPF	7x2x1,50	33,6	2558	12,6
MAS7115TUESX-EIPF	7x3x1,50	35,0	2842	12,6
MAS1215TUESK-EIPF	12x2x1,50	42,4	3809	12,6
MAS3315TUESX-EIPF	12x3x1,50	44,5	4415	12,6
MAS1915TUESK-EIPF	19x2x1,50	48,5	5072	12,6
MAS7415TUESX-EIPF	19x3x1,50	51,0	5931	12,6
MAS2715TUESK-EIPF	27x2x1,50	56,8	6706	12,6
MAS8115TUESX-EIPF	27x3x1,50	59,6	7677	12,6



Assessed to ISO 9001:2015  
LPCB Cert. No 568



# EN 50288-7

# 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:**

Polyvinyl Chloride FR - PE

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Outer Sheath:**

Polyvinyl chloride FR - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

### IDENTIFICATION OF CORES

Pair:



### ON REQUEST

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

### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

90/300/500 V



# EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150HDADN-RE9	1x2x0,50	6,6	48	37,5
MAS0250HDADN-RE9	2x2x0,50	9,8	87	37,5
MAS0450HDADN-RE9	4x2x0,50	11,4	136	37,5
MAS0650HDADN-RE9	6x2x0,50	13,8	191	37,5
MAS0850HDADN-RE9	8x2x0,50	15,3	241	37,5
MAS1050HDADN-RE9	10x2x0,50	17,9	303	37,5
MAS1250HDADN-RE9	12x2x0,50	18,6	346	37,5
MAS1650HDADN-RE9	16x2x0,50	20,8	442	37,5
MAS2050HDADN-RE9	20x2x0,50	23,5	547	37,5
MAS2450HDADN-RE9	24x2x0,50	26,0	652	37,5
MAS0175HDADN-RE9	1x2x0,75	7,0	56	25,5
MAS0275HDADN-RE9	2x2x0,75	10,4	102	25,5
MAS0475HDADN-RE9	4x2x0,75	12,2	163	25,5
MAS0675HDADN-RE9	6x2x0,75	14,8	231	25,5
MAS0875HDADN-RE9	8x2x0,75	16,4	293	25,5
MAS1075HDADN-RE9	10x2x0,75	19,2	368	25,5
MAS1275HDADN-RE9	12x2x0,75	19,9	422	25,5
MAS1675HDADN-RE9	16x2x0,75	22,2	543	25,5
MAS2075HDADN-RE9	20x2x0,75	25,2	673	25,5
MAS2475HDADN-RE9	24x2x0,75	28,0	804	25,5
MAS0110HDADN-RE9	1x2x1,00	7,3	64	18,8
MAS0210HDADN-RE9	2x2x1,00	11	119	18,8
MAS0410HDADN-RE9	4x2x1,00	13	193	18,8
MAS0610HDADN-RE9	6x2x1,00	15,7	276	18,8
MAS0810HDADN-RE9	8x2x1,00	17,5	351	18,8
MAS1010HDADN-RE9	10x2x1,00	20,4	442	18,8
MAS1210HDADN-RE9	12x2x1,00	21,2	509	18,8
MAS1610HDADN-RE9	16x2x1,00	23,7	657	18,8
MAS2010HDADN-RE9	20x2x1,00	26,9	815	18,8
MAS2410HDADN-RE9	24x2x1,00	29,9	975	18,8
MAS0115HDADN-RE9	1x2x1,50	7,9	78	12,6
MAS0215HDADN-RE9	2x2x1,50	12,0	147	12,6
MAS0415HDADN-RE9	4x2x1,50	14,1	245	12,6
MAS0615HDADN-RE9	6x2x1,50	17,2	352	12,6
MAS0815HDADN-RE9	8x2x1,50	19,1	452	12,6
MAS1015HDADN-RE9	10x2x1,50	22,4	568	12,6
MAS1215HDADN-RE9	12x2x1,50	23,2	658	12,6
MAS1615HDADN-RE9	16x2x1,50	26,0	853	12,6
MAS2015HDADN-RE9	20x2x1,50	29,5	1060	12,6
MAS2415HDADN-RE9	24x2x1,50	32,7	1269	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm<sup>2</sup> - 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 - 300 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150HDADN-RE3	1x2x0,50	5,6	40	37,5
MAS0250HDADN-RE3	2x2x0,50	8,2	70	37,5
MAS0450HDADN-RE3	4x2x0,50	9,5	107	37,5
MAS0650HDADN-RE3	6x2x0,50	11,9	164	37,5
MAS0850HDADN-RE3	8x2x0,50	13,1	202	37,5
MAS1050HDADN-RE3	10x2x0,50	16,1	245	37,5
MAS1250HDADN-RE3	12x2x0,50	15,6	278	37,5
MAS1650HDADN-RE3	16x2x0,50	17,4	356	37,5
MAS2050HDADN-RE3	20x2x0,50	20,1	465	37,5
MAS2450HDADN-RE3	24x2x0,50	22,1	542	37,5
MAS0175HDADN-RE3	1x2x0,75	5,9	47	25,5
MAS0275HDADN-RE3	2x2x0,75	8,8	83	25,5
MAS0475HDADN-RE3	4x2x0,75	10,2	130	25,5
MAS0675HDADN-RE3	6x2x0,75	12,8	200	25,5
MAS0875HDADN-RE3	8x2x0,75	14,1	248	25,5
MAS1075HDADN-RE3	10x2x0,75	16,2	302	25,5
MAS1275HDADN-RE3	12x2x0,75	17,0	354	25,5
MAS1675HDADN-RE3	16x2x0,75	19,4	477	25,5
MAS2075HDADN-RE3	20x2x0,75	21,7	577	25,5
MAS2475HDADN-RE3	24x2x0,75	23,9	676	25,5
MAS0110HDADN-RE3	1x2x1,00	6,7	58	18,8
MAS0210HDADN-RE3	2x2x1,00	10,1	105	18,8
MAS0410HDADN-RE3	4x2x1,00	12,3	186	18,8
MAS0610HDADN-RE3	6x2x1,00	14,7	257	18,8
MAS0810HDADN-RE3	8x2x1,00	16,2	322	18,8
MAS1010HDADN-RE3	10x2x1,00	19,5	434	18,8
MAS1210HDADN-RE3	12x2x1,00	20,2	495	18,8
MAS1610HDADN-RE3	16x2x1,00	22,4	623	18,8
MAS2010HDADN-RE3	20x2x1,00	25,1	757	18,8
MAS2410HDADN-RE3	24x2x1,00	27,6	889	18,8
MAS0115HDADN-RE3	1x2x1,50	6,8	67	12,6
MAS0215HDADN-RE3	2x2x1,50	10,3	122	12,6
MAS0415HDADN-RE3	4x2x1,50	12,6	221	12,6
MAS0615HDADN-RE3	6x2x1,50	15,0	309	12,6
MAS0815HDADN-RE3	8x2x1,50	16,8	399	12,6
MAS1015HDADN-RE3	10x2x1,50	20,0	520	12,6
MAS1215HDADN-RE3	12x2x1,50	20,6	597	12,6
MAS1615HDADN-RE3	16x2x1,50	22,9	759	12,6
MAS2015HDADN-RE3	20x2x1,50	25,7	927	12,6
MAS2415HDADN-RE3	24x2x1,50	28,3	1092	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm<sup>2</sup> - 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 - 500 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0175HDADN-RE5	1x2x0,75	5,9	47	22,5
MAS0275HDADN-RE5	2x2x0,75	8,8	83	22,5
MAS0475HDADN-RE5	4x2x0,75	10,2	130	22,5
MAS0675HDADN-RE5	6x2x0,75	12,8	200	22,5
MAS0875HDADN-RE5	8x2x0,75	14,1	248	22,5
MAS1075HDADN-RE5	10x2x0,75	16,2	302	22,5
MAS1275HDADN-RE5	12x2x0,75	17,0	354	22,5
MAS1675HDADN-RE5	16x2x0,75	19,4	477	22,5
MAS2075HDADN-RE5	20x2x0,75	21,7	577	22,5
MAS2475HDADN-RE5	24x2x0,75	23,9	676	22,5
MAS0110HDADN-RE5	1x2x1,00	6,7	58	18,8
MAS0210HDADN-RE5	2x2x1,00	10,1	105	18,8
MAS0410HDADN-RE5	4x2x1,00	12,3	186	18,8
MAS0610HDADN-RE5	6x2x1,00	14,7	257	18,8
MAS0810HDADN-RE5	8x2x1,00	16,2	322	18,8
MAS1010HDADN-RE5	10x2x1,00	19,5	434	18,8
MAS1210HDADN-RE5	12x2x1,00	20,2	495	18,8
MAS1610HDADN-RE5	16x2x1,00	22,4	623	18,8
MAS2010HDADN-RE5	20x2x1,00	25,1	757	18,8
MAS2410HDADN-RE5	24x2x1,00	27,6	889	18,8
MAS0115HDADN-RE5	1x2x1,50	6,8	67	12,6
MAS0215HDADN-RE5	2x2x1,50	10,3	122	12,6
MAS0415HDADN-RE5	4x2x1,50	12,6	221	12,6
MAS0615HDADN-RE5	6x2x1,50	15,0	309	12,6
MAS0815HDADN-RE5	8x2x1,50	16,8	399	12,6
MAS1015HDADN-RE5	10x2x1,50	20,0	520	12,6
MAS1215HDADN-RE5	12x2x1,50	20,6	597	12,6
MAS1615HDADN-RE5	16x2x1,50	22,9	759	12,6
MAS2015HDADN-RE5	20x2x1,50	25,7	927	12,6
MAS2415HDADN-RE5	24x2x1,50	28,3	1092	12,6
MAS0125HDADN-RE5	1x2x2,50	6,8	67	7,7
MAS0225HDADN-RE5	2x2x2,50	10,3	122	7,7
MAS0425HDADN-RE5	4x2x2,50	12,6	221	7,7
MAS0625HDADN-RE5	6x2x2,50	15,0	309	7,7
MAS0825HDADN-RE5	8x2x2,50	16,8	399	7,7
MAS1025HDADN-RE5	10x2x2,50	20,0	520	7,7
MAS1225HDADN-RE5	12x2x2,50	20,6	597	7,7
MAS1625HDADN-RE5	16x2x2,50	22,9	759	7,7
MAS2025HDADN-RE5	20x2x2,50	25,7	927	7,7
MAS2425HDADN-RE5	24x2x2,50	28,3	1092	7,7

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm<sup>2</sup> - 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)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:**

Polyvinyl Chloride FR - PE

**Individual Screen:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Outer Sheath:**

Polyvinyl chloride FR - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**  
8 x cable diameter



**Hazardous Area Classification**  
IEC Zone 1 - Group 2

### IDENTIFICATION OF CORES

Pair:

○ ● + Yellow Numbered Tapes

### ON REQUEST

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

### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

90/300/500 V



# EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250HDADN-RE9	2x2x0,50	6,5	58	37,5
MAC0450HDADN-RE9	4x2x0,50	7,5	93	37,5
MAC0650HDADN-RE9	6x2x0,50	8,9	132	37,5
MAC0850HDADN-RE9	8x2x0,50	9,8	167	37,5
MAC1050HDADN-RE9	10x2x0,50	11,4	207	37,5
MAC1250HDADN-RE9	12x2x0,50	11,8	239	37,5
MAC1650HDADN-RE9	16x2x0,50	13,1	308	37,5
MAC2050HDADN-RE9	20x2x0,50	14,7	380	37,5
MAC2450HDADN-RE9	24x2x0,50	16,3	453	37,5
MAC0275HDADN-RE9	2x2x0,75	7,2	72	25,5
MAC0475HDADN-RE9	4x2x0,75	8,3	117	25,5
MAC0675HDADN-RE9	6x2x0,75	10,0	167	25,5
MAC0875HDADN-RE9	8x2x0,75	11,0	213	25,5
MAC1075HDADN-RE9	10x2x0,75	12,8	265	25,5
MAC1275HDADN-RE9	12x2x0,75	13,2	307	25,5
MAC1675HDADN-RE9	16x2x0,75	14,7	396	25,5
MAC2075HDADN-RE9	20x2x0,75	16,6	490	25,5
MAC2475HDADN-RE9	24x2x0,75	18,4	584	25,5
MAC0210HDADN-RE9	2x2x1,00	8,3	92	18,8
MAC0410HDADN-RE9	4x2x1,00	9,7	154	18,8
MAC0610HDADN-RE9	6x2x1,00	11,6	220	18,8
MAC0810HDADN-RE9	8x2x1,00	12,9	282	18,8
MAC1010HDADN-RE9	10x2x1,00	15	353	18,8
MAC1210HDADN-RE9	12x2x1,00	15,5	409	18,8
MAC1610HDADN-RE9	16x2x1,00	17,3	531	18,8
MAC2010HDADN-RE9	20x2x1,00	19,6	658	18,8
MAC2410HDADN-RE9	24x2x1,00	21,7	786	18,8
MAC0215HDADN-RE9	2x2x1,50	9,2	118	12,6
MAC0415HDADN-RE9	4x2x1,50	10,8	200	12,6
MAC0615HDADN-RE9	6x2x1,50	13,1	289	12,6
MAC0815HDADN-RE9	8x2x1,50	14,5	373	12,6
MAC1015HDADN-RE9	10x2x1,50	16,9	466	12,6
MAC1215HDADN-RE9	12x2x1,50	17,5	543	12,6
MAC1615HDADN-RE9	16x2x1,50	19,6	707	12,6
MAC2015HDADN-RE9	20x2x1,50	22,2	878	12,6
MAC2415HDADN-RE9	24x2x1,50	24,6	1050	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y-Pimf - 1x2x2,5 mm<sup>2</sup> - 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 - 300 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250HDADN-RE3	2x2x0,50	6,9	62	37,5
MAC0450HDADN-RE3	4x2x0,50	8,0	99	37,5
MAC0650HDADN-RE3	6x2x0,50	9,6	140	37,5
MAC0850HDADN-RE3	8x2x0,50	10,6	177	37,5
MAC1050HDADN-RE3	10x2x0,50	12,2	221	37,5
MAC1250HDADN-RE3	12x2x0,50	12,7	254	37,5
MAC1650HDADN-RE3	16x2x0,50	14,1	327	37,5
MAC2050HDADN-RE3	20x2x0,50	15,9	404	37,5
MAC2450HDADN-RE3	24x2x0,50	17,6	480	37,5
MAC0275HDADN-RE3	2x2x0,75	7,6	76	25,5
MAC0475HDADN-RE3	4x2x0,75	8,8	123	25,5
MAC0675HDADN-RE3	6x2x0,75	10,6	176	25,5
MAC0875HDADN-RE3	8x2x0,75	11,7	224	25,5
MAC1075HDADN-RE3	10x2x0,75	13,6	279	25,5
MAC1275HDADN-RE3	12x2x0,75	14,1	323	25,5
MAC1675HDADN-RE3	16x2x0,75	15,7	417	25,5
MAC2075HDADN-RE3	20x2x0,75	17,7	516	25,5
MAC2475HDADN-RE3	24x2x0,75	19,6	615	25,5
MAC0210HDADN-RE3	2x2x1,00	8,3	92	18,8
MAC0410HDADN-RE3	4x2x1,00	9,7	154	18,8
MAC0610HDADN-RE3	6x2x1,00	11,6	220	18,8
MAC0810HDADN-RE3	8x2x1,00	12,9	282	18,8
MAC1010HDADN-RE3	10x2x1,00	15	353	18,8
MAC1210HDADN-RE3	12x2x1,00	15,5	409	18,8
MAC1610HDADN-RE3	16x2x1,00	17,3	531	18,8
MAC2010HDADN-RE3	20x2x1,00	19,6	658	18,8
MAC2410HDADN-RE3	24x2x1,00	21,7	786	18,8
MAC0215HDADN-RE3	2x2x1,50	9,6	122	12,6
MAC0415HDADN-RE3	4x2x1,50	11,2	206	12,6
MAC0615HDADN-RE3	6x2x1,50	13,6	298	12,6
MAC0815HDADN-RE3	8x2x1,50	15,0	383	12,6
MAC1015HDADN-RE3	10x2x1,50	17,5	480	12,6
MAC1215HDADN-RE3	12x2x1,50	18,2	559	12,6
MAC1615HDADN-RE3	16x2x1,50	20,3	727	12,6
MAC2015HDADN-RE3	20x2x1,50	23,0	903	12,6
MAC2415HDADN-RE3	24x2x1,50	25,5	1080	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y-Pimf - 1x2x2,5 mm<sup>2</sup> - 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 - 500 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0275HDADN-RE5	2x2x0,75	7,9	78	37,5
MAC0475HDADN-RE5	4x2x0,75	9,2	128	37,5
MAC0675HDADN-RE5	6x2x0,75	11,1	182	37,5
MAC0875HDADN-RE5	8x2x0,75	12,2	232	37,5
MAC1075HDADN-RE5	10x2x0,75	14,2	290	37,5
MAC1275HDADN-RE5	12x2x0,75	14,7	335	37,5
MAC1675HDADN-RE5	16x2x0,75	16,4	432	37,5
MAC2075HDADN-RE5	20x2x0,75	18,5	535	37,5
MAC2475HDADN-RE5	24x2x0,75	20,5	638	37,5
MAC0210HDADN-RE5	2x2x1,00	8,6	96	25,5
MAC0410HDADN-RE5	4x2x1,00	10,1	159	25,5
MAC0610HDADN-RE5	6x2x1,00	12,1	228	25,5
MAC0810HDADN-RE5	8x2x1,00	13,4	292	25,5
MAC1010HDADN-RE5	10x2x1,00	15,6	365	25,5
MAC1210HDADN-RE5	12x2x1,00	16,2	423	25,5
MAC1610HDADN-RE5	16x2x1,00	18,1	549	25,5
MAC2010HDADN-RE5	20x2x1,00	20,4	680	25,5
MAC2410HDADN-RE5	24x2x1,00	22,7	812	25,5
MAC0215HDADN-RE5	2x2x1,50	9,4	120	18,8
MAC0415HDADN-RE5	4x2x1,50	11,0	204	18,8
MAC0615HDADN-RE5	6x2x1,50	13,3	294	18,8
MAC0815HDADN-RE5	8x2x1,50	14,8	378	18,8
MAC1015HDADN-RE5	10x2x1,50	17,3	474	18,8
MAC1215HDADN-RE5	12x2x1,50	17,9	552	18,8
MAC1615HDADN-RE5	16x2x1,50	20,0	718	18,8
MAC2015HDADN-RE5	20x2x1,50	22,6	892	18,8
MAC2415HDADN-RE5	24x2x1,50	25,1	1066	18,8
MAC0225HDADN-RE5	2x2x2,50	11,5	176	12,6
MAC0425HDADN-RE5	4x2x2,50	13,5	306	12,6
MAC0625HDADN-RE5	6x2x2,50	16,4	446	12,6
MAC0825HDADN-RE5	8x2x2,50	18,3	577	12,6
MAC1025HDADN-RE5	10x2x2,50	21,4	724	12,6
MAC1225HDADN-RE5	12x2x2,50	22,2	847	12,6
MAC1625HDADN-RE5	16x2x2,50	24,8	1106	12,6
MAC2025HDADN-RE5	20x2x2,50	28,2	1377	12,6
MAC2425HDADN-RE5	24x2x2,50	31,3	1649	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y-Pimf - 1x2x2,5 mm<sup>2</sup> - 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:**

Polyvinyl Chloride FR - PE

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Polyvinyl chloride FR - PVC

**Armour:**

Galvanized Steel Wires Armour

**Outer Sheath:**

Polyvinyl chloride FR - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

### ON REQUEST

- 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



### IDENTIFICATION OF CORES

Pair:



### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

90/300/500 V



# EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE9	1x2x0,50	8,8	155	37,5
MAS0250ADADN-RE9	2x2x0,50	10,6	215	37,5
MAS0450ADADN-RE9	4x2x0,50	11,6	266	37,5
MAS0650ADADN-RE9	6x2x0,50	13,1	328	37,5
MAS0850ADADN-RE9	8x2x0,50	14,0	377	37,5
MAS1050ADADN-RE9	10x2x0,50	15,5	455	37,5
MAS1250ADADN-RE9	12x2x0,50	15,9	479	37,5
MAS1650ADADN-RE9	16x2x0,50	17,2	565	37,5
MAS2050ADADN-RE9	20x2x0,50	18,8	661	37,5
MAS2450ADADN-RE9	24x2x0,50	21,1	861	37,5
MAS0175ADADN-RE9	1x2x0,75	9,2	171	25,5
MAS0275ADADN-RE9	2x2x0,75	11,4	245	25,5
MAS0475ADADN-RE9	4x2x0,75	12,5	308	25,5
MAS0675ADADN-RE9	6x2x0,75	14,2	387	25,5
MAS0875ADADN-RE9	8x2x0,75	15,2	450	25,5
MAS1075ADADN-RE9	10x2x0,75	16,9	535	25,5
MAS1275ADADN-RE9	12x2x0,75	17,4	581	25,5
MAS1675ADADN-RE9	16x2x0,75	18,9	692	25,5
MAS2075ADADN-RE9	20x2x0,75	21,5	924	25,5
MAS2475ADADN-RE9	24x2x0,75	23,3	1057	25,5
MAS0110ADADN-RE9	1x2x1,00	9,9	196	18,8
MAS0210ADADN-RE9	2x2x1,00	12,5	289	18,8
MAS0410ADADN-RE9	4x2x1,00	13,9	374	18,8
MAS0610ADADN-RE9	6x2x1,00	15,9	477	18,8
MAS0810ADADN-RE9	8x2x1,00	17,2	560	18,8
MAS1010ADADN-RE9	10x2x1,00	19,3	672	18,8
MAS1210ADADN-RE9	12x2x1,00	19,8	734	18,8
MAS1610ADADN-RE9	16x2x1,00	22,4	995	18,8
MAS2010ADADN-RE9	20x2x1,00	24,7	1174	18,8
MAS2410ADADN-RE9	24x2x1,00	26,8	1350	18,8
MAS0115ADADN-RE9	1x2x1,50	10,5	221	12,6
MAS0215ADADN-RE9	2x2x1,50	13,5	338	12,6
MAS0415ADADN-RE9	4x2x1,50	15,2	448	12,6
MAS0615ADADN-RE9	6x2x1,50	17,4	581	12,6
MAS0815ADADN-RE9	8x2x1,50	18,9	690	12,6
MAS1015ADADN-RE9	10x2x1,50	22,1	944	12,6
MAS1215ADADN-RE9	12x2x1,50	22,7	1031	12,6
MAS1615ADADN-RE9	16x2x1,50	24,8	1242	12,6
MAS2015ADADN-RE9	20x2x1,50	27,4	1477	12,6
MAS2415A DADN-RE9	24x2x1,50	29,8	1709	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y - 1x2x2,5 mm<sup>2</sup> - 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 - 300 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE5	1x2x0,50	9,0	163	37,5
MAS0250ADADN-RE5	2x2x0,50	11,1	229	37,5
MAS0450ADADN-RE5	4x2x0,50	12,2	283	37,5
MAS0650ADADN-RE5	6x2x0,50	13,7	351	37,5
MAS0850ADADN-RE5	8x2x0,50	14,7	404	37,5
MAS1050ADADN-RE5	10x2x0,50	16,4	478	37,5
MAS1250ADADN-RE5	12x2x0,50	16,8	515	37,5
MAS1650ADADN-RE5	16x2x0,50	18,2	607	37,5
MAS2050ADADN-RE5	20x2x0,50	20,0	713	37,5
MAS2450ADADN-RE5	24x2x0,50	22,4	928	37,5
MAS0175ADADN-RE5	1x2x0,75	9,5	178	25,5
MAS0275ADADN-RE5	2x2x0,75	11,8	258	25,5
MAS0475ADADN-RE5	4x2x0,75	13,1	327	25,5
MAS0675ADADN-RE5	6x2x0,75	14,8	411	25,5
MAS0875ADADN-RE5	8x2x0,75	15,9	478	25,5
MAS1075ADADN-RE5	10x2x0,75	17,8	570	25,5
MAS1275ADADN-RE5	12x2x0,75	18,3	619	25,5
MAS1675ADADN-RE5	16x2x0,75	20,0	738	25,5
MAS2075ADADN-RE5	20x2x0,75	22,7	986	25,5
MAS2475ADADN-RE5	24x2x0,75	24,6	1128	25,5
MAS0110ADADN-RE5	1x2x1,00	9,9	196	18,8
MAS0210ADADN-RE5	2x2x1,00	12,5	289	18,8
MAS0410ADADN-RE5	4x2x1,00	13,9	374	18,8
MAS0610ADADN-RE5	6x2x1,00	15,9	477	18,8
MAS0810ADADN-RE5	8x2x1,00	17,2	560	18,8
MAS1010ADADN-RE5	10x2x1,00	19,3	672	18,8
MAS1210ADADN-RE5	12x2x1,00	19,8	734	18,8
MAS1610ADADN-RE5	16x2x1,00	22,4	995	18,8
MAS2010ADADN-RE5	20x2x1,00	24,7	1174	18,8
MAS2410ADADN-RE5	24x2x1,00	26,8	1350	18,8
MAS0115ADADN-RE5	1x2x1,50	10,7	228	12,6
MAS0215ADADN-RE5	2x2x1,50	13,9	349	12,6
MAS0415ADADN-RE5	4x2x1,50	15,6	463	12,6
MAS0615ADADN-RE5	6x2x1,50	17,9	601	12,6
MAS0815ADADN-RE5	8x2x1,50	19,4	714	12,6
MAS1015ADADN-RE5	10x2x1,50	22,7	977	12,6
MAS1215ADADN-RE5	12x2x1,50	23,4	1068	12,6
MAS1615ADADN-RE5	16x2x1,50	25,6	1286	12,6
MAS2015ADADN-RE5	20x2x1,50	28,3	1530	12,6
MAS2415ADADN-RE5	24x2x1,50	30,9	1771	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y-Pimf - 1x2x2,5 mm<sup>2</sup> - 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 - 500 V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0175HDADN-RE5	1x2x0,75	9,6	184	22,5
MAS0275HDADN-RE5	2x2x0,75	12,1	268	22,5
MAS0475HDADN-RE5	4x2x0,75	13,4	340	22,5
MAS0675HDADN-RE5	6x2x0,75	15,3	429	22,5
MAS0875HDADN-RE5	8x2x0,75	16,5	499	22,5
MAS1075HDADN-RE5	10x2x0,75	18,5	595	22,5
MAS1275HDADN-RE5	12x2x0,75	19,0	646	22,5
MAS1675HDADN-RE5	16x2x0,75	21,4	878	22,5
MAS2075HDADN-RE5	20x2x0,75	23,6	1030	22,5
MAS2475HDADN-RE5	24x2x0,75	25,6	1180	22,5
MAS0110HDADN-RE5	1x2x1,00	10,1	202	18,8
MAS0210HDADN-RE5	2x2x1,00	12,9	300	18,8
MAS0410HDADN-RE5	4x2x1,00	14,3	388	18,8
MAS0610HDADN-RE5	6x2x1,00	16,4	496	18,8
MAS0810HDADN-RE5	8x2x1,00	17,7	582	18,8
MAS1010HDADN-RE5	10x2x1,00	20	700	18,8
MAS1210HDADN-RE5	12x2x1,00	21,3	870	18,8
MAS1610HDADN-RE5	16x2x1,00	23,2	1036	18,8
MAS2010HDADN-RE5	20x2x1,00	25,6	1223	18,8
MAS2410HDADN-RE5	24x2x1,00	27,8	1408	18,8
MAS0115HDADN-RE5	1x2x1,50	10,6	225	12,6
MAS0215HDADN-RE5	2x2x1,50	13,7	344	12,6
MAS0415HDADN-RE5	4x2x1,50	15,4	456	12,6
MAS0615HDADN-RE5	6x2x1,50	17,7	592	12,6
MAS0815HDADN-RE5	8x2x1,50	19,2	703	12,6
MAS1015HDADN-RE5	10x2x1,50	22,4	962	12,6
MAS1215HDADN-RE5	12x2x1,50	23,1	1051	12,6
MAS1615HDADN-RE5	16x2x1,50	25,2	1267	12,6
MAS2015HDADN-RE5	20x2x1,50	27,9	1506	12,6
MAS2415HDADN-RE5	24x2x1,50	30,4	1743	12,6
MAS0125HDADN-RE5	1x2x2,50	11,9	281	7,7
MAS0225HDADN-RE5	2x2x2,50	15,9	448	7,7
MAS0425HDADN-RE5	4x2x2,50	18,0	617	7,7
MAS0625HDADN-RE5	6x2x2,50	21,7	925	7,7
MAS0825HDADN-RE5	8x2x2,50	23,6	1104	7,7
MAS1025HDADN-RE5	10x2x2,50	26,8	1338	7,7
MAS1225HDADN-RE5	12x2x2,50	27,6	1476	7,7
MAS1625HDADN-RE5	16x2x2,50	30,3	1803	7,7
MAS2025HDADN-RE5	20x2x2,50	35,3	2550	7,7
MAS2425HDADN-RE5	24x2x2,50	38,5	2945	7,7

### CABLE PRINTING

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

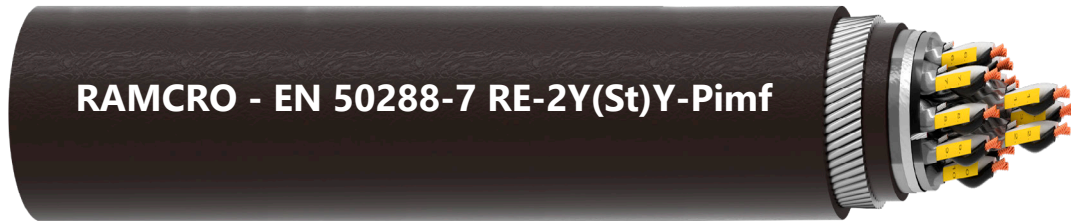


Via Marzorati, 15 - 20014 Nerviano - Milan - Italy / [www.ramcro.it](http://www.ramcro.it)

# 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:**

Polyvinyl Chloride FR - PE

**Individual Screen:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Polyvinyl chloride FR - PVC

**Armour:**

Galvanized Steel Wires Armour

**Outer Sheath:**

Polyvinyl chloride FR - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

### ON REQUEST

- 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



### IDENTIFICATION OF CORES

Pair:

○ ● + Yellow Numbered Tapes

### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

90/300/500 V



# 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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	11,7	260	25,5
MAC0475ADADN-RE9	4x2x0,75	12,9	332	25,5
MAC0675ADADN-RE9	6x2x0,75	14,6	420	25,5
MAC0875ADADN-RE9	8x2x0,75	15,7	491	25,5
MAC1075ADADN-RE9	10x2x0,75	17,6	586	25,5
MAC1275ADADN-RE9	12x2x0,75	18,1	639	25,5
MAC1675ADADN-RE9	16x2x0,75	19,6	767	25,5
MAC2075ADADN-RE9	20x2x0,75	22,4	1021	25,5
MAC2475ADADN-RE9	24x2x0,75	24,2	1171	25,5
MAC0210ADADN-RE9	2x2x1,00	12,8	306	18,8
MAC0410ADADN-RE9	4x2x1,00	14,3	400	18,8
MAC0610ADADN-RE9	6x2x1,00	16,4	514	18,8
MAC0810ADADN-RE9	8x2x1,00	17,7	607	18,8
MAC1010ADADN-RE9	10x2x1,00	19,9	730	18,8
MAC1210ADADN-RE9	12x2x1,00	21,2	906	18,8
MAC1610ADADN-RE9	16x2x1,00	23,2	1085	18,8
MAC2010ADADN-RE9	20x2x1,00	25,5	1285	18,8
MAC2410ADADN-RE9	24x2x1,00	27,8	1482	18,8
MAC0215ADADN-RE9	2x2x1,50	13,9	354	12,6
MAC0415ADADN-RE9	4x2x1,50	15,5	475	12,6
MAC0615ADADN-RE9	6x2x1,50	17,9	619	12,6
MAC0815ADADN-RE9	8x2x1,50	19,4	737	12,6
MAC1015ADADN-RE9	10x2x1,50	22,7	1006	12,6
MAC1215ADADN-RE9	12x2x1,50	23,3	1103	12,6
MAC1615ADADN-RE9	16x2x1,50	25,5	1334	12,6
MAC2015ADADN-RE9	20x2x1,50	28,2	1589	12,6
MAC2415HDADN-RE9	24x2x1,50	30,8	1842	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y-Pimf - 1x2x2,5 mm<sup>2</sup> - 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-Pimf - 300V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250ADADN-RE3	2x2x0,50	11,4	244	37,5
MAC0450ADADN-RE3	4x2x0,50	12,6	306	37,5
MAC0650ADADN-RE3	6x2x0,50	14,2	384	37,5
MAC0850ADADN-RE3	8x2x0,50	15,2	445	37,5
MAC1050ADADN-RE3	10x2x0,50	17,0	529	37,5
MAC1250ADADN-RE3	12x2x0,50	17,5	573	37,5
MAC1650ADADN-RE3	16x2x0,50	19,0	682	37,5
MAC2050ADADN-RE3	20x2x0,50	21,6	911	37,5
MAC2450ADADN-RE3	24x2x0,50	23,4	1041	37,5
MAC0275ADADN-RE3	2x2x0,75	12,1	273	25,5
MAC0475ADADN-RE3	4x2x0,75	13,4	350	25,5
MAC0675ADADN-RE3	6x2x0,75	15,3	444	25,5
MAC0875ADADN-RE3	8x2x0,75	16,5	519	25,5
MAC1075ADADN-RE3	10x2x0,75	18,5	622	25,5
MAC1275ADADN-RE3	12x2x0,75	19,0	678	25,5
MAC1675ADADN-RE3	16x2x0,75	21,4	919	25,5
MAC2075ADADN-RE3	20x2x0,75	23,6	1082	25,5
MAC2475ADADN-RE3	24x2x0,75	25,6	1243	25,5
MAC0210ADADN-RE3	2x2x1,00	12,8	306	18,8
MAC0410ADADN-RE3	4x2x1,00	14,3	400	18,8
MAC0610ADADN-RE3	6x2x1,00	16,4	514	18,8
MAC0810ADADN-RE3	8x2x1,00	17,7	607	18,8
MAC1010ADADN-RE3	10x2x1,00	19,9	730	18,8
MAC1210ADADN-RE3	12x2x1,00	21,2	906	18,8
MAC1610ADADN-RE3	16x2x1,00	23,2	1085	18,8
MAC2010ADADN-RE3	20x2x1,00	25,5	1285	18,8
MAC2410ADADN-RE3	24x2x1,00	27,8	1482	18,8
MAC0215ADADN-RE3	2x2x1,50	14,2	365	12,6
MAC0415ADADN-RE3	4x2x1,50	15,9	490	12,6
MAC0615ADADN-RE3	6x2x1,50	18,4	639	12,6
MAC0815ADADN-RE3	8x2x1,50	20,0	762	12,6
MAC1015ADADN-RE3	10x2x1,50	23,4	1040	12,6
MAC1215ADADN-RE3	12x2x1,50	24,0	1140	12,6
MAC1615ADADN-RE3	16x2x1,50	26,3	1378	12,6
MAC2015ADADN-RE3	20x2x1,50	29,1	1643	12,6
MAC2415ADADN-RE3	24x2x1,50	33,4	2267	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)YRY-Pimf - 1x2x2,5 mm<sup>2</sup> - 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0275ADADN-RE5	2x2x0,75	12,4	283	37,5
MAC0475ADADN-RE5	4x2x0,75	13,8	363	37,5
MAC0675ADADN-RE5	6x2x0,75	15,8	462	37,5
MAC0875ADADN-RE5	8x2x0,75	17,0	540	37,5
MAC1075ADADN-RE5	10x2x0,75	19,1	647	37,5
MAC1275ADADN-RE5	12x2x0,75	19,6	705	37,5
MAC1675ADADN-RE5	16x2x0,75	22,2	957	37,5
MAC2075ADADN-RE5	20x2x0,75	24,4	1127	37,5
MAC2475ADADN-RE5	24x2x0,75	26,5	1295	37,5
MAC0210ADADN-RE5	2x2x1,00	13,2	317	25,5
MAC0410ADADN-RE5	4x2x1,00	14,7	415	25,5
MAC0610ADADN-RE5	6x2x1,00	16,9	533	25,5
MAC0810ADADN-RE5	8x2x1,00	18,3	630	25,5
MAC1010ADADN-RE5	10x2x1,00	21,3	865	25,5
MAC1210ADADN-RE5	12x2x1,00	21,9	941	25,5
MAC1610ADADN-RE5	16x2x1,00	23,9	1127	25,5
MAC2010ADADN-RE5	20x2x1,00	26,4	1335	25,5
MAC2410ADADN-RE5	24x2x1,00	28,8	1540	25,5
MAC0215ADADN-RE5	2x2x1,50	14,0	360	18,8
MAC0415ADADN-RE5	4x2x1,50	15,8	483	18,8
MAC0615ADADN-RE5	6x2x1,50	18,2	630	18,8
MAC0815ADADN-RE5	8x2x1,50	19,7	751	18,8
MAC1015ADADN-RE5	10x2x1,50	23,1	1025	18,8
MAC1215ADADN-RE5	12x2x1,50	23,7	1124	18,8
MAC1615ADADN-RE5	16x2x1,50	26,0	1358	18,8
MAC2015ADADN-RE5	20x2x1,50	28,7	1619	18,8
MAC2415ADADN-RE5	24x2x1,50	32,1	2041	18,8
MAC0225ADADN-RE5	2x2x2,50	16,2	466	12,6
MAC0425ADADN-RE5	4x2x2,50	18,4	647	12,6
MAC0625ADADN-RE5	6x2x2,50	22,2	971	12,6
MAC0825ADADN-RE5	8x2x2,50	24,1	1160	12,6
MAC1025ADADN-RE5	10x2x2,50	27,4	1409	12,6
MAC1225ADADN-RE5	12x2x2,50	28,2	1558	12,6
MAC1625ADADN-RE5	16x2x2,50	31,1	1907	12,6
MAC2025ADADN-RE5	20x2x2,50	36,2	2688	12,6
MAC2425ADADN-RE5	24x2x2,50	39,4	3109	12,6

### CABLE PRINTING

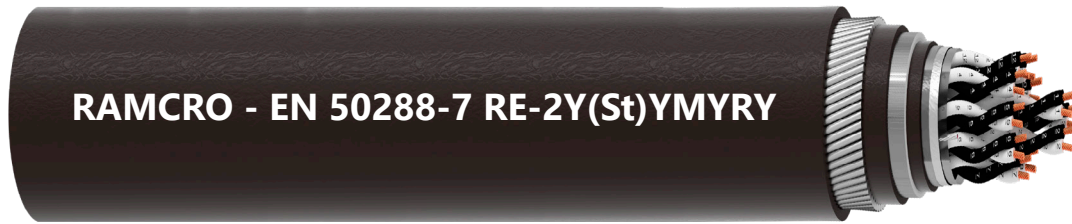
RAMCRO - RE-2Y(St)YRY-Pimf - 1x2x2,5 mm<sup>2</sup> - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



# EN 50288-7:2005

## RE-2Y(St)YMYRY

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



### CONSTRUCTION

**Formation:**

Plain annealed copper wire, Stranded acc. to HD 383

**Insulation:**

Polyvinyl Chloride FR - PE

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Polyvinyl chloride FR - PVC

**Chemical Protection:**

Lead Cover

**Inner Sheath:**

Polyvinyl chloride FR - PVC

**Armour:**

Galvanized Steel Wires Armour

**Outer Sheath:**

Polyvinyl chloride FR - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### IDENTIFICATION OF CORES

Pair:



### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**

8 x cable diameter



**Hazardous Area Classification**

IEC Zone 1 - Group 2

### ON REQUEST

- 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



### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

90/300/500 V





# EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE9LC	1x2x0,50	13,8	553	37,5
MAS0250ADADN-RE9LC	2x2x0,50	15,7	695	37,5
MAS0450ADADN-RE9LC	4x2x0,50	16,7	788	37,5
MAS0650ADADN-RE9LC	6x2x0,50	18,1	911	37,5
MAS0850ADADN-RE9LC	8x2x0,50	19,0	998	37,5
MAS1050ADADN-RE9LC	10x2x0,50	21,7	1266	37,5
MAS1250ADADN-RE9LC	12x2x0,50	22,1	1320	37,5
MAS1650ADADN-RE9LC	16x2x0,50	23,4	1470	37,5
MAS2050ADADN-RE9LC	20x2x0,50	25,1	1646	37,5
MAS2450ADADN-RE9LC	24x2x0,50	26,8	1890	37,5
MAS0175ADADN-RE9LC	1x2x0,75	14,2	588	25,5
MAS0275ADADN-RE9LC	2x2x0,75	16,4	755	25,5
MAS0475ADADN-RE9LC	4x2x0,75	17,6	869	25,5
MAS0675ADADN-RE9LC	6x2x0,75	19,2	1017	25,5
MAS0875ADADN-RE9LC	8x2x0,75	21,4	1257	25,5
MAS1075ADADN-RE9LC	10x2x0,75	23,2	1428	25,5
MAS1275ADADN-RE9LC	12x2x0,75	23,6	1496	25,5
MAS1675ADADN-RE9LC	16x2x0,75	25,1	1681	25,5
MAS2075ADADN-RE9LC	20x2x0,75	27,2	1974	25,5
MAS2475ADADN-RE9LC	24x2x0,75	29,0	2189	25,5
MAS0110ADADN-RE9LC	1x2x1,00	15	644	18,8
MAS0210ADADN-RE9LC	2x2x1,00	17,6	850	18,8
MAS0410ADADN-RE9LC	4x2x1,00	19	995	18,8
MAS0610ADADN-RE9LC	6x2x1,00	22,1	1320	18,8
MAS0810ADADN-RE9LC	8x2x1,00	23,4	1464	18,8
MAS1010ADADN-RE9LC	10x2x1,00	25,5	1680	18,8
MAS1210ADADN-RE9LC	12x2x1,00	26,1	1769	18,8
MAS1610ADADN-RE9LC	16x2x1,00	28,1	2086	18,8
MAS2010ADADN-RE9LC	20x2x1,00	30,6	2459	18,8
MAS2410ADADN-RE9LC	24x2x1,00	34,3	3117	18,8
MAS0115ADADN-RE9LC	1x2x1,50	15,6	696	12,6
MAS0215ADADN-RE9LC	2x2x1,50	18,6	941	12,6
MAS0415ADADN-RE9LC	4x2x1,50	21,4	1254	12,6
MAS0615ADADN-RE9LC	6x2x1,50	23,7	1498	12,6
MAS0815ADADN-RE9LC	8x2x1,50	25,1	1677	12,6
MAS1015ADADN-RE9LC	10x2x1,50	27,8	2019	12,6
MAS1215ADADN-RE9LC	12x2x1,50	28,4	2136	12,6
MAS1615ADADN-RE9LC	16x2x1,50	30,7	2533	12,6
MAS2015ADADN-RE9LC	20x2x1,50	34,9	3280	12,6
MAS2415A DADN-RE9LC	24x2x1,50	38,0	3822	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY - 1x2x2,5 mm<sup>2</sup> - 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)YMYRY - 300V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE3LC	1x2x0,50	14,1	573	37,5
MAS0250ADADN-RE3LC	2x2x0,50	16,1	728	37,5
MAS0450ADADN-RE3LC	4x2x0,50	17,2	829	37,5
MAS0650ADADN-RE3LC	6x2x0,50	18,8	963	37,5
MAS0850ADADN-RE3LC	8x2x0,50	20,9	1187	37,5
MAS1050ADADN-RE3LC	10x2x0,50	22,6	1343	37,5
MAS1250ADADN-RE3LC	12x2x0,50	23,0	1401	37,5
MAS1650ADADN-RE3LC	16x2x0,50	24,5	1564	37,5
MAS2050ADADN-RE3LC	20x2x0,50	26,5	1830	37,5
MAS2450ADADN-RE3LC	24x2x0,50	28,1	2021	37,5
MAS0175ADADN-RE3LC	1x2x0,75	14,5	608	25,5
MAS0275ADADN-RE3LC	2x2x0,75	16,9	788	25,5
MAS0475ADADN-RE3LC	4x2x0,75	18,1	910	25,5
MAS0675ADADN-RE3LC	6x2x0,75	21,1	1200	25,5
MAS0875ADADN-RE3LC	8x2x0,75	22,2	1322	25,5
MAS1075ADADN-RE3LC	10x2x0,75	24,1	1507	25,5
MAS1275ADADN-RE3LC	12x2x0,75	24,6	1579	25,5
MAS1675ADADN-RE3LC	16x2x0,75	26,4	1852	25,5
MAS2075ADADN-RE3LC	20x2x0,75	28,4	2092	25,5
MAS2475ADADN-RE3LC	24x2x0,75	30,5	2411	25,5
MAS0110ADADN-RE3LC	1x2x1,00	15	644	18,8
MAS0210ADADN-RE3LC	2x2x1,00	17,6	850	18,8
MAS0410ADADN-RE3LC	4x2x1,00	19	995	18,8
MAS0610ADADN-RE3LC	6x2x1,00	22,1	1320	18,8
MAS0810ADADN-RE3LC	8x2x1,00	23,4	1464	18,8
MAS1010ADADN-RE3LC	10x2x1,00	25,5	1680	18,8
MAS1210ADADN-RE3LC	12x2x1,00	26,1	1769	18,8
MAS1610ADADN-RE3LC	16x2x1,00	28,1	2086	18,8
MAS2010ADADN-RE3LC	20x2x1,00	20,6	2459	18,8
MAS2410ADADN-RE3LC	24x2x1,00	34,3	3117	18,8
MAS0115ADADN-RE3LC	1x2x1,50	15,8	711	12,6
MAS0215ADADN-RE3LC	2x2x1,50	18,9	967	12,6
MAS0415ADADN-RE3LC	4x2x1,50	21,8	1289	12,6
MAS0615ADADN-RE3LC	6x2x1,50	24,2	1543	12,6
MAS0815ADADN-RE3LC	8x2x1,50	25,7	1729	12,6
MAS1015ADADN-RE3LC	10x2x1,50	28,4	2084	12,6
MAS1215ADADN-RE3LC	12x2x1,50	29,1	2205	12,6
MAS1615ADADN-RE3LC	16x2x1,50	33,1	2976	12,6
MAS2015ADADN-RE3LC	20x2x1,50	36,4	3540	12,6
MAS2415ADADN-RE3LC	24x2x1,50	39,0	3952	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY - 1x2x2,5 mm<sup>2</sup> - 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)YMYRY - 500V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0175HDADN-RE5LC	1x2x0,75	14,7	622	22,5
MAS0275HDADN-RE5LC	2x2x0,75	17,2	812	22,5
MAS0475HDADN-RE5LC	4x2x0,75	18,5	940	22,5
MAS0675HDADN-RE5LC	6x2x0,75	21,5	1241	22,5
MAS0875HDADN-RE5LC	8x2x0,75	22,7	1369	22,5
MAS1075HDADN-RE5LC	10x2x0,75	24,7	1564	22,5
MAS1275HDADN-RE5LC	12x2x0,75	25,2	1640	22,5
MAS1675HDADN-RE5LC	16x2x0,75	27,1	1924	22,5
MAS2075HDADN-RE5LC	20x2x0,75	29,3	2176	22,5
MAS2475HDADN-RE5LC	24x2x0,75	33,1	2870	22,5
MAS0110HDADN-RE5LC	1x2x1,00	15,2	659	18,8
MAS0210HDADN-RE5LC	2x2x1,00	17,9	876	18,8
MAS0410HDADN-RE5LC	4x2x1,00	19,4	1026	18,8
MAS0610HDADN-RE5LC	6x2x1,00	22,7	1364	18,8
MAS0810HDADN-RE5LC	8x2x1,00	24	1514	18,8
MAS1010HDADN-RE5LC	10x2x1,00	26,4	1814	18,8
MAS1210HDADN-RE5LC	12x2x1,00	27	1908	18,8
MAS1610HDADN-RE5LC	16x2x1,00	28,9	2165	18,8
MAS2010HDADN-RE5LC	20x2x1,00	33,1	2914	18,8
MAS2410HDADN-RE5LC	24x2x1,00	35,7	3285	18,8
MAS0115HDADN-RE5LC	1x2x1,50	15,7	705	12,6
MAS0215HDADN-RE5LC	2x2x1,50	18,8	955	12,6
MAS0415HDADN-RE5LC	4x2x1,50	21,6	1273	12,6
MAS0615HDADN-RE5LC	6x2x1,50	23,9	1523	12,6
MAS0815HDADN-RE5LC	8x2x1,50	25,4	1706	12,6
MAS1015HDADN-RE5LC	10x2x1,50	28,1	2055	12,6
MAS1215HDADN-RE5LC	12x2x1,50	28,8	2174	12,6
MAS1615HDADN-RE5LC	16x2x1,50	31,1	2579	12,6
MAS2015HDADN-RE5LC	20x2x1,50	35,8	3388	12,6
MAS2415HDADN-RE5LC	24x2x1,50	38,5	3894	12,6
MAS0125HDADN-RE5LC	1x2x2,50	17,0	817	7,7
MAS0225HDADN-RE5LC	2x2x2,50	22,1	1290	7,7
MAS0425HDADN-RE5LC	4x2x2,50	24,2	1562	7,7
MAS0625HDADN-RE5LC	6x2x2,50	27,4	1984	7,7
MAS0825HDADN-RE5LC	8x2x2,50	29,3	2250	7,7
MAS1025HDADN-RE5LC	10x2x2,50	34,3	3102	7,7
MAS1225HDADN-RE5LC	12x2x2,50	35,5	3339	7,7
MAS1625HDADN-RE5LC	16x2x2,50	38,5	3948	7,7
MAS2025HDADN-RE5LC	20x2x2,50	42,1	4658	7,7
MAS2425HDADN-RE5LC	24x2x2,50	45,5	5375	7,7

### CABLE PRINTING

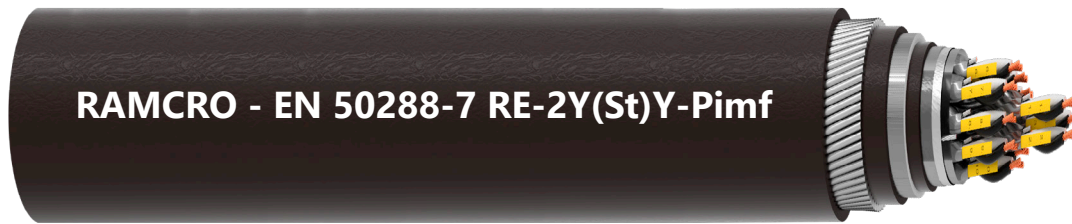
RAMCRO - RE-2Y(St)YMYRY - 1x2x2,5 mm<sup>2</sup> - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016  
CPR Class B2ca + BATCH + METER MARKING



# EN 50288-7:2005

## RE-2Y(St)YMYRY-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:**

Polyvinyl Chloride - PE

**Individual Screen:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Polyvinyl chloride - PVC

**Chemical Protection:**

Lead Cover

**Inner Sheath:**

Polyvinyl chloride - PVC

**Armour:**

Galvanized Steel Wires Armour

**Outer Sheath:**

Polyvinyl chloride - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

### ON REQUEST

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

### IDENTIFICATION OF CORES

Pair:

○ ● + Yellow Numbered Tapes

### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

90/300/500 V



# EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0275HDADN-RE9LC	2x2x0,75	16,0	725	37,5
MAC0475HDADN-RE9LC	4x2x0,75	17,1	832	37,5
MAC0675HDADN-RE9LC	6x2x0,75	18,6	970	37,5
MAC0875HDADN-RE9LC	8x2x0,75	20,0	1095	37,5
MAC1075HDADN-RE9LC	10x2x0,75	22,4	1358	37,5
MAC1275HDADN-RE9LC	12x2x0,75	22,8	1422	37,5
MAC1675HDADN-RE9LC	16x2x0,75	24,2	1597	37,5
MAC2075HDADN-RE9LC	20x2x0,75	25,9	1800	37,5
MAC2475HDADN-RE9LC	24x2x0,75	27,7	2073	37,5
MAC0210HDADN-RE9LC	2x2x1,00	16,7	785	25,5
MAC0410HDADN-RE9LC	4x2x1,00	18,0	912	25,5
MAC0610HDADN-RE9LC	6x2x1,00	20,9	1205	25,5
MAC0810HDADN-RE9LC	8x2x1,00	21,9	1332	25,5
MAC1010HDADN-RE9LC	10x2x1,00	23,8	1521	25,5
MAC1210HDADN-RE9LC	12x2x1,00	24,3	1599	25,5
MAC1610HDADN-RE9LC	16x2x1,00	25,9	1809	25,5
MAC2010HDADN-RE9LC	20x2x1,00	28,1	2131	25,5
MAC2410HDADN-RE9LC	24x2x1,00	30,1	2459	25,5
MAC0215HDADN-RE9LC	2x2x1,50	17,9	883	18,8
MAC0415HDADN-RE9LC	4x2x1,50	19,4	1042	18,8
MAC0615HDADN-RE9LC	6x2x1,50	22,6	1388	18,8
MAC0815HDADN-RE9LC	8x2x1,50	23,9	1548	18,8
MAC1015HDADN-RE9LC	10x2x1,50	26,2	1783	18,8
MAC1215HDADN-RE9LC	12x2x1,50	26,9	1959	18,8
MAC1615HDADN-RE9LC	16x2x1,50	28,9	2234	18,8
MAC2015HDADN-RE9LC	20x2x1,50	32,2	2807	18,8
MAC2415HDADN-RE9LC	24x2x1,50	35,7	3390	18,8
MAC0225HDADN-RE9LC	2x2x2,50	18,9	974	12,6
MAC0425HDADN-RE9LC	4x2x2,50	21,8	1304	12,6
MAC0625HDADN-RE9LC	6x2x2,50	24,1	1567	12,6
MAC0825HDADN-RE9LC	8x2x2,50	25,6	1762	12,6
MAC1025HDADN-RE9LC	10x2x2,50	28,4	2125	12,6
MAC1225HDADN-RE9LC	12x2x2,50	29,0	2255	12,6
MAC1625HDADN-RE9LC	16x2x2,50	32,2	2849	12,6
MAC2025HDADN-RE9LC	20x2x2,50	36,4	3624	12,6
MAC2425HDADN-RE9LC	24x2x2,50	38,9	4053	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY-Pimf - 1x2x2,5 mm<sup>2</sup> - 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)YMYRY-Pimf - 300V

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250HDADN-RE3LC	2x2x0,50	16,5	758	37,5
MAC0450HDADN-RE3LC	4x2x0,50	17,6	872	37,5
MAC0650HDADN-RE3LC	6x2x0,50	19,3	1022	37,5
MAC0850HDADN-RE3LC	8x2x0,50	21,5	1263	37,5
MAC1050HDADN-RE3LC	10x2x0,50	23,2	1436	37,5
MAC1250HDADN-RE3LC	12x2x0,50	23,7	1504	37,5
MAC1650HDADN-RE3LC	16x2x0,50	25,2	1692	37,5
MAC2050HDADN-RE3LC	20x2x0,50	27,3	1987	37,5
MAC2450HDADN-RE3LC	24x2x0,50	29,1	2204	37,5
MAC0275HDADN-RE3LC	2x2x0,75	17,2	818	25,5
MAC0475HDADN-RE3LC	4x2x0,75	18,5	953	25,5
MAC0675HDADN-RE3LC	6x2x0,75	21,5	1263	25,5
MAC0875HDADN-RE3LC	8x2x0,75	22,7	1397	25,5
MAC1075HDADN-RE3LC	10x2x0,75	24,7	1600	25,5
MAC1275HDADN-RE3LC	12x2x0,75	25,2	1683	25,5
MAC1675HDADN-RE3LC	16x2x0,75	27,1	1982	25,5
MAC2075HDADN-RE3LC	20x2x0,75	29,3	2249	25,5
MAC2475HDADN-RE3LC	24x2x0,75	33,1	2958	25,5
MAC0210HDADN-RE3LC	2x2x1,00	17,9	883	18,8
MAC0410HDADN-RE3LC	4x2x1,00	19,4	1042	18,8
MAC0610HDADN-RE3LC	6x2x1,00	22,6	1388	18,8
MAC0810HDADN-RE3LC	8x2x1,00	23,9	1548	18,8
MAC1010HDADN-RE3LC	10x2x1,00	26,2	1783	18,8
MAC1210HDADN-RE3LC	12x2x1,00	26,9	1959	18,8
MAC1610HDADN-RE3LC	16x2x1,00	28,9	2234	18,8
MAC2010HDADN-RE3LC	20x2x1,00	32,2	2807	18,8
MAC2410HDADN-RE3LC	24x2x1,00	35,7	3390	18,8
MAC0215HDADN-RE3LC	2x2x1,50	19,3	999	12,6
MAC0415HDADN-RE3LC	4x2x1,50	22,2	1339	12,6
MAC0615HDADN-RE3LC	6x2x1,50	24,6	1611	12,6
MAC0815HDADN-RE3LC	8x2x1,50	26,4	1887	12,6
MAC1015HDADN-RE3LC	10x2x1,50	29,1	2190	12,6
MAC1215HDADN-RE3LC	12x2x1,50	30,0	2410	12,6
MAC1615HDADN-RE3LC	16x2x1,50	33,8	3136	12,6
MAC2015HDADN-RE3LC	20x2x1,50	37,3	3738	12,6
MAC2415HDADN-RE3LC	24x2x1,50	40,1	4298	12,6

### CABLE PRINTING

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



Assessed to ISO 9001:2015  
LPCB Cert. No 588



Member of CISO Federation  
CERTIFIED MANAGEMENT SYSTEM  
BS OHSAS 18001



Member of CISO Federation  
CERTIFIED MANAGEMENT SYSTEM  
ISO 14001



# EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0275HDADN-RE5LC	2x2x0,75	17,5	842	37,5
MAC0475HDADN-RE5LC	4x2x0,75	18,9	983	37,5
MAC0675HDADN-RE5LC	6x2x0,75	22,0	1303	37,5
MAC0875HDADN-RE5LC	8x2x0,75	23,2	1444	37,5
MAC1075HDADN-RE5LC	10x2x0,75	25,3	1657	37,5
MAC1275HDADN-RE5LC	12x2x0,75	25,9	1743	37,5
MAC1675HDADN-RE5LC	16x2x0,75	27,9	2055	37,5
MAC2075HDADN-RE5LC	20x2x0,75	30,3	2421	37,5
MAC2475HDADN-RE5LC	24x2x0,75	34,0	3069	37,5
MAC0210HDADN-RE5LC	2x2x1,00	18,3	908	25,5
MAC0410HDADN-RE5LC	4x2x1,00	21	1204	25,5
MAC0610HDADN-RE5LC	6x2x1,00	23,1	1432	25,5
MAC0810HDADN-RE5LC	8x2x1,00	24,5	1598	25,5
MAC1010HDADN-RE5LC	10x2x1,00	27,1	1920	25,5
MAC1210HDADN-RE5LC	12x2x1,00	27,6	2027	25,5
MAC1610HDADN-RE5LC	16x2x1,00	29,9	2398	25,5
MAC2010HDADN-RE5LC	20x2x1,00	33,9	3106	25,5
MAC2410HDADN-RE5LC	24x2x1,00	36,9	3616	25,5
MAC0215HDADN-RE5LC	2x2x1,50	19,1	988	18,8
MAC0415HDADN-RE5LC	4x2x1,50	22,0	1323	18,8
MAC0615HDADN-RE5LC	6x2x1,50	24,4	1591	18,8
MAC0815HDADN-RE5LC	8x2x1,50	26,0	1791	18,8
MAC1015HDADN-RE5LC	10x2x1,50	28,8	2161	18,8
MAC1215HDADN-RE5LC	12x2x1,50	29,4	2294	18,8
MAC1615HDADN-RE5LC	16x2x1,50	33,5	3095	18,8
MAC2015HDADN-RE5LC	20x2x1,50	36,9	3687	18,8
MAC2415HDADN-RE5LC	24x2x1,50	39,7	4239	18,8
MAC0225HDADN-RE5LC	2x2x2,50	22,4	1326	12,6
MAC0425HDADN-RE5LC	4x2x2,50	24,6	1616	12,6
MAC0625HDADN-RE5LC	6x2x2,50	27,9	2061	12,6
MAC0825HDADN-RE5LC	8x2x2,50	30,0	2431	12,6
MAC1025HDADN-RE5LC	10x2x2,50	34,9	3230	12,6
MAC1225HDADN-RE5LC	12x2x2,50	36,4	3585	12,6
MAC1625HDADN-RE5LC	16x2x2,50	39,2	4130	12,6
MAC2025HDADN-RE5LC	20x2x2,50	43,1	5008	12,6
MAC2425HDADN-RE5LC	24x2x2,50	46,8	5700	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)YMYRY-Pimf - 1x2x2,5 mm<sup>2</sup> - 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 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:**

Polyvinyl Chloride FR - PE

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Polyvinyl chloride FR - PVC

**Chemical Protection:**

Nylon Cover

**Armour:**

Galvanized Steel Wires Armour

**Outer Sheath:**

Polyvinyl chloride FR - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### IDENTIFICATION OF CORES

Pair:



### STANDARD REFERENCES

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

### CHARACTERISTICS



**Min. Bending Radius**

8 x cable diameter



**Hazardous Area Classification**

IEC Zone 1 - Group 2

### ON REQUEST

- 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



### ELECTRICAL DATA

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE9NC	1x2x0,50	13,8	553	37,5
MAS0250ADADN-RE9NC	2x2x0,50	15,7	695	37,5
MAS0450ADADN-RE9NC	4x2x0,50	16,7	788	37,5
MAS0650ADADN-RE9NC	6x2x0,50	18,1	911	37,5
MAS0850ADADN-RE9NC	8x2x0,50	19,0	998	37,5
MAS1050ADADN-RE9NC	10x2x0,50	21,7	1266	37,5
MAS1250ADADN-RE9NC	12x2x0,50	22,1	1320	37,5
MAS1650ADADN-RE9NC	16x2x0,50	23,4	1470	37,5
MAS2050ADADN-RE9NC	20x2x0,50	25,1	1646	37,5
MAS2450ADADN-RE9NC	24x2x0,50	26,8	1890	37,5
MAS0175ADADN-RE9NC	1x2x0,75	14,2	588	25,5
MAS0275ADADN-RE9NC	2x2x0,75	16,4	755	25,5
MAS0475ADADN-RE9NC	4x2x0,75	17,6	869	25,5
MAS0675ADADN-RE9NC	6x2x0,75	19,2	1017	25,5
MAS0875ADADN-RE9NC	8x2x0,75	21,4	1257	25,5
MAS1075ADADN-RE9NC	10x2x0,75	23,2	1428	25,5
MAS1275ADADN-RE9NC	12x2x0,75	23,6	1496	25,5
MAS1675ADADN-RE9NC	16x2x0,75	25,1	1681	25,5
MAS2075ADADN-RE9NC	20x2x0,75	27,2	1974	25,5
MAS2475ADADN-RE9NC	24x2x0,75	29,0	2189	25,5
MAS0110ADADN-RE9NC	1x2x1,00	15	644	18,8
MAS0210ADADN-RE9NC	2x2x1,00	17,6	850	18,8
MAS0410ADADN-RE9NC	4x2x1,00	19	995	18,8
MAS0610ADADN-RE9NC	6x2x1,00	22,1	1320	18,8
MAS0810ADADN-RE9NC	8x2x1,00	23,4	1464	18,8
MAS1010ADADN-RE9NC	10x2x1,00	25,5	1680	18,8
MAS1210ADADN-RE9NC	12x2x1,00	26,1	1769	18,8
MAS1610ADADN-RE9NC	16x2x1,00	28,1	2086	18,8
MAS2010ADADN-RE9NC	20x2x1,00	30,6	2459	18,8
MAS2410ADADN-RE9NC	24x2x1,00	34,3	3117	18,8
MAS0115ADADN-RE9NC	1x2x1,50	15,6	696	12,6
MAS0215ADADN-RE9NC	2x2x1,50	18,6	941	12,6
MAS0415ADADN-RE9NC	4x2x1,50	21,4	1254	12,6
MAS0615ADADN-RE9NC	6x2x1,50	23,7	1498	12,6
MAS0815ADADN-RE9NC	8x2x1,50	25,1	1677	12,6
MAS1015ADADN-RE9NC	10x2x1,50	27,8	2019	12,6
MAS1215ADADN-RE9NC	12x2x1,50	28,4	2136	12,6
MAS1615ADADN-RE9NC	16x2x1,50	30,7	2533	12,6
MAS2015ADADN-RE9NC	20x2x1,50	34,9	3280	12,6
MAS2415A DADN-RE9NC	24x2x1,50	38,0	3822	12,6

### CABLE PRINTING

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



Via Marzorati, 15 - 20014 Nerviano - Milan - Italy / [www.ramcro.it](http://www.ramcro.it)

# 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE3NC	1x2x0,50	14,1	573	37,5
MAS0250ADADN-RE3NC	2x2x0,50	16,1	728	37,5
MAS0450ADADN-RE3NC	4x2x0,50	17,2	829	37,5
MAS0650ADADN-RE3NC	6x2x0,50	18,8	963	37,5
MAS0850ADADN-RE3NC	8x2x0,50	20,9	1187	37,5
MAS1050ADADN-RE3NC	10x2x0,50	22,6	1343	37,5
MAS1250ADADN-RE3NC	12x2x0,50	23,0	1401	37,5
MAS1650ADADN-RE3NC	16x2x0,50	24,5	1564	37,5
MAS2050ADADN-RE3NC	20x2x0,50	26,5	1830	37,5
MAS2450ADADN-RE3NC	24x2x0,50	28,1	2021	37,5
MAS0175ADADN-RE3NC	1x2x0,75	14,5	608	25,5
MAS0275ADADN-RE3NC	2x2x0,75	16,9	788	25,5
MAS0475ADADN-RE3NC	4x2x0,75	18,1	910	25,5
MAS0675ADADN-RE3NC	6x2x0,75	21,1	1200	25,5
MAS0875ADADN-RE3NC	8x2x0,75	22,2	1322	25,5
MAS1075ADADN-RE3NC	10x2x0,75	24,1	1507	25,5
MAS1275ADADN-RE3NC	12x2x0,75	24,6	1579	25,5
MAS1675ADADN-RE3NC	16x2x0,75	26,4	1852	25,5
MAS2075ADADN-RE3NC	20x2x0,75	28,4	2092	25,5
MAS2475ADADN-RE3NC	24x2x0,75	30,5	2411	25,5
MAS0110ADADN-RE3NC	1x2x1,00	15	644	18,8
MAS0210ADADN-RE3NC	2x2x1,00	17,6	850	18,8
MAS0410ADADN-RE3NC	4x2x1,00	19	995	18,8
MAS0610ADADN-RE3NC	6x2x1,00	22,1	1320	18,8
MAS0810ADADN-RE3NC	8x2x1,00	23,4	1464	18,8
MAS1010ADADN-RE3NC	10x2x1,00	25,5	1680	18,8
MAS1210ADADN-RE3NC	12x2x1,00	26,1	1769	18,8
MAS1610ADADN-RE3NC	16x2x1,00	28,1	2086	18,8
MAS2010ADADN-RE3NC	20x2x1,00	20,6	2459	18,8
MAS2410ADADN-RE3NC	24x2x1,00	34,3	3117	18,8
MAS0115ADADN-RE3NC	1x2x1,50	15,8	711	12,6
MAS0215ADADN-RE3NC	2x2x1,50	18,9	967	12,6
MAS0415ADADN-RE3NC	4x2x1,50	21,8	1289	12,6
MAS0615ADADN-RE3NC	6x2x1,50	24,2	1543	12,6
MAS0815ADADN-RE3NC	8x2x1,50	25,7	1729	12,6
MAS1015ADADN-RE3NC	10x2x1,50	28,4	2084	12,6
MAS1215ADADN-RE3NC	12x2x1,50	29,1	2205	12,6
MAS1615ADADN-RE3NC	16x2x1,50	33,1	2976	12,6
MAS2015ADADN-RE3NC	20x2x1,50	36,4	3540	12,6
MAS2415ADADN-RE3NC	24x2x1,50	39,0	3952	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y4MYRY - 1x2x2,5 mm<sup>2</sup> - 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0175HDADN-RE5NC	1x2x0,75	14,7	622	22,5
MAS0275HDADN-RE5NC	2x2x0,75	17,2	812	22,5
MAS0475HDADN-RE5NC	4x2x0,75	18,5	940	22,5
MAS0675HDADN-RE5NC	6x2x0,75	21,5	1241	22,5
MAS0875HDADN-RE5NC	8x2x0,75	22,7	1369	22,5
MAS1075HDADN-RE5NC	10x2x0,75	24,7	1564	22,5
MAS1275HDADN-RE5NC	12x2x0,75	25,2	1640	22,5
MAS1675HDADN-RE5NC	16x2x0,75	27,1	1924	22,5
MAS2075HDADN-RE5NC	20x2x0,75	29,3	2176	22,5
MAS2475HDADN-RE5NC	24x2x0,75	33,1	2870	22,5
MAS0110HDADN-RE5NC	1x2x1,00	15,2	659	18,8
MAS0210HDADN-RE5NC	2x2x1,00	17,9	876	18,8
MAS0410HDADN-RE5NC	4x2x1,00	19,4	1026	18,8
MAS0610HDADN-RE5NC	6x2x1,00	22,7	1364	18,8
MAS0810HDADN-RE5NC	8x2x1,00	24	1514	18,8
MAS1010HDADN-RE5NC	10x2x1,00	26,4	1814	18,8
MAS1210HDADN-RE5NC	12x2x1,00	27	1908	18,8
MAS1610HDADN-RE5NC	16x2x1,00	28,9	2165	18,8
MAS2010HDADN-RE5NC	20x2x1,00	33,1	2914	18,8
MAS2410HDADN-RE5NC	24x2x1,00	35,7	3285	18,8
MAS0115HDADN-RE5NC	1x2x1,50	15,7	705	12,6
MAS0215HDADN-RE5NC	2x2x1,50	18,8	955	12,6
MAS0415HDADN-RE5NC	4x2x1,50	21,6	1273	12,6
MAS0615HDADN-RE5NC	6x2x1,50	23,9	1523	12,6
MAS0815HDADN-RE5NC	8x2x1,50	25,4	1706	12,6
MAS1015HDADN-RE5NC	10x2x1,50	28,1	2055	12,6
MAS1215HDADN-RE5NC	12x2x1,50	28,8	2174	12,6
MAS1615HDADN-RE5NC	16x2x1,50	31,1	2579	12,6
MAS2015HDADN-RE5NC	20x2x1,50	35,8	3388	12,6
MAS2415HDADN-RE5NC	24x2x1,50	38,5	3894	12,6
MAS0125HDADN-RE5NC	1x2x2,50	17,0	817	7,7
MAS0225HDADN-RE5NC	2x2x2,50	22,1	1290	7,7
MAS0425HDADN-RE5NC	4x2x2,50	24,2	1562	7,7
MAS0625HDADN-RE5NC	6x2x2,50	27,4	1984	7,7
MAS0825HDADN-RE5NC	8x2x2,50	29,3	2250	7,7
MAS1025HDADN-RE5NC	10x2x2,50	34,3	3102	7,7
MAS1225HDADN-RE5NC	12x2x2,50	35,5	3339	7,7
MAS1625HDADN-RE5NC	16x2x2,50	38,5	3948	7,7
MAS2025HDADN-RE5NC	20x2x2,50	42,1	4658	7,7
MAS2425HDADN-RE5NC	24x2x2,50	45,5	5375	7,7

### CABLE PRINTING

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



Via Marzorati, 15 - 20014 Nerviano - Milan - Italy / [www.ramcro.it](http://www.ramcro.it)

# EN 50288-7:2005

## RE-2Y(St)Y4YRY-Pimf

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



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



### CONSTRUCTION

**Formation:**

Plain annealed copper wire, Stranded acc. to HD 383

**Insulation:**

Polyvinyl Chloride - PE

**Individual Screen:**

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

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Collective Screen:**

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

**Inner Sheath:**

Polyvinyl chloride - PVC

**Chemical Protection:**

Nylon Cover

**Armour:**

Galvanized Steel Wires Armour

**Outer Sheath:**

Polyvinyl chloride - PVC

**Colour Outer Sheath:**

Blue (IS), Black (NIS)

### STANDARD REFERENCES

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

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

### ON REQUEST

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

### IDENTIFICATION OF CORES

Pair:

○ ● + Yellow Numbered Tapes

### TEMPERATURE RANGE

**During Installation:**

-5° C up to +50° C

**Fixed Installation:**

-30° C up to +80° C

**Insulation Operation:**

-30° C up to +90° C



### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

90/300/500 V



# 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0275HDADN-RE9NC	2x2x0,75	16,0	725	37,5
MAC0475HDADN-RE9NC	4x2x0,75	17,1	832	37,5
MAC0675HDADN-RE9NC	6x2x0,75	18,6	970	37,5
MAC0875HDADN-RE9NC	8x2x0,75	20,0	1095	37,5
MAC1075HDADN-RE9NC	10x2x0,75	22,4	1358	37,5
MAC1275HDADN-RE9NC	12x2x0,75	22,8	1422	37,5
MAC1675HDADN-RE9NC	16x2x0,75	24,2	1597	37,5
MAC2075HDADN-RE9NC	20x2x0,75	25,9	1800	37,5
MAC2475HDADN-RE9NC	24x2x0,75	27,7	2073	37,5
MAC0210HDADN-RE9NC	2x2x1,00	16,7	785	25,5
MAC0410HDADN-RE9NC	4x2x1,00	18,0	912	25,5
MAC0610HDADN-RE9NC	6x2x1,00	20,9	1205	25,5
MAC0810HDADN-RE9NC	8x2x1,00	21,9	1332	25,5
MAC1010HDADN-RE9NC	10x2x1,00	23,8	1521	25,5
MAC1210HDADN-RE9NC	12x2x1,00	24,3	1599	25,5
MAC1610HDADN-RE9NC	16x2x1,00	25,9	1809	25,5
MAC2010HDADN-RE9NC	20x2x1,00	28,1	2131	25,5
MAC2410HDADN-RE9NC	24x2x1,00	30,1	2459	25,5
MAC0215HDADN-RE9NC	2x2x1,50	17,9	883	18,8
MAC0415HDADN-RE9NC	4x2x1,50	19,4	1042	18,8
MAC0615HDADN-RE9NC	6x2x1,50	22,6	1388	18,8
MAC0815HDADN-RE9NC	8x2x1,50	23,9	1548	18,8
MAC1015HDADN-RE9NC	10x2x1,50	26,2	1783	18,8
MAC1215HDADN-RE9NC	12x2x1,50	26,9	1959	18,8
MAC1615HDADN-RE9NC	16x2x1,50	28,9	2234	18,8
MAC2015HDADN-RE9NC	20x2x1,50	32,2	2807	18,8
MAC2415HDADN-RE9NC	24x2x1,50	35,7	3390	18,8
MAC0225HDADN-RE9NC	2x2x2,50	18,9	974	12,6
MAC0425HDADN-RE9NC	4x2x2,50	21,8	1304	12,6
MAC0625HDADN-RE9NC	6x2x2,50	24,1	1567	12,6
MAC0825HDADN-RE9NC	8x2x2,50	25,6	1762	12,6
MAC1025HDADN-RE9NC	10x2x2,50	28,4	2125	12,6
MAC1225HDADN-RE9NC	12x2x2,50	29,0	2255	12,6
MAC1625HDADN-RE9NC	16x2x2,50	32,2	2849	12,6
MAC2025HDADN-RE9NC	20x2x2,50	36,4	3624	12,6
MAC2425HDADN-RE9NC	24x2x2,50	38,9	4053	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y4YRY-Pimf - 1x2x2,5 mm<sup>2</sup> - 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250HDADN-RE3NC	2x2x0,50	16,5	758	37,5
MAC0450HDADN-RE3NC	4x2x0,50	17,6	872	37,5
MAC0650HDADN-RE3NC	6x2x0,50	19,3	1022	37,5
MAC0850HDADN-RE3NC	8x2x0,50	21,5	1263	37,5
MAC1050HDADN-RE3NC	10x2x0,50	23,2	1436	37,5
MAC1250HDADN-RE3NC	12x2x0,50	23,7	1504	37,5
MAC1650HDADN-RE3NC	16x2x0,50	25,2	1692	37,5
MAC2050HDADN-RE3NC	20x2x0,50	27,3	1987	37,5
MAC2450HDADN-RE3NC	24x2x0,50	29,1	2204	37,5
MAC0275HDADN-RE3NC	2x2x0,75	17,2	818	25,5
MAC0475HDADN-RE3NC	4x2x0,75	18,5	953	25,5
MAC0675HDADN-RE3NC	6x2x0,75	21,5	1263	25,5
MAC0875HDADN-RE3NC	8x2x0,75	22,7	1397	25,5
MAC1075HDADN-RE3NC	10x2x0,75	24,7	1600	25,5
MAC1275HDADN-RE3NC	12x2x0,75	25,2	1683	25,5
MAC1675HDADN-RE3NC	16x2x0,75	27,1	1982	25,5
MAC2075HDADN-RE3NC	20x2x0,75	29,3	2249	25,5
MAC2475HDADN-RE3NC	24x2x0,75	33,1	2958	25,5
MAC0210HDADN-RE3NC	2x2x1,00	17,9	883	18,8
MAC0410HDADN-RE3NC	4x2x1,00	19,4	1042	18,8
MAC0610HDADN-RE3NC	6x2x1,00	22,6	1388	18,8
MAC0810HDADN-RE3NC	8x2x1,00	23,9	1548	18,8
MAC1010HDADN-RE3NC	10x2x1,00	26,2	1783	18,8
MAC1210HDADN-RE3NC	12x2x1,00	26,9	1959	18,8
MAC1610HDADN-RE3NC	16x2x1,00	28,9	2234	18,8
MAC2010HDADN-RE3NC	20x2x1,00	32,2	2807	18,8
MAC2410HDADN-RE3NC	24x2x1,00	35,7	3390	18,8
MAC0215HDADN-RE3NC	2x2x1,50	19,3	999	12,6
MAC0415HDADN-RE3NC	4x2x1,50	22,2	1339	12,6
MAC0615HDADN-RE3NC	6x2x1,50	24,6	1611	12,6
MAC0815HDADN-RE3NC	8x2x1,50	26,4	1887	12,6
MAC1015HDADN-RE3NC	10x2x1,50	29,1	2190	12,6
MAC1215HDADN-RE3NC	12x2x1,50	30,0	2410	12,6
MAC1615HDADN-RE3NC	16x2x1,50	33,8	3136	12,6
MAC2015HDADN-RE3NC	20x2x1,50	37,3	3738	12,6
MAC2415HDADN-RE3NC	24x2x1,50	40,1	4298	12,6

### CABLE PRINTING

RAMCRO - RE-2Y(St)Y4YRY-Pimf - 1x2x2,5 mm<sup>2</sup> - 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.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0275HDADN-RE5NC	2x2x0,75	17,5	842	37,5
MAC0475HDADN-RE5NC	4x2x0,75	18,9	983	37,5
MAC0675HDADN-RE5NC	6x2x0,75	22,0	1303	37,5
MAC0875HDADN-RE5NC	8x2x0,75	23,2	1444	37,5
MAC1075HDADN-RE5NC	10x2x0,75	25,3	1657	37,5
MAC1275HDADN-RE5NC	12x2x0,75	25,9	1743	37,5
MAC1675HDADN-RE5NC	16x2x0,75	27,9	2055	37,5
MAC2075HDADN-RE5NC	20x2x0,75	30,3	2421	37,5
MAC2475HDADN-RE5NC	24x2x0,75	34,0	3069	37,5
MAC0210HDADN-RE5NC	2x2x1,00	18,3	908	25,5
MAC0410HDADN-RE5NC	4x2x1,00	21	1204	25,5
MAC0610HDADN-RE5NC	6x2x1,00	23,1	1432	25,5
MAC0810HDADN-RE5NC	8x2x1,00	24,5	1598	25,5
MAC1010HDADN-RE5NC	10x2x1,00	27,1	1920	25,5
MAC1210HDADN-RE5NC	12x2x1,00	27,6	2027	25,5
MAC1610HDADN-RE5NC	16x2x1,00	29,9	2398	25,5
MAC2010HDADN-RE5NC	20x2x1,00	33,9	3106	25,5
MAC2410HDADN-RE5NC	24x2x1,00	36,9	3616	25,5
MAC0215HDADN-RE5NC	2x2x1,50	19,1	988	18,8
MAC0415HDADN-RE5NC	4x2x1,50	22,0	1323	18,8
MAC0615HDADN-RE5NC	6x2x1,50	24,4	1591	18,8
MAC0815HDADN-RE5NC	8x2x1,50	26,0	1791	18,8
MAC1015HDADN-RE5NC	10x2x1,50	28,8	2161	18,8
MAC1215HDADN-RE5NC	12x2x1,50	29,4	2294	18,8
MAC1615HDADN-RE5NC	16x2x1,50	33,5	3095	18,8
MAC2015HDADN-RE5NC	20x2x1,50	36,9	3687	18,8
MAC2415HDADN-RE5NC	24x2x1,50	39,7	4239	18,8
MAC0225HDADN-RE5NC	2x2x2,50	22,4	1326	12,6
MAC0425HDADN-RE5NC	4x2x2,50	24,6	1616	12,6
MAC0625HDADN-RE5NC	6x2x2,50	27,9	2061	12,6
MAC0825HDADN-RE5NC	8x2x2,50	30,0	2431	12,6
MAC1025HDADN-RE5NC	10x2x2,50	34,9	3230	12,6
MAC1225HDADN-RE5NC	12x2x2,50	36,4	3585	12,6
MAC1625HDADN-RE5NC	16x2x2,50	39,2	4130	12,6
MAC2025HDADN-RE5NC	20x2x2,50	43,1	5008	12,6
MAC2425HDADN-RE5NC	24x2x2,50	46,8	5700	12,6

### CABLE PRINTING

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



# Take more safety in oil field...

The use of low voltage cables in petrochemical field and refineries, is playing, in recent years, a large share of the market of cables.

The use of electrical cables, in a typical petrochemical plant, can reach lengths of up to 4000 km, and these cables must ensure a high efficiency and a resistance to breakage and chemical agents. If these features are not guaranteed, the safety of entire system could be put at risk.

The main international regulatory bodies have written standards, refer to these types of cables, eliminating the chemical and the mechanical problem introducing the lead covering.

Unfortunately this is not enough.

What we are experiencing now is a time when the markets are trying to economize and to make an impact as much as possible "clean" on environment, condemning all hazardous substances to a short life.



Lead is, as we all have learned over years, very strong material, but also very polluting when directly buried, and no long disposable because need to be recycled.

In this way a number of oil Companies and governments are already demanding lead-free cables for both new projects and upgrades.

Usually, a lead inner sheath is used as a protection against hydrocarbon (gasoline, diesel fuel and motor oil) and as a moisture barrier. The drawback of the lead sheath is mainly its heavy weight and potential health danger.

Nowadays an alternative exists to get a lighter, healthier cable without loose protection capability.



Assessed to ISO 9001:2015  
LPCB Cert. No 588



Member of CISO Federation  
CERTIFIED MANAGEMENT SYSTEM  
BS OHSAS 18001



Member of CISO Federation  
CERTIFIED MANAGEMENT SYSTEM  
ISO 14001



# ...ask for NYLORAM cables

That is possible using a polyamide inner sheath.

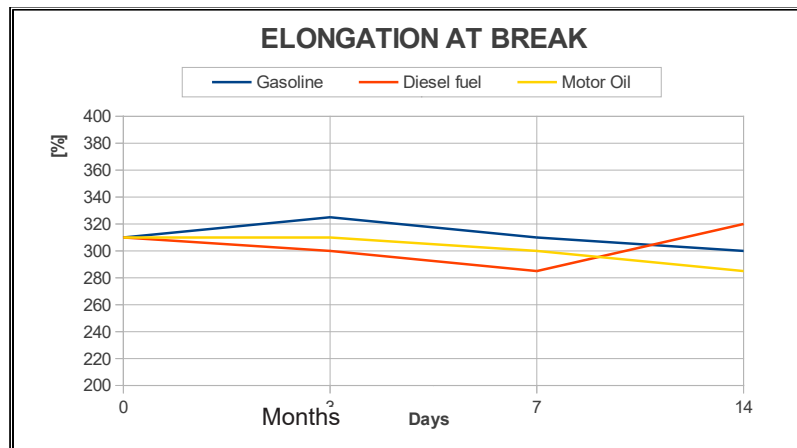
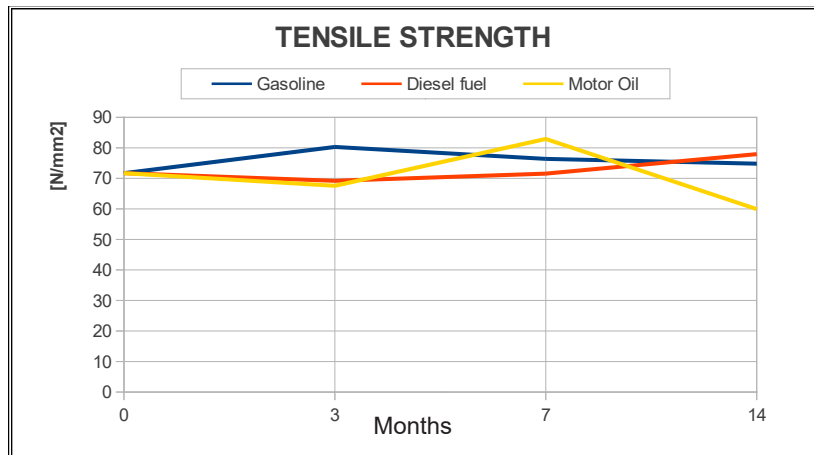
Polyamide has a good chemical resistance against hydrocarbon (comparable to lead), greater mechanical characteristics (specially against lateral compression (crush)) and less weight.

Tests:

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

- Gasoline
- Diesel Fuel
- Motor Oil

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



Conclusions:

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



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

This standard contains specific requirements for the design, selection, installation and initial verification of electrical installations in, or associated with, places where explosive atmospheres.

When the equipment must also be suitable for other critical environmental conditions, for example the possibility of entry of water and possibility of corrosion, can be necessary requirements additional protection.

The requirements set by the standard apply only in the case of use of the equipment in standard atmospheric conditions, as defined by the IEC EN 60079-0; in the case of different weather conditions it may take additional precautions.

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

The indications about the cable must be as the follow:

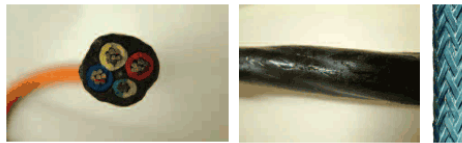
## 1. The cable entry system - Shall comply with the IEC 60079-1 indications

a) 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.

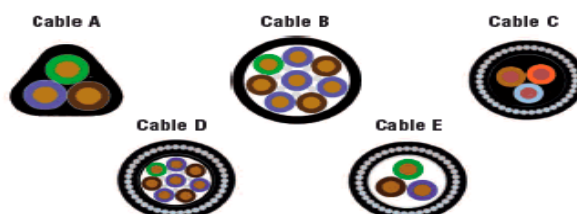
But the cable must play a part in the safety of the installation, even in the case of indirect cable entry, when gas migration must be avoided.

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?

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





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

Cable A is not suitable to apply a Flameproof sealing ring as this cable is the incorrect shape, and unless the cable is round the sealing ring will not be able to make an effective seal on the cable.

Cables B, D & E are not suitable to apply a Flameproof sealing ring, as the white areas represent a gap or void in the cable whereby there is either no inner cable sheath, or extruded bedding, or suitable fillers are absent. In this case no protection to the interstices of the cable can be offered by a sealing ring.

Cable C is the only one of the five sample cables illustrated which could be selected as correctly meeting the IEC 60079-14 criteria, as it has an extruded inner cable bedding and there is no gas migration path between the conductors.

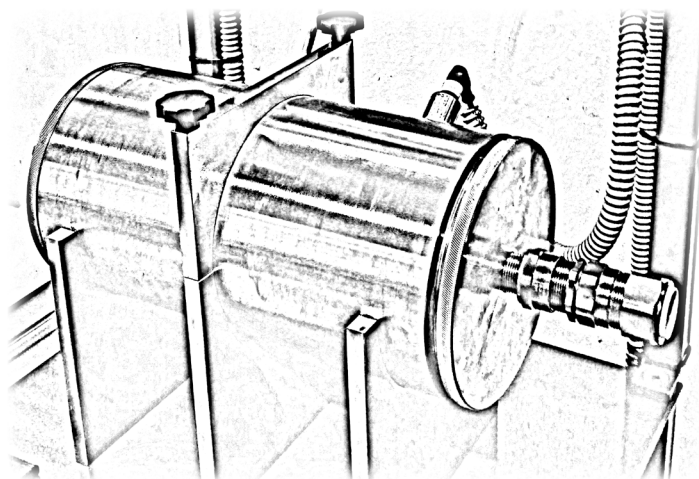
Equally, if the cable is not adequately filled, and allows the passage of air or gas to flow along the cable length then there would be no protection to the inner part of the cable when an elastomeric sealing ring is used.

In this case a compound barrier type cable gland is the only safe solution and this is needed to maintain the integrity of the equipment as explained above, and prevent gas migration from equipment to equipment, or hazardous areas to safe areas.

Now a new addition to the Annex E inside the IEC/EN 60079-14, provides a test method that can confirm the appropriateness 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 ( $\pm 2$  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.

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

IEC / EN 60079-14

**RAMCRO S.P.A.**

*Test Evaluation*

Test on sample: **Ramfirecro-F3 2x2.50 mm2 cable to LPCB 568a**

Test No. **288/12**

Prepared by RAMCRO LAB  
**26/08/2015**



Test Evaluation on Ramfirecro-F3 2x2.50 mm2 cable to LPCB 568a - Test No. 288/12 26/8/2015

Test date: 24/08/2015

IEC / EN 60079-14

**Results**

Cable Type	Test	Test Time	AIR pressure Test	Comments	Results
2 x 2.50 mm2	1	5 seconds	0.3 kPa	No comments	0.05 kPa
	2	5 seconds	0.3 kPa	No comments	0.04 kPa

**Conclusions**

The samples specified on page 5 of this document, met the requirements of IEC / EN 60079-14

Test date: 24/08/2015

Operator  
Giusto Simone  
RAMCRO S.p.A.  
Via Marzorati 15  
20014 NERVIANO (MO)  
Tel: 0331.406.511 - Fax 0331.406.528  
P. IVA 04698820158

Via Marzorati, 15 - 20014 Nerviano - Milano  
Tel. +39 0331 406 511 + 50 lines / FAX +39 0331 406 559 + 5 lines / www.ramcro.it

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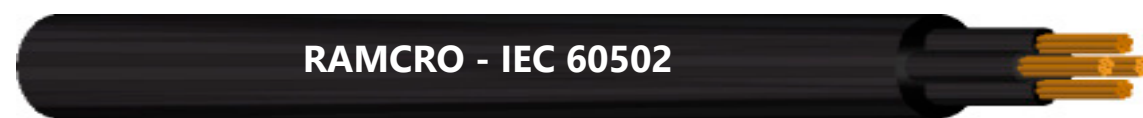
# IEC 60502



# 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 direct burial applications.



EAC



### CONSTRUCTION

**Formation:**

Plain annealed copper wire, Multistrand

**Insulation:**

Polyvinyl chloride - PVC

**Wrapping:**

at least 1 layer of plastic tape 0,023 mm

**Outer Sheath:**

Polyvinyl chloride - PVC

**Colour Outer Sheath:**

Black

### STANDARD REFERENCES

- IEC 60502
- IEC 60288
- IEC 60811
- IEC 60754-1
- IEC 60754-2
- IEC 60331-2
- IEC 60332-3-24

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

### IDENTIFICATION OF CORES

Core: Black Numbered

### ON REQUEST

- 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



### CABLE PRINTING

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

### ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm\*Km

Test Voltage Core-Core:

5000 V

Test Voltage Core-Screen:

5000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

600/1000 V



# IEC 60502-1

## PVC/Unscreened/PVC

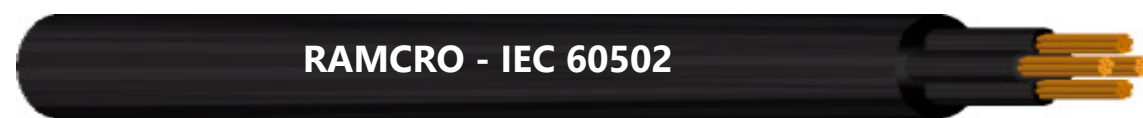
These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SSS0210HEAAD-1000V	2x1.00	8,9	122	34,6
SSS0310HEAAD-1000V	3x1.00	9,1	136	34,6
SSS0510HEAAD-1000V	5x1.00	10,4	183	34,6
SSS0710HEAAD-1000V	7x1.00	11,2	225	34,6
SSS1210HEAAD-1000V	12x1.00	14,1	341	34,6
SSS1910HEAAD-1000V	19x1.00	16,2	484	34,6
SSS2410HEAAD-1000V	24x1.00	18,7	595	34,6
SSS0215HEAAD-1000V	2x1.50	9,6	144	21,8
SSS0315HEAAD-1000V	3x1.50	9,7	163	21,8
SSS0515HEAAD-1000V	5x1.50	11,3	223	21,8
SSS0715HEAAD-1000V	7x1.50	12,1	277	21,8
SSS1215HEAAD-1000V	12x1.50	15,4	425	21,8
SSS1915HEAAD-1000V	19x1.50	17,7	609	21,8
SSS2415HEAAD-1000V	24x1.50	20,5	752	21,8
SSS0225HEAAD-1000V	2x2.50	10,4	181	13,7
SSS0325HEAAD-1000V	3x2.50	10,6	210	13,7
SSS0525HEAAD-1000V	5x2.50	12,3	293	13,7
SSS0725HEAAD-1000V	7x2.50	13,3	371	13,7
SSS1225HEAAD-1000V	12x2.50	17,0	579	13,7
SSS1925HEAAD-1000V	19x2.50	19,7	844	13,7
SSS2425HEAAD-1000V	24x2.50	23,0	1046	13,7
SSS0240HEAAD-1000V	2x4.00	11,8	239	8,6
SSS0340HEAAD-1000V	3x4.00	12,0	281	8,6
SSS0540HEAAD-1000V	5x4.00	14,1	400	8,6
SSS0740HEAAD-1000V	7x4.00	15,2	511	8,6
SSS1240HEAAD-1000V	12x4.00	19,7	808	8,6
SSS1940HEAAD-1000V	19x4.00	22,9	1192	8,6
SSS2440HEAAD-1000V	24x4.00	26,7	1481	8,6
SSS0260HEAAD-1000V	2x6.00	13,3	321	3,4
SSS0360HEAAD-1000V	3x6.00	13,5	385	3,4
SSS0560HEAAD-1000V	5x6.00	16,0	557	3,4
SSS0760HEAAD-1000V	7x6.00	17,4	721	3,4
SSS1260HEAAD-1000V	12x6.00	22,7	1153	3,4
SSS1960HEAAD-1000V	19x6.00	26,6	1718	3,4
SSS2460HEAAD-1000V	24x6.00	31,6	2174	3,4
SSS0211HEAAD-1000V	2x10.00	15,7	478	2,0
SSS0311HEAAD-1000V	3x10.00	16,0	585	2,0
SSS0511HEAAD-1000V	5x10.00	19,1	862	2,0
SSS0711HEAAD-1000V	7x10.00	20,9	1130	2,0
SSS1211HEAAD-1000V	12x10.00	27,5	1827	2,0
SSS1911HEAAD-1000V	19x10.00	32,7	2788	2,0
SSS2411HEAAD-1000V	24x10.00	38,9	3520	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.



EAC



### 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

**Colour Outer Sheath:**

Black

### STANDARD REFERENCES

- IEC 60502
- IEC 60288
- IEC 60811
- IEC 60754-1
- IEC 60754-2
- IEC 60331-2
- IEC 60332-3-24

### CHARACTERISTICS

**Min. Bending Radius**

8 x cable diameter

**Hazardous Area Classification**

IEC Zone 1 - Group 2

### IDENTIFICATION OF CORES

Core: Black Numbered

### ON REQUEST

- 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



### CABLE PRINTING

RAMCRO - 0,6/1 kV - IEC 60502 - 10x2,5 mm<sup>2</sup> - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

### ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm\*Km

Test Voltage Core-Core:

5000 V

Test Voltage Core-Screen:

5000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

600/1000 V



# IEC 60502-1

## PVC/Unscreened/PVC/SWA/PVC

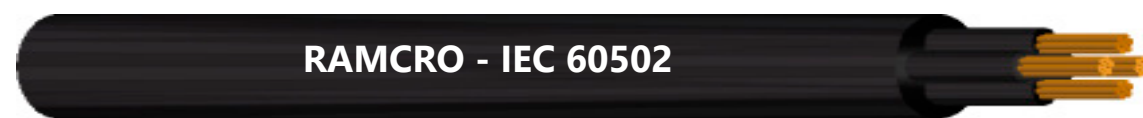
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RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SSS0210HEAAD-1000V	2x1.00	8,9	122	34,6
SSS0310HEAAD-1000V	3x1.00	9,1	136	34,6
SSS0510HEAAD-1000V	5x1.00	10,4	183	34,6
SSS0710HEAAD-1000V	7x1.00	11,2	225	34,6
SSS1210HEAAD-1000V	12x1.00	14,1	341	34,6
SSS1910HEAAD-1000V	19x1.00	16,2	484	34,6
SSS2410HEAAD-1000V	24x1.00	18,7	595	34,6
SSS0215HEAAD-1000V	2x1.50	9,6	144	21,8
SSS0315HEAAD-1000V	3x1.50	9,7	163	21,8
SSS0515HEAAD-1000V	5x1.50	11,3	223	21,8
SSS0715HEAAD-1000V	7x1.50	12,1	277	21,8
SSS1215HEAAD-1000V	12x1.50	15,4	425	21,8
SSS1915HEAAD-1000V	19x1.50	17,7	609	21,8
SSS2415HEAAD-1000V	24x1.50	20,5	752	21,8
SSS0225HEAAD-1000V	2x2.50	10,4	181	13,7
SSS0325HEAAD-1000V	3x2.50	10,6	210	13,7
SSS0525HEAAD-1000V	5x2.50	12,3	293	13,7
SSS0725HEAAD-1000V	7x2.50	13,3	371	13,7
SSS1225HEAAD-1000V	12x2.50	17,0	579	13,7
SSS1925HEAAD-1000V	19x2.50	19,7	844	13,7
SSS2425HEAAD-1000V	24x2.50	23,0	1046	13,7
SSS0240HEAAD-1000V	2x4.00	11,8	239	8,6
SSS0340HEAAD-1000V	3x4.00	12,0	281	8,6
SSS0540HEAAD-1000V	5x4.00	14,1	400	8,6
SSS0740HEAAD-1000V	7x4.00	15,2	511	8,6
SSS1240HEAAD-1000V	12x4.00	19,7	808	8,6
SSS1940HEAAD-1000V	19x4.00	22,9	1192	8,6
SSS2440HEAAD-1000V	24x4.00	26,7	1481	8,6
SSS0260HEAAD-1000V	2x6.00	13,3	321	3,4
SSS0360HEAAD-1000V	3x6.00	13,5	385	3,4
SSS0560HEAAD-1000V	5x6.00	16,0	557	3,4
SSS0760HEAAD-1000V	7x6.00	17,4	721	3,4
SSS1260HEAAD-1000V	12x6.00	22,7	1153	3,4
SSS1960HEAAD-1000V	19x6.00	26,6	1718	3,4
SSS2460HEAAD-1000V	24x6.00	31,6	2174	3,4
SSS0211HEAAD-1000V	2x10.00	15,7	478	2,0
SSS0311HEAAD-1000V	3x10.00	16,0	585	2,0
SSS0511HEAAD-1000V	5x10.00	19,1	862	2,0
SSS0711HEAAD-1000V	7x10.00	20,9	1130	2,0
SSS1211HEAAD-1000V	12x10.00	27,5	1827	2,0
SSS1911HEAAD-1000V	19x10.00	32,7	2788	2,0
SSS2411HEAAD-1000V	24x10.00	38,9	3520	2,0

# IEC 60502-1

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

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



EAC



## CONSTRUCTION

### Formation:

Plain annealed copper wire, Multistrand

### Insulation:

Polyvinyl chloride - PVC

### Wrapping:

at least 1 layer of plastic tape 0,023 mm

### Inner Sheath:

Polyvinyl chloride - PVC

### Chemical Protection:

Lead Cover

### Armour:

Galvanized Steel Wire Armour

### Inner Sheath:

Polyvinyl chloride - PVC

### Colour Outer Sheath:

Black

## STANDARD REFERENCES

- IEC 60502
- IEC 60288
- IEC 60811
- IEC 60754-1
- IEC 60754-2
- IEC 60331-2
- IEC 60332-3-24

## CHARACTERISTICS



### Min. Bending Radius

8 x cable diameter



### Hazardous Area Classification

IEC Zone 1 - Group 2

## IDENTIFICATION OF CORES

Core: Black Numbered

## ON REQUEST

- 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



## CABLE PRINTING

RAMCRO - 0,6/1 kV - IEC 60502 - 10x2,5 mm<sup>2</sup> - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING

## ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm\*Km

Test Voltage Core-Core:

5000 V

Test Voltage Core-Screen:

5000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

600/1000 V



# IEC 60502-1

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

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SSS0210HEAAD-1000V	2x1.00	8,9	122	34,6
SSS0310HEAAD-1000V	3x1.00	9,1	136	34,6
SSS0510HEAAD-1000V	5x1.00	10,4	183	34,6
SSS0710HEAAD-1000V	7x1.00	11,2	225	34,6
SSS1210HEAAD-1000V	12x1.00	14,1	341	34,6
SSS1910HEAAD-1000V	19x1.00	16,2	484	34,6
SSS2410HEAAD-1000V	24x1.00	18,7	595	34,6
SSS0215HEAAD-1000V	2x1.50	9,6	144	21,8
SSS0315HEAAD-1000V	3x1.50	9,7	163	21,8
SSS0515HEAAD-1000V	5x1.50	11,3	223	21,8
SSS0715HEAAD-1000V	7x1.50	12,1	277	21,8
SSS1215HEAAD-1000V	12x1.50	15,4	425	21,8
SSS1915HEAAD-1000V	19x1.50	17,7	609	21,8
SSS2415HEAAD-1000V	24x1.50	20,5	752	21,8
SSS0225HEAAD-1000V	2x2.50	10,4	181	13,7
SSS0325HEAAD-1000V	3x2.50	10,6	210	13,7
SSS0525HEAAD-1000V	5x2.50	12,3	293	13,7
SSS0725HEAAD-1000V	7x2.50	13,3	371	13,7
SSS1225HEAAD-1000V	12x2.50	17,0	579	13,7
SSS1925HEAAD-1000V	19x2.50	19,7	844	13,7
SSS2425HEAAD-1000V	24x2.50	23,0	1046	13,7
SSS0240HEAAD-1000V	2x4.00	11,8	239	8,6
SSS0340HEAAD-1000V	3x4.00	12,0	281	8,6
SSS0540HEAAD-1000V	5x4.00	14,1	400	8,6
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SSS1960HEAAD-1000V	19x6.00	26,6	1718	3,4
SSS2460HEAAD-1000V	24x6.00	31,6	2174	3,4
SSS0211HEAAD-1000V	2x10.00	15,7	478	2,0
SSS0311HEAAD-1000V	3x10.00	16,0	585	2,0
SSS0511HEAAD-1000V	5x10.00	19,1	862	2,0
SSS0711HEAAD-1000V	7x10.00	20,9	1130	2,0
SSS1211HEAAD-1000V	12x10.00	27,5	1827	2,0
SSS1911HEAAD-1000V	19x10.00	32,7	2788	2,0
SSS2411HEAAD-1000V	24x10.00	38,9	3520	2,0





# HI-TEMPERATURE CABLE

Flororam & Siloram

# HI-TEMPERATURE CABLES

## Flororam & Siloram

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

### RAMCRO - HI TEMPERATURE CABLE

#### CONSTRUCTION

**Formation:**

Tinned Copper Conductor, Stranded  
Nickel-Plated Copper

**Insulation:**

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

**Collective Screen:**

Tinned Copper Wire Braid (90% Coverage)

**Outer Sheath:**

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

**Colour Outer Sheath:**

Black

#### STANDARD REFERENCES

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

#### CHARACTERISTICS

**Min. Bending Radius**

14 x cable diameter

**Hazardous Area Classification**

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

#### IDENTIFICATION OF CORES

Core:



#### TEMPERATURE RANGE

**Installation Temperature:**

-5° C up to +50° C

**Bare Copper Conductor:**

-30° C up to +130° C

**Tinned / Silver Copper Conductor:**

-30° C up to +180° C

**Nikel-Plated Copper Conductor:**

-30° C up to +260° C



#### CABLE PRINTING

On Request

#### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 5000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 V



# HI-TEMPERATURE CABLES

## Flororam & Siloram

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

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	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 occur and is exceptionally stable to oil, fat, acid, alkali, and solvents. Furthermore fluorinated flexible cables are sun and weather resistant.

### RAMCRO - HI TEMPERATURE CABLE



#### CONSTRUCTION

**Formation:**

Tinned Copper Conductor, Stranded  
Nickel-Plated Copper

**Insulation:**

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

**Collective Screen:**

Tinned Copper Wire Braid (90% Coverage)

**Inner Sheath:**

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

**Armour:**

Galvanized Steel Wire Braid

**Outer Sheath:**

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

**Colour Outer Sheath:**

Black

#### STANDARD REFERENCES

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

#### CHARACTERISTICS

**Min. Bending Radius**

14 x cable diameter

**Hazardous Area Classification**

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

#### IDENTIFICATION OF CORES

Core:



#### TEMPERATURE RANGE

**Installation Temperature:**

-5° C up to +50° C

**Bare Copper Conductor:**

-30° C up to +130° C

**Tinned / Silver Copper Conductor:**

-30° C up to +180° C

**Nikel-Plated Copper Conductor:**

-30° C up to +260° C



#### CABLE PRINTING

On Request

#### ELECTRICAL DATA

**Insulation Resistance @ 20°C:**

> 1000 MOhm\*Km

**Test Voltage Core-Core:**

2000 V

**Test Voltage Core-Screen:**

2000 V

**Mutual Capacitance between conductors:**

< 250 nF/km

**Inductance:**

< 1 mH/km

**Operating Voltage:**

600 V



# HI-TEMPERATURE CABLES

## Flororam & Siloram

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

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
STS0226WEVXX-HT	2x0.25	4.6	66.30
STS0426WEVXX-HT	4x0.25	5.0	66.30
STS0250WEVXX-HT	2x0.50	5.5	36.36
STS0450WEVXX-HT	4x0.50	6.1	36.36
STS0275WEVXX-HT	2x0.75	5.8	24.80
STS0475WEVXX-HT	4x0.75	6.4	24.80
STS0210WEVXX-HT	2x1.00	6.5	18.30
STS0410WEVXX-HT	4x1.00	7.2	18.30
STS0215WEVXX-HT	2x1.50	7.1	12.42
STS0415WEVXX-HT	4x1.50	7.9	12.42
STS0225WEVXX-HT	2x2.50	8.2	7.56
STS0425WEVXX-HT	4x2.50	9.2	7.56
STS0240WEVXX-HT	2x4.00	9.2	4.2
STS0440WEVXX-HT	4x4.00	10.5	4.2
STS0260WEVXX-HT	2x6.00	10.1	3.6
STS0460WEVXX-HT	4x6.00	11.5	3.6

RAMCRO CODE	FORMATION (mm <sup>2</sup> )	OVERALL DIAMETER (mm)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
STS0226WEVXX-HT	2x0.25	7.6	66.30
STS0426WEVXX-HT	4x0.25	8.3	66.30
STS0250WEVXX-HT	2x0.50	8.5	36.36
STS0450WEVXX-HT	4x0.50	9.3	36.36
STS0275WEVXX-HT	2x0.75	9.2	24.80
STS0475WEVXX-HT	4x0.75	10.5	24.80
STS0210WEVXX-HT	2x1.00	10.1	18.30
STS0410WEVXX-HT	4x1.00	11.4	18.30
STS0215WEVXX-HT	2x1.50	10.7	12.42
STS0415WEVXX-HT	4x1.50	12.3	12.42
STS0225WEVXX-HT	2x2.50	12.4	7.56
STS0425WEVXX-HT	4x2.50	14.4	7.56
STS0240WEVXX-HT	2x4.00	14.8	4.2
STS0440WEVXX-HT	4x4.00	17.6	4.2
STS0260WEVXX-HT	2x6.00	16.5	3.6
STS0460WEVXX-HT	4x6.00	19.5	3.6



# THERMOCOUPLE CABLES

## Thermosensitive Applications

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

**RAMCRO - THERMOCOUPLES**

**EAC**



### CONSTRUCTION

**Formation:**

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

**Insulation:**

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

**Screen:**

Individual or Collective

**Inner Sheath:**

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

**Armour:**

Galvanized Steel Wire Braid

**Outer Sheath:**

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

**Colour Outer Sheath:**

On Request

### TYPE OF THERMOCOUPLE

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

### STANDARD REFERENCES

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

### IDENTIFICATION OF CORES

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



## INSTRUMENTATION & CONTROL CABLE

CONSTRUCTION	CPR CLASSIFICATION
PVC FR/ PVC FR	B2 <sub>CA</sub> s2, d0, a3*
PVC FR/SCREEN/PVC FR	B2 <sub>CA</sub> s2, d0, a3*
LSZH(FRNC)/LSZH (FRNC)	B2 <sub>CA</sub> s1, d0, a1*
LSZH (FRNC)/SCREEN/LSZH (FRNC)	B2 <sub>CA</sub> s1, d0, a1*
XLPE FR/LSZH (FRNC)	B2 <sub>CA</sub> s1, d0, a1*
XLPE FR/SCREEN/LSZH (FRNC)	B2 <sub>CA</sub> s1, d0, a1*
XLPE FR/SCREEN/PVC FR/ARMOUR/PVC FR	B2 <sub>CA</sub> s2, d0, a3*
XLPE FR/SCREEN/LSZH (FRNC)/ARMOUR/LSZH (FRNC)	B2 <sub>CA</sub> s1, d0, a1*
PE FR/SCREEN/LSZH (FRNC)/ARMOUR/LSZH (FRNC)	B2 <sub>CA</sub> s1, d0, a1*
PVC FR/SCREEN/PVC FR/ARMOUR/PVC FR	B2 <sub>CA</sub> s2, d0, a3*
XLPE FR/SCREEN/PVC FR	C <sub>CA</sub> s2, d1, a3*
PE FR/SCREEN/PVC FR	C <sub>CA</sub> s2, d1, a3*
PE FR/SCREEN/LSZH (FRNC)	B2 <sub>CA</sub> s1a, d0, a1*
FG16OHR16	B2 <sub>CA</sub> s1a, d0, a2*
FG16OHM16	B2 <sub>CA</sub> s2, d0, a3*

## ALARM CABLE

CONSTRUCTION	CPR CLASSIFICATION
PVC FR/PVC FR	C <sub>CA</sub> s2, d0, a3*
PVC FR/SCREEN/PVC FR	C <sub>CA</sub> s1, d0, a3*
LSZH (FRNC)/LSZH (FRNC)	C <sub>CA</sub> s1, d0, a1*
LSZH (FRNC)/SCREEN/LSZH (FRNC)	C <sub>CA</sub> s1, d0, a1*

## DATA LAN

CONSTRUCTION	CPR CLASSIFICATION
U-UTP/U-FTP/S-FTP	E <sub>CA</sub> *

## COAXIAL

CONSTRUCTION	CPR CLASSIFICATION
CLASS A++, A+, B e C	E <sub>CA</sub> *

## SATELLITE

CONSTRUCTION	CPR CLASSIFICATION
SAT CABLE	E <sub>CA</sub> *

## TELEPHONE

CONSTRUCTION	CPR CLASSIFICATION
TRR/TRHR	E <sub>CA</sub> *

## FIRE RESISTANT

CONSTRUCTION	CPR CLASSIFICATION
SIL/CAM/LSZH(FRNC)	C <sub>CA</sub> s1A, d0, a1*
MICA+XLPE/CAM/LSZH(FRNC)	B2 <sub>CA</sub> s1A, d0, a1*









## **RAMCRO S.p.A.**

via Marzorati, 15 - Nerviano

20014 - Milano - Italy

tel. +39 0331 406 511

fax +39 0331 406 559

QD 06/01

Edited by Sales Director on January 2019

Dr. Carlo Croci

Approved by AQ: PC